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INTRODUCTION

Questioning the world opens a path of understanding (Rothe et al., 2018). Although in the human history, many were forced to obedience and forbidden to question (Regenbogen, 2016; Mermillod, at el., 2015). Even so, the path of curiosity found a way to survive. In fact, research shows that it takes certain skills and motivational intelligence to inquire about any stimuli (Van der Meji, 1992; Gureckis, 2018). The etymological roots for the word *question* are to *seek*, *conquer*, and *request* (Ayto, 1991; Barnhart, 1995; Skeet, 1995). It is the innate human tendency to simply cognize and seek the truth (N. Angha, 2002). Among the most predominant questions asked are, “Who am I?” and “What is the “self?” As Joseph Shipley, a drama critic, writer, and editor (Rothstein, 1988), said, “Man’s greatest conquest still awaits, within” (Shipley, 1984, p.198). This chapter presents novel concepts that simplify the answer to the question of what the *self* is, through the application of psychology, linguistics, and epistemology. Another paramount factor is to cognate the idea the *self* with the origin and the vitality of technology. Present postulations are based on the author’s practice and experience with years of psychotherapeutic practice and independent linguistics and epistemological research.

The significant effect of technology in the human condition is undoubtable (Sophia et al., 2019; Council on Communication and Media, 2016; Lissak, 2018), particularly during the Covid and post Covid eras (Kumar et al., 2021; Limone & Toto, 2021). Although, it has allowed for a global connection for people with remarkable progressive effects (Chimirri & Schraube, 2019; Bhat, 2021; Costley, 2014)), it has had many negative consequences on the mind of people as well (American Academy of Pediatrics, 2016; Storm, 2021; Alhumaid, 2019). The question comes, can technology be better understood by understanding its maker, the *self*? Thus, gain better insight into the information technology’s maleficence and benevolence? Can the understanding of technology help create a pathway to *self*-freedom? The questions will be answered throughout this chapter.

TECHNICALLY TECHNICAL

The inequality between technology and human creativity was introduced in the 1950s by the Austrian philosopher Günther Anders (Fuchs, 2017, Chimirri & Schraube, 2019). He proposed there is a rebellious or “Prometheus” breach between “the relations of production and ideology, production and imagination, doing and feeling, knowledge and conscience, the machine and the body, production and needs” (Anders, 1956, as cited in, Fuchs, 2017, p. 3). He proposed that if these dualities do not conjoin, then the maleficence of technology will be far greater than its benevolence (Fuchs, 2017; Schraube, 2005). Since then, investigators and scientists have been attempting to bind the gap between information technology and understanding (Sandra, 2022). However, some researchers realize that *self*-understanding may be the key to mend this gap (Fuchs, 2017; Kool & Agrawal, 2016).

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The goal is to simplify the understanding of technology. According to Kukla (1995), simplification is an innovative view of an idea that clarifies its predecessors. Thus, a historical view of technology is presented.

The history of the word *technology* dates to the Indo-European languages, and it means to *cut, art, craft, web, and net*; also, it has the same root as the word *architect* (Nourai, 2013; Skeat, 1995; Shipley, 1984, Watkins, 2011). Technology's history dates to the time man first utilized fire (Gregersen, 2019). Yet, the word technology is only about a hundred and fifty years old (Lee, 2005). The evolution of the word takes the reader to the pre-Socratic Greek philosophers; they used *technologica* to treat crafts and arts. Still, the term initially referred to grammar usage (Barnhart, 1995). The Greek term *Logos*, translated to *the word* or *reason*, was also referred to as *techne* (Tulley, 2008; Carroll, 2017). Aristotle was one of the original thinkers to relate the concepts of *techne* and *logos* together, though he did not link them as one word (Tulley, 2008; Barnes, 1984). The idea of technology was mentioned in the Oxford English Dictionary in the 1600s (Tulley, 2008), but the meaning of working with mechanics was first seen in 1800 (Barnhart, 1995; Carroll, 2017).

In considering the above mentioned, the origin of the word *technology* means *to cut, a customized art form, or to web a design*. The question is, how is that related to the *self*? Before addressing the question, a review of the self is warranted.

A 'SELF' INVESTIGATION

Throughout human history, as evident from ancient writings such as the Avesta, the Vedas, and cuneiform writings, reasoning minds have tried to understand who the true human is throughout the history of humanity. Thus, created fields of understanding, i.e., the love of knowledge or philosophy and the study of spirit or psychology. According to philosophy, the human is the greatest wonder and the noblest field of study (Palmiano, 2015). Blackmore (2002) suggested that perhaps all scientific endeavors eventually lead to discovering the *self* or the *I*. The pursuit of understanding the self is an instinctive phenomenon that brings a sense of stability (Leary & Tangney, 2012). In the process of understanding the self, there are two ideas that have been correlated together. First, interoception, which refers to the "process of sensing, interpreting, and integrating signals originating from within the body" (Sattari, 2022, p.9). Second, is neuroplasticity, which is the brain's ability to adapt to novel circumstances (Demarin, et al., 2014). Studies have found that interoception and cognitive flexibility can lead to neuroplasticity and overall better health (Sattari, 2022). As such, great thinkers of the world have taken one aspect of the infinite human possibility such as the *self* and described it for understanding and simplification to fit the current scientific recognitions.

The views and opinions have evolved, thus via cognition, it seems the route toward simplification has gotten even more convoluted. Moreover, most psychological explanations of who a person is versus how they view themselves is considered complex (Rosenberg, 1965). There are numerous explanations and notions about what is the self, the ego, the I, (Woźniak, 2018; Lapsley & Ste, 2012; Oyserman et al., 2012), and what is the investigative question, 'I am?' So, at this point, how can such magnificent ideas become simple? Scientists have dissected material until they found atoms, electrons, and neutrons, then empty space (Papageorgiou, et al., 2016; Kozłowski, 2020). South Asian thinkers called this empty space zero (Nourai, 2013; Barnhart, 1995).

The etymology of the word *zero* comes from *nothing*, but it means 'not a thing' or 'empty space' (Nourani, 2013; Skeat, 1995; Barnhart, 1995). The idea of empty space or absolute was a Newtonian

vestige (Linder, 2012). Later it was found that space is filled with charges, fluctuation of fields and that morph into one another (Milonni, 2017). In other words, *zero* means the possibility of everything. What if the same route was taken to understand the self? What if the word *self* were traced back to its original concept? What if self-esteem or self-worth could be calculated? Introducing cognitive transcendence to put forth a path from the complication of why people suffer toward simplicity. *Cognitive transcendence* (CT) is defined as cognition beyond the perceived mental limitation. The conceptual ideas for CT are rooted in human potential rather than the mental perspectives constraints.

To start, one can prudently say that the basis of suffering is human belief. As any cognitive behaviorist can explain, belief is anchored on a mental story (Vanheule & Hauser, 2009). Even scientific knowledge can be argued that it is a tale put together by the mind, even when it is factual “science is a grand story that emerges from our need to make sense of the world” (Gottschall, 2012, p. 17). Thus, is it sound to say stories are based on beliefs created through thoughts? Neurologically, a story is composed of thoughts that become habituated in the brain and wired together (McMicken, 2015). Every thought is a connection of words. What if, like the atom, the particles of thought were dissected and ascertained, and each word, like the electrons, was expanded? Can language and the origin of the words unveil a clue and clear a path to simplicity?

“Language is the garden of man’s mind; its fertility, and its beauty, rise from its roots” (Shipley, 1984, p.i.)

METHODS PRESENTED IN THE MODELS

The models presented in this chapter were developed working with patients over a decade who had struggled with mental disorders. The experience elicited the question of how the problem of mental illness can be simplified and how CT can be achieved. The ideas presented in this chapter are based on an in-dept review of literature. The subjects include psychology, physics, lineage, and history of language and culture was conducted. The research leads to the formulation of the genesis of the self and a mathematical formula of calculating self-esteem presented in this chapter. Furthermore, the resolve is CT and the establishment of mental freedom.

LOOKING AT PSYCHOLOGY THROUGH LANGUAGE

Language is an evolutionary principle (Pinker, 1994) and the law of evolution is to evolve as necessarily required by time and conditions. Each word in a language has historical semantics and a current semantical meaning (Bagha, 2011). The semantics show a word’s affiliation and contextual meanings as liaisons to one another (Zhang, 2013). The semantics of a language may be divorced from the etymological history of the words used in that language (Bagha, 2011; Braha, 2015). Semantically, words change their meanings every time they are used (Hayakawa & Hayakawa, 1990), whereas *etymology* is the historical lineage and root meaning of a word. The etymology of the word *etymology* comes from *truth* or *real* (Ayto, 1991; Bhattathiri, 2019). Words used in language become detached from the actual or ‘true’ intended meanings, causing distortions and convolution in fields of understanding, including psychology. After all, “no word, however logical and beautiful, can ever convey the real essence” (S. Angha, 1991, p. 126). Niels Bohr, the noble laureate, also pointed out that what is considered reality is anything but the true reality (Folse, 1987).

The evolution of language can be observed in infants. The essential component of speech is memory (Locke & Kutz, 1975). Remembering names and concepts is an element vital to recollection. So, if language development in an infant is observed today, thousands of years of language progression can be seen within the first 4–5 years of its development. Parents, caregivers, and the perception of the environment teach children what words to use. Unless the caregivers are linguists, the children grow into adulthood using the words according to what they have been taught semantically (Sun & Pate, 2017). Perhaps some individuals may research the current definitions of words in dictionaries; however, and inevitability, perception is projection. Even such individuals may project their understanding of the words to the original lexicon (Carston, 2012). Like other mental fallacies, daily words appear to reflect their true ideation; however, that is not the case (S. Angha, 1991). The majority of people do not try and discover the proper semantics behind the words and simply, according to the Aristotelian view, give meanings by the necessity and sufficiency of the presenting conditions (Murphy, 2004; Benzon, 2004). The meaning of the words is then pragmatically or habitually encoded overtime (Carston, 2012). Could the lack of knowledge about words be a source of the ambiguity people face within their thoughts and thus suffer? Can suffering be alleviated if the mind can understand what suffering is?

The sound of words and concepts that are utilized create a frequency of waves and vibrations (Anyae-gbuna, 2013) that trap the mind of a thinker. Humans do not suffer circumstances; they suffer what they think and script for themselves about the circumstances (Adibian, 2022), which is the premise behind cognitive psychology (Gautam et al., 2020). For example, there are distinct differences between pain and suffering, although the words are used interchangeably in most literature. Pain is seen as a physical reflection of mental suffering, and both conditions are considered natural parts of life, which result in self-development (Bueno-Gómez, 2017; VanderWeele, 2019). Some newer models describe the two conditions not as a divide but as a continuation of one another. For instance, the mental process known as *culture* can also affect the suffering of pain (Frank, 2001). Pain is never simply a matter of nerves and neurotransmitters but always requires a personal and cultural encounter with meaning (Morris, 1991, p. 267). Still, suffering is viewed as the intangible experience from the beyond and the loss of a grip (Frank, 2001) on life. There is a distinct judgment and a sense of loss that underlies the notions of suffering (VanderWeele, 2019).

If the word *pain* itself is analyzed, then it is evident that the etymology of the word *pain* is *punishment* (Nourai, 2013). Essentially pain is a reaction to adverse action. Conversely, the etymology of the word *suffering* is to *carry* (Watkins, 2011; VanderWeele, 2019). Consequently, the only way to suffer is to carry the pain long after the situation has been resolved. In such word deconstruction, the concepts become easier to comprehend and perhaps to understand that suffering is literally carrying pain. An individual might, existentially, see their responsibility or the fundamental role they play in their life's manifestation of suffering.

Another example is the concept of holding a grudge. In the current literature, a grudge is viewed as a theoretical construct (Bunker & Ball, 2008) held by people who believe they have been victimized (Exline & Baumeister, 2000; Monsjou, 2018). Additionally, holding a grudge is the basis of unforgiveness and harboring maladaptive feelings, which could have negative mental and physical implications (Witvliet et al., 2001; Sandage et al., 2012; Monsjou, 2018). Even in business relationships, it is repetitive maltreatment of interpersonal relations that causes a loss of trust, which then materializes the concept of a grudge (Bunker & Ball, 2008; Bell, 2008). The unforgiving state of the grudge-holder could eventually turn into a desire for misfortune for the transgressor (Monsjou, 2018). In fact, Wixen believed grudge to a deep-rooted resentment or ill will (1971).

The etymology of the word *grudge* comes from *grunt*, *find fault*, and *complain* (Barnhart, 1995; Shipley, 1984). Consequently, to hold a grudge literally means to find a reason for complaining. When an individual can admit that holding a grudge is due to their egoic mind wanting to complain, it might make it easier to let go.

As frequently evident in research studies when scholars engage in comprehensive analysis of subjects, they find the answer is always within the equation (Krishnamurti, 2018; S. Angha, personal communication, n.d.; Adibian, 2022). Education in the context of this paper, represents the questions being asked. Hence, if the concepts are evaluated, then the ideas become simplified.

TRAPPED IN THE WORD ‘SELF’

Before diving into the self, it is crucial to consider a reasonably novel idea connecting linguistics and synaesthesia. The word *synaesthesia* is composed of the prefix *syn*, meaning *together*, and the suffix *aisthēsis*, meaning *perception* (Ward & Cytowic, 2006; Root, 2019). Thus, synaesthetes experience an added perception in the joining of various senses (Banissy et al., 2014). For example, an individual with synaesthesia might see sounds or hear colors. Are languages and metaphors not a sound frequency vibration that has crossed paths with existential senses of connotations or reflections? Cuskley and Kirby (2013) believe that the origin of language was the “cross-model-association” of sound vibrations with symbology. The mental crossing of sound vibrations and meanings becomes congealed in the human condition, in other words, a form of synaesthesia, resulting in confusion. Accordingly, since synaesthesia of language is understood as preserving together (Ward & Cytowic, 2006; Root, 2019), then the diffusion of language and words would inevitably lead to clarity and comprehension.

The idea of what the self is has been contemplated and evaluated throughout history (Wiley, 1994). The literature suggests that self-concepts are developed socially and perceptually (Rochat, 2001; Morf & Koole, 2012; Wehrle & Fasbender, 2018). The idea of self-psychology was the brainchild of Heinz Kohut in the 1970s, who shifted the idea of self from biology to psychology and mental self-development (Rabstejnek, 2015; Banai et al., 2005). Self-psychology and concepts of the self differ in that the latter is all the mental ideations that have developed regarding understanding the self (Rosenberg, 1989); and the former delineates how ideations develop (Rabstejnek, 2015; Banai et al., 2005). According to Morf and Koole (2012), there is not only a self but also a *desired self* that contains the *potential* (possible self), *aspirational* (ideal self), and *obligatory* (our self). Such selves can be found through introspection and self-conceptualization (Morf & Koole, 2012; Wehrle & Fasbender, 2018).

INTRODUCING THE COGNITIVE TRANSCENDENCE’S THEORY OF SELF

The idea of *myself* is generally considered a single word, but it is a compound of *my* and *self*; then there is *your self* and *their self*. Is it not safe to say that the self belongs to the person? Additionally, if it is presented as belonging, then it is merely affiliated with a person and not actually the person? Can this belonging called *self* be a tool that a person can utilize? In other words, the question becomes, what is this *self* that belongs to humans?

The word *self* originated in the Indo-European languages, from words meaning to *separate*, *divide*, and *own* (Nourai, 2013; Watkins, 2011; Shipley, 1984; McPherson, 2018) or to customize. Therefore, the *self* is the individual’s customization of who they think they are based on egoic concepts. As noted

Figure 1. Genesis of The Self



earlier, humans do not suffer events; they suffer what they believe about the events (Adibian, 2022). Could *suffering* mean to carry the idea customized by the individual and personalized as the *self* (Watkins, 2011; VanderWeele, 2019)? What is one customizing within one's *self*? Keeping the root definition in mind, the *self* can be divided into three segments.

Figure 1 explains the genesis of the *self*. First, is the potentiation and possibility of the *infinite self*. Second, customization or selfhood is initiated and the *pronoun self*, meaning *my-self*, *your-self*, and *their-self*, starts conceptualizing in the mind. Finally, the *socially cultivated self* is developed as a direct result of social interaction.

The infinite self or the infinite possibility of the self refer to the moments before any idea of the self is defined; therefore, it is customized or open to all universal potentiality. It is like the first person singular, 'I am.' Angha (2002) explained that the "discovery of the *I*, the source of life, is the beginning of the journey toward self-knowledge (p. 121). The *am* in 'I am' and the *is* in 'she is' evolved from the same Sanskrit root meaning 'to breathe' (Jaynes, 1976). Therefore, the phrase 'I am' indicates that 'I breathe.' The breath represents life in the human condition, the precedent of life (Oxley & Russell, 2020). The word *inspiration* comes from the word *spire*, which means to breathe (Skeat, 1995). On the other hand, *expire* means to lose life or the loss of breath (N. Angha, 2001; Skeat, 1995). That is why someone who feels inspired might take a deep breath, suggesting the individual is literally putting life into an idea. The awarding life is also true when a signifier such as *am* is placed after *I*.

When one states, 'I am great' or 'I am stupid,' in both conditions, the *I* or the infinite and incalculable possibility becomes calculated and ephemeral with a limited objectives. The ephemerality of "I am" is evident as the adjectives continually shift. Thus, 'I am' leads the individual to pronouns. The etymology of *pronoun* comes from *name* or *label* (Watkins, 2011). Thus, with the labeling of what has been customized, the *my*, *your*, *her*, *him*, *they* illusion of belonging or synesthetic is born.

The distinct differentiation of *my-self* versus *his-self* or *her-self* starts to blossom. Returning to the etymology of the word *self*, meaning to customize (Nourani, 2013; Watkins, 2011; Shipley, 1984; Mcpherson, 2018), the path of such synthesis brings the human understanding from vast possibilities to “who I think I am.” The pronoun-self is developed by the timeless dance of genetics and environmental factors. In psychodynamic practices, the pronoun-self is called the *ego* (Freud, 1923), or in cognitive behavioral perceptions, the beliefs (Beck & Fleming, 2021). As noted earlier, humans never suffer events; they suffer what they think about the event (Adibian, 2022). For example, when one believes oneself to be a victim of an event, this is saying the individual with all the possibilities of the infinite self is breathing life into the notion of being a victim, adopting a victim’s mentality, and so long as one holds on to that belief, one will inevitably suffer. A patient once asked, “Not only do I not want to be a victim anymore, but I do also not want to be a survivor either, as being a survivor means I have to keep the idea of being a former victim in my mind. Can’t I just be free of both?” The answer is yes.

Subsequently, when all the selves become meticulously divided and defined, patterns start to appear, and the notion of groupthink is initiated (Golkar, 2013). The constitution of group thoughts or ideas marks the genesis of the culture. The etymology of the word *culture* comes from *cultivate* (Shipley, 1984), and any idea or behavior that is considered “civilized culture” is cultivated by a mass belief. The word *civilized* derives from the Latin word *civilis*, meaning *cities* and *commonwealth* (Graeber & Wengrow, 2021; Shipley, 1984). The word *society* has the same etymological root as *pursue* and *sequence*, and it means to *follow*. (Nourani, 2013). Therefore, to be social in society means to follow the follower. As the ideas become increasingly cultivated in the group think, beliefs amalgamate, a pendulum is structured, and a pendulum swing comes into motion. Where the cadence of the pendulum swings, the minds of the masses will follow because they are social creatures (Sakman, 2019). Through the pendulum swing of civilized social movements, the mass illusions of words, ideas, and beliefs emerge, and they are imposed on all the selves to such a degree that the cliché of “keeping up with the Joneses” (Titelman, 1996) is fashioned. These ideas increase the likelihood of group suffering because the notions have, by then, been cultured and normalized. Human infinite possibly, in such cases become so impoverished to the point of judgment, criticism, and increasingly, self-punishment.

“Study yourself, the thing that attracts you the most is what possesses you.” (S. Angha, 2009, p. 50)

“Man has but to seek and he will find whatever he seeks, whether it be health, wealth, or illuminations of any kind whatsoever.” (Grabe & Ferrell, 1932, p. 36)

COGNITIVE TECHNOLOGY AND THE SELF

The need to bridge psychology and technology has been discussed throughout the years, mainly as artificial intelligence (AI) becomes more of a common idea (Gado, 2021; Abraham, 2021). The term AI is defined as “the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings” (Copeland, 2022, p.1). AI is a scientific field with multifaceted angles (Abraham, 2021). Cognitive technology is “a field of computer science that mimics human brain function through a variety of means, including natural language processing, data mining, and pattern recognition” (Cognitive Technology, 2018, p.1). It is considered a subset of AI (Kuzior & Kwilinski, 2022).

Considering the abovementioned, when the etymological history of the *self* and *technology* is compared, they both describe a *cut* or *customization* of an idea. Therefore, it is sound to say the way a

Figure 2. The Self-Esteem Formula

$$\begin{array}{l}
 M_s - Cr = Se \\
 M_s + A = Se
 \end{array}$$

M_s = My "Self"
 $-Cr$ = Criticalness
 $+A$ = Awareness

person customizes their-*self*, they will use the technology, whether in cognitive technology, AI, or any medium related to technology, including social media. The way people customize their Facebook page or Instagram is how they customize their idea of the *self* (Kusuma & Yuniardi, 2020). Furthermore, suppose these historical definitions and ideations are correlated in science and technology. In that case, the creation of AI will be more based on true human potential rather than who people think they are.

FORMULA TO CALCULATE MY-SELF'S-ESTEEM

The concept of self-esteem has become part of the common language. It is used to indicate a person's sense self-evaluation (Happer, 2016). Although some studies have found that higher self-esteem may not be correlated with better performance, it has been correlated to overall happier life (Baumeister et al., 2003; Ciarrochi et al., 2007). By understanding the meaning of the word *self*, the question is now, what is self-esteem? The word *esteem* has the same root as *estimate*, which means to calculate worth. Therefore, self-esteem is the calculation of how much my customized self is worth, and because the query is mathematical, is it not fitting to propose a formula for its calculation?

Figure 2 is the formula for calculating self-esteem. When looking at self-esteem, per the definition provided in this chapter, *self* refers to the customized pronoun-self, or who one thinks one is. In the formula provided, M_s signifies *my-self*, and the worth "I" or the person has given to themselves. The Cr is negative by nature, representing the criticalness of the individual. Being critical and criticalness has a history of being presented as a necessity for change, motivation, and even group development (Rabinovich & Morton, 2010; Çetin et al., 2014). Others see providing criticism as a way of creating negative mental effects including conflict (Baron, 1988). When exploring the word *critical*, it becomes evident that the etymology of the word goes back to Indo-European words meaning *dig*, *scratch*, *cut*, and *discriminate* (Shipley, 1984; Watkins, 2011). To criticize is to judge, scratch, and cut based on perception, which is always a projection based on the egoic mind. Essentially everything that is associated with criticalness is going to lose potentiation. Most high achievers think they have achieved because they are critical and judgmental of themselves (Rabinovich & Morton, 2010; Çetin et al., 2014); however, the truth is such achievers have accomplished not because they have been critical but despite their criticalness.

The $+A$ represents awareness, and, contrary to criticalness, awareness is positive by nature, and anything associated with awareness gains potentiation. The etymology of *awareness* also dates to the

Indo-European languages, in words meaning *watch*, *protect*, and *heed* (Watkins, 2011; McPherson, 2018). The difference between *criticism* and *awareness* is quite apparent since one is about observing what is, and the other is about dividing and destroying. Criticism, by definition, is punitive and, for this reason, negative, but awareness or observation, by definition, is enhancement and thus positive. Observation and awareness bring respect and understanding. This awareness is one of the foundations for the effectiveness of meditation and interoception (Bahadorani et al., 2021; Sattari, 2022). The word respect combines the prefix *re* and the suffix *spect*, meaning to *see* or to *look* (Ayto, 1991). The suffix *spect* can be observed in a myriad of words e.g., *spectator*, *introspect*, *spectacles*, and *prospect*. So literally, to be aware of the self is to respect the self. The difference between awareness and criticalness can be observed in the following example.

When putting numbers for such a formula, they are based on self-evaluation, with 100%, the maximum score. Currently there are many established self-esteem scales of measurements, such as the Rosenberg Self Esteem Scale (RSES) (Rosenberg, 1965; Gray-Little, et al., 1997) or Self-Esteem Stability Scale (SESS) (Altmann & Roth, 2018) that can be used to for this formula. The formula can interchange awareness and criticalness, such that $Ms - Cr + A = Se$, meaning a person can add both awareness and criticalness to their function and adjust the formula accordingly. As a result, how critical a person is can have a numerical value. Based on the proposed calculation, reducing criticism will restore self-worth to a more optimal level. Furthermore, eliminating criticism will allow the individual to understand themselves and perhaps wonder about the infinite self. Now one might wonder, how does a person go from low self-esteem to remembering their true self or the infinite self? To answer the question, a look at CT is needed.

FUTURE RESEARCH DIRECTIONS

Combining Psychology and Technology

To present the concepts in this chapter, several scientific fields were visited. Future research can further align these fields, even venture into quantum physics, religious studies, and archaeology as all thoughts and ideas represent the human condition. Humanity has spent millennia creating separation between views, science, religions, countries, races, etc.; perhaps it is time to reunite. The break is not just with the external world but also within an individual.

The formula of self-esteem, if written in computer language, can pave the way to potentially an application (AP). The AP might allow everyone to gauge how their beliefs affect their self-worth.

Can there be an application that gauges a person's identity? Every external creation made by a human represents internal human processing. Can there be an application that shows the infinite *self* and alleviates the misunderstanding of the socially cultivated *self*? Only time will tell.

CONCLUSION

Unveiling Freedom Again and The Genesis of Cognitive Transcendence

Since memory was established, the belief in freedom has danced in wondering minds, and words trapped the thought vibrations of those minds. Literary writers try to decipher the concept of freedom from

philosophical perspectives, legal, social, and psychological perspectives (Saliba, 1991). Freedom can be established as a relationship between one and the other with constraints, ‘free to’ versus ‘freedom from’ (Priel, 2013; Callister, 2017). Current freedom ideations are separated into positive and negative angles. Scholars argue that conditions lead to effective and mal-effective outcomes; therefore, restrictions are needed for freedom to prevail (Graeff, 2012). Emanuel Kant believed that despite being in prison, a person can still be free (Saliba, 1991). Plato believed that only when one is just can one be free (Plato, ca. 375 B.C.E./1945; Mohammad, 2016).

Theoretically, when a person has access to global information at the touch of a figure, the feeling of freedom comes to mind. But are they truly freeing, or has technology become another way to avoid looking inward? Unfortunately, addiction to technology is increasing at an alarming rate (Serenko et al., 2021; Allcott, et al., 2022; Kuss et al., 2013). To have *self*-control (Allcott, et al., 2022) or *self*-freedom an individual must understand what the *self* is.

When searching for freedom, one could get trapped in its subjective nature and the brilliance of the minds who have explained its philosophy. Can freedom be simplified? The word *freedom* is created with the prefix *free* and the suffix *dom*, meaning *jurisdiction*. The word itself means the jurisdiction to be free. The etymology of the word *free* takes the reader back thousands of years ago to the Far East; it has the same root as the word *friend*, which means to *love* (Nourai, 2013); thus, to be free is to be in love and freedom represents the dominion of love. Based on the ideas presented in this chapter, the question comes, why do we say people “fall in love” but no one “stands in love”? The egoic mind and the customized self is the one who falls.

Note the title of this section, unveiling freedom. There is no need to ‘find’ or ‘achieve’ freedom. If people stop doing what they have been doing, they will see that they have been free all along. True psychotherapy is not to learn what to do next but to stop doing what the *I* has been doing that led to suffering. CT is the ability to look beyond the egoic mind.

You went out in search of gold far and wide, but all along, you were gold on the inside.

—Rumi (Moezzi, 2020, p. 3)

By understanding all the ingredients, people have a recipe of their *selves* and understand why their lives ‘taste’ the way they do. Suffering will stay in a system as long as the system is hospitable to it. The proposed method of psychotherapy in this writing suggests looking at the words a mind has been trapped in, which lead to feelings of hate, anger, sadness, and fear. Then, allow for an understanding and simplification of the trap. Also, the self-esteem formal presents a simple way of calculating the *self*’s worth. Because it is a new concept, it requires further research and evaluation of its efficacy.

Overall, the proposal here is by letting go of the customary ideas and fixed thoughts of who people “think” they are, the underlying freedom will unveil itself and allow for feelings of love. Love is always the answer, and everything else is a misunderstanding.

“Stone walls do not a prison make,

Nor iron bars a case;

Minds innocent and quite take

That for a hermitage;

If I have freedom in my love,

And in my soul am free.”

—Richard Lovelace (Lovelace, 1642, p. 12)

“Only a society whose individual members have recognized their true value and identity can reach a stage of health, balance, harmony, and collaboration.”

—Professor N. Angha (2002, p. 171)

This investigation of the self suggests opening the word to hear the meaning behind it and discovering the intent through understanding a collective human intention and releasing the human potential from the customized definitions of finite possibility to infinite accessibility. The lingering question is whether silence—no words or thoughts—can lead to peace and freedom. The answer is yes, as numerous studies on meditation have shown (Bahadorani al el., 2021; Rappaport, 2020; Pascoe al el., 2021). The effects of silence will also be elaborated on in future writings, but for now, as mentioned, love is always the answer, and everything else is a misunderstanding.

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REFERENCES

- Abraham, A. (2021). Psychology in an artificial intelligence stance. *European Journal of Molecular & Clinical Medicine*, 8(3).
- Adibian, S. (2022). *From a stressful doing to a peaceful being* [Unpublished manuscript]. IGI Global.
- Alhumaid, K. (2019). Four ways technology has negatively changed education. *Journal of Educational and Social Research*, 9(4), 10–20. doi:10.2478/jesr-2019-0049
- Allcott, H., Gentzkow, M., & Song, L. (2022). *Digital addiction* (w28936). NBER. <https://web.stanford.edu/~gentzkow/research/DigitalAddiction.pdf>
- Altmann, T., & Roth, M. (2018). The Self-esteem Stability Scale (SESS) for cross-sectional direct assessment of self-esteem stability. *Frontiers in Psychology*, 9, 91. Advance online publication. doi:10.3389/fpsyg.2018.00091 PMID:29487551
- American Academy of Pediatrics. (2016). Media and young minds. *Pediatrics*, 138(5), 1–8. PMID:27940793

- Angha, N. (2001). *Expansion and contraction: Within being(dham)*. M. T. O. Shahmaghsoudi Publication Center.
- Angha, N. (2002). *Theory of "I": The unlimited vision . . . of leadership* (1st ed.). M. T. O. Shahmaghsoudi Printing and Publication Center.
- Angha, S. (1980). *Manifestation of thought* (7th ed.). M. T. O. Shahmaghsoudi Publication Center.
- Angha, S. (1991). *Manifestation of thought*. M. T. O. Shahmaghsoudi Publication Center.
- Anyaegbuna, F. (2013). *Book five: Vibrations, waves and sounds*. Solid Rock Press & Publishers.
- Ayto, J. (1991). *Dictionary of Word Origins: The histories of more than 8,000 English language words* (1st ed.). Arcade Publishing.
- Bagha, K. N. (2011). A short introduction to semantics. *Journal of Language Teaching and Research*, 2(6), 1411–1419. doi:10.4304/jltr.2.6.1411-1419
- Bahadorani, N., Lee, J. W., & Martin, L. R. (2021). Implications of Tamarkoz on stress, emotion, spirituality and heart rate. *Scientific Reports*, 11(1), 1–17. doi:10.103841598-021-93470-8 PMID:34238979
- Banai, E., Mikulincer, M., & Shaver, P. R. (2005). "Self object" needs in Kohut's self psychology: Links with attachment, self-cohesion, affect regulation, and adjustment. *Psychoanalytic Psychology*, 22(2), 224–260. doi:10.1037/0736-9735.22.2.224
- Banissy, M., Jones, C., & Cohen, K. R. (2014). Synesthesia: An introduction. *Frontiers in Psychology*, 5. Advance online publication. doi:10.3389/fpsyg.2014.01414 PMID:25566110
- Barnes, J. (Ed.). (1984). *The complete works of Aristotle: The revised Oxford translation*. Princeton University Press.
- Barnhart, R. U. (1995). *The Barnhart concise dictionary of etymology: The origins of American English words* (1st ed.). HarperCollins.
- Baron, R. A. (1988). Negative effects of destructive criticism: Impact on conflict, self-efficacy, and task performance. *The Journal of Applied Psychology*, 73(2), 199–207. doi:10.1037/0021-9010.73.2.199 PMID:3384772
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high selfesteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1–44. doi:10.1111/1529-1006.01431 PMID:26151640
- Beck, J. S., & Fleming, S. (2021). A brief history of Aaron T. Beck, MD and cognitive behavior therapy. *Clinical Psychology in Europe*, 3(2), e6701. Advance online publication. doi:10.32872/cpe.6701 PMID:36397957
- Bell, D. (2008). Causes and consequences of grudge-holding in service relationships. *Journal of Services Marketing*.
- Benzon, W. (2004). *The Big Book of Concepts* by Gregory L. Murphy. The MIT Press. Academic Press.

- Bhat, S. (2021). The positive and negative impact of new technology on accelerated learning during Covid-19 pandemic. *International Journal of Applied Research*, 7(8), 41–44. doi:10.22271/allresearch.2021.v7.i8a.8821
- Bhattathiri, N. (2019). Semantic etymology: An innovative approach to historical linguistics. *Trilingual Research Journal*, 8(4–6), 9–14.
- Blackmore, S. (2002). The question is: Who am I? *Journal of the American Society for Psychical Research*, 96, 143–151.
- Braha, S. (2015). *The etymology of words contents*. doi:10.13140/RG.2.2.11518.64325
- Bueno-Gómez, N. (2017). Conceptualizing suffering and pain. *Philosophy, Ethics, and Humanities in Medicine; PEHM*, 12(1), 7. Advance online publication. doi:10.1186/13010-017-0049-5 PMID:28958214
- Bunker, M., & Ball, D. (2008). Causes and consequences of grudge-holding in service relationships. *Journal of Services Marketing*, 22(1), 37–47. doi:10.1108/08876040810851941
- Callister, P. (2017). What is meant by freedom? *Pace Law Review*, 37(2), 507–550.
- Carroll, L. L. (2017). A comprehensive definition of technology from an ethological perspective. *Social Sciences*, 6(4), 126. doi:10.3390/ssci6040126
- Carston, R. (2012). Word meaning and concept expressed. *Linguistic Review*, 29(4). Advance online publication. doi:10.1515/tlr-2012-0022
- Çetin, B., İlhanb, M., & Yilmazc, F. (2014). An investigation of the relationship between the fear of receiving negative criticism and of taking academic risk through canonical correlation analysis. *Educational Sciences: Theory and Practice*, 14(1), 146–158.
- Chimirri, N., & Schraube, E. (2019). *Rethinking psychology of technology for future society: Exploring Subjectivity from within more-than-human everyday life*. . doi:10.1007/978-3-030-25308-0_3
- Ciarrochi, J., Heaven, P. C. L., & Fiona, D. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *Journal of Research in Personality*, 41(6), 1161–1178. doi:10.1016/j.jrp.2007.02.001
- Cognitive technology. (2018). *Techopedia*. Retrieved November 27, 2022, from <https://www.techopedia.com/definition/32482/cognitive-technology>
- Copeland, B. J. (2022). *Artificial intelligence*. Retrieved November 27th, 2022, from <https://www.britannica.com/technology/artificial-intelligence/Methods-and-goals-in-AI>
- Costley, K. C. (2014). *The positive effects of technology on teaching and student learning* (ED554557). ERIC. <https://files.eric.ed.gov/fulltext/ED554557.pdf>
- Creely, T. E., Knisely, W. N., & Lewis, A. C. (2019). Technology and the self: A new deity. *Ethics, Medicine, and Public Health*, 10, 111–119. doi:10.1016/j.jemep.2019.100404
- Cuskley, C., & Kirby, S. (2013). Synesthesia, cross-modality, and language evolution. In J. Simner & E. M. Hubbard (Eds.), *The Oxford handbook of synesthesia* (pp. 869–899). Oxford University Press.

Demarin, V., Morovic, S., & Béné, R. (2014). Neuroplasticity. *Periodicum Biologorum*, 116, 209–211.

Exline, J. J., & Baumeister, R. F. (2000). Expressing forgiveness and repentance: Benefits and barriers. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 133–155). Guilford Press.

Folse, H. J. (1987). *Niels Bohr's concept of reality* [Symposium]. *Symposium of the Foundation of Modern Physics*.

Frank, A. (2001). Can we research suffering? *Qualitative Health Research*, 11(3), 353–362. doi:10.1177/104973201129119154 PMID:11339079

Freud, S. (1923). *The ego and the id: The standard edition of the complete psychological works of Sigmund Freud*. Psychoanalytic Electronic Publishing. https://www.sas.upenn.edu/~cavitch/pdf-library/Freud_SE_Ego_Id_complete.pdf

Fuchs, C. (2017). Günther Anders' undiscovered critical theory of technology in the age of big data. *TripleC*, 15(2), 582–611. doi:10.31269/triplec.v15i2.898

Gado, S., Kempen, R., Lingelbach, K., & Bipp, T. (2021). Artificial intelligence in psychology: How can we enable psychology students to accept and use artificial intelligence? *Psychology Learning & Teaching*, 21(01), 37–56. Advance online publication. doi:10.1177/14757257211037149

Gautam, M., Tripathi, A., Deshmukh, D., & Gaur, M. (2020). Cognitive behavioral therapy for depression. *Indian Journal of Psychiatry*, 62(2), 223–229. doi:10.4103/psychiatry.IndianJPsychiatry_772_19 PMID:32055065

Gillio, S., Parasco, A., Forester, K., Bellahsene, T., Berman, K., Fernandez, C., Scher, R., Taylor, T., & Tourso, A. (2019). *Technology and its impact on the individual* [Capstone research paper]. FIT CFMM Master's Degree Program. <https://www.fitnyc.edu/documents/cfmm-capstone-2019-tech-and-human-identity-white-paper.pdf>

Golkar, H. (2013). Groupthink principles and fundamentals in organizations. *Interdisciplinary Journal of Contemporary Research in Business*, 5(8).

Gottschall, J. (2012). *The storytelling animal: How stories make us human*. Houghton Mifflin Harcourt.

Grabe, E. F., & Ferrell, P. C. (1932). *The sub-conscious speaks*. DeVirss & Co. Publishers.

Graeff, P. (2012). *Measuring individual freedom actions and rights as indicators of individual liberty*. Fraser Institute.

Graever, D., & Wengrow, D. (2021). *The dawn of everything: A new history of humanity*. Farrar, Straus and Giroux.

Gray-Little, B., Williams, V. S. L., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 23(5), 443–451. doi:10.1177/0146167297235001

Gregersen, E. (2019). History of technology timeline. *Encyclopedia Britannica*. Retrieved, November 27th, 2022, from <https://www.britannica.com/story/history-of-technology-timeline>

- Gureckis, T. M. (2018). Do people ask good questions? *Computational Brain & Behavior*, 1(1), 69–80. doi:10.100742113-018-0005-5
- Hayakawa, S. I., & Hayakawa, A. R. (1990). *Language in thought and action* (1st ed.). Harvest Original.
- Hepper, E. (2016). Self-Esteem. Encyclopedia of Mental Health. doi:10.1016/B978-0-12-397045-9.00076-8
- Hill, D., Ameenuddin, N., Reid Chassiakos, Y. L., Cross, C., Hutchinson, J., Levine, A., Boyd, R., Mendelson, R., Moreno, M., & Swanson, W. S. Council on Communication and Media. (2016). Media and young minds. *Pediatrics*, 138(5), e20162591. Advance online publication. doi:10.1542/peds.2016-2591 PMID:27940793
- Jaynes, J. (1976). *The origin of consciousness in the breakdown of the bicameral mind* (1st ed.). Mariner Books.
- Kool, V. K., & Agrawal, R. (2017). *Psychology of technology*. Springer., doi:10.1007/978-3-319-45333-0
- Kozlowski, M. (2020). On empty space. *Journal of Consciousness Exploration*, 11(2), 236–239.
- Krishnamurti, J. (2018). *The answer is in the problem*. KFA.
- Kukla, A. (1995). Amplification and simplification as modes of theoretical analysis in psychology. *New Ideas in Psychology*, 13(3), 201–217. doi:10.1016/0732-118X(94)00052-5
- Kumar, S., Kartikey, D., & Singh, T. (2021). Impact of technology on various aspects of human life during Covid-19 pandemic: A survey. *Journal of Psychosomatic Research*, 16(1), 127–142. doi:10.32381/JPR.2021.16.01.12
- Kuss, D. J., Griffiths, M. D., & Binder, J. F. (2013). Internet addiction in students: Prevalence and risk factors. *Computers in Human Behavior*, 29(3), 959–966. doi:10.1016/j.chb.2012.12.024
- Kusuma, I. J., & Yuniardi, M. (2020). The use of Instagram and psychological well-being in the digital era. *Proceedings of the 5th ASEAN Conference on Psychology, Counselling, and Humanities*. 10.2991/assehr.k.200120.023
- Kuzior, A. (2021). Cognitive technology and artificial intelligence in social perception. *Production Engineering*, 30(2), 109–115. doi:10.2478/mspe-2022-0014
- Lapsley, D., & Ste, P. C. (2012). Id, ego, and superego. Encyclopedia of Human Behavior. doi:10.1016/B978-0-12-375000-6.00199-3
- Lee, K. (2005). Technology: History and philosophy. *Essays in Philosophy*, 6(1), 143–158. doi:10.5840/eip20056123
- Limone, P., & Toto, G. (2021). Psychological and Emotional Effects of Digital Technology on Children in COVID-19 Pandemic. *Brain Sciences*, 11(9), 1126. doi:10.3390/brainsci11091126 PMID:34573148
- Linder, H. (2012). Beyond Newton and Einstein to flowing space. *Physics Essays*, 25(4), 500–509. doi:10.4006/0836-1398-25.4.500

- Lissak, G. (2018). Adverse physiological and psychological effects of screen time on children and adolescents: Literature review and case study. *Environmental Research*, 164, 149–157. doi:10.1016/j.envres.2018.01.015 PMID:29499467
- Locke, J., & Kutz, K. (1975). Memory for speech and speech for memory. *Journal of Speech and Hearing Research*, 18(1), 176–191. doi:10.1044/jshr.1801.176 PMID:1127902
- Lovelace, R. (1642). *To Althea, from prison*. Novello & Co.
- Matz, S. C. (Ed.). (2022). The psychology of technology: Social science research in the age of big data. American Psychological Association, 16, 451.
- McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (2001). *Forgiveness: Theory, research and practice*. Guilford Press.
- McMicken, D. (2015). *What is story?* . doi:10.13140/RG.2.1.4418.1847
- Mcmiken, D. (2015). *What is story?* . doi:10.13140/RG.2.1.4418.1847
- McPherson, F. (2018). *Indo-European cognate dictionary*. Wayz Press.
- Mermillod, M., Marchand, V., Lepage, J., Bègue, L., & Dambrun, M. (2015). Destructive obedience without pressure: Beyond the limits of the agentic state. *Social Psychology*, 46(6), 345–351. doi:10.1027/1864-9335/a000251
- Milonni, P. W. (2017). Void: The strange physics of nothing. *American Journal of Physics*, 85(8), 637–639. doi:10.1119/1.4983116
- Moezzi, M. (2020). *The Rumi Perscription: How an Ancient Mystic Poet Changed My Modern Manic Life*. *Kirkus Reviews*, 88(2).
- Mohammad, M. (2016). Plato on freedom. *Review Journal Philosophy and Social Science*, 41(1).
- Monsjou, E. V. (2018). *Holding grudges: Developing theory and measurement* [Doctoral dissertation]. York University of Toronto.
- Morf, C. M., & Koole, S. L. (2012). The self. In M. Hewstone, W. Stroebe, & K. Jonas (Eds.), *Introduction to social psychology: A European perspective*. Blackwell Publishing.
- Morris, D. B. (1991). *The culture of pain*. University of California Press.
- Mruk, C. J. (1987). The interface between computers and psychology: Toward a psychology of computerization. *Computers in Human Behavior*, 3(3-4), 167–179. doi:10.1016/0747-5632(87)90021-5
- Murphy, G. L. (2004). *The big book of concepts*. MIT Press.
- Nourai, A. (2013). *Etymological dictionary of Persian, English and other Indo-European languages*. Xilbris Corporation.
- Oxley, R., & Russel, A. (2020). Interdisciplinary perspective on breath, body and world. *Body & Society*, 26(2), 3–29. Advance online publication. doi:10.1177/1357034X20913103 PMID:33424415
- Oyserman, D., Elmore, K., & Smith, G. (2012). Self, self-concept, and identity. In J. Tangney & M. Leary (Eds.), *The handbook of self and identity* (2nd ed., pp. 69–104). Guilford Press.

Palmiano, D. (2015). *What is philosophy and what is philosophy of man all about?* Prince Chariel Publishing House.

Papageorgiou, G., Markos, A., & Zarkadis, N. (2016). Understanding the atom and relevant misconceptions: Students' profiles in relation to three cognitive variables. *Science Education International*, 27(4), 464–488.

Pascoe, M. C., de Manincor, M., Tseberja, J., Hallgren, M., Baldwin, P. A., & Parker, A. G. (2021). Psychobiological mechanisms underlying the mood benefits of meditation: A narrative review. *Comprehensive Psychoneuroendocrinology*, 6(May), 100037. doi:10.1016/j.cpnec.2021.100037 PMID:35757358

Pinker, S. (1994). *Language instinct: How the mind creates language* (1st ed.). William Morrow and Company. doi:10.1037/e412952005-009

Plato. (1945). *The republic of Plato* (F. MacDonald Cornford, Trans.). Oxford University Press. (Original work published ca. 375 B.C.E.)

PrielD. (2013, December 30). Lon Fuller's political jurisprudence of freedom. *Jerusalem Review of Legal Studies*. <https://ssrn.com/abstract=2374974>

Rabinovich, A., & Morton, T. (2010). Who says we are bad people? The impact of criticism source and attributional content on responses to group-based criticism. *Personality and Social Psychology Bulletin*, 36(4), 524–536. doi:10.1177/0146167210362980 PMID:20363906

Rabstejnek, C. V. (2015). A brief review of self psychology. *Human and Organizational Understanding and Development*, 13(4).

Rappaport, H. (2020). Beyond mindfulness: Meditation for mystical experience and persisting benefit. *Berkeley Undergraduate Journal*, 34(2). Advance online publication. doi:10.5070/B3342049983

Regenbogen, J. (2016). *Questioning history: 16 essential questions that will deepen your understanding of the past*. Vernon Press.

Rochat, P. (2001). Origins of self-concept. In G. Bremner & A. Fogel (Eds.), *Blackwell handbook of infant development* (pp. 191–212). Blackwell Publishing.

Root, N. (2019). What Language Tells Us About Synesthesia, What Synesthesia Tells Us About Language. *UC San Diego*. <https://escholarship.org/uc/item/1px4k39s>

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press. doi:10.1515/9781400876136

Rosenberg, M. (1989). Self-concept research: A historical overview. *Social Forces*, 68(1), 34–44. doi:10.2307/2579218

Rothe, A., Lake, B. M., & Gureckis, T. (2018). Do people ask good questions? *Computational Brain & Behavior*, 1(1), 69–89. doi:10.100742113-018-0005-5

Rothstein, M. (1988). Joseph Shipley, 94, Drama critic and the author of many books. *The New York Times*.

Sakman, E. (2019). *Humans as social primates*. Springer. doi:10.1007/978-3-319-16999-6_1373-1

Saliba, A. (1991). The concept of freedom. *Hyphen*, 6(5), 217–220.

- Sandage, S., Worthington, E. Jr, Hight, T., & Berry, J. (2012). Seeking forgiveness: Theoretical context and an initial empirical study. *Journal of Psychology and Theology*, 28(1), 21–35. doi:10.1177/009164710002800102
- Sattari, S. (2022). *Investigation of the relationship between interoception, cognitive flexibility, and post-traumatic growth* [Doctoral dissertation]. Walden University.
- Schraube, E. (2005). “Torturing things until they confess”: Günther Anders’ critique of technology. *Science as Culture*, 14(1), 77–85. doi:10.1080/09505430500041983
- Serenko, A., & Turel, O. (2021). Directing technology addiction research in information systems: Part II. Understanding technology addiction. *The Data Base for Advances in Information Systems*. Advance online publication. 53
- Shipley, J. T. (1984). *The origins of English words: A discursive dictionary of Indo-European roots*. John Hopkins University Press.
- Skeat, W. W. (1995). *Etymological dictionary of the English language*. Oxford University Press.
- Storm, A. (2019). The negative effects of technology for students and educators. *Journal of Educational and Social Research*, 9(4).
- Sun, H., & Pate, J. (2017). *The semantic spaces of child speech, child-directed speech and adult-directed speech: a manifold perspective* [Paper presented]. Cognitive Science Society 39th Annual Meeting, London, UK.
- Titelman, G. (1996). *Random house dictionary of America’s popular proverbs and sayings* (2nd ed.). Random House.
- Tulley, R. (2008). Is there techne in my logos? On the origins and evolution of the ideographic term—Technology. *International Journal of Technology, Knowledge and Society*, 4(1), 93–104. doi:10.18848/1832-3669/CGP/v04i01/55813
- Van der Meij, H. (1992). *A critique of research on questioning*. <https://files.eric.ed.gov/fulltext/ED343950.pdf>
- VanderWeele, T. J. (2019). Suffering and response: Directions in empirical research. *Social Science & Medicine*, 224, 58–66. doi:10.1016/j.socscimed.2019.01.041 PMID:30743193
- Vanheule, S., & Hauser, S. (2009). A narrative analysis of helplessness in depression. *Journal of the American Psychoanalytic Association*, 56(4), 1309–1330. doi:10.1177/0003065108325969 PMID:19037128
- Ward, J., & Cytowic, R. (2006). Synesthesia and language. *Encyclopedia of language and linguistics*, 371–376. doi:10.1016/B0-08-044854-2/04196-1
- Watkins, C. (2011). *The American heritage dictionary of Indo-European roots* (3rd ed.). Houghton Mifflin Harcourt.
- Wehrle, K., & Fasbender, U. (2018). Self-concept. *Encyclopedia of Personality and Individual Differences*. doi:10.1007/978-3-319-28099-8_2001-1
- Wiley, N. (1994). History of the self: From primates to present. *Sociological Perspectives*, 37(4), 527–545. doi:10.2307/1389278

Witvliet, C. V., Ludwing, T. E., & Vander Laan, K. L. (2001). Granting forgiveness or harboring grudges: Implications for emotion, physiology and health. *Psychological Science*, 12(2), 117–123. Advance online publication. doi:10.1111/1467-9280.00320 PMID:11340919

Wixen, B. N. (1971). Grudges: A psychoanalytic study. *Psychoanalytic Review*, 58(3), 333. PMID:5150681

Woźniak, M. (2018). “I” and “me”: The self in the context of consciousness. *Frontiers in Psychology*, 9, 1656. Advance online publication. doi:10.3389/fpsyg.2018.01656 PMID:30233474

Zhang, L. (2013). Application of etymology and semantic field theory for second language acquisition. *US–China Foreign Language*, 11(11), 834–839.

ADDITIONAL READING

Babich, B. (2021). *Günther Anders’ philosophy of technology: from phenomenology to critical theory*. Bloomsbury Academic. doi:10.5040/9781350228610

Creely, T. E., Knisely, W. N., Ayotte, C., & Lewis, C. (2019). Technology and the self: A new deity. *Ethics, Medicine, and Public Health*, 10, 111–119. doi:10.1016/j.jemep.2019.100404

Ellens, J. (2017). Science, religion, and health: The interface of psychology and Theology. *Open Journal of Social Sciences*, 5(06), 25–36. doi:10.4236/jss.2017.56004

Ramírez, R. (2017). Technology and self-modification: Understanding technologies of the self after Foucault. *Journal of Science and Technology of the Arts*, 9(3), 45. doi:10.7559/citarj.v9i3.423

Yaden, D. B., Eichstaedt, J. C., & Medaglia, J. D. (2018). The future of technology in positive psychology: Methodological advances in the science of well-being. *Frontiers in Psychology*, 9, 962. doi:10.3389/fpsyg.2018.00962 PMID:29967586

KEY TERMS AND DEFINITIONS

Artificial Intelligence (AI): Computer-based systems performing as an intelligent being would.

Cognitive Technology: Computer science field that stimulates human mental functioning.

Cognitive Transcendence (CT): A cognition beyond the perceived mental limitation. The conceptual ideas for CT are rooted in human potential rather than the mental perspectives constraints.

Interoception: Mental internal interpretation of bodily sensations.

Neuroplasticity: Brain’s ability to modify in accordance with situations.

Self: An internal idea of one’s identity based on personal customization.

Technology: To customize, to web, and create.