Becoming transdisciplinary theologians: Wentzel van Huyssteen, Paul Cilliers and Constantine Stanislavski

Author:

Gys Loubser¹

Affiliation:

¹Department of Systematic Theology and Ecclesiology, Stellenbosch University, South Africa

Correspondence to:

Gys Loubser

Email:

gysloubser@gmail.com

Postal address:

Faculty of Theology, 171 Dorp Street, 7600 Stellenbosch, South Africa

Dates:

Received: 28 Jan. 2015 Accepted: 29 Apr. 2015 Published: 02 July 2015

How to cite this article:

Loubser, G., 2015, 'Becoming transdisciplinary theologians: Wentzel van Huyssteen, Paul Cilliers and Constantine Stanislavski', HTS Teologiese Studies/Theological Studies 71(3), Art. #2901, 9 pages. http://dx.doi.org/10.4102/hts.v71i3.2901

Copyright:

© 2015. The Authors. Licensee: AOSIS OpenJournals. This work is licensed under the Creative Commons Attribution License.

Read online:



Scan this QR code with your smart phone or mobile device to read online.

Firstly, I discuss deferent descriptions of transdisciplinary research and argue that Wentzel van Huyssteen's postfoundationalist description of epistemology provides a progenitive epistemology for a variety of transdisciplinary engagements. Secondly, I suggest that *complexity*, as described by Paul Cilliers, can be rooted in a postfoundationalist epistemology and illuminates the facilitation of transdisciplinary research. Based on this description and facilitation of transdisciplinarity, I argue that transdisciplinary theologians need to be skilled empathisers because knowledge is generated and exchanged by embodied agents, embedded in particular disciplines. In a transversal move I suggest that, given contemporary research on empathic skills and the embodied aspects of empathy, Stanislavski's approach to the training of actors illuminates a way in which we can train transdisciplinary theologians. The training develops empathetic skills through both mental and embodied exercises and equips students to generate empathy in different contexts without following set rules.

Introduction

Training transdisciplinary researchers has taken many forms because of different descriptions of what transdisciplinary research entails. In this paper, I offer a specific description of transdisciplinary research and propose practical exercises for training transdisciplinary theologians.

Firstly, I discuss different descriptions of transdisciplinary research and argue that Wentzel van Huyssteen's postfoundationalist description of epistemology provides a progenitive epistemology for a variety of transdisciplinary engagements. Secondly, I suggest that complexity, as described by Paul Cilliers, can be rooted in a postfoundationalist epistemology and illuminates the facilitation of transdisciplinary research. Based on this description and facilitation of transdisciplinarity, I argue that transdisciplinary theologians need to be skilled empathisers because knowledge is generated and exchanged by embodied agents, embedded in disciplines. In transdisciplinary research, it is not abstract ideas or disciplines that exchange knowledge, but rather people with a particular emotional life and worldview that get to know each other and the ideas they hold, theories they develop and knowledge they generate. From here, I discuss different aspects of empathy by engaging paleo-anthropology, neurology, hermeneutics and acting. I further propose that practical exercises developed by Constantine Stanislavski bring these different aspects together. Stanislavski's exercises will help develop the embodied empathic skills of transdisciplinary theologians.

Transdisciplinary epistemology

Basarab Nicolescu (2002:43) argues that a transdisciplinary approach is something different from a multidisciplinary or interdisciplinary approach. He (Nicolescu 2002) writes as follows:

Disciplinary research concerns, at most, one and the same level of Reality; most cases, it only concerns fragments of one level of Reality. In contrast, transdisciplinarity concerns the dynamics engendered by the action of several levels of Reality at once. While not a new discipline or a new superdiscipline, transdisciplinarity is nourished by disciplinary research; in turn, disciplinary research is clarified by transdisciplinary knowledge in a new and fertile way. (pp. 44–45)

In transdisciplinary research, the boundaries of disciplines is a concern, and the ways in which we draw and understand the boundaries have an influence on the ways in which we conduct transdisciplinary research. The boundaries of disciplines are influenced by both the internal and external environments of the discipline. In other words, disciplines are nourished by their own structures and the environment they are in. Disciplinary boundaries demarcate and connect disciplines (Cilliers & Nicolescu 2012:715–716).

In transdisciplinary research, attention is given to the role that values play in inquiry and the ethical participation of the active inquirer (Montuori 2008:ix). In transdisciplinary research, the embodied

contextuality of knowledge is underscored, and knowledge is not separated from the knower and the knower's context. This is because '... we conceive of knowledge as embedded in our (communicative) practices, activities and uses' (Regeer & Bunders 2003:104). Knowledge is a process of engagement and interaction (Montuori 2008:xii)

Christian Pohl (2010:76) holds that transdisciplinary research is varied and in no way a fixed approach. He offers four features found in a wide spectrum of transdisciplinary research and explains that transdisciplinary research relates to social relevant issues, transcends and integrates disciplinary paradigms, is participatory and searches for unity of knowledge

Thomas Jahn (2008:5) suggests that transdisciplinary research starts by bringing together all the agents affected by the problem. Here lay, academic and specialist agents take part in framing the problem, which will then be turned into appropriate disciplinary questions (Jahn 2008:8–9). He explains that transdisciplinary researchers intend to integrate knowledge in the overlapping areas between academic questions and important social problems where interdisciplinary researchers intend to integrate knowledge in the overlapping areas between various disciplines (Jahn 2008:10). Transdisciplinary research includes interdisciplinary research, but interdisciplinary research is not necessarily transdisciplinary research.

Wentzel van Huyssteen's postfoundationalist epistemology includes the values and overall understanding of transdisciplinarity described above. The reason for this comparability is the concept of transversality found at the heart of a postfoundationalist epistemology. Van Huyssteen (2014) writes the following:

... transversal reasoning promotes different, non-hierarchical but equally legitimate ways of viewing specific topics, problems, traditions or disciplines, and create the kind of space where different voices need not always be in contradiction, or in danger of assimilating one another, but are in fact dynamically interactive with one another. (p. 214)

This understanding of transversality, which describes the engagement of agents across porous disciplinary boundaries, is rooted in an epistemology that embraces our embodiment and acknowledges our embeddedness in specific contexts. Van Huyssteen argues that rational agents are situated in the rich, narrative texture of social practices and traditions. Self-awareness and self-conceptions are intrinsically embedded in our rationality and are the '... indispensable starting points for an account of the values that shape human rationality' (Van Huyssteen 2014:221). Important to note, however, is that rational agents are not ensnared by their embeddedness, offering knowledge drenched in relativity. Rational agents offer knowledge that is contextually shaped but not contextually bound (Van Huyssteen 2014:217). It is a fusion of epistemology and hermeneutics (Van Huyssteen 2006:22). Rational agents are in constant conversation with foundationalist and nonfoundationalist

thought (Van Huyssteen 1999:117). They adopt a particular attitude towards the epistemic values that shape human reflection. It is a dynamic approach without universal rules. They are in constant conversation with all rational agents from other reasoning strategies regarding the epistemic values they employ because critical engagement with a particular disciplinary domain requires knowledge and skills specific to the disciplinary domain (Mingers 2008:251). Critical engagement with a variety of methodologies and epistemologies starts with '... real, situated, embodied, activities and desires of actual agents, not abstract theories, frameworks or methodologies themselves' (Van Huyssteen 2014:254). The postfoundationalist rational agent safeguards disciplinary boundaries and appreciates that interdisciplinary research points back to intradisciplinary research.

Agustin Fuentes draws on Van Huyssteen when he develops an approach to transdisciplinary research between theology and the natural sciences. Fuentes (2013) explains that transversality enables one to do the following:

... unify without appeals to overarching universals and undergirding necessary conditions, neither of which are receptive to temporal passage and changing conditions, be it the successive moments of consciousness or the changing scenes of social practice. (p. 108)

Fuentes' approach is to illuminate conceptual overlaps and potential fertile interfaces in reflection of highly integrated topics such as human nature(s) (Fuentes 2013:108). Transdisciplinary research, for Fuentes (2013:109), is characterised by transcending disciplinary boundaries to synthesise knowledge '... in the quest to understand the subject of inquiry as a complex dynamic system necessitating diverse disciplinary insights'. Disciplines are understood as networks that transverse one another (Osmer 2008:172). Fuentes categorises Van Huyssteen's (2006) Gifford Lectures, Alone in the world? Human uniqueness in science and theology as a transdisciplinary project but argues that transdisciplinary research preferably involves team-based collaborations (Fuentes 2013:121) that open up the possibility for mutual malleability (Fuentes 2013:107).

In this respect, I propose that Van Huyssteen's postfoundationalist epistemology offers progenitive support for transdisciplinary research, but his approach to interdisciplinary research falls short of being a sustainable transdisciplinary approach for two reasons. Firstly, Van Huyssteen engages academics because he engages academic problems, not practical problems. Secondly, he does not do research as part of a team. That being said, he does insist on engaging rational agents in conversation. However, these conversational partners have been academics and do not include non-academic practitioners. I propose that, by drawing on Paul Cilliers' understanding of complexity, it is possible to offer a description of transdisciplinarity rooted in a postfoundationalist epistemology. The reason complexity can be rooted in a postfoundationalist epistemology is that General Systems Theory and Cybernetics '... emerged as attempts to develop a "transversal" language, a way of

thinking that could move across disciplines and re-connect what had been torn asunder in disciplinary fragmentation' (Montuori 2013:216). Transversal approaches stress the importance of context and the dangers of decontextualisation (Montuori 2013:217). It is therefore not surprising that complexity can be described as an organic transdisciplinary facilitator with a variety of disciplinary research drawing on this concept.

Complexity and transdisciplinary facilitation

There are many commonalities between Van Huyssteen's postfoundationalist epistemology and the epistemology Paul Cilliers envisions in describing the epistemological implications of complexity (Loubser 2013). What I want to stress here is their insistence on the embodiedness, embeddedness and ethical responsibility of the inquirer. Cilliers (2007:85) holds that knowledge should be reserved for information that is situated historically and contextually by a knowing subject. To generate an understanding of a system, we have to place limits on the information, which means that we need to reduce or interpret the system (Cilliers 2007:86). To do this, we identify the boundaries of the system (Cilliers 2007), but these boundaries are simultaneously a function of the activity of the system and a product of our descriptive approach (Cilliers 2008:47). We have to interpret and evaluate the system, and the model we use is shaped by the aims of our description (Cilliers 2000:46). However, the choice of models is not arbitrary, because some models work better than others, but we cannot claim that this choice is an objective choice (Osberg, Biesta & Cilliers 2008:218). Models always involve decisions and values.

When we describe a complex system, we have to make particular modelling choices, and our judgments are shaped by our personal lives (Woermann & Cilliers 2012:404). Woermann and Cilliers (2012) put it as follows:

... our modelling choices are based on subjective judgments about what matters — both in terms of our work and in terms of our personal lives ... In this regard, ethics should be understood as something that constitutes both our knowledge and us; rather than as a normative system that dictates right action. (p. 404)

Knowledge is not generated in the pursuit of truth, '... but rather a process of working towards finding suitable strategies for dealing with complex phenomena' (Woermann & Cilliers 2012:406). The ethical moment is when we have to take a leap from the known to the unknown or uncertain because there are no fixed rules or moral codes to follow (Preiser 2012:22). Since we have to reduce the complexity of a system to model or frame it, we are responsible for our choices, and this responsibility is exercised through critique and self-critique. However, Woermann and Cilliers (2012) indicate the following important point:

 \dots if we remain open to other ways of modelling and other ways of being, we are more likely to practice a self-critical rationality, to respect diversity, to be willing to revise our models, and to guard against the naturalisation of these models. (p. 408)

This is important because rational judgement, in a postfoundationalist sense, is the '... ability to evaluate a situation, to assess evidence and then come to a responsible and reasonable decision without following any present, modernist rules' (Van Huyssteen 1999:143). Whilst the analytical method may be adequate for understanding complicated systems, such as Jumbo jets and computers, it is inept at grasping the workings of complex systems, such as the brain, language and social systems (Cilliers 1998:1). The reason for this is that complex systems are not made up of the sum of their parts but also by the intricate relationships between these components (Cilliers 1998:2). Personal value judgments play a key role in epistemic junctures because rational agents are embedded in a context, and therefore, knowledge is contextually shaped. However, whilst rational judgement focuses on the particular and subjective enactment, it also transcends personal feelings and thought towards the intersubjective and communal (Van Huyssteen 1999:144). These judgments are made by individuals '... who are in command of an appropriate body of information relevant to the judgment in question' (Van Huyssteen 1999:144). Rational agents are those '... who can exercise good sense and good judgments in difficult and complex circumstances' (Van Huyssteen 1999:145).

Woermann and Cilliers provide four mechanisms that reinforce and promote a critical attitude, namely provisionality, transgressivity, irony and imagination. Provisionality implies that meaning is contingent and shaped by the context. Transgressivity involves rebelling against imposed boundaries, and irony '... is a way of affirming a certain position whilst undermining the absolutist status of that which we affirm through our lives' (Woermann & Cilliers 2012:412). Imagination, '... constitutes the ability to generate variety and options, and to break out of one's closed or limited hermeneutical circles' (Van Huyssteen 1999:413). It implies that we should allow personal and social imagination to flourish because it is the only way we can engage our environment productively (Van Huyssteen 1999:415). One way to develop imagination is by engaging in the arts:

On the psychological level, we can develop our imagination by engaging in the arts, which – far from being a pleasurable diversion – is an important way in which to break out of our hermeneutical circles, or – otherwise stated –to transform the framework we apply when apprehending the world. (Van Huyssteen 1999:414)¹

By engaging in the arts, we can learn how to reframe and reinterpret our view of the world. This is an important ability for the transdisciplinary theologian because our self-awareness shapes our judgments as Van Huyssteen (1999) argues:

As human beings we are characterized by self-awareness, and our individual, personal motivations or reasons for believing,

^{1.} Joseph Carroll (2007:640) conveys that he, E.O. Wilson and J. Tooby and L. Cosmides all argue that '... the arts serve a unique adaptive function in that they provide an emotionally saturated cognitive order that mediates between innate dispositions and the complexities of contingent circumstances. 'Carroll (2007) explains that literature and theatre create models of people acting in the world, which provide general psychological maps though which people assess motives and behaviour and evaluate alternatives.

acting, and choosing are not only closely tied in with some sense of who this 'I' is, but are indeed epistemically shaping the value judgments we make in terms of this self-conception. (p. 152)

However, judgement is not arbitrary. It is always based on specific information generated in a particular context (Van Huyssteen 1999:144), but rational judgement is more than just expressing private feelings. It is a process of intersubjective communication that is focused on the contextual, but it transcends the personal through intersubjective communication. Rational judgement is an epistemic skill that involves the development of intellectual skills that are in many ways analogous to physical skills (Van Huyssteen 1999:144).

People can function effectively and successfully with a set of beliefs that they later modify or exchange for other beliefs (Van Huyssteen 1999:144). We can accept a set of fallible claims and be prepared to reconsider them when we have good reason to do so (Van Huyssteen 1999:144). Instead of focusing on the general, judgement needs to focus on the particular and the contingent (Van Huyssteen 1998:24). In these situations, judgement is not made according to general rules and neither should there be a search for such rules. Rational agents '... can exercise good sense and good judgement in difficult and complex circumstances' (Van Huyssteen 1998:26). However, '... a single person may be capable of acting as a rational agent in some circumstances', but may not have the expertise to act as a rational agent in others (Brown 1988:185). Furthermore, when there are rules available in a situation '... an informed agent will recognize that it is the case, and will apply those rules' (Van Huyssteen 1999:186).

The focus now shifts from searching for rules we can follow to searching for rational agents who can generate intelligibility in complex systems. This is a move away from abstract thoughts towards acknowledging the contextuality of the embodied mind.² However, whilst the rational agent is conditioned by a specific context, the agent's reflection need not be determined by the context (Van Huyssteen 1999:147). The agent generates knowledge through interpretation. This interpretation is influenced by concepts of the self, and it is this self that uses a particular ethic in generating knowledge. Van Huyssteen (2014) explains further:

Importantly, the performative praxis of transversal reasoning is not only *discursive* (through language and conversation), but also occurs *non-discursively* beyond the realm of language and the spoken word. Therefore, as there is time and space for conversation and discourse, so there is a time and space of action, of mood, of desire, and our experience as 'events of interpretation' are again always situated temporally and spatially. (p. 219)

This means that responsible judgement is inextricably linked to our emotional states, personal drives and life goals. Furthermore, transdisciplinary conversation includes getting to know other rational agents. I once again quote Van Huyssteen (1999):

This self-conception always shapes what we regard as the most plausible reasons for the choices we make, the beliefs we commit ourselves to, and the actions we take ... Rationality thus clearly entails an unavoidable investment in the interest of others (p. 153)

Transdisciplinary research, therefore, includes getting to know another self. Transdisciplinary theologians have to understand disciplinary contexts and histories, but they need to go further. They have to understand the worlds of the selfs that generated the knowledge. To focus on theories and arguments reduces knowledge because it does not acknowledge the person who develops the theory and makes the argument. Knowledge includes a knower. This would entail that transdisciplinary theologians develop exceptional empathic skills. Transdisciplinary theologians cannot draw on knowledge from different disciplines without acknowledging the ethics, epistemologies and worlds of the agents who generated the knowledge because the self-conception of the knowing agents shape and influence their knowledge. Transdisciplinary research is more than bringing knowledge from different disciplines together, it is also getting to know the embodied persons who generated the knowledge. Empathic skills will also be necessary since much transdisciplinary research involves teamwork and partnership. Becoming a transdisciplinary theologian will require developing empathic skills with which one can understand the world and self of the other.

Empathy

Maxine Sheets-Johnston suggests that empathy goes to the heart of human personhood and to our moral and ethical development (Van Huyssteen 2011:455). For Sheets-Johnston, empathy is indicated somatically (Van Huyssteen 2011:456) and involves getting to know other moving bodies, rather than just other minds (Van Huyssteen 2011:457). Van Huyssteen (2011) expands on this notion as follows:

[I]t gives us access to the mental acts and processes of others, and through empathy we discover feelings and values of other, what their convictions are, and precisely through this capacity for empathy we ultimately share...an intersubjective world, that is, a *commonly intelligible world*. And of crucial importance, although often neglected, in empathy we basically make sense of each other in ways *outside* of language. (pp. 455–456)

Sheets-Johnston clarifies that empathy is more than a mental construction and is not a one-sided experience (Van Huyssteen 2011:457). She suggests that our understanding of others matures as we ourselves mature. Empathy is '... seeing deeply into another, and ... in a more Ricoeurian way, finding oneself in another, finding oneself as another' (Van Huyssteen 2011:456).

^{2.}This focus on the embodied mind is reminiscent of some existentialist scholars. Miguel de Unamuno stated: 'Philosophy is a product of the humanity of each philosopher, and each philosopher is a man of flesh and bone who addresses himself to other men of flesh and bone like himself. And, let him do what he will, he philosophizes not with the reason only, but with the will, with the feelings, with the flesh and with the bones, with the whole soul and with the whole body. It is the man that philosophizes' (Macquarrie 1978:15).

of 9

In line with Sheets-Johnston, Steven Mithen (2005:167) suggests that the body plays a significant role in expressing our emotional states through vocalisation and body language. Mithen (2005:317) proposes that mimesis played a significant role in early human communication and describes mimesis as '... the ability to reproduce conscious, self-initiated, representational acts that are intentional but not linguistic' (2005:167). For Mithen (2005:168), mimesis includes both mimicry and imitation. Mimesis includes '... tones of voice, facial expressions, eye movements, manual signs and gestures, postural attitudes, patterned whole-body movements of various sorts, and long sequences of these elements' (2005:168). Some psychologists argue that true imitation requires imitating the body movements of other people and animals and understanding the intention behind those movements (2005:169), as seen when infants imitate their caregivers (Baron-Cohen 2007:215).3 However, infants do not necessarily appreciate the distinction between self and others (Silk 2007:116), but '... motor imitation, the re-enactment of things people do, is a primitive means of understanding and communicating with people' (Distin 2011:55). Dunbar, Barrett and Lycett argue the following:

... the evolution of specifically human sociality is crucially dependent on both language and on the capacity for empathy or 'theory of mind', that is, the capacity to envision the world from someone else's point of view – to intuit another person's perceptions, thoughts, and beliefs. (Carroll 2007:641)

Another interesting dimension to empathy is illuminated in the work of Giacomo Rizzolatti and Leonardo Fogassi on mirror neurons. They suggest that there seems to be a link between the mirror-neuron system and understanding language (Rizzolatti & Fogassi 2007:191). We can understand the emotions of others through deducing it from body language and through direct mapping. This means that the observed emotion triggers the same emotion in the observer. Rizzolatti and Fogassi (2007) explain this as follows:

[D]ata strongly suggests that humans understand disgust, and most likely other emotions through a direct mapping mechanism. The observation of emotionally laden action activates those structures that give a first-person experience of the same actions. By means of this activation a bridge is created between ourselves and others. (p. 192)

Rizzolatti and Fogassi suggest that we can grasp the minds of others through direct simulation and conceptional reasoning (Krznaric 2014:21–22). However, whilst mirror neurons may form part of our embodied empathetic abilities, Roman Krznaric (2014:24) suggests that empathy also involves '... active engagement in understanding someone's emotions and mental states'. In his book *Empathy: A handbook for revolution*, Krznaric (2014) explores the habits of highly empathetic people. These habits include shifting mental frameworks, stepping into other people's shoes, exploring unknown lives

and cultures through immersion, developing curiosity about strangers and the craft of listening and transporting oneself into other people's minds through art, literature and film (Krznaric 2014::xv). Throughout this exploration, Krznaric (2014:99) explicates empathy as a skill (or a set of skills) that can be learned and indicates that our ability for it varies (Baron-Cohen 2007:213).

For Krznaric one of the most challenging ways to develop empathetic skills is through method acting. He explains it as follows:

[Daniel] Day-Lewis is a leading practitioner of method acting – an approach made famous in the 1930s by the Russian theatre director Constantin Stanislavsky – and believes that the successful practice of his craft requires immersing himself, as far as possible, in the life and spirit of his character. He attempts to completely embody his role, both physically and psychologically ... The aim is not just to gain insight into his stage character, so he can perform with authenticity, but also to make discoveries about himself ... [Day-Lewis says] 'In an underground sense, you're choosing to explore yourself through another life.' (Krznaric 2014:72)

In his publication *An actor prepares*, Constantine Stanislavski (1989:15) explains that the aim of acting is to create the inner life of a human spirit and its expression in an artistic form. His approach to acting is an embodied approach that requires control of a responsive and prepared vocal and physical apparatus (Stanislavski 1989:17).

Jean Benedetti (2008:2), a Stanislavski scholar, explains that it is '... this capacity to reflect back to, respond to and judge other people's thought and feelings that is at the root of art'. Tolstoi held that art '... is based on the fact that one man, hearing or seeing another man's expression of feeling, is capable of experiencing the same feelings as the person expressing it' (Benedetti 2008:2). As such, Stanislavski argues that students need to develop physical and mental skills before they could work on a character. The difficult, and inspiring, aspect of Stanislavski's approach is his insistence that the actor has to draw on personal experience when developing and portraying a character (Benedetti 2008:8). Actors would begin by recalling experiences from their own lives similar to the event in the play, and when these memories were clear and strong enough, they could relate to the action on stage (Van Heerden 2007:28). It is this affective memory that fills fictional roles with real emotion.

What is important from an acting point of view is that, in attempting to understand another person (or character), one cannot focus solely on the intellectual beliefs of the other person. One has to make sense of the whole person because the emotional states and experiences of the person influence his or her decisions and actions. In attempting to understand another person, one has to appreciate that it is an embodied person and that communication includes both the discursive and non-discursive. Empathy is both a mental and physical act.

Getting into the mind of the other can also be found in hermeneutics – the art of interpretation. Anthony Thiselton

^{3.}Matthew Potolsky (2006:16) also argues that mimesis is more that imitation. Investigating the history of mimesis from Plato and Aristotles to the present bio-anthropological research, Potolsky (2006:144) explains that Theodor Adorno described mimesis in relation to rationality. Adorno holds that '... rather than setting the world at a distance, mimesis brings it closer; and in place of the hierarchical Platonic opposition between copy and original, mimesis forges a bridge between self and other' (Potolsky 2006:145).

(2009:5-6) explains that we intend to understand the motivations and journeys that have led to an argument or conviction through hermeneutics. It is the art of thinking, and it involves understanding the other even though it is provisional and incomplete (Thiselton 2009:159). Friedrich Schleiermacher suggested that, through imagination and historical research, one can step outside one's own frame of mind into the author's frame of mind (Thiselton 2009:6). For Schleiermacher, one needs to examine the authors' way of thinking and how they combine ideas and thoughts (Thiselton 2009:153-153). Schleiermacher's approach to knowledge is reminiscent of Cilliers' and Van Huyssteen's description of knowledge when Schleiermacher explains that '... complete knowledge always involves an apparent circle, that each part can be understood only out of the whole to which it belongs, and vice versa' (Thiselton 2009:155-156). In this sense, hermeneutics overlaps with epistemology (Thiselton 2009:158). Dilthey suggests that one can understand by stepping into the shoes of the dialogue partner or author through empathy (Thiselton 2009:6). The interpreter should relive the experience of the author (Thiselton 2009:163). Rudolf Bultmann insists that one needs to have a 'living relationship' with the person or text one wants to understand. Ernst Fuchs maintains that '... empathy or mutual understanding stood at the very heart of hermeneutics' (Thiselton 2009:6), and Hans-Georg Gadamer emphasises the contextualisation of problems in the hermeneutical process because '... abstract problems outside a context is not necessary to answer ... Hermeneutics gives context to problems' (Thiselton 2009:11). Both Martin Heidegger and Gadamer emphasise the provisionality and the historical and temporal nature of understanding and maintain that such an understanding rests on a preunderstanding (Thiselton 2009:209). The provisionality, contextuality and ethical nature of understanding links with both Van Huyssteen's (2014) and Cilliers' descriptions of knowledge.

For the postfoundationalist, human experience is embodied, embedded in, and filtered through complex networks of belief. Because of this all our radically contextual experiences have a deep hermeneutical dimension precisely because we relate cognitively to the world, and to one another, in terms of interpreted experience. It is the complex interpretation of all experience (hermeneutics) in terms of networks of belief we already hold even as we critically evaluate them (epistemology) ... (p. 217)

Stanislavski and transdisciplinary exercises

Stanislavski offers a framework to develop a character and a play when the necessary physical and mental fitness is acquired. In the first phase, the company explores the play and researches the context in which it is set - the context of the narrative and the context of the theatre and what is on stage (Benedetti 2008:6). The company divides the play into episodes and discusses each other's characters - their backgrounds, emotional states, desires and intentions. The reason for this is that each actor should know each character

intimately so that they can play off each other and react naturally (Benedetti 2008:7). In transdisciplinary research, this will be where the whole team discusses the project so that all participants know how their research fits into the whole.

Lee Strasberg, who developed 'Method Acting' in America, based his approach on Stanislavki's method but made changes. He argues that actors first have to become aware of themselves, meaning that they had to self-evaluate in attempting to understand themselves in relationship to their whole life and society (Van Heerden 2007:59). Opposing Stanislavski, Strasberg argues that actors first have to develop truthful emotional states of the character and that logical actions and behaviours would follow (Van Heerden 2007:81). Stanislavski holds that actors first have to move like a character. Moving like the character helps develop the emotional states. When the emotional states are acquired, the movement on stage becomes natural. Even though they differ on some of the detail, both Stanislavski and Strasberg argue for the link between people's physical action and emotional state. This links with the research of Sheets-Jonston, Mithen, Rizzolatti and Fogassi who illuminate the embodied aspects of empathy. For the transdisciplinary theologian, it underscores the importance of person-to-person contact in transdisciplinary research and the value of personal contact with the communities involved in the research.

The intent of Stanislavski's exercises and training is more than acquiring skills. It is part of forming actors (Matthews 2011:150). John Matthews (2011) explains it as follows:

... formation is more than a process of acquiring new skills; it is also a process of undergoing significant and lasting changes that affect aspects of a trainee's lived experience extending beyond what they do in training. (p. 152)

The intention of the exercise employed in training actors is to facilitate continuous self-exploration and development (Matthews 2011:153). This was extremely important to Stanislavski because portraying a character on stage draws on the whole being of the actor. Stanislavski (1947) explains that preparation for the part and repeated performances requires the following:

... full concentration of all the mental and physical talents of the actor, and the participation of the whole of his physical and psychic capacity. It takes hold of his sight and hearing, all his external senses; it draws out not only the periphery but also the essential depth of his existence, and it evokes to activity his memory, imagination, emotions, intelligence and will. (p. 25)

In other words, one does not do transdisciplinary theology, but becomes a transdisciplinary theologian through the continuous development of particular skills. It is not a way of doing, but rather a way of being.

In the following section, I describe Stanislavski's exercises and exercises based on his method that are relevant to the transdisciplinary researcher.

Concentration

Developing concentration is very important in the training exercises. Benedetti (2008:32) explains that just '... like muscular relaxation and control, the ability to focus and to control and direct concentration is one of the most fundamental skills an actor must acquire.' Stanislavski would have his students relax their bodies and meditate before turning to the training exercises.⁴ Students would sit upright in a chair and relax all muscles. Then they start by tightening and relaxing the muscles in their left hand and repeating this with every part of their body – getting to know how they move and how their muscles work (Cole 1947:41). The assumption here is that concentration is the ability to control one's attention (Cole 1947:35), and this can be developed through a few exercises such as the following:

- 1. Let the students sit in a circle. The first student says his name, and the second student repeats his name and adds hers. The third repeats both names and adds his. This goes around so that the first student has to repeat all the names. Instead of names, one can use other words (Cole 1947:39; Lewis 1980:14).
- 2. Students split into pairs and sit opposite each other and compare clothing (Benedetti 2008:40). Next, six or eight more students are brought in and asked to observe everyone, including themselves. Here they have to identify the dominant colour in everyone's clothing. Hereafter, the entire group is brought together and everyone has to observe each other in the group and themselves. Here they are asked to observe and describe (or mime) how each member is sitting. To enhance the development of concentration and attention this exercise can be repeated with every meeting, but the time allowed for this is shortened each time.

What is interesting about this exercise is the argument that '... there is no reason without action, so there is no concentration without a reason' (Benedetti 2008:41). We employ concentration for a purpose – concentration is an action aimed at something. This is important for the researcher and the research project. Transdisciplinary theologians engage specific problems and specific researchers with specific shared focus (Van Huyssteen 2006:4–5).

- Choose a student in the group and place her opposite the rest of the group. While the group is talking to each other, the student has to direct her attention to the sounds on the street and describe the scene outside (Cole 1947:37). This exercise requires that the student focus her attention on a context beyond her immediate context.
- 2. Select a student to read a section in a book and summarise the section. While he is reading, the group can interrupt him and make noises. He has to compel himself to direct his attention to what he is reading (Cole 1947:37). This exercise requires that the student focus and keep his attention focused on one 'voice'.

- 3. Everyone in the group gets a turn to tell the rest of the group in detail how their day has unfolded. The rest of the group may interrupt and make comments. The student telling the story has to remain attentive and complete her story. This requires that she can pause and restart her attention, which strengths her memory (Cole 1947:38; Lewis 1980:26).
- 4. Select a student to tell a story whilst counting how many matches are in a matchbox. Here the student has to pay attention to two actions at once.

Observation, attention and keenness of perception

- Mirror exercises. Paired students stand opposite each other, and while keeping eye contact, the one mirrors the movement of the other. The one who is being mirrored has to consider the pace so that the one mirroring does not fall behind. After a few minutes, they switch roles (Cole 1947:38; Lewis 1980:21). Although this exercise was developed before Rizzoli and Fogassi's research on mirror neurons, it draws on this capacity.
- 2. *Copying exercises*. Choose a student to stand in front of the group and perform a series of movements. Another student is then asked to copy the series of movements (Cole 1947:38; Lewis 1980:24).
- 3. *Animal exercises*. The student is asked to notice the specific behavioural characteristics of an animal. After this, the student has to tell a story as the specific animal would have displaying and interpreting its characteristics. This helps the student to create characters different from himself (Van Heerden 2007:75–76).⁵

Imagination

- 1. Use an object like a pencil. By using his imagination, the student has to transform this pencil into something else. However, it has to be plausible. A pencil does not look like a bird or a lemon, but it can be a director's baton with which he directs the orchestra. Lewis (1980:40) explains that '... we have to use our imagination to justify what might otherwise appear senseless or uncomfortable.'
- 2. Select one student to stand in front of the group and take a pose. Now she has to imagine what this pose might mean what she would do if she took this pose. In this way, she has to use her imagination to justify the pose (Cole 1947:43).
- Another way in which Stanislavski would develop the communicative skills of actors was through silent improvisation exercises. By making actors do improvisation exercises without being allowed to speak, Stanislavski developed and refined the non-verbal

^{4.}John Matthews (2011:151) points out that Eugenio Barba's use of the word formation '... is precisely the same as that used by monasticism to denote the activity of ascetic training exercises.' Stanislavski himself was interested in Eastern mysticism. Scholars have also found traces of Indian and Asian spiritual influences in the work of Jerzy Grotowski (to many, Stanslavski's heir).

^{5.}Interestingly, mimesis continued as an important ingredient in human culture as can be seen in Ancient Greek and Roman mime, Chinese and Indian dance and the dances of Australian aborigines '... in which individuals identify with, and act out the role of, a totemic animal' (Mithen 2005:168). One can still see the working of mimicry and mimes in the hunting and religious rituals of modern hunter-gather societies. The !Kung community of the Kalahari Desert are so skilled at mimicking the peculiarities of posture and movement of individuals that it is easy to guess the identity of the person mimicked (Mithen 2005:169).

communication of the actors (Van Heerden 2007:38). Strasberg allowed sounds but not language, which develops actors' use of intonation in their communication (Van Heerden 2007:38). Here imagination is needed to create a situation and context.

Anne Bogart (2007), a professor of directing at Colombia University, explains this as follows:

A combination of awareness and imagination stimulates empathy ... Empathy in this sense is not something that happens to you; rather, it is an action you take in the world. You will yourself into another person or event. (p. 66)

Conclusion

A postfoundationalist epistemology offers the agility needed for transdisciplinary research by rooting rationality and knowledge in embodied rational agents who are embedded in particular historical contexts, without collapsing into relativism. This implies that a rational agent in one context is not necessarily a rational agent in another because rational agents are embedded in particular contexts, disciplines and systems. Therefore, transdisciplinary theologians need to identify and engage rational agents embedded in the disciplines they intend to consult. This requires highly developed empathic skills since one does not engage a disciple but embodied persons who have the expertise and skills for generating intelligibility in that discipline.

It is also important to remember that there is no single transdisciplinary method, and two transdisciplinary researchers in the same context, engaging the same issue, will not necessarily generate the same knowledge and solution. Transdisciplinary facilitation is not an exact science but rather an art that is cultivated and refined by researchers as they themselves mature (cf. Montuori 2010:113). This makes training transdisciplinary researchers difficult because one cannot train researchers to apply a specific method. Transdisciplinary researchers have to develop skills that allow them to engage issues creatively and contextually. Alfonso Montuori (2010) explains this as follows:

Complex thought recognizes the role of the observer in observation and concerns itself with situating the subject in its context, with recognizing the nature of its relationships, and with reflecting on the construction of knowledge and on the knower's operations in this process. (p. 128)

In a transversal move, I suggest that, given contemporary research on empathic skills and the embodied aspects of empathy, Stanislavski's approach to training actors illuminates a way in which we can train transdisciplinary theologians. The training develops empathetic skills through both mental and embodied exercises and equips students to generate empathy in different contexts without following set rules. However, training is more than gaining skills, it is forming transdisciplinary researchers. By developing their concentration, observation and imagination; practising their craft and embodying their knowledge; they become skilled transdisciplinary researchers.

Now the question remains: How does training transdisciplinary theologians differ from training transdisciplinary researchers? The answer: There is no difference. The development of empathetic skills discussed above is applicable to all transdisciplinary researchers. In this respect, there is no divide between the natural scientists and researchers in the humanities. The training discussed above connects researchers from all disciplines and illuminates the common pursuit of knowledge. Transdisciplinary theologians are theologians because of their disciplinary training and the issues they engage regarding faith, religion and spirituality. Transdisciplinary theologians are transdisciplinary because they engage real-world issues regarding faith, religion and spirituality by acknowledging the importance and validity of knowledge generated in other disciplines (academic or nonacademic) and drawing on this knowledge in their specific context. They challenge the paradigms and boundaries of theology through engagement with researchers from other disciplines (cf. Montuori 2010:126). Transdisciplinary theologians recognise that the issues regarding faith, religion and spirituality are complex issues and require solutions that cannot be developed in a single discipline. This is because faith, religion and spirituality are complex and dynamic concepts that influence and are influenced by emotional, intellectual, economic, ecological, political, communal and personal aspects of people's lives. Faith, religion and spirituality are embedded in people's complex lives, and transdisciplinary theologians engage these issues as such. In this way, transdisciplinary theologians can pursue the following:

... knowledge that will allow us to understand optimally what we are committing ourselves to, and where possible, to construct theories as better explanations of what is experienced in the life of faith. (Van Huyssteen 1999:117)

Acknowledgements

I would like to thank the National Research Foundation (South Africa), the Centre for Theological Inquiry (Princeton) and the Centre for Studies in Complexity (Stellenbosch) for their support in developing this article.

Competing interests

The author declares that he has no financial or personal relationships which may have inappropriately influenced him in writing this article.

References

Baron-Cohen, S., 2007, 'The evolution of empathizing and systemizing: Assortative mating of two strong systemizers and the cause of autism', in R.I.M. Dunbar & L. Barrett (eds.), *The Oxford handbook of evolutionary psychology*, pp. 213–226, Oxford University Press, Oxford.

Benedetti, J., 2008, Stanislavski and the actor, Methuen Drama, London.

Bogart, A., 2007, And then, you act: Making art in an unpredictable world, Routledge, New York, NY.

Brown, H., 1988, Rationality, Routledge, New York, NY.

Carroll, J., 2007, 'Evolutionary approaches to literature and drama', in R.I.M. Dunbar & L. Barrett (eds.), The Oxford handbook of evolutionary psychology, pp. 637–648, Oxford University Press, Oxford.

Cilliers, P., 1998, Complexity and postmodernism: Understanding complex systems, Routledge, London



- Cilliers, P., 2000, 'Rules and complex systems', Emergence 2(3), 40–50. http://dx.doi. org/10.1207/S15327000EM0203_04
- Cilliers, P., 2007, 'Why we cannot know complex things completely', in F. Capra, A. Juarrero, P. Sotolongo & J. van Uden (eds.), Reframing complexity: Perspectives from the North and South, pp. 81–90, ISCE Publishing, Mansfield. (Exploring Complexity Book Series, vol. 1).
- Cilliers, P., 2008, 'Complexity theory as a general framework for sustainability science', in M. Burns & A. Weaver (eds.), Exploring sustainable science: A South African perspective, pp. 39–57, African Sun Media, Stellenbosch.
- Cilliers, P. & Nicolescu. B., 2012, 'Complexity and transdisciplinarity: Discontinuity, levels of reality and the hidden third', Futures 44, 711–718.
- Cole, T., 1947, Acting: A handbook of the Stanislavski method, Lear, New York, NY.
- Distin, K., 2011, Cultural evolution, Cambridge University Press, Cambridge.
- Fuentes, A., 2013, 'Evolutionary perspectives and transdisciplinary intersections: A roadmap to generative areas of overlap in discussing human nature', *Theology and Science* 11(2), 106–129. http://dx.doi.org/10.1080/14746700.2013.780430
- Jahn, T., 2008, 'Transdisciplinary in the practice of research', in M. Bergmann & E. Schramm (Hg.), Transdisziplinäre Forschung: Integrative Forschungsprozesse verstehen und bewerten, pp. 21–37, Campus Verlag, Frankfurt.
- Krznaric, R., 2014, Empathy: A handbook for revolution, Ebury Publishing, London.
- Lewis, R., 1980, Advice to the players, Theatre Communications Group, New York, NY.
- Loubser, G.M., 2013, 'A common pursuit: Paul Cilliers' and Wentzel van Huyssteen's epistemic attitudes', *Nederduitse Gereformeerde Teologiese Tydskrif* 54(1/2), 13 pages.
- Macquarrie, J., 1978, Existentialism, Penguin Books, New York, NY.
- Matthews, J., 2011, Training for performance: A meta-disciplinary account, Methuen Drama, London.
- Mingers, J., 2008, Realising systems thinking: Knowledge and action in management science, Springer Science and Business Media Inc., New York, NY.
- Mithen, S., 2005, The singing Neanderthals: The origins of music, language, mind and body, Phoenix, London.
- Montuori, A., 2008, 'Foreword: Transdisciplinarity', in B. Nicolescu (ed.), Transdisciplinarity: Theory and practice, pp ix—xvii, Hampton Press, Inc., Cresskill, NJ.
- Montuori, A., 2010, 'Transdisciplinary and creative inquiry in transformative education: Researching the research degree', in M. Maldonato & R. Pietrobon (eds.), Research on scientific research: A transdisciplinary study, pp. 110–135, Sussex Academic Press, Brighton.
- Montuori, A., 2013, 'Complexity and transdisciplinarity: Reflections on theory and practice', World Futures 69, 200–230.
- Nicolescu, B., 2002, Manifesto of transdisciplinarity, transl. K-C. Voss, State University of New York Press, Albany, NY.

- Osberg, D., Biesta, G. & Cilliers. P., 2008, 'From representation to emergence: Complexity's challenge to the epistemology of schooling', *Educational Philosophy and Theory* 44(1), 213–227. http://dx.doi.org/10.1111/j.1469-5812.2007.00407.x
- Osmer, R., 2008, Practical theology: An introduction, Eerdmans, Grand Rapids, MI.
- Pohl, C., 2010, 'From transdisciplinarity to transdisciplinary research', *Transdisciplinary Journal of Engineering and Science* 1(1), 74–83.
- Potolsky, M., 2006, Mimesis, Routledge, New York, NY.
- Preiser, R., 2012, 'The problem of complexity: Re-thinking the role of critique', MA dissertation, Department of Philosophy, Stellenbosch University.
- Regeer, B. & Bunders, J., 2003, 'The epistemology of transdisciplinary research:
 From knowledge integration to communities of practice', *Interdisciplinary Environmental Review* 5(2), 98–118. http://dx.doi.org/10.1504/IER.2003.053901
- Rizzolatti, G. & Fogassi, L., 2007, 'Mirror neurons and social cognition', in R.I.M. Dunbar & L. Barrett (eds.), The Oxford handbook of evolutionary psychology, pp. 179–195, Oxford University Press, Oxford.
- Silk, J., 2007, 'Empathy, sympathy and prosocial preferences in primates', in R.I.M. Dunbar & L. Barrett (eds.), The Oxford handbook of evolutionary psychology, pp. 115–126, Oxford University Press, Oxford.
- Stanislavski, C., 1989, *An actor prepares*, transl. E. Reynolds Hapgood, Routledge, New York, NY.
- Stanislavski, C., 1947, 'The actor's responsibility', in T. Cole (ed.), Acting: A handbook of the Stanislavski method, pp. 18–21, Lear, New York, NY.
- Thiselton, A., 2009, Hermeneutics: An introduction, Eerdmans, Grand Rapids, MI.
- Van Huyssteen, J.W., 1998, Rethinking theology and science: Six models for the current dialogue, ed. with Niels Henrik Gregersen, Eerdmans, Grand Rapids, MI.
- Van Huyssteen, J.W., 1999, The shaping of rationality: Toward interdisciplinarity in theology and science, Eerdmans, Grand Rapids, MI.
- Van Huyssteen, J.W., 2006, Alone in the World? Human uniqueness in science and theology, Eerdmans, Grand Rapids, MI.
- Van Huyssteen, J.W., 2011, 'Should theology take evolutionary ethics seriously?:

 A conversation with Hannah Arendt and Maxine Sheets-Johnstone', in L. Hansen,
 N. Koopman & R. Vosloo (eds.), Living theology: Essays presented to Dirk J. Smit on
 his sixtieth birthday, pp. 454-467, Bible Media, Wellington.
- Van Huyssteen, J.W., 2014, 'Postfoundationlism in theology: The structure of theological solutions', *Ephemerides Theologicae Lovanienses* 90(2), 209–229.
- Van Heerden, E., 2007, 'Tracing the impact of Stanislavski's system on Strasberg's method', MA dissertation, Department of Drama, Stellenbosch University.
- Woermann, M. & Cilliers, P., 2012, 'The ethics of complexity and the complexity of ethics', South African Journal of Philosophy 31(2), 403–419. http://dx.doi.org/10.1080/02580136.2012.10751787