Theoretical Analysis

Analysing Anorexia Nervosa: Digital Logic Provides Alternative Meanings of its Nature, Leading to Alternative Forms of Psychotherapy

Derek Botha*\textsuperscript{a}
\textsuperscript{a} Department of Psychology, Rhodes University, South Africa

Abstract

The purpose of this article is to apply innovative analogue and digital thinking processes that, first, negate DSM (III to 5\textsuperscript{th} Eds.) understandings of anorexia, and then formulate a bases which encapsulates alternative understandings of the universal patterns of behavior, understandings that honour and embrace the patterns of behavior expressed by each person. Published research of lived experiences of persons who exhibit patterns of behavior and attitudes towards food, weight, body shape and size, that are deemed to be diagnostic criteria of anorexia nervosa, provides evidence that those patterns of behavior serve as coping mechanisms against the suffocating forces of unwanted, specific, and personal discourses in their lives. As a consequence of this application, the article argues that these universal patterns of behavior and attitudes to food, weight and body image, expressed uniquely by each person, are expressions, images and ideas of a specific form of an archetype, with each person having their personal and unique reasons for their behavioral expressions. This analyses indicates that these persons do not “suffer from” a mental eating disorder called anorexia, and that psychotherapeutic approaches for each person should focus on the problems in their lives, problems that cause them to express the images and ideas of a universal archetype.

Keywords: Anorexia nervosa, analogue logic, personal narratives, digital logic, alternative understandings

Table of Contents

Current understandings of anorexia
Principles of analogue and digital thinking processes
Linking anorexia and DSM diagnostic criteria using analogue logic
References
The objective of this article is to present two different ways of logic in order to analyse the meanings of the universal patterns of behavior and lifestyle attitudes exhibited by persons who are deemed to “have” a mental eating disorder, called anorexia nervosa, and to propose a related and alternative narrative informed approach to psychotherapy for these persons, an approach which would be appropriate, meaningful and effective.

First, an analysis based on **analogue** logic is presented that assesses the reliability of the diagnostic criteria for anorexia in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association [APA], DSM-III, 1980 to DSM-5, 2013). This analysis relates these current understandings of anorexia to current psychotherapy approaches, and their resultant outcomes. However, the state of these therapeutic outcomes fails to reflect that there is an **intrinsic connection** (Leifer, 1997) between the **signs** (of anorexia nervosa), being the diagnostic criteria in DSMs, and the **referent**, being a mental eating disorder called anorexia nervosa. As this analogue logic clearly negates the reliability of the DSM diagnostic criteria for anorexia nervosa, it then provides opportunities for presenting the significance of the narratives from the voices of persons who exhibit universal patterns of behavior that are deemed to indicate that these persons “have” a mental eating disorder, called anorexia.

Then, an analysis based on **digital** logic is applied to the universal patterns of behavior and lifestyle attitudes, and indicates that these universal patterns of behavior, as indicated in DSMs, actually **stand for**, or **represent** specific, personal, unwanted and negative discourses in the life of a person, leading to their “ethical problems in living”¹ (Szasz, 2010, 2010).

¹ A broad understanding in this context, of the notion of “ethical” refers to the relationship a person constructs with him or herself, compared to a relationship which they constitute for themselves with discourses or knowledge (Foucault, 1997, 1977a; Guilfoyle, 2014).
Such alternative understandings of “anorexia”\(^2\) based on digital logic, then provide opportunities for alternative approaches for psychotherapy, which, for each of these persons, will be meaningful and appropriate, given their specific circumstances. Thus, the analyses in this article provide the bases of how the lived experiences of persons present alternative understandings of what the meaning of “anorexia” is for each person, as well as appropriate, alternative approaches to psychotherapy for these persons.

### Current understandings of anorexia

#### Bases of current understandings

The DSM is intentionally and only targeted on the signs and symptoms of anorexia, and not on underlying causes. Anorexia nervosa is claimed to be based on statistical and clinical patterns of behavior and lifestyle attitudes. This lack of an explanatory or causative basis is symptomatic of a general absence of pathophysiological understandings of anorexia. This was confirmed by Spitzer and First (2005) who stated that:

> Little progress has been made toward understanding the pathophysiological processes and cause of mental disorders. If anything, the research has shown the situation is even more complex than initially imagined, and we believe not enough is known to structure the classification of psychiatric disorders according to etiology. (p.1898)

Specific causes of anorexia are still unknown (Mayo Clinic, 2020; Rikani et al., 2013). However, “whatever its original cause, it must currently be considered a … dysfunction in the individual” (DSM-IV, p. xxi), and classifications are “disorders that people have” (DSM IV, p. xxii) (italics added). Thus, in spite of any complexities in its presumed etiologies, the nature of anorexia

> “is understood by dominant discourses to be an internalised, psycho-medical … phenomenon, that is, a person is an anorexic, has anorexia, suffers from anorexia, and so on. In other words, a person is pathologised, and in some way personifies anorexic discourses” (Botha, 2015, p. 3; see, for example, Malson et al., 2004).

\(^2\) The form, anorexia nervosa or anorexia (both without inverted commas), is used when meaning a DSM diagnostic construct of a mental eating disorder from certain behaviors, whereas “anorexia” (in inverted commas) is used when referring to alternative meanings of these very patterns of behavior expressed by the voices of persons in relationship with “anorexia”, and indicates their personal experiences and meanings of the universal patterns of behavior, standing for their unique and specific “personal, social and ethical problems in living” – the differences in meaning of these terms being the very essence of this article.
As indicated, these modernist, structuralist understandings and diagnostic criteria for anorexia nervosa are presented in DSM-III to DSM-5. DSM-I and DSM-II had little in terms of which to classify them as scientific documents (Kutchins & Kirk, 1997), partially as a result of the omission of specifically reliable diagnostic criteria (Chmieleweski et al., 2015). However, DSM-III to DSM-5 are claimed to be based on the premises of the scientific medical model, in an attempt to solve the problems of earlier DSMs. They too have faced criticism in regard to their reliability.

Reliability of DSM-III to DSM-5 for anorexia diagnoses

A central claim for DSM-III was that scientifically based specific diagnostic criteria would profoundly improve the reliability of diagnosis. Although this claim of reliability has been disputed, it has been persisted with in subsequent DSMs. The DSM-5 field trials recorded details of lower levels of diagnostic reliability compared to any prior field trials and general research literature. This drew considerable adverse comments in regard to the reliability of DSM-5 diagnostic criteria (Chmielewski et al., 2015). In fact, before the DSM-5 was published, Sysko et al., (2012) stated that it is “important that research evaluating the revised eating disorders criteria continue after the release of the DSM-5 to assess the reliability and validity (Grilo & White, 2011; White & Grilo, 2011; Wolfe et al., 2009) of the new eating disorder criteria sets and diagnoses in addition to the clinical utility of the revised classification scheme” (p. 307).

Subsequent to the publication of DSM-5, Chmielewski, et al., (2015) undertook a study based on their hypothesis: “Rather than indicating specific problems with DSM-5, however, the field trials may have revealed long-standing diagnostic issues that have been hidden due to a reliance on audio/visual recordings for estimated reliability” (p. 764). The study by Chmielewski, et al., (2015) assessed the reliability of DSM-IV diagnoses by using both the standard audio-recording technique, and the test-retest technique used in the DSM-5 field trials. Their results established that there is an influence of the research method on estimates of diagnostic reliability for anorexia. This raises the question as to what influence any alternative, but similar, research methods could have on estimating the reliability of DSM diagnoses? An implication could be that there is a lack of any reliable indication revealing that any version of DSM has a higher level of reliability than any previous version. It must also be noted that each reliability study is influenced and affected by factors specific to each study, factors such as the training and supervision of interviewers, their skills and...
prior related experiences, their commitment to diagnostic accuracy, comparative environmental clinical settings and patient mix in each study (Kirk & Kutchins, 1994, p. 85). In addition, the specialised DSM research for reliability studies would have been undertaken in settings and circumstances that are likely to have differed compared to normal uncontrolled clinical surroundings and settings that prevail for clinical practice.

The nature of psychiatric signs and symptoms in DSM

Current clinical neuroscience is significantly informed by the use of structured interviews that are commonly entrenched in logical positivism and behaviorism. Noordgaard et al., (2013) have indicated that this approach has defined the alleged “operational revolution in psychiatry” which led to the establishment of DSM-III, and has been a foundational aspect of all later DSMs (Noordgaard et al., 2013). These authors claimed that “psychiatry targets the phenomena of consciousness, which, unlike somatic symptoms and signs, cannot be grasped on the analogy with material thing-like objects” (Noordgaard et al., 2013, p. 353). Based on clinical examples, they concluded that “fully structured interviews are neither theoretically adequate nor practically valid in obtaining psycho-diagnostic information” (Noordgaard et al., 2013, p. 353). The inference is that in order to adequately and reliably construct the nature of psychiatric symptoms and signs, a more appropriate method would be required, preferably one which could be established upon phenomenologically informed concerns.

It is in these contexts that aspects of both reliability (and validity) for anorexia will be further deconstructed by the exploration of specific applications of analogue and digital thinking processes.

Principles of analogue and digital thinking processes

As the differences between analogue and digital thinking processes are important in the explicatory ways for the contentions, suggestions and proposals of this article, these different processes need to be explained before applying them in the discussions which follow.

The differences between analogue and digital ways of thinking have led to significant means of making sense of lived experiences, and of the world. The difference is that analogue thinking processes are connected, and joined to the world that it represents, whilst digital thinking separates a representation from what it represents.
In analogue thinking, *intrinsic connections* are represented by *signs* (Leifer, 1997, p. 257). For instance, a racing fire-engine with sirens blaring is a sign of a fire somewhere. In addition, specific medical symptoms are *signs* of illnesses or diseases: for example, increased optic pressure is a sign of an eye disease called glaucoma. These examples indicate the intrinsic connections between *signs*, and what they indicate or point to - an object, event, thing, phrase, linguistic expression, concrete object, physical attribute - all being the “referent” for a sign. This fundamental insight will be incorporated in the next section that discusses analogue thinking process and anorexia.

Digital representations are *symbols*, and there is *no intrinsic connection* between a *symbol* and its *referent* (Leifer, 1997, p. 257). Leifer (1997) presents as a useful example of digital representations, the writing process in an eight-bit digital computer (2^8) that registers each letter of the alphabet in a combination of sequential binary on-off signals, where *on* is “+” and *off* is “-“. In this case, each letter of the alphabet registers a different set of binary signals using *on* and *off*, such as:

- A ++ — — — — — — — —  
- B + - — — — — — — — —  
- C -+ — — — — — — — —  

In this process there is *no intrinsic relationship* between “on-off” series and each letter of the alphabet. An eight-bit computer can form words and sentences using different strings of these binary digits.

In the digital thinking process, a *symbol* is termed as something that *stands for/represents* something else. *Symbols* are things - physical objects, sounds, behaviors, scripts, electric signals - which are interesting, not in themselves, but for what they represent/stand for. In this context, Leifer has stated that: “Digital thinking substitutes symbols for things themselves. Since there is no intrinsic connection between a symbol and its referent, *anything in the universe may be used as a symbol of anything else*” (Leifer, 1997, p. 258) (italics added).

These two significantly different thinking processes will now be applied in an exploration of understandings of the construction and meanings of anorexia.
Linking anorexia and DSM diagnostic criteria using analogue logic

In terms of the definition of a mental disorder, the naming of categories in the DSMs follows the traditional method and the fundamental approach used in all systems of medical diagnosis (DSM-IV, p. xxii). Thus, the philosophical logic of the scientific medical model incorporated in the DSMs is based on the process of analogue logic, or thinking processes, where intrinsic connections are represented by signs that point to or indicate a referent (Leifer, 1997, p. 257). In the case of anorexia nervosa, the various DSM diagnostic criteria (universal patterns of behavior and lifestyle attitudes towards food, weight and body shape and size), are assumed to be signs that point to the referent - the mental eating disorder called anorexia nervosa. This is a modernist or structuralist construct of anorexia nervosa, meaning that the referent is a psycho-medical, internalised experience - a person is pathologized and they have, or suffer from, anorexia.

It must be recalled that the binding assumption in the diagnostic construct of anorexia in the DSMs is that there is an intrinsic connection between the signs and the referent. Now, if this hypothesis were to be validated, then outcomes of modernist, structuralist based treatment interventions that are focused on food, weight, body image and shape, for persons exhibiting anorexic behavior, should be significantly successful.

Evidence of treatment outcomes

These analogue informed, structuralist understandings of anorexia have led to various treatment approaches that have underlying analogue informed, structuralist principles. These treatment approaches are directed at diverse “aspects of ‘anorexia’, including distorted thoughts regarding food and body image; dysfunctional behaviors such as restrictive eating, binging, and purging” (Botha, 2015, p. 3; Bodell & Keel, 2010). However, literature reports indicate that although psychotherapy is the treatment of choice for persons in relationship with anorexia, these analogue and structuralist informed psychotherapeutic interventions are only partly effective (Watson & Bulik, 2013), the evidence base for treatment is meagre, and any specific, effective form of psychotherapy is lacking (for example, Attia & Walsh, 2009; Bulik et al., 2007; Hay et al., 2009; Murray et al., 2019; Strober, 2010; Wallier et al., 2009; Watson & Bulik, 2013). This has led to unsatisfactory

---

3 In narrative therapy, the expression a person in relationship with “anorexia” reflects the use of (externalizing) conversations in which the problem (e.g., “anorexia”) becomes the problem, and not the person (see Morgan, 2000, pp. 17, 24). In other words, “anorexia” becomes an entity that is separate from a person (see Morgan, 2000, pp. 17, 24), and allows a person to be freed from being subject to, and dominated by “restricting ‘truths’ about their identity and negative ‘certainties’ about their lives” (White, 2007, p. 2).
recovery rates (Touyz et al., 2013) and consequent cases of enduring and severe anorexia, with the outlook for recovery diminishing with the duration of the problem (Robinson et al., 2015; Touyz et al., 2013).

Expectations versus research findings

This raises the question as to what could be the cause(s) of this important discrepancy between expectations of treatment outcomes for anorexia, compared to research findings, in the context of the analogue logic as applied to DSM diagnostic criteria for anorexia? The most obvious factor is that, in practical terms, there is no intrinsic connection between the signs and the referent, as assumed by the DSM constructs. In other words, the patterns of behavior and attitudes towards food, weight, body size and shape cannot be deemed to be signs of a mental eating disorder called anorexia nervosa. Or, presented in another way, it may be possible that the discrepancy could be because each person who exhibits universal anorexic patterns of behavior does so because of their own personal, unique, independent reasons. This setting was well stated by Megan who participated in a recent study (Rance et al., 2017) about anorexia treatment. She said that “eating disorders are not about food, they’re about life … [but] a lot of people want them to be about food” (Rance et al., 2017, p. 5).

It must be borne in mind that there are two primary parties that have a direct input to the “workings” of the analogue formulating process of anorexia nervosa - first, voting members of APA for the incorporation of the mental eating disorder, anorexia, in DSMs; and, second, those persons who exhibit universal patterns of “anorexic” behavior. The inference in DSMs is that the APA believes in, and relies upon an analogue process that is based on an intrinsic connection between the signs, and the referent (the mental eating disorder, anorexia). It is this inference that the APA has tested, using standard techniques, such as, the audio-recording, and the test-retest techniques, in field trials to determine the degree of reliability of DSM diagnostic criteria for anorexia.

Personal narratives establish alternative understandings of “anorexia”

Recent research in current neuroscience and cognitive science has indicated that the study of consciousness as well as self-experience has turned out to be a central concern (Damasio, 2010; Feinberg, 2009; Pollan, 2018). Noordgaard et al., (2013), and other
researchers (Gallagher & Zahavi, 2008; Thomson, 2007) have increasingly focused on the neural correlates of such phenomena as emotion, experiences of self-hood, consciousness, but also “in demonstrating the indispensability of the study of conscious life (understood as embodied and socially embedded) to the explanation of behavior in general” (Noordgaard et al., 2013, p. 362).

In the light of this current paradigm shift to the study of emotions, experiences of self-identity, consciousness, and conscious life, explanations of behavior, and aspects of personal narratives from those persons with lived experience with “anorexia” need to be explored so that understandings of “anorexia” can be “faithful to (mental or experiential) reality rather than an approach that implicitly distorts this reality in order to make it fit to its own prejudice” (Noordgaard et al., 2013, p. 362).

Other than mental health practitioners, the major participants in “real life clinical practice” are each of those persons who exhibit universal patterns of behavior which are deemed to be signs of anorexia. However, in direct contrast to the assumptions of APA members who approve the DSM diagnostic criteria as universal constructs of a mental eating disorder (anorexia), could it be that each person would have their own, specific, unique narratives and personal reasons or causes for exhibiting universal patterns of “anorexic” behavior and lifestyle attitudes?

An important factor in this regard is the onset age of anorexia. The APA has indicated that this is usually in mid to late adolescence, or even in young adulthood (APA, 2013, p. 341). In addition, research has endorsed this situation (e.g., Morris & Twaddle, 2007). Strober (2010) has stated that for a person of this age who may be in a relationship with anorexia:

Onset of puberty is a foreboding signal. This time brings distressingly rapid changes in physicality and the rules of social and cognitive discourse which arouse intense feelings of threat and the anticipation of future challenges perceived as insurmountable. Thus, arriving at this crucial point, when innate social processes normally activate a wide range of appetitive drives, the adolescent experience is anticipated with dread, success in getting through it unscathed too wildly implausible to concede. (p. 227)
In addition, Strober (2010) has indicated that the developmental imperatives referred to above:

arrive with a suddenness that makes for the unkindest of insults: a social world advancing too rapidly toward greater, more bewildering complexity; a life too unruly for her sensibilities, making demands for flexibility and tolerance that are beyond her reach; and a body sensing strange and compelling new energies, changing in shape unexpectedly. (p. 229)

It is generally accepted that a combination of multiple and diverse factors are involved in any case of anorexia, and that these come together in ways that are unique to each person (Halse et al., 2008). These factors can be placed in two broad groups. The first group consists of individual factors which include a person’s biological and psychological composition. The second group relates to individual experiences, environments, and sociocultural contexts (Halse et al., 2008). Halse et al., (2008) presented stories from a group of 8 teenage girls who were diagnosed with anorexia, stories that are becoming “increasingly recognized in clinical and professional health practices - that the unique experiences and circumstances of individuals are the starting point for any discussion of anorexia amongst teenage girls and their families” (p. 13).

In addition to these emerging factors that are influential forces directing the focus of causes of anorexia to the individual, in personal accounts of lived experiences in qualitative research studies, the voices of those persons exhibiting patterns of “anorexic” behavior tell significant narratives that are obviously not considered by the producers of DSMs (APA) (for example, Krug et al., 2013; Marzola et al., 2015; Nordbo et al., 2006; Racine & Wilde, 2013; Rance et al., 2017; Schmidt & Treasure, 2006; Tierney & Fox, 2010; Wildes et al., 2010; Williams et al., 2016; Williams & Reid, 2010, 2012).

Patterns of behavior of coping mechanisms - reports from lived experiences

The indications now are that the focus needs to shift to the multiple voices of those persons who have lived experiences of “anorexia”. This transferral to the narratives of these persons means that this source of knowledge is essentially founded on an empirical process. It is in this regard, that American psychiatrist Ron Leifer has stated that: “Genuine knowledge is empirical. It is based upon experience, observation and reflection, not the words of others, regardless of their credentials” (Leifer, 2008, p. 91).
This move to hearing and acknowledging voices of persons in relationship with “anorexia” has been presented in qualitative-oriented studies which have examined the narratives of the lived experiences of these persons. These are narratives that have constructed alternative understandings of “anorexia” (Krug et al., 2013; Marzola et al., 2015; Racine & Wildes, 2013; Rance et al., 2017; Tierney & Fox, 2010; Wildes et al., 2010; Williams & Reid, 2010). In this context, it has been reported that negative, dominant, personal, discourses have adversely influenced the lives and living experiences of persons (MacNeil et al., 2012; Morris & Twaddle, 2007; Wagener & Much, 2010). In addition, persons have reported that their lived experiences with their relationship with “anorexia” have shown that “anorexic” behavior, feelings and thoughts, were coping mechanisms, or forms of resistance (e.g., Faija et al., 2017; Morris & Twaddle, 2007; Williams & Reid, 2012; Wagener & Much, 2010). These coping mechanisms provide ways of protection, defence, safety and resistance against stress, future challenges and anxieties, conflicts, unexpected and undesirable changes in the lives of those persons (Botha, 2014, 2019; e.g., MacNeil et al., 2012; Marzola et al., 2015; Schmidt & Treasure, 2006; Wagener & Much, 2010). The participants in the study by Williams & Reid (2012) indicated that anorexia “was their only way of coping because they had not learned other coping strategies; thus, they depended on their disorder and felt that they ‘needed’ it” as “their disorder enabled them to ‘survive’ their unpleasant experiences” (p. 804). These research studies have thus indicated that persons in relationship with “anorexia” have revealed that their universal patterns of behavior and lifestyle attitudes regarding food, weight, body size and shape, all of which are thought to be diagnostic criteria for a mental eating disorder called anorexia, function as coping mechanisms so as to resist the forces of specific, undesirable, unique, personal and dominant negative discourses in their lives. In other words, the negative discourses cause emotional pain, distress, anxiety and suffering, resulting in these persons having a desire to avoid the suffering caused, and consequently a person embraces “anorexic” behaviors in order to find a preferable way of living compared to the stress, pain and suffering from the negative discourses in their lives (e. g., Botha, 2019; Halse et al., 2008; MacNeil et al., 2012; Marzola et al., 2015; Shelley, 1997; Wagener & Much, 2010).

The words of Botha (2019), although formulated for “anorexic adolescents”, apply equally to persons of all ages in relationship with “anorexia”. He stated that when faced with persistently threatening, challenging, and anxiety provoking circumstances in life:
expressions of rebelliousness, control, obsession and evasion - so predominant in anorexic attitudes and behaviors - can provide supports of meaning and positions of safety and security, defending young people against threats and attacks of uncertainty and distress, and help them resist non-preferred identity changes and patterns of life that are demanded by forces of social discourses. (Botha, 2019, p. 8)

**Digital logic for determining alternative meanings of universal patterns of behavior and lifestyles**

As indicated above, when applying analogue logic, or an analogue thinking process, the absence of acceptable levels of psychotherapeutic outcomes from application of DSM influenced, structuralist informed approaches for persons in relationship with anorexia, indicates that there are no intrinsic connections between the signs and the referent, as assumed by the diagnostic constructs of DSMs for a mental eating disorder called anorexia. This could indicate that the patterns of behavior and attitudes towards food, weight, body size and shape could have alternative meanings based on personal, unique, specific and independent experiences of persons exhibiting such behaviors. In order to examine this hypothesis further, an application of digital logic to the “diagnostic” equation for anorexia would be appropriate. A brief recall of the essence of digital logic is that: “Digital thinking substitutes symbols for things themselves. Since there is no intrinsic connection between a symbol and its referent, anything in the universe may be used as a symbol of anything else” (Leifer, 1997, p. 258) (italics added).

In an application of the “diagnostic” equation, the universal patterns of behavior and attitudes towards food, weight, and body shape and size will be retained in the analysis for alternative meanings based on digital logic. Then, in the case of each person, applying digital logic, their universal patterns of behavior would be the symbols - the “anything” that stands for/represents what the referent is for them - the “anything else”. This means that in each individual case, universal symbols (that is, the patterns of “anorexic” behavior and lifestyles) indicate an “anything else” (Leifer, 1997, p. 258) for each person. However, in these circumstances then, for each person, this “anything else”, understandably is not a mental eating disorder called anorexia nervosa.


An archetype\(^4\) - an alternative interpretation of “anorexic” patterns of behavior, and implications for therapy

Thus, for persons in relationship with “anorexia”, the “anything” in the digital thinking process, is the universal range of patterns of behavior and attitudes to life that are exhibited by them in various permutations, in response to the “anything else” in each of their lives. The universal patterns of behavior can be seen to be the typical examples of behavior of a person faced with the powers and forces of unwanted, specific, negative discourses in their life, which are the causes of the coping or resistant patterns of behavior, deemed to be signs of anorexia. Or, as paradoxically stated in DSM-IV in regard to anorexia nervosa (307.1): “The onset of this illness is often associated with a stressful life event, such as leaving home for college” (p. 543).

In this sense, the universal patterns of behavior could be seen to be forms of an archetypal behavior (not a Jungian archetype), that, in each case, is an example of specific behavior patterns in circumstances that are “typical, stereotypical and universal. The ability of a newborn child to suckle is archetypal, as are smiling, frowning, crying, all those recurring qualities, behaviors and gestures that make us human” (Pascal, 1992, p. 79).

For each person, these archetypal images - the “anything” - are produced and fashioned in response and as resistances to the power and forces of personal, unique, anxiety-provoking, unwanted and challenging dominant social discourses in their lives - that is, by and against the “anything else” in the digital logic process for each person. This process then results in the Leifer (1997) statement reading as follows: archetypal images are symbols that stand for or represent “anything else” (being the referent for each person). In these circumstances, and for each person, Leifer’s digital statement creates meanings, such as:

| Symbols (Anything) | stand for | Referent (Anything Else) |
|-------------------|-----------|-------------------------|
| Archetypal images and ideas | Leaving home for college, and recent death of mother |

\(^4\) For the purposes of this article, a definition from Mirriam-Webster online dictionary of an archetype is authoritative: the original pattern or model of which all things of the same type are representations or copies (Retrieved February, 2020 from https://www.merriam-webster.com/dictionary/archetype). The use of the concept of an archetype for encapsulating an alternative understanding of the universal range of patterns of behavior and attitudes to life exhibited by persons who are presumed to “suffer from” “anorexia”, must not be confused with meanings of the notion of structuralism which applies to a person who has fixed, essentialist and indispensable characteristics.
In the three examples above, for each person the causes of the coping behaviors, as archetypal images, are the stated referents, and are unique for each person. Thus, in these circumstances, the digital thinking processes will be valid as the symbols stand for, or represent specifics for each person. In each case, both the anything and the anything else in Leifer’s statement are functions of the person’s “ethical problems in living” (Szasz, 2010) - they are not influenced by, nor are they a function of assumptions of the APA in regard to diagnostic criteria for a mental eating disorder. Paradoxically, in these circumstances which are described for digital logic in order to analyse person’s “anorexic” behavior, it can also be claimed that analogue logic will become effective, in that signs for each person indicate or point to the specific referents in each case.

From a practical viewpoint, the implications of these circumstances in regard to the digital understandings of “anorexia”, can be incorporated in the treatment philosophy expressed by Szasz (2010) who stated that “psychiatrists are not concerned with mental illnesses and their treatment. In actual practice they deal with personal, social, and ethical problems in living” (p. 262).

Related alternative approaches to psychotherapy

The situations examined in this article do not only indicate ways to determine alternative understandings and meanings of the nature of “anorexia”, but the analyses also present an opportunity to identify alternative, meaningful and appropriate approaches to psychotherapy for persons in relationship with “anorexia”.

Kronbichler (2004, p.58) set out a comparison of structural perspectives, and post-structuralist ideas and ways of working with persons in relationship with “anorexia”. These comparisons are set out in Table 1.
Table 1.
Comparison of structuralist versus post-structuralist perspectives in the treatment of anorexia nervosa

| Structuralist perspective | Post-structuralist perspective |
|---------------------------|--------------------------------|
| Anorexic behavior is surface manifestation of problems in the depth structure of the person | Anorexia nervosa is located in the interrelationship between social and cultural practices and subjectivity |
| Explanations of anorexia nervosa are to be found in the psyche and/or the family dynamics | Exploration of the forces that stand with anorexia nervosa and those that stand with a life free from anorexia nervosa |
| Main focus on weight gain | Focus on the effects of anorexia nervosa in different dimensions of life |
| Orientation along normative rules concerning eating patterns, relationships (and adolescent development) | Orientation alongside the persons’ hopes, dreams, visions, purposes, etc |
| Centered position of the therapist as expert | Decentered position of the therapist as co-researcher |

For persons in relationship with anorexia, in their specific circumstances, the use of a post-structuralist therapeutic approach, namely narrative therapy, has provided an orientation that concentrates on the specific needs and problems of each person who exhibits such archetypal images and patterns of behavior (Botha, 2015, 2019; Epston, 2020; Epston & Maisel, 2009; Ingamells, 2016a, 2016b; Kronbichler, 2004; Lock et al., 2004; Madigan & Goldner, 1998; Maisel et al., 2004; Vromans & Schweitzer, 2011; Weber et al., 2006; White, 2011). For instance, a recent article (Botha, 2019) explained an innovative and amended form of narrative therapy that addressed these circumstances. This article draws on notions of negative and positive resistances in exploring alternative understandings of ‘anorexia’, in a narrative therapy based approach for ‘anorexic’ adolescents. In doing so, it posits ‘anorexic’ lifestyles as forms of coping mechanisms against dominant social discourses. Narrative treatment is to facilitate a movement away from subjection of dominant social discourses, and should enable intentional movements towards ethical subjectivities. This means that adolescents should then find no need to embrace ‘coping’ mechanisms that lead to lifestyles of ‘anorexia’, and treatment can shift away from food, weight, and body image, to dealing with ‘problems in living’. (p. 181).

The article (Botha, 2019) explained further that a post-structuralist, narrative approach to therapy for persons in relationship with “anorexia”, would afford opportunities for narrative conversations that focus on the person’s values, principles for living, and preferred identities (White & Epston, 1990), in order to co-author, with the therapist, an acceptable outcome that “would be the identification or generation of alternative stories that enable them to...
perform new meanings, bringing with them desired possibilities - new meanings that persons will experience as more helpful, satisfying, and open-ended” (White & Epston, 1990, p. 15).

Concluding comments

The application of the principles of analogue and digital logic are further indications that reliability of the diagnostic criteria in the DSM’s for the mental eating disorder called anorexia, does not exist. This article has explained that the eating behavior patterns, and attitudes towards food, body weight and shape, do not indicate/point to, nor stand for/represent a mental eating disorder. These behavior patterns and lifestyles are essentially coping mechanisms used to provide supports of meaning, identity constructs, conditions of safety and security when persons are faced with challenges, demands, conflicts created by specific, unwanted, and negative dominant discourses in their lives. Then, each person would have their own, personal, unique, independent reasons for embracing universal patterns of behavior which are deemed to be expressions of/criteria for an eating disorder.

For these persons, it is argued that treatment approaches should focus on those personal, negative and dominant discourses that are the reasons that create the needs for coping mechanisms. Therapeutic requirements for these persons in their circumstances, are clearly provided by a narrative approach, specifically an innovative form that is centred on the use of negative and positive resistances (Botha, 2019).

Funding/Financial Support
The author has no funding to report

Other Support/Acknowledgement
The author has no support to report.

Competing Interests
The author has declared that no competing interests exist.
References

American Psychiatric Association (APA). (1980, 1987, 1994, 2000, 2013). Diagnostic and Statistical Manual of Mental Disorders (III to 6th Eds.). Author.

Attia, E., & Walsh, B. T. (2009). Behavioral management for anorexia nervosa. The New England Journal of Medicine, 360, 500-506.

Bodell, L. P., & Keel, P. K. (2010). Current treatment for anorexia nervosa: Efficacy, safety, and adherence. Psychology Research and Behavior Management, 3, 91-108.

Botha, D. (2014). Developmental interactions and interdependencies: Adolescence, masculinity, and anorexia nervosa. International Journal of Men’s Health, 13(3), 156-171.

Botha, D. (2015). Anorexia nervosa: A fresh perspective. Theory and Psychology, 25, 328-345.

Botha, D. (2019). ‘Anorexic adolescents’: Negative and positive resistances in narrative therapy. Journal of Constructivist Psychology, 32(2), 181-198.

Bulik, C. M., Berkman, N. D., Brownley, K. A., Sedway, J., & Lohr, K. N. (2007). Anorexia nervosa treatment: A systematic review of randomised controlled trials. International Journal of Eating Disorders, 40(1), 310-320.

Chmielewski, M., Clark, L. A., Bagby, R. M., & Watson, D. (2015). Method matters: Understanding diagnostic reliability in DSM-IV and DSM-5. Journal of Abnormal Psychology, 124(3), 764-769.

Damasio, A. (2010). Self comes to mind: constructing the conscious brain. Pantheon.

Epston, D. (2020). Archive of resistance: Anti-anorexia/anti-bulimia. Retrieved January, 2020, from https://www.narrativeapproaches.com/resources/anorexia-bulimia-archives-of-resistance

Epston, D., & Maisel, R. (2009). Anti-anorexia/bulimia: A polemics of life and death. In H. Malson & M. Burns (Eds.), Critical feminist approaches to eating dis/orders (pp. 209-220). Routledge.

Faija, C. L., Tierney, S., Gooding, P. A., Peters, S., & Fox, J. R. E. (2017). The role of pride in women with anorexia nervosa: A grounded theory study. Psychology and Psychotherapy: Theory, Research and Practice, 90(4), 567-585.

Feinberg, T. (2009). From axons to identity: neurological explorations of the nature of the self. Norton.
Foucault, M. (1997). On the genealogy of ethics: An overview of work in progress. In P. Rabinow (Ed.), *Michael Foucault: Ethics: Subjectivity and truth, Vol. 1* (pp. 253-280). New Press.

Foucault, M. (1997a). The ethics of concern for self as a practice of freedom. In P. Rabinow (Ed.), *Michael Foucault: Ethics: Subjectivity and truth, Vol. 1* (pp. 281-302). New Press.

Gallagher, S., & Zahavi, D. (2008). *The phenomenological mind: an introduction to philosophy of mind and cognitive science*. Routledge.

Grilo, C. M., & White, M. A. (2011). A controlled evaluation of the distress criterion for binge eating disorder. *Journal of Consulting and Clinical Psychology, 79*, 509-514.

Guilfoyle, M. (2014). *The person in narrative therapy: A post-structural, Foucauldian account*. Palgrave Macmillan.

Hay, P. P. J., Bacaltchuk, J., Byrnes, R. T., Claudino, A. M., Ekmejian, A. A., & Yong, P. Y. (2009). Individual psychotherapy in the outpatient treatment of adults with anorexia nervosa. Cochrane Database Syst. Rev. https://doi.org/10.1002/14651858.CD003909

Halse, C., Honey, A., & Boughtwood, D. (2008). *Inside anorexia: The experiences of girls and their families*. Jessica Kingsley.

Ingamells, K. M. (2016a). Wilbur the worrier becomes Wilbur the warrior. A teaching story for narrative family therapists. *Journal of Systemic Therapies, 35*(4), 43-57.

Ingamells, K. M. (2016b). Learning How to Counter-Story in Narrative Therapy (With David Epston and Wilbur the Warrior). *Journal of Systemic Therapies, 35*(4), 58-71. https://doi.org/10.1521/jsyt.2016.35.4.58

Kirk, S. A. & Kutchins, H. (1994). The Myth of the Reliability of DSM. *Journal of Mind and Behavior, 15*(1&2), 71-86.

Kronbichler, R. (2004). Narrative therapy with boys struggling with anorexia. *The International Journal of Narrative Therapy and Community Work, 4*, 55-70.

Krug, I., Penelo, E., Fernandez-Aranda., F., Anderluh, M., Bellodi, L., Cellini, E., di Bernardo, M., Granero, R., Karwautz, A., Nacmias, B., Ricca, V., Sorbi, S., Tchanturia, K., Wagner, G., Collier, D., & Treasure, J. (2013). Low social interactions in eating disorder patients in childhood and adulthood: A multi-centre European case control study. *Journal of Health Psychology, 18*, 26-37.
Kutchins, H., & Kirk, S.A. (1997). Making us crazy: DSM - the psychiatric bible and the creation of mental disorders. Free Press.

Leifer, R. (1997). The Happiness Project: Transforming the three poisons that cause the suffering we inflict on ourselves and others. Snow Lion.

Leifer, R. (2008). Vinegar into Honey. Penguin Random House.

Lock, A., Epston, D. & Maisel, R. (2004). Countering that which is called anorexia. Narrative Inquiry, 14(2), 275-301.

MacNeil, L., Esposito-Smythers, C., Mehlenbeck, R., & Weismoore, J. (2012). The effects of avoidance coping and coping self-efficacy on eating disorder attitudes and behaviors: A stress-diathesis model. Eating Behaviors, 4, 293-296.

Madigan, S., & Goldner, E. (1998). A narrative approach to anorexia: Discourse, reflexivity, and questions. In M. F. Hoyt (Ed.), The handbook of constructive therapies (pp. 380-400). Jossey-Bass.

Maisel, R., Epston, D., & Borden, A. (2004). Biting the hand that starves you: Inspiring resistance to anorexia/bulimia. Norton.

Malson, H., Finn, D. M., Treasure, J., Clarke, S., & Anderson, G. (2004). Constructing ‘The eating disordered patient’: A discourse analysis of accounts of treatment experiences. Journal of Community and Applied Social Psychology, 14(6), 473-489. https://doi.org/10.1002/casp.804

Marzola, E., Abbate-Daga, G., Gramaglia, C., Amianto, F., & Fassino, S. (2015). A qualitative investigation into anorexia nervosa: The inner perspective. Cogent Psychology, 2, 1-10.

Mayo Clinic, (2020). Anorexia nervosa: Symptoms and causes. Retrieved January, 2020 from https://www.mayoclinic.org/diseases-conditions/anorexia/symptoms-causes/dxc-20179513

Morgan, A. (2000). What is narrative therapy? An easy-to-read introduction. Dulwich Centre Publications.

Morris, J., & Twaddle, S. (2007). Anorexia nervosa. British Medical Journal, 334, 894-898. https://doi.org/10.1136/bmj.39171.616840.BE
Murray, S. B., Quintana, D. S., Loeb, K. L., Griffiths, S., & Le Grange, D. (2019). Treatment outcomes for anorexia nervosa: a systematic review and meta-analysis of randomized controlled trials. *Psychological Medicine, 49*(4), 535-544. https://doi.org/10.1017/S0033291718002088

Nordbo, R. H., Espeset, E. M., Gulliksen, K. S., Skarderud, F., & Holte, A. (2006). The meaning of self-starvation: Qualitative study of patients’ perceptions of anorexia nervosa. *International Journal of Eating Orders, 39*, 556-564.

Nordgaard, J., Sass, L. A., & Parnas, J. (2013). The psychiatric interview: validity, structure, and subjectivity. *European Archives of Psychiatry and Clinical Neuroscience, 263*(4), 353-364.

Pollan, M. (2018). *How to change your mind: The new science of psychedelics*. Penguin.

Pascal, E. (1992). *Jung to live by: A guide to the application of Jungian principles for everyday life*. Warner Books.

Racine, S. E. & Wildes, J. E. (2013). Emotion dysregulation and symptoms of anorexia nervosa: The unique roles of lack of emotional awareness and impulse control difficulties when upset. *International Journal of Eating Orders, 46*, 713-720.

Rance, N., Moller, N., & Clarke, V. (2017). Eating disorders are not about food, they’re about life: Client perspectives on anorexia nervosa treatment. *Journal of Health Psychology, 22*(5), 582-594. https://doi.org/10.1177/1359105315609088

Rikani, A. A., Choudhry, Z., Choudhry, A. M., Ikram, H., Asghar, M. W., Kajal, D., Waheed, A., & Mobassarah, N. J. (2013). A critique of the literature on etiology of eating disorders. *Annals of Neurosciences, 20*, 157-161.

Robinson, P., Kukucska, R., Guidetti, G., & Leavey, G. (2015). Severe and Enduring Anorexia Nervosa (SEED-AN): A Qualitative Study of Patients with 20+ Years of Anorexia Nervosa. *European Eating Disorders Review, 23*(4), 318-326.

Schmidt, U., & Treasure, J. (2006). Anorexia nervosa: Valued and visible. A cognitive-interpersonal maintenance model and its implications for research and practice. *International Journal of Psychology, 45*(3), 343-366.

Shelley, R. (1997). *Anorexics on Anorexia*. Jessica Kingsley.

Spitzer R. L. & First, M B. (2005). Classification of psychiatric disorders. *JAMA, 294*(15), 1898-9. https://doi.org/10.1001/jama.294.15.1898
Strober, M. (2010). The chronically ill patient with anorexia nervosa: development, phenomenology and therapeutic considerations. In C. M. Grilo & J. E. Mitchell (Eds.), The treatment of eating disorders: A clinical handbook (pp. 225-237). Guilford.

Sysko, R., Roberto, C. A., Barnes, R. D., Grilo, C. M., Attia, E., & Walsh, B. T. (2012). Test-retest reliability of the proposed DSM-5 eating disorder diagnostic criteria, Psychiatry Research, 196(2-3), 302-308.

Szasz, T. S. (2010). The myth of mental illness. Harper Perennial. (Original work published 1974).

Tierney, S., & Fox, J. R. (2010). Living with the anorexic voice: A thematic analysis. Psychology and Psychotherapy: Theory, Research and Practice, 83, 243-254.

Thomson, E. (2007). Biology, phenomenology, and the sciences of mind. Harvard University.

Touyz, S., Le Grange, D., Lacey, H., Hay, P., Smith, R., Maguire, S., Bamford, B., Pike, K. M., & Crosby, R. D. (2013). Treating severe and enduring anorexia nervosa: a randomized controlled trial. Psychological Medicine, 43(12), 2501-2511.

Vromans, L., & Schweitzer, R. (2011). Narrative therapy for adults with a major depressive disorder: Improved symptom and interpersonal outcomes. Psychotherapy Research, 21, 4-15.

Wagener, A. M. & Much, K. (2010). Eating disorders as coping mechanisms. Journal of College Student Psychotherapy, 24(3), 203-212.

Wallier, J., Vibert, S., & Berthoz, S. (2009). Dropout from inpatient treatment for anorexia nervosa. International Journal of Eating Disorders, 42, 636-647. https://doi.org/10.1002/eat.20609

Watson, H. J., & Bulik, C. M. (2013). Update on the treatment of anorexia nervosa: review of clinical trials, practice guidelines and emerging interventions. Psychological Medicine, 43, 2477-2500.

Weber, M., Davis, K., & McPhie, L. (2006). Narrative therapy, eating disorders and groups: Enhancing outcomes in rural NSW. Australian Social Work, 59(4), 391-405. https://doi.org/10.1080/03124070600985970

White, M. (2007). Maps of narrative practice. Norton.

White, M. (2011). On Anorexia. In D. Denborough (Ed.), Narrative practice: Continuing the conversations (pp. 87-97). Norton.

White, M. & Epston, D. (1990). Narrative means to therapeutic ends. Norton.
White, M. A., & Grilo, C. M. (2011). Diagnostic efficiency of DSM-IV indicators for binge eating episodes. *Journal of Consulting and Clinical Psychology, 79*, 75-83. https://doi.org/10.1037/a0022210

Wildes, J. E., Ringham, R. M., & Marcus, M. D. (2010). Emotion avoidance in patients with anorexia nervosa: Initial test of a functional model. *International Journal of Eating Disorders, 43*, 398-404.

Williams, K., King, J., & Fox, J. R. E. (2016). Sense of self and anorexia nervosa: A grounded theory. *Psychology and Psychotherapy: Theory, Research and Practice, 89*(2), 211-228.

Williams, S., & Reid, M. (2010). Understanding the experience of ambivalence in anorexia nervosa: the maintainer’s perspective. *Psychology and Health, 25*(5), 551-567.

Williams, S., & Reid, M. (2012). "It’s like there are two people in my head": A phenomenological exploration of anorexia nervosa and its relationship to the self. *Psychology and Health, 27*(7), 798-815.

Wolfe, B. E., Baker, C. W., Smith, A. T., Kelly-Weeder, S. (2009). Validity and utility of the current definition of binge eating. *International Journal of Eating Disorders, 42*, 674-686.

**About the author**

**Derek Botha** is trained as a psychotherapist in Australia, and is currently a practicing narrative therapist. He is also a Research Associate in the Department of Psychology, Rhodes University, Grahamstown, South Africa. He publishes in the field of mental health, and his research interests revolve around aspects of anorexia nervosa.

**Corresponding Author’s Contact Address**

derek.botha@telkomsa.net