Review

**Out of Flatland: The Role of the Notion of a Worldview in the Science of Well-being**

Danilo Garcia* and Patricia Rosenberg**

**ABSTRACT**

This paper discusses the suggestion of the notion of a worldview as part of the Science of Well-Being. We present, at first, an allegoric comparison as to why the view of a ternary unity of being (i.e. a coherence of the three parts of the being, body, mind, and psyche to maximize well-being) is difficult to grasp. We also discuss that humans do have unique experiences and memories, but that we are also connected to both all living things and to our environment. Finally, we point to a ternary model of personality to increase our understanding of a person’s well-being: Temperament, character, and identity.

**Key Words:** Character; Interpreter module; Narrative self; Science of well-being; Temperament; Unity of being; Worldviews

**Peer reviewer for this paper:** Anon

*CPhD, Director, Blekinge Center of Competence, Research, Development, and Innovation for Better Health in Blekinge, Blekinge County Council, Karlskrona, Sweden, Associate Professor, Department of Psychology, University of Gothenburg, Gothenburg, Sweden. Researcher, Institute of Neuroscience and Physiology, Sahlgrenska Academy, Gothenburg, Sweden. Head Researcher and Founder, Network for Empowerment and Well-Being, Sweden. Researcher, Department of Psychology, Lund University, Lund, Sweden

**MSc, Researcher, Network for Empowerment and Well-Being, Sweden. Project Coordinator and Well-Being Coach, Blekinge Center of Competence, Research, Development, and Innovation for Better Health in Blekinge, Blekinge County Council, Karlskrona, Sweden

Address for correspondence to: Dr. D. Garcia, Network for Empowerment and Well-Being, Axel W. Anderssons Väg 8A, SE 371 62 Lyckeby, Sweden. E-mail: danilo.garcia@icloud.com

Received 3 Mar 2015. Revised 13 Jan 2016. Accepted 26 Feb 2016.

**CITATION:** Garcia D, Rosenberg P. Out of Flatland: The Role of the Notion of a Worldview in the Science of Well-being. Mens Sana Monogr 2016;14:133-40.

**Access this article online**

| Quick Response Code: | Website: | DOI: |
|----------------------|----------|------|
| ![QR Code](image.png) | www.msmonographs.org | 10.4103/0973-1229.193082 |
Introduction

“I am not a plane Figure, but a Solid. You can call me a Circle; but in reality I am not a Circle, but an infinite number of Circles, of size varying from a Point to a Circle of 13 inches in diameter, one placed on the top of the other. When I cut through your plane as I am now doing, I make in your plane a section which you, very rightly, call a Circle.”

— A Sphere talking to A Square in Flatland by E. A. Abbott (1884[1]).

In a recent article, Nilsson (2014[23]) suggests that the notion of a worldview needs to be included in Cloninger’s Science of Well-Being (e.g., Cloninger 2004[3], Cloninger 2006[4], Cloninger 2007[5], and Cloninger 2013[7]). According to Nilsson (2014, pp. 1[23]), the worldview is “the person’s most basic beliefs, values, constructs, and scripts for understanding, evaluating, and acting upon reality, which ground the network within which more specific beliefs, goals, intentions, etc., are embedded.” (Koltko-Rivera, 2004[20]). Cloninger’s Science of Well-Being focuses on self-awareness of the unity of being through sustainable personality development in three dimensions (i.e. the self, others, and the universe or the world as a whole, for example, nature). In Cloninger’s paradigm, unity of being represents a complete, coherent, and harmonious sense of the self in these three dimensions, in turn, giving raise to feelings of hope in one self’s ability to cope and make decisions (i.e. self-directedness), feelings of love toward others (i.e. cooperativeness), and feelings of faith in that we are a part of something beyond the self and others (i.e. self-transcendence). Nilsson first argues that the notion of unity of being is a presupposition rather than an empirical fact because Cloninger sees it as intuitive (Cloninger, 2004[3]) and that others suggest that its critics lack self-awareness (for a review see Cloninger, 2004[3]). Although Cloninger further develops the notion of unity of being and his view on scientific paradigms in several of his works (e.g., Cloninger 2004[3], Cloninger 2013[8], and Cloninger 2013[9]), we wanted to put this discussion in the context of the analogy that follows.

Consider the quote from the book Flatland by E. A. Abbott (1884[1]) at the beginning of this article. The sphere called “A Sphere” who is from Spaceland, a three-dimensional world, visits the square called “A Square” who lives in Flatland, a two-dimensional world. “A Sphere’s” appearance in Flatland is that of a circle that can change its diameter at will. “A Sphere” visits Flatland to introduce a new geometrical two-dimensional figure to the idea of a third dimension in the hopes of eventually educating the population of Flatland. To convince “A Square” of a third dimension, “A Sphere” needs to pull “A Square” out of Flatland into the experience of Spaceland. We suggest this analogy embodies what Cloninger is explaining (2004[3])— to grasp the notion of unity of being, we need to actually simultaneously experience the three dimensions...
by ourselves (cf. Haidt, 2006[16]). One of the things that might prevent us humans from accepting or achieving unity of being might be the mere notion Nilsson refers to as our worldviews. The subjective reality imbedded in our worldview is a distorted reality experienced through our senses and the context we live in. This is also similar to the reality of the prisoners in Plato’s Cave who since childhood gaze at shadows in the wall in front of them. In the case of “A Square,” its worldview is based on a two-dimensional plane and therefore he is unable to understand and experience the dimension of elevation (Haidt, 2006[16]). Again, the Flatland analogy only puts the axiom of the unity of being in perspective and we only give a brief simplified account of it; readers should seek more information in the works cited here. Nevertheless, related to our reasoning here, research suggests that witnessing acts of self-transcendence, that is, what Cloninger proposes as the third dimension of human personality, actually causes calmness and the desire to become a better person (i.e. moral elevation; Haidt, 2006[16]). Hence, experience might facilitate the understanding of a ternary structure of personality.

Moreover, as noted by Nilsson, there has been an increase in studies on meaning-making in the form of life narratives (McAdams, 2008[21]), an interpreter module (Gazzaniga, 2008[14]; Haidt, 2006[16]; and Kahneman, 2011[19]), and worldviews (Koltko-Rivera, 2004[20]). We agree in that these studies are not commonly unified in personality psychology and to an even lesser degree in well-being research (for some exceptions see McAdams, 2008[21]; Pennebaker, 2011[24]; and Garcia et al., 2015[13]). This is highly important because the words we use are not only a mirror of our thoughts and feelings but also the tools that can be used to guide behaviour (Pennebaker, 2011[24]). However, Nilsson’s observation is only partially complete. We suggest that a unified theory of personality operationalized as temperament-character-narrative presents a more complete approach. Cloninger (2007[5]) has for instance pointed out that the temperament-character-narrative dimensions have evolved through three major systems of learning and memory in a long series of steps through evolution. The first system is the procedural, which regulates different emotional responses such as fear, disgust, ambition, and anger (i.e. Cloninger’s temperament dimensions). According to Cloninger, the evolution of the second and third system allowed humans to develop character or “the reflection of personal goals and values” (2004, p. 45[3]). Specifically, the second system, the propositional system, is present in primates and helps the individual to be self-directed and cooperative in a social environment. The third system, the episodic system, exists only among humans and stands for humans’ capacity for self-awareness, which allows introspection and recollection of autobiographical memories (Cloninger, 2007[5]).

Nilsson further proposes that a person might experience ill- or well-being depending on her/his worldview. The question is, we argue, whether subjective worldviews actually guide us toward lasting well-being, and if they promote
adaptation and survival in harmony with the world around us (cf. Cloninger, 2013[7]). For instance, it is true that intelligence and money are important for our subjective well-being only if excelling in academic achievement and status, respectively, are the part of our worldview (Myers and Diener, 1995[22]). Nilsson, however, forgets that worldviews might be shared as well and that certain behaviours bring well-being to most human beings. For example, prosocial attitudes (i.e. cooperation) increase individuals’ well-being across different cultures (e.g., Aknin et al., 2013[2]). In other words, promoting helpful behaviour seems to lead to well-being independent of subjective worldviews. In contrast, certain things are important for our well-being only depending of our own unique worldview. Although Nilsson’s proposition might be a step forward for personality research, it actually diminishes the Science of Well-Being to the individuals’ subjective experience of reality, probably leading to a “separation of being” (cf. Cohen et al., 2000[11]). For instance, as suggested by Hart et al. (2005[17]), people have a desire to uphold a meaningful picture of reality, which is probably motivated by existential insecurity. When threatened, individuals’ try to protect their cherished worldviews by, for example, enhancing the value of in-group members and devaluing the value of out-group members (Greenberg et al., 1990[15]). That is, separation rather than unity with others who do not resemble ourselves or are not regarded as equal to us.

Furthermore, Nilsson also suggests “neither worldview nor the development of character and well-being is a one-size-fits-all” (Nilsson, 2014, p. 3[23]). Although it is very appealing to see ourselves as unique, which we are in the sense Nilsson proposes through our own and unique experiences and memories, we are also connected to all living things and our environment (Dawkins, 1982[22]). Moreover, Cloninger’s tri-dimensional model of character (i.e. the self, others, and the universe) resonates with the findings by cultural psychologists (e.g., Shweder et al., 1997[29]) who suggest that moral judgments across cultures can be organized in three main areas of ethics: autonomy (cf. self-directedness), community (cf. cooperativeness), and divinity (cf. self-transcendence). Some cultures are more or less inclined to one or the other. Also of importance, in the field of personality psychology, it is common to define personality as stable through the life span. In contrast, Cloninger has actually revised the definition of personality (Cloninger 2004[3]) to emphasize the interaction between temperament and character and each of the traits within the model across the life span (e.g., Cloninger and Zohar, 2011[8], Josefsson et al., 2013[18]):

**Personality is a dynamic organisation within the individual of the psychobiological systems by which the person both shapes and adapts uniquely to an ever-changing internal and external environment (Cloninger, 2012[6]).**

In other words, it is a nonlinear dynamic model of personality that covers drives, goals and values, and influences and is co-influenced by the life narrative.
Concluding Remarks [Figure 1]

Nilsson’s proposition, if we understood it correctly, is indeed important to the Science of Well-Being and personality theory in general. However, we argue that it is important because worldviews are analogical to Flatland, the individual needs to be aware of her/his worldview to experience well-being and exercise her/his free will. One’s worldview could be meaningfully organized around agency (self-directedness), communion (cooperativeness), and spirituality (self-transcendence) to recognize what truly helps the individual to achieve well-being. In this context, a definition of well-being is lacking in Nilsson’s article; thus, our conclusion here might depend on which definition he is using. Well-being might, for example, refer to feeling good (i.e. happiness), doing good (i.e. mature and actively virtuous living), physical health (i.e. absence of disease or infirmity), and prosperity (i.e. success, good fortune, and flourishing) (Cloninger, 2004[3]). Finally, one of the main concerns is the fact that the notion of worldviews presented by Nilsson is too broad and comprises both implicit and explicit constructs of a person’s self-awareness. In the quest of a nonreductive theory of personality, Nilsson puts together all parts of human self-aware experience in one notion, which misses out relevant constructs such as temperament and character (Cloninger, 2004[3]), the life narrative (McAdams, 2008[21]), and the interpreter module (Gazzaniga, 2008[14]; Haidt, 2006[16]; Kahneman, 2011[19]). All of which might interact in the development of well-being [Figure 1].

Take Home Message

A ternary awareness of our being is necessary if the worldview is going to be

- The worldview is suggested as a part of the Science of Well-Being.
- Cloninger’s Science of Well-Being focuses on self-awareness of the unity of being through personality development in three dimensions.

- One of the things that might prevent us humans from accepting or achieving unity of being might be the mere focus on our worldviews.
- A unified ternary theory of personality (i.e., traits-character-narratives) is highly important because the words we use are not only a mirror of our thoughts and feelings; they are tools that can be used to guide behaviour.

- Worldviews are not only unique but also might be shared as well.
- Certain common behaviours across cultures bring well-being to most human beings.

- Cloninger’s ternary model of character (i.e., the self, others, and the universe) resonates with findings from cultural psychology.
- This is a non-linear dynamic model of personality that covers drives, goals and values and influences and is co-influenced by the life narrative.

Figure 1: Flowchart of the paper
integrated as a part of the Science of Well-Being. Without this ternary structure, it is probable that the focus on one’s worldview leads to separation of being. We rather propose a ternary structure of personality: temperament, character, and identity [Figure 2].

Acknowledgments

We want to direct our gratitude toward Henrik Anckarsäter at the Centre for Ethics, Law and Mental Health, University of Gothenburg, Sweden, for his important comments on earlier versions of the manuscript.

Conflict of interest

The development of this article was supported by a grant from AFA Insurance and a grant from The Swedish Research Council (Dnr. 2015-01229). The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript. Dr. Danilo Garcia was the Guest Editor of the research topic in which Dr. A. Nilsson’s article was published. Dr. Danilo Garcia is the Director of the Blekinge Center of Competence, which is the Blekinge County Council’s research and development unit. Patricia Rosenberg is a researcher, project coordinator, and well-being coach at the Center. The Center works on innovations in public health and practice through interdisciplinary scientific

![Figure 2: A unified view of personality including temperament (Novelty Seeking, Harm Avoidance, Reward Dependence, and Persistence), character (Self-directedness, Cooperativeness, and Self-transcendence), and identity (a construction of the interpreter module and the narrative self). All of which interact in the development of well-being (Adapted with permission from C. R. Cloninger, personal communication December 2, 2014).](image-url)
research, person-centered methods, community projects, and the dissemination of knowledge to increase the quality of life of the habitants of the county of Blekinge, Sweden.

Declaration

This article is an original unpublished work and has not been submitted for publication elsewhere.

References

1. Abbott EA. Flatland: A Romance in Many Dimensions. New York: Dover; 1884.
2. Aknin LB, Barrington-Leigh CP, Dunn EW, Helliwell JF, Burns J, Biswas-Diener R, et al. Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. J Pers Soc Psychol 2013;104:635-52.
3. Cloninger RC. Feeling Good: The Science of Well-Being. New York: Oxford University Press; 2004.
4. Cloninger CR. The science of well-being: An integrated approach to mental health and its disorders. World Psychiatry 2006;5:71-6.
5. Cloninger CR. Spirituality and the science of feeling good. South Med J 2007;100:740-3.
6. Cloninger CR. Science of Well-Being: How to be Healthy, Happy, and Fulfilled in the Face of Current World Challenges. Lecture Conducted at the University of Gothenburg, Gothenburg, Sweden; March, 2012.
7. Cloninger CR. What makes people healthy, happy, and fulfilled in the face of current world challenges? Mens Sana Monogr 2013;11:16-24.
8. Cloninger CR. Degeneracy of categorical disease paradigms. Philos Psychatr Psychol 2013;20:275-9.
9. Cloninger CR. The importance of ternary awareness for overcoming the inadequacies of contemporary psychiatry. Rev Psychiatry 2013;40:110-113.
10. Cloninger CR, Zohar AH. Personality and the perception of health and happiness. J Affect Disord 2011;128:24-32.
11. Cohen GL, Aronson J, Steele CM. When beliefs yield to evidence: Reducing biased evaluation by affirming the self. Pers Soc Psychol Bull 2000;26:1151-64.
12. Dawkins R. The Extended Phenotype – The Long Reach of the Gene. New York: Oxford University Press; 1982.
13. Garcia D, Anckarsäter H, Kjell ON, Archer T, Rosenberg P, Cloninger CR, et al. Agentic, communal, and spiritual traits are related to the semantic representation of written narratives of positive and negative life events. Psychol Well Being 2015;5:1-20.
14. Gazzaniga MS. Who’s in Charge? Free Will and the Science of the Brain. New York: HarperCollins Publishers; 2011.
15. Greenberg J, Pyszczynski T, Solomon S, Rosenblatt A, Veeder M, Kirkland S, et al. Evidence for terror management II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldviews. J Pers Soc Psychol 1990;58:308-18.
16. Haidt J. The Happiness Hypothesis: Finding Modern Truth in Ancient Wisdom. New York: Basic Books; 2006.
17. Hart J, Shaver PR, Goldenberg JL. Attachment, self-esteem, worldviews, and terror management: Evidence for a tripartite security system. J Pers Soc Psychol 2005;88:999-1013.
18. Josefsson K, Jokela M, Cloninger CR, Hintsanen M, Salo J, Hintsa T, et al. Maturity and change in personality: Developmental trends of temperament and character in adulthood. Dev Psychopathol 2013;25:713-27.
19. Kahneman D. Thinking, Fast and Slow. New York: Allen Lane; 2011.
20. Koltko-Rivera ME. The psychology of worldviews. Rev Gen Psychol 2004;1:3-58.
21. McAdams DP. Personal narratives and the life story. In: John O, Robins R, Pervin LA, editors. Handbook of Personality: Theory and Research. 3rd ed. New York: Guilford Press; 2008. p. 241-61.
22. Myers DG, Diener E. Who is happy? Psychol Sci 1995;1:10-8.
23. Nilsson A. A non-reductive science of personality, character, and well-being must take the person’s worldview into account. Front Psychol 2014;5:961.
24. Pennebaker JW. The Secret Life of Pronouns. What Our Words Say About Us. New York: Bloomsbury Press; 2011.
25. Shweder RA, Much NC, Mahapatra M, Park L. The ‘Big Three’ of morality (autonomy, community, divinity) and the ‘Big Three’ explanations of suffering. In: Brandt M, Rozin P, editors. Morality and Health. New York: Routledge; 1997. p. 119-72.

Questions that this Paper Raises

1. Is the notion of the worldview needed in the Science of Well-Being?
2. Does a person’s worldview prevent her/him from experiencing the unity of being?
3. Are we humans unique or are there universal ethics that unify us as species?
4. Is Cloninger’s biopsychosociospiritual model of personality a unified model of human personality?

About the Author

**Danilo Garcia Ph.D.** is a Doctor of Philosophy in Psychology and Associate Professor at the University of Gothenburg. He is also a well-being coach and the Director of The Blekinge Center of Competence, which focuses on innovation, research, and development of health and healthcare through person-centered methods. He is interested in personality, character, free will, responsibility, life narratives, empowerment, happiness, well-being, exercise, and human performance.

**Patricia Rosenberg M.Sc.** has been a high school teacher for more than 10 years. She is also a researcher, project coordinator, and well-being coach. Her main interests lie at the interface of religion and psychology. Her other interests are the role of education in well-being among youth.