

EXPLORING THE HIDDEN POWER OF WORLDVIEWS

A new learning framework to advance the transformative agenda of
Education for Sustainable Development

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Thesis submitted for the degree of Doctor of Philosophy in Sustainable Futures
Institute for Sustainable Futures
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January 31st 2018

Certificate of original authorship

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as part of the collaborative doctoral degree and/or fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Acknowledgements

I would like to express all my gratitude to my supervisor and friend, Professor Cynthia Mitchell, Deputy Director at the Institute for Sustainable Futures, for her continuous support during this PhD journey. I am grateful for her patience, motivation and insight. Her guidance helped me to achieve each step in this transformative learning process, from the complex literature review and the formulation of the wacky onion, to the intriguing empirical design and the communication of the outcomes in national and international forums. I could not have imagined having a kinder and wiser soul as a mentor for my PhD experience. From the bottom of my heart: thank you always, Cyn!

I am also deeply grateful to my co-supervisor and friend, Dr Tanzi Smith, Honorary Associate at the Institute for Sustainable Futures. Her insightful comments, delicate and accurate advice and permanent encouragement made me widen my research experience from various perspectives, always with great depth of analysis. It was an honour to receive her wonderfully thoughtful feedback. She is an inspiration when it comes to being a critical thinker, an empathetic person and a warm and sweet spirit. Without her, I would not have been able to make sense of this PhD journey. My absolute appreciation and gratefulness to you, Tanz!

I thank both of my supervisors, Cynthia and Tanzi, for believing in me, even when I stopped doing so. Thank you always for keeping me going when times were tough, and for your support throughout these four years – not only through your amazing professional guidance and leadership but, most importantly, for always bringing compassion, optimism, sensitivity, humour and humanness into this challenging process. Thank you always, Cyn and Tanz!

I also express my recognition and thanks to each and every person who provided personal and institutional support to this PhD research project. A very special mention to Dr. Annick De Witt, Adjunct Assistant Professor at the Copernicus Institute of Sustainable Development, Utrecht University, for her inspiring work and warm

support. Friends, colleagues and staff at the Institute for Sustainable Futures and the University of Technology Sydney, thank you all for providing the academic and administrative support. Distinguished officers from the National Council of Science and Technology in Mexico, thank you for providing all the funds for this work. All my gratitude to Megan Bray for the psychological support and advice provided during this challenging and transformative journey. Thanks also to John Henderson for the illustrations in this document. My recognition and gratitude to Editor Jane Ayles; and to all of whom supported me throughout this journey.

I thank my mum, my grandma, my family, my friends in Mexico and Australia. Thank you all for your love and support along the way!

I dedicate this research project, focused on human transformation, to four people I love, and who in these last four years became stardust: Edward, Tío Amado, Dra. Silvia del Amo and, especially, mi querido Tagüelo.

List of contributions

Journal publications

- De la Sienna, E., Smith, T. & Mitchell, C. 2017, 'Worldviews, a mental construct hiding the potential of human behaviour: A new learning framework to guide Education for Sustainable Development', *Journal of Sustainability Education*, vol. 13, March, pp. 1-21.

Conference papers

- De la Sienna, E., Smith, T. & Mitchell, C. 2016, 'Worldviews as virtual realities hiding the potential of human behaviour: A fundamental construct for the fulfilment of the goals of the Education for Sustainable Development. Session: Pedagogy and material development for Transformative Education', paper presented to the International Conference on ESD: Transforming education for children and youth. Centre for Environmental Education, Ahmedabad, India.
- De la Sienna, E., Smith, T. & Mitchell, C. 2017, 'Unlocking the hidden power of worldviews: a new opportunity for the transformative education for sustainable development', Session: Education for Sustainable Development: An issue of consciousness and values, paper presented to the Fifth Annual International Conference on Sustainable Development. New York, United States of America.

Conference presentations

- De la Sienna, E., Smith, T. & Mitchell, C. 2015, 'An integrated learning model to self-recognise and transform worldviews and behaviours. Session: Values in place: The interior dimension of sustainability', presentation to Culture(s) in

Sustainable Futures: Theories, Policies and Practices. European Cooperation in Science and Technology. University of Jyväskylä. Helsinki, Finland.

- De la Sienna, E., Smith, T. & Mitchell, C. 2016, 'Worldviews as virtual realities hiding the potential of human behaviour: A fundamental construct for the fulfilment of the goals of the Education for Sustainable Development. Session: Educating for change', presentation to Global Ecologies – Local Impacts. University of Sydney, Australia.
- De la Sienna, E., Smith, T. and Mitchell, C. 2017, 'Unlocking the hidden power of worldviews: a new opportunity for the transformative Education for Sustainable Development. Session: Perspectives, Challenges and Innovation in Research', presentation to 9th World Environmental Education Congress. Vancouver, Canada.

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List of abbreviations

CGT	Constructivist Grounded Theory
ESD	Education for Sustainable Development
IBDM	Interpersonal Biology of the Developing Mind
TFWB	Transdisciplinary Framework on Worldviews and Behaviours
WBLF	Worldviews Based Learning Framework

Abstract

The field of Education for Sustainable Development (ESD) is evolving from a positivist orientation dominated by the connection between knowledge and behaviour, to a range of more integrated approaches aiming at introspection and the deep transformation of the self. A transdisciplinary literature review covering neurological, cognitive, affective, psychological and philosophical aspects of human behaviour, as well as theories of learning and educational paradigms unveiled *worldviews* as a useful term to build a new approach to learning, potentially helpful in the achievement of ESD's transformative goals.

A *worldview* is a complex constellation of meaning from which the wide range of human conduct emerges; it is the uniquely personal, subjective meaning given to reality, which explains each life experience and prescribes patterns of emotions, thoughts and actions. The concept was used to explore how people apprehend and make sense of their own reality, and form their unique structures of meaning. This investigation explored the potential of worldviews in both a theoretical and empirical manner. The Transdisciplinary Framework on Worldviews and Behaviours (TFWB) was developed as a theoretical explanation of what worldviews are and how they are mentally formed and physically expressed through the wide range of human conduct the body can display. Then, building upon the TFWB, an in-depth qualitative study of the personal worldviews was designed and implemented to gain insights into the actual experience people have of their own worldview and how it is formed and transformed.

Twenty-five randomly selected participants' worldviews were explored in three steps. Initially, the participants completed an online multiple-choice survey based on a worldviews typology and questionnaire focused on the identification of ontological, epistemological, axiological, anthropological and sociological perceptions. Then, they participated in a semi-structured interview where they discussed their responses to the questionnaire, the most significant life experiences they identified as being crucial

in the formation of their worldview, and behaviours which they identified as representative expressions of their worldview. Follow-up questions administered two months later provided an opportunity to prompt and capture insights and reflections arising from the experience of the interviews. Based on a Constructivist Grounded Theory (CGT) approach, data was analysed through specifically tailored interpretive frameworks; for example, to analyse coded data regarding life experiences, a specific interpretive framework integrating premises on worldviews, learning, and psychological influences in mental development, was developed.

The empirical research revealed a general struggle among the participants to recognise their own worldview, how it is formed and how it determines the way they behave. Participants showed inconsistency and variations in their capacity to self-recognise, critically reflect and eloquently express themselves. Reported significant life experiences like moving into a new country, getting married or the death of a relative suggest that, for this group at least, traditional education approaches have not played a significant role in the recognition of these fundamental issues about human identity and existential meanings. Self-recognising a personal worldview resembled the first five phases of a transformative learning experience, with the potential to encourage reformulations in meaning structures and increase coherence in personal narratives; in turn, this includes the inherent opportunity to explore new ways of being, becoming and behaving.

Based on the empirical results and the theoretical TFWB, this thesis concludes with a distillation from the findings into five learning principles integrated into a worldviews based learning framework (WBLF), which would make a difference to ESD. This study argues that transformative ESD needs new foundations that position worldviews at the centre of the learning and transformation process. Such an approach would improve people's self-recognition of how and when they sense and apprehend the world, and build its meanings; and how such meanings determine the ways people feel, think and act, contributing to the achievement of ESD's transformative goals.

Graphical abstract

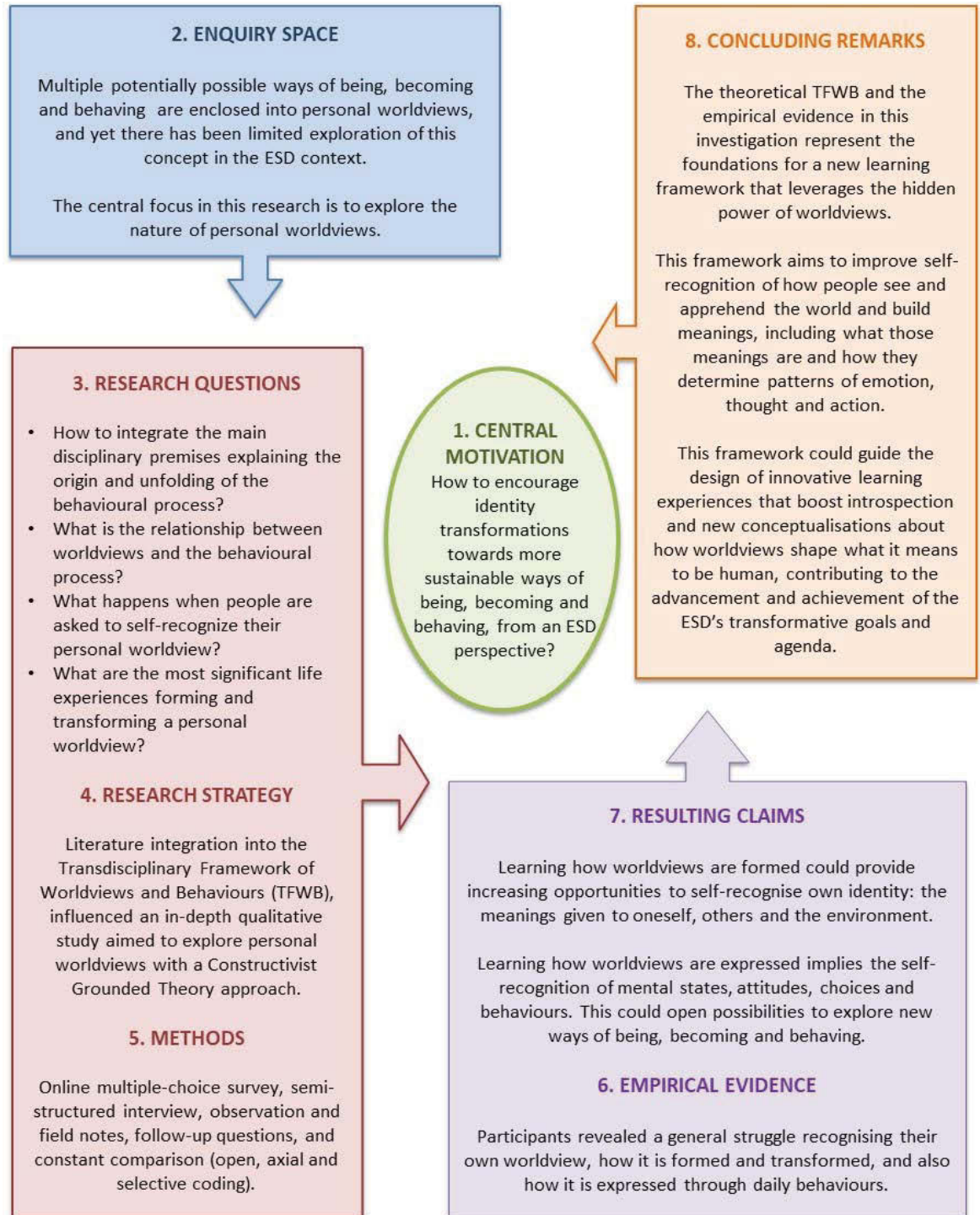


Figure 1. Graphical abstract based on Hammersley's research framework (Hammersley 1998) adapted by Hopwood (Hopwood 2014).