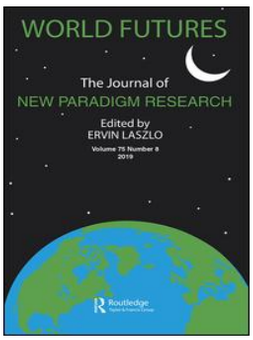

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Applying Transdisciplinarity: Exploring Transgenerational Traumas of Anatolia, Turkey

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ABSTRACT

Collective trauma such as wars, genocide, and natural disasters often affect society from micro (individual) to macro (society) levels. These multilevel traumas are inevitably passed on to subsequent generations, such as through the biology of the person, psycho-dynamics, family-dynamics, and socio-dynamics, which makes the exploration of historical traumas well suited to a transdisciplinary approach. Transdisciplinarity views knowledge building and dissemination as a holistic process. To be able to address the interdependent and complex nature of transgenerational trauma, in this paper, I propose the four dimensions of transdisciplinarity outlined by Montuori as a framework. I exemplify applying transdisciplinary in exploring historical traumas of Anatolia, Turkey.

KEYWORDS

Anatolia; collective trauma; contemporary research; historical trauma; transdisciplinarity; transdisciplinary research; transgenerational trauma

Introduction

The consequences of war, genocide, massacre, and displacement, when not dealt with, are transmitted to future generations. Such atrocities can cause extreme personal trauma for the individuals involved, whether victims, witnesses, or perpetrators (Herman, 2015; Levine, 1997; van der Kolk, 2014; Volkan, 2006). The effects of collective trauma expand from individuals with direct experience to their families, communities, and society (Sztompka, 2000). The personal effects of these traumatic experiences, if not healed, are transmitted to the next generation through adaptive and maladaptive behaviors, psychologically (Danieli, 1985; Duran &

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Duran, 1995; Leary, 2005; Menakem, 2017; Schützenberger, 1998; Volkan, 2006, 2014), socially, culturally (Alexander, 2012; Sztompka, 2000) and (as we now know) epigenetically (Kellerman, 2001; Yehuda et al., 2005). Generation by generation, traumatic personal experiences began to be experienced as part of the culture and collective identities.

Collective traumatic experiences become part of the collective narratives and begin to live and breathe within the culture and large group identities (Volkan, 2004). Trauma narratives find places in stories, myths, cultural norms, institutions, and political conflicts. Hence, collectively and historically shared traumas in Anatolia during the last centuries have become inherently more complicated generation by generation. Furthermore, the deep wounds that exist from long-standing conflicts between Turks, Kurds, and Armenians have not yet been sufficiently addressed and healed (Soyalp, 2019). Given the complexity of exploring historical traumas, it is not possible to address the complexity of Armenian, Kurdish, and Turkish transgenerational traumas from the perspective of only one discipline. As a result, I chose to do a transdisciplinary research.

Transdisciplinary research is centered on an inquiry question and draws on literature across and beyond disciplines, without assuming disciplinary boundaries, to address the question at hand (Klein, 2013; Leavy, 2011; Montuori, 2005b, 2012b; Morin, 2008; Nicolescu, 1999; Wells, 2012). According to transdisciplinary scholar Patricia Leavy, "transdisciplinary approaches to research are needed in order to effectively address many contemporary challenges" (2011, p. 9). More and more undergraduate and graduate students are expected to think analytically, critically, and conceptually to integrate multifaceted world problems. Therefore, many researchers and higher education institutes have been increasingly adopting transdisciplinary practices even though they do not call it such (Leavy, 2011; McGregor & Volckmann, 2011). Transdisciplinary departments, such as environmental studies, sustainability, gender studies, and ethnic and racial studies, emerged to address complex environmental or societal problems the world faces today. This illustrates that today's complex social problems need contemporary research frameworks; transdisciplinarity is one of them.

Creativity and complexity scholar Alfonso Montuori (2005b, 2010, 2011, 2012a, 2012b, 2013a, 2013b) proposed a practical heuristic guide to researchers which organizes transdisciplinary inquiry elements in four main dimensions: research that (a) is inquiry-based, (b) is transparadigmatic, (c) incorporates complex thought, and (d) integrates the inquirer. In this article, I discuss these four elements and how they apply to study transgenerational trauma.

In the following, I review the current perspectives on transdisciplinarity. I first introduce Alfonso Montuori's four main dimensions to transdisciplinarity in more depth. Then, I shift my exploration to why I studied historical trauma from a transdisciplinary perspective, followed by how I applied transdisciplinarity, specifically, in studying historical traumas of Anatolia.

Transdisciplinarity as an Approach to Inquiry

As disciplinary research dominated the mid-20th century, it branched out into sub-disciplines and became even more hyper-specialized (Augsburg, 2006). In a complex and multidimensional world, transdisciplinary research evolved in response to the needs of the emerging of new knowledge patterns (Gidley, 2010; Montuori, 2011) to address "contemporary challenges, and the complexities of which heedlessly transgress disciplinary boundaries" (Donnelly, 2016, p. 51).

Throughout the 20th century, major academic disciplines have gone through a significant shift in relation to the transcending of disciplinary specializations, via inter-, multi-, and transdisciplinary approaches (Gidley, 2010). The transdisciplinarity framework is still a relatively new way of looking at research (McGregor, 2015b; Nicolescu, 2010). *Trans-* prefix, by definition, means "on or to the other side; across; beyond" (Translation, 2019). After seven centuries of disciplinary knowledge creation and practice, only in the last century transdisciplinarity as a research paradigm was born. (Trans)disciplinarity as a term was first used in the late 1960s by Edgar Morin, Erich Jantsch, Andre Lichnerowicz, and mostly known by Swiss philosopher and psychologist Jean Piaget in 1972 (Nicolescu, 2003, 2010). The use of transdisciplinary over the years branched out to different forms: from highly theoretical to more applied (Montuori, 2012b). Moreover, transdisciplinarity (as a term not as a practice) has entered the mainstream, which urged the need to distinguish the various "schools" or approaches to transdisciplinarity (Donnelly, 2016; McGregor, 2015b).

Augsburg (2014) and Klein (2004) delineated two dominant transdisciplinary camps. One branch saw the work of physicist Basarab Nicolescu and philosopher Edgar Morin, who viewed transdisciplinarity as a new approach to create knowledge "with attendant axioms for what counts as reality, logic, and knowledge" (McGregor, 2015a, pp. 10–11) and the other view known as the Swiss, Zurich, or German school emerging from the International Transdisciplinary Conference held in Zurich in 2000, which saw transdisciplinarity as a new type of research (Gibbons et al., 1994) informed by the post-normal sciences (Nowotny, 2003, p. 11). Helga Nowotny (2003), a professor of social studies of science,

summarized this branch of transdisciplinarity as Mode-2 (in comparison to Mode-1/disciplinary sciences), a knowledge production method with two main criteria: accountability and quality control. In summary, these criteria mean: accountability to their audience and to be conducted in an aim of societal value; in other words, "to obtain a better outcome, to produce better science" (p. 3).

My perspective and application of transdisciplinarity are mainly influenced by the works of Nicolescu, Morin Augsburg, Klein, Leavy, Montuori, and Wells. From their perspective, transdisciplinarity is an issue-based or inquiry centered approach and views knowledge building and dissemination as a holistic process that requires innovation and flexibility. Transdisciplinary research can be inquiry-driven, socially conscious, and oriented toward systems thinking and complexity theory (Montuori, 2012a) and is a mode of inquiry with the potential for transcultural engagement in both theory and practice. Transdisciplinary research draws literature across and beyond disciplines, without assuming disciplinary boundaries (Augsburg, 2014; Klein, 2004, 2013; Leavy, 2011; Montuori, 2012a; Morin, 2008; Nicolescu, 1999, 2010).

Historically, theory and practice evolved in binary opposition, with very little interaction and influence from one another. Transdisciplinary research allows a dialogue between theory and practice and thus creates tools for scholar-practitioners who are involved both in theoretical paradigms and hands-on practices in their communities. In a way, scholar-practitioners could mobilize their skills, energy, creativity, and imagination toward addressing the world's most pressing collective challenges (Donnelly, 2016).

From a comprehensive review, Alfonso Montuori (2005a, 2010, 2011, 2012a, 2012b, 2013a, 2013b) proposes a practical heuristic guide to researchers which organizes transdisciplinary inquiry elements in four main dimensions: research that (a) is inquiry-based, (b) is transparadigmatic, (c) incorporates complex thought, and (d) integrates the inquirer.

Research That is Inquiry-Based

One of the fundamentals of disciplinary research is the advancement of a particular field. Hence, the scope of a particular discipline limits disciplinary research. For example, a psychologist would not look at trauma as a collective phenomenon that would come under the purview of the discipline of sociology. On transdisciplinarity, the researcher does not lead with the discipline, but with the description of the phenomenon. Then, the researcher decides how to approach it with pertinent knowledge that may be drawn from many disciplines (Montuori, 2012a). Transdisciplinary research integrates and synthesizes disciplinary knowledge: "all disciplines

offer unique but limited perspectives onto the social reality they study" (Leavy, 2011, p. 15). It allows the researcher to cross beyond disciplines in an effort to explore an inquiry question more fully (Montuori, 2012a).

I would like to share a short anecdote to illustrate transdisciplinarity. But first, I will briefly introduce the creator of the anecdote. In the popular culture of the Middle East, he is known as Mullah Nasruddin, a 12th century Seljuk satirical Sufi, who lived in central Anatolia. Nasruddin is today most known by his funny stories, jokes, or humorous anecdotes, which are told and retold endlessly in the tea-houses and the historic silk road routes of the Middle East and still can be heard in homes, schools, and social settings. Nasruddin stories could be understood and interpreted on many levels. The humorous Nasruddin anecdote often has a moral point and aims to expand the realization and insight of the listener of his stories. That said, it turns out that many people still do not know about the creator of these mind-bending, spirit-expanding anecdotes.

Nasruddin is a well-known and loved historical figure in Turkey. The historian and scholar, Mikail Bayram, has done extensive research on Nasruddin through reading handwritten letters and resources from the 12th century. According to Bayram (2005), Nasruddin's original name was Nasir ud-din Mahmood al-Khoyi, or by his title Ahi Evran (the leader and founder of Ahi organization). He was a social activist and social entrepreneur of his time and took a political stance against the Mongol invasion in the 12th century. He was killed at a protest in today's Kayseri, Turkey, which Bayram claims there was a state-enforced massacre of all protestors. Another well-known historical figure that was killed by his side was Mevlana Rumi's youngest son, Ala al-Din Muhammad. Nasruddin and Rumi had a complicated relationship and conflicting political stance. Bayram (2005) argued that because Nasruddin took a political stance against the Mongol invasion and subsequent governments and because of the way he was killed, his latest work of short anecdotes reached the popular culture; however, his true identity remained hidden. Nasruddin wrote his last book, a collection of short funny anecdotes, as a veiled moral guide for society. I have not had the opportunity to read the original book, but his stories have been widely used in popular media in many cultures for centuries. As an example, I will share one of his most popular short stories. This particular story is not only a thought-provoking anecdote but is also still very relevant to contemporary issues we[1] face today; it is an excellent example illustrating the importance of transdisciplinary research.

> Someone saw Nasrudin searching for something on the ground. 'What have you lost, Mulla?' he asked. 'My key', said the Mulla. So they both

> went down on their knees and looked for it. After a time the other man asked: 'Where exactly did you drop it?' 'In my own house'. Then why are you looking here?' 'There is more light here than inside my own house'. (Idris Shah, 1983, p. 9)

Metaphorically, when research is disciplinary, the researcher is limited to exploring areas where the light is—*within their disciplinary boundaries*. Transdisciplinary research is mainly concerned with finding the key—*answering the inquiry question*. Thus, the researcher looks for the key where it might have been originally lost despite the darkness in the room, even if this means going *outside the bounds of disciplinary knowledge*. The "bedroom" within this analogy is the *dominant disciplinary discourse*, the main areas or disciplines the researcher will explore. But they could still step outside to other areas in search of clues to find. In this story, Mullah Nasruddin knew that the key was lost in his bedroom, but for some other stories, the key might have been lost somewhere in the house, or somewhere in the neighborhood, and so forth. The point is that the researcher could have more than one dominant disciplinary discourse and include other disciplines and theoretical perspectives in support of answering the inquiry question, all depending on where the key might be.

That said, when the key is found, using methods of transdisciplinary inquiry, the researcher will find surprisingly that the *answer* is hidden not in the key but in the overall map of all explored places and lessons learned through the process.

Research That is Trans/Meta-Paradigmatic

Most traditional inquiries are intra-paradigmatic, meaning the research and arguments are built within an established discipline and theoretical framework. This method of research causes fundamental disciplinary and theoretical assumptions to remain largely unchallenged. In response to global needs for new ways of knowledge creation, integral or holistic approaches to scholarship trends, by definition, are often inter-, multi-, or transdisciplinary; for instance, Magorah Maruyama coined an obscure term, "paradigmatology," in an important paper referencing cross-disciplinary and cross-cultural communication (Montuori, 2012b, p. 1). Sustainability or environmental studies are other examples where transdisciplinary involvement is another crucial point to understand and respond to our planetary needs (Wells, 2012).

Montuori (2012a, 2012b) argued that a central dimension of transdisciplinarity is that it should be meta-paradigmatic. During the (trans) disciplinary process, going across and beyond multiple disciplines, a researcher will find that each discipline explored could have different theoretical

perspectives and underlying assumptions, which makes it a difficult task to undertake. The researcher needs to develop fluency in this myriad of perspectives in order to incorporate *different theoretical perspectives*. It follows then that the main concerns of transparadigmatic inquiry are to be aware of all potential territories that should be explored, building fluency in exploring those areas and understanding many ways in which the topic has historically been approached. The building of fluency means understanding

> not only the content of various disciplinary approaches to issues, but their underlying assumptions or paradigms, and how those paradigms shape the inquiry. This process would also, of course, put into question the inquirer's own paradigmatic assumptions, and offer an opportunity to question and explore one's own assumptions. (Montuori, 2005a, p. 155)

Research That Incorporates Complex Thought

Most urgent human problems are complex. Traditional research has pulled subjects into silos away from their context to study them. Complex thought studies the question within its native context—rather than isolating the subject from its surroundings. Complex thought looks at relationships and connections to have a fuller understanding of the topic (Montuori, 2008, 2011, 2012b, 2013a, 2013b). Philosopher, sociologist, and complexity scholar Edgar Morin and his work had a strong influence on Montuori's perspective of transdisciplinarity. Morin's complex thought process, while developing rich understandings of the phenomenon beyond disciplines, also looks further at the relationships between various academic literature, systems, and frameworks a researcher can explore (Montuori, 2013a) and establishes a new relationship between the subject and the object. In transdisciplinarity, the subject and the object are separated as they are in modernity, but they are also unified by their immersion in what Nicolescu (2012) called the Hidden Third with infinite rays of action.

To further explain how transdisciplinarity incorporates complex thought, I will briefly explain its primary elements: systems theory, cybernetics, and complexity theory. Montuori (2011) argued that system theory and cybernetics emerged as an attempt to create tools and a language to reconnect and move across disciplines that had become too closed and hyper-specialized. Organic elaborate systems are natural manifestations where groups of interrelated and interacting elements form a complex whole.

As transdisciplinarity was being discussed in France in the 1940s, theoretical biologist Ludwig von Bertalanffy (1969) sought to find a new

approach to study life and living systems and developed the General Systems Theory (Gidley, 2010). Von Bertalanffy envisioned general system theory as a way of addressing an increasingly complex world (Montuori, 2011). System theory introduced the ideas of closed and open systems; and how nature or society is an open system in ways where its elements are in constant interaction within themselves and with the outside of their perceived boundaries.

Cybernetics, by comparison, in its early years, emerged most notably from the famous Macy conferences from 1946 to 1953. These conferences explored concepts, such as negative and positive feedback, self-organization, and entropy. Cybernetics refers to "arts of steering, or the study of dynamic circular interactions and recursive patterns of organization" (Montuori, 2011, p. 414) in the forms of negative and positive feedbacks. Negative feedback refers to deviation-reducing feedback. An example could be seen in thermostat programing in which when the temperature in the room reaches a lower degree, the thermostat is programed to begin to raise the temperature toward the setpoint. Positive feedback refers to "self-exciting" patterns, a pattern that reinforces itself; positive does not necessarily mean for the good. For example, people who do not exercise tend to feel out of shape and are less likely to move. Then over time, these sedentary people get even more out of shape and even more less likely to move, and so on. Negative feedback changes the trajectory; it may be that the person is diagnosed with a health problem, and they received this information as a wake-up call. Negative feedback changes the course, and the introduction of positive feedback starts a situation and a change—when somebody begins to exercise, once the pattern is set, the more they exercise, they are more likely to move and so forth.

The same principle could apply to our thought patterns. The organizational psychology field is historically one of the earliest adopters of systems thinking to their methodology. The Ladder of Inference (Ross, 1994) is one of the most widely used models to describe the unconscious thought process of many people. An assumption of the model is that people live in a world of self-generated belief systems, which remain largely untested. These beliefs are adopted based on earlier observations and conclusions, in which people enter into comfortable, positive feedback thought patterns. For example, if I observed someone giving me a "wrong" look, and I made the assumption that they do not like me (as described in positive feedback example above), my later observations of this person will also look for proof to emphasize and validate this belief, and as time goes on, I am more likely to firmly believe that this person does not like me, even if it is untrue. If not tested with reflective thinking, this thought pattern tends to grow stronger over time. Modern neuroscience also confirmed the basic assumption of the axiom of *neurons that*

fire together wire together (Bi & Poo, 2001; Hebb, 1949; Keysers & Perrett, 2004; Markram et al., 1997). One way to interrupt this thought pattern is through an unexpected encounter (negative feedback); something out of the ordinary happens and challenges an individual's belief system. For example, if the person I thought hated me comes to my aid in time of need and is generous with compassion, I think to myself, "I had no idea this person cared about me." But of course, change in belief and assumptions is not that simple and is complex. In the example above, after the experience, an individual often has choices: they default back to old ways of thinking (due to other cultural or personal emphasis and orientation), or the positive feedback could kick start a new thought pattern about the person, showing them in a new light. In other words, negative feedback provides a chance to re-create a person's beliefs and assumptions. But the depth and direction of the change depend on many factors and is often complex.

In relation to these paradigms, complexity theory also emerged as "the study of interconnected, interdependent, dynamic systems" (Montuori, 2011, p. 414). In Montuori's (2012a) summary, it is explained that complex thought integrates system theory, cybernetics, and complexity theory to offer a way of thinking that accounts for context, interconnection, interdependence, change, and uncertainty. He also warns that if a researcher is attempting to work across disciplines, connecting topics, ideas, and phenomena with a way of thinking that separates, abstracts, and epistemologically removes context, that would be defeating the purpose of the research (p. 3).

I would also like to reference here complexity framework as it is inclusive in design rather than reductive and isolation oriented; it also allows the researcher to include their humanity, their subjectivity, agency, and responsibility as an individual. Transdisciplinarity and complexity are inextricably intertwined; therefore, both may be needed to explore difficult topics which require radical shifts in our perception of humans, at-large, as constructed active subjects (Wells, 2012).

Research That Integrates the Inquirer

Transdisciplinary research provides a way of thinking and organization of knowledge to addresses the complexity of the world while also taking the role of the inquirer seriously (Montuori, 2010, p. 123). As Nicolescu (2008) put it, "knowledge is neither exterior nor interior: it is simultaneously exterior and interior. The studies of the universe and of the human being sustain one another" (p. 9).

As part of my Organizational Psychology Master's program, I took a required course called "Self as an Instrument." During this class, we engaged with several self-assessment tools to explore who we are as

persons and what our personality traits are (e.g., the Myers-Briggs Type Indicator [Briggs Myers et al., 1998], Enneagram [Riso & Hudson, 1996], Conflict Style [Hammer, 2005]). We provided feedback to each other on how we show up in groups to help gain a broader understanding of who we are as persons and as professionals. The aim of this process was to learn how when we enter an organization as a consultant for cultural, group, or organizational assessment or other organizational intervention reasons, in addition to several other technical tools we learned, we can also use our personal experiences as information for understanding what is going on in the organization. When I enter an organization, I ask the questions, "What kind of reactions do I have? What are my thoughts? What is influencing my thought? How my personal stories affecting my observation and my assumptions? What kind of patterns am I observing? What belongs to me versus what belongs to the organization?"

Morin (2008) also points out the urgency of self-attunement into a study and how the researcher needs to have an investment in exploring their self-limitations and bringing awareness to blind spots in perception. Using *the self as an instrument* could be a difficult task as we are often blind to our own biases, prejudices, and assumptions. In the classroom, we spent a semester exploring our potential biases, prejudices, and assumptions as a person and in the world. This could be a lifelong exploration. I find integrating the inquirer into the inquiry in transdisciplinary research very similar. As I immerse myself in the literature and research materials, I am also part of the research; I am not independent of it. Rather than trying to completely separate the self from the research for the sake of objectivity, transdisciplinarity embraces the fact that the researcher who is doing the research is a human being and can never be completely separate from what they are studying, and invites researcher into the process (Morin, 2008). Transdisciplinary research involves constant self-awareness both in the potential self-deception and for creativity (Montuori, 2012a).

Following this research, I ask myself (adopted from Donnelly [2016]):

- What personal experiences have guided me to do this research?
- What kind of identities do I have?
- What shaped and affected the creation of those identities?
- What views, perspectives, biases, and beliefs have been informing my understanding of the inquiry question?
- What relevant knowledge have I acquired through lived experiences that can shed light on to my inquiry?
- What personal stories do I hold that can generate broader meaning and insight for others?

In the following, I first introduce the definitions of collective, transgenerational, and historical trauma. Later I discuss the development my doctorate research in studying historical traumas of Anatolia from transdisciplinary approach.

Why Study Historical Trauma from Transdisciplinary Perspective

An atrocity or a natural disaster at a collective level can affect the entire society. Even though the experience of the trauma may differ at a personal or community level, a significant number of common experiences can create shared psychological states, depending on how close people are to the origin of the traumatic event (Volkas, 2014). Collective trauma may cause similar psychological symptoms, such as post-traumatic stress disorder (PTSD), defense mechanisms, or exhibition of psychological problems or stress-related symptoms that are shared by a group of people who experienced trauma at a collective level in similar ways (Volkan, 2002b).

Atrocities, in comparison to disasters and accidents (though both are potentially traumatic to everyone involved), are psychologically harder to bear as atrocities involve dehumanization and undignifying practices (e.g., Herman, 2015; Janoff-Bulman, 1985; Volkan, 2006; Volkan & Itzkowitz, 2000). Collective atrocity often causes psycho-political consequences too. When other groups deliberately cause disasters, they may lead to massive medical/psychological problems. Meanwhile, if the affected groups cannot mourn their losses or reverse their feelings of helplessness and humiliation, the experience obligates subsequent generation(s) to complete these unfinished psychological processes. These transgenerationally transmitted psychological tasks shape future political/military ideological development and/or decision-making processes. Under certain conditions, an ideology of entitlement to revenge develops, initiating and/or contributing to new societal traumas and perpetuation of violence (Volkan & Itzkowitz, 2000). The effects of historically collective traumas manifest at multiple societal levels, which may include the psychological, cultural, and socio-economical. If these traumas are not healed, they continue to affect us not only in the present day but will be passed on to future generations. Healing of such complex, inter-related phenomena is not a simple task. It requires participation across all strata in society.

Inspired by the women's movement, U.S. feminist psychiatrist Judith Herman wrote that three times in the past, psychological trauma surfaced in the public consciousness, and each time flourished by a political movement (Herman, 2015, p. 9). The first diagnosis of psychological trauma emerged as hysteria, a supposed disorder of women of all races

(Pierre, 1993, pp. 10–11). Herman (2015) outlines the development of understanding and studying trauma dating back to French neurologist Charcot in the 1880s. Freud was inspired by Charcot's work in hysteria (trauma) and explored the topic mainly in the years between 1888 and 1898. This first phase grew out of a political movement of the late 19th century in France; a working-class movement during the Belle Époque period that was a period of relative peace and optimism where arts and music flourished between the years of 1871 (after the Franco-Prussian War) and 1914 (the beginning of World War I). The second wave of awareness began in England and the United States after the WWI, reaching its peak after the Vietnam War when soldiers from combat were arriving home with symptoms similar to hysteria (e.g., Grinker & Spiegel, 1945; Kardiner, 1941; Kardiner & Spiegel, 1947). In the face of the horrific effects of war, the political context of the phenomenon, then called "shell-shock" (Myers, 1915, 1916), was the growth of the anti-war movement. The third trauma wave grew through public awareness of sexual and domestic violence; the political context was the feminist movement that began in the late 1960s in Western Europe and Northern America. The contemporary understanding of psychological trauma is the synthesis of these three phases (Herman, 2015, p. 9).

In the last three decades, in addition to what Herman (2015) described as the three waves (p. 9), a new wave of consciousness of trauma has been emerging, and again appears to flourish by political movements. This new wave is exposing the transgenerational nature of trauma. The first research on this emerged during the 1980s. The children of Jewish Holocaust survivors had similar symptoms to their parents even if children were not exposed to a traumatic event, which brought the first evidence of trauma's intergenerational nature (e.g., Danieli, 1985; Danieli et al., 2017; Solomon et al., 1988). Later researchers reconfirmed the transmission of trauma with the subsequent generations, the grandchildren of survivors (e.g., Aarons & Berger, 2017; Fossion et al., 2003; Letzter-Pouw et al., 2014)

With the collective trauma that happened within the last century, researchers have been able to work with the survivors and their first or second-generation descendants directly. However, the historically traumatic experiences could also go several generations back, where the direct survivors are long gone. For instance, the soul wounding of Native Americans (Duran & Duran, 1995) and post-traumatic slavery syndrome of Africans Americans (Leary, 2005) are important examples of trauma's centuries-old psychological, institutional, and systemic perpetuation.

Social movements are "collective actions that either challenge or defend existing structures or systems of authority" (Christopher & Sandor, 2018, p. 427). The new development of understanding the nature

of transgenerational trauma coincides with the rise of technology, communication, and sociopolitical movements that raised social consciousness around environmental rights, indigenous rights, unjust socioeconomic structures, and institutionalized racism (e.g., the Standing Rock protest, Black Lives Matter, #metoo, the Occupy movements, the Arab Spring, and Gezi Uprising).

Most recently, epigenetic and embryology research confirmed, from a biological point of view, how, in response to trauma, an individual's epigenome could change through turning the genes on or off. Epigenetic transmissions, which are also known as tags, provide instructions to the DNA. The change in the epigenome "tags" could transmit to subsequent generations, causing disease or psychological vulnerability (Causadias et al., 2018; Hayes, 2018; Kellerman, 2001; Yehuda et al., 2005, 2016). One research found even memories in relation to fear could transmit up to two generations (Dias & Ressler, 2014). Epigenetic factors could also impact the emotional limbic brain and social interactions (Gaudi et al., 2016). So far, geneticists have found more than four million genetic switches that could be turned on or off depending on lifestyle and environmental factors (The ENCODE Project Consortium, 2012).

Epigenetics is a relatively new field of research. There is still so much that researchers do not know in terms of how epigenetic transmission functions and the risk for the subsequent generations. However, one solid argument epigenetic research has is that there is now scientific proof that babies are not born with "clean slates," and earlier traumatic experiences may make the next generation more vulnerable to developing stress-related symptoms or other health problems.

Now, collectively, through social movements and accompanying research, societies understand that collective trauma's complex effects are not only psychological but also biological, institutional, cultural, and systemic. Consequences of collective trauma transcend generations and repeat themselves in several different forms from micro and macro levels of society. With this awareness, studies on trauma appear to have entered a new phase, which is transdisciplinary.

Applying Transdisciplinarity: Studying Historical Traumas of Anatolia

When we look at human history, it is filled with grim events, such as wars, genocide, assassinations of inspirational leaders, natural disasters, and famine. Anatolia, located in the westernmost protrusion of Asia (Asia Minor), which currently makes up the majority of the Republic of Turkey, was no exception. In Anatolia, several historical traumatic events

occurred in the last centuries, and some continue to have significant controversies surrounding them.

In Anatolia, Armenians, Kurds, Turks, and many other ethnicities and religious groups had lived side-by-side for over a thousand years, until the collapse of the Ottoman Empire (decline period and dissolution 1792–1922), when they became estranged and sometimes fought as enemies (Adanır, 2015; Akçam, 2012; Suny et al., 2011). Influenced by European nationalism, Turkish, Greek, Arab, and Armenian nationalist movements began to erupt within Ottoman Empire at the beginning of the 19th century, accelerating the fall of the Ottoman Empire (Göçek, 2002; van Bruinessen, 2002).

With the rise of linking identity consciousness to a nationality in the mid-19th century and onwards, people in Europe and the Ottoman Empire were grappling with questions, such as what it means to come from a specific region and what it means to call oneself a Turk, Serbian, Bulgarian, or Armenian from this region or another region (Göçek, 2002). With the appearance of the modern bureaucratic state, capitalism, and nationalist values in the last two centuries, ethnic communities took on new political importance. The rise of nationalism and modern nation-states over the past 200 years have resulted in numerous conflicts that created avenues for atrocities, such as war, genocide, and forced displacement from ancestral lands (Bocchi & Ceruti, 1997). Consequently, Anatolia witnessed forced migrations of its indigenous people, massacres, epidemics, economic hardships, oppression, and assimilation policies, to name a few.

Research That is Inquiry-Based

The development of my research inquiry question took overall two years and then completing the research six additional years. I was first influenced by the definition of spiritual truth from mystic A. H. Almaas and the concepts of truth from Felipe Fernandez-Armesto, which both vaguely launched my research as the truth of Anatolia. Almaas (2001), from a spiritual perspective, defines truth as presence, a self-existing quality of Being; from personal experience, Fernandez-Armesto (1997) defines truth in categories—the truth we feel, the truth we are told, the truth of reason and the truth we perceive through senses. I was thinking about these concepts and the multifacility of truth and reading about Anatolia from historical, psychological, and sociological resources.

Looking for the truth of Anatolia, very quickly, I began to see the traces of centuries-old resilience as well as conflicts, war, pain, and suffering. This was when I decided to structure my study on historical trauma and healing. In order to narrow down a research question from historical trauma of Anatolia, I have done various interviews with family members

and scholars, attended conferences, and traveled for three months in Turkey from western Turkey to eastern Turkey, from Southern Turkey to middle, Ankara and back to Istanbul to get a sense of the major traumas of Anatolia in then 20th century. Even though I discovered many traumas, such as trauma of Syriac Orthodox people, Yezidis, Ottoman Greeks, and so on, the Armenian Genocide of 1915–1917 kept showing up as one of the major societal traumas of Anatolia and leading up to 21st century, the conflict between Kurdish identity and Turkish state is another major ongoing societal trauma of Anatolia. Therefore, I grounded the research question with the last century's Turkish, Kurdish, and Armenian trauma.

Using transdisciplinary inquiry as an underlying paradigm (Augsburg, 2014; Klein, 2004, 2013; Leavy, 2011; McGregor, 2015b; Montuori, 2005a, 2012a; Morin, 2008; Nicolescu, 1999, 2010; Wells, 2012), I decided to explore the complexity of history, psychology, and identity of Anatolians; in particular, Turks, Kurds, and Armenians. Armenian, Kurdish, and Turkish historical traumas of Anatolia are connected. Observing the ways in which they are connected and addressing collective traumas' lasting consequences can lead us to avenues for peace and reconciliation. Through this lens, my initial research inquiry question was:

> What kinds of psychosocial obstacles may be preventing Armenians, Kurds, and Turks of Anatolia from reconciliation and peace? Drawing from historical and transgenerational trauma theories and extensive historical literature review of Anatolia, what are the most significant factors that might help to support the reconciliation and healing of the historical traumas amongst Armenian, Kurdish, and Turkish ethnicities in Anatolia?

Research That is Trans/Meta-Paradigmatic

Efforts toward reconciliation and healing in Turkey might be supported by a better understanding of the potential psychological impacts of historical trauma among Armenian, Kurdish, and Turkish communities. Drawing from literature on collective, historical, and transgenerational trauma, I defined *historical trauma* in my research as the complex lasting and devastating physical, social, and psychological impacts upon a massive number of people at the same time and in similar ways. Collective trauma often affects the society at multiple levels: micro (individual) to mezzo (local community) to macro (culture and society at large). These multilevel traumas are inevitably passed on to subsequent generations and thus become transgenerational and historical. The transmission of trauma happens at several levels such as through biology of the person, psycho-

dynamics, family-dynamics and socio-dynamics which makes the exploration of historical traumas transdisciplinary and complex.

Therefore, as soon as I formed my inquiry question around the historical traumas of Turks, Kurds, and Armenians, I immediately needed to explore four central paradigms. One is history—the context in which collective wounding happened and its historical evolution. Secondly, I explored the field of psychology to understand the mechanism of trauma and how it is experienced at an individual level as well as how trauma transmits. Thirdly, I engaged with sociological arguments to understand the experience of trauma at a collective level. What are the societal points of view; how do people organize and respond to collective trauma and consequently form collective narrative and memory? Furthermore, fourth, I looked to the field of anthropology to grasp the experience of what it means to be Turkish, Kurdish, or Armenian, including ethnic differences, relations, the nature of identification, and identity-based conflicts.

Important to highlight, the inquiry question of historical traumas amongst Turks, Kurds, and Armenians is an ambitious one. I was at first overwhelmed by the extensive body of knowledge in some areas of research and puzzled by desperate lack of it in some others. Historical, sociological, political, and anthropological resources were present in both Turkish and English languages. However, the opposition of perspectives was steep. Research on the transmission of trauma in Anatolia and its psychological perspectives were severely limited. The transdisciplinary inquiry was valuable in helping me navigate through both heavily saturated areas of knowledge and a lack of research content.

Transdisciplinarity is not a methodology. As Alfonso Montuori eloquently stated, transdisciplinarity is an underlying paradigm or a framework (personal communication, May 2017). Transdisciplinarity allowed me to go beyond disciplines and become a detective in order to answer my inquiry question. While I was branching out to multiple disciplines, I grounded the research in a particular theoretical framework regarding collective trauma and its transgenerational nature (Danieli, 1985, 1998; Duran, 2006; Kellerman, 2001; Leary, 2005; Menakem, 2017; Sztompka, 2000, Volkan, 2002a, 2002b, 2004, 2006, 2013; Volkan & Itzkowitz, 2000; Volkas, 2009, 2014).

Research That Incorporates Complex Thought

Both (trans)generational and (trans)disciplinary have a unique sensitivity to look at the intertwined web-like nature of life. Incorporating complex thought, transdisciplinarity explores the liminal space where the multiple worlds meet; where there is exchange, relationships, modes of influence; a

space where the boundary is spacious with so many shades and colors. Boundaries, even if they look like a straight line, never completely separate the two sides; the boundary is a place where multiple worlds touch, effect, inform, and learn from one another; the boundary is a gradient; the space that is less understood and overlooked and cannot be defined with arbitrary walls.

As professor of sociology Neil Smelser eloquently states, the comparison of psychological and sociological trauma together by definition is a slippery slope (Smelser, 2004). This is because their theoretical perspectives are epistemologically different and not easy to synthesize in a meaningful way. That said, Gidley (2010) argued individual psychological development and sociocultural evolution are two faces of the evolution of human consciousness; therefore, it is important to understand their inherent relationships. Morin's complex thoughts have the potential to explore the place where an individual meets society along with the dynamics of relationships between individuals and society. In this integration process, disciplinary framework is not compromised; on the contrary, complex thinking shows how they are connected because in actual real life, they are connected. The experience of an individual is not separate from society, and likewise society is not separate from individual experiences; both are part of the same social paradigm. Transdisciplinary approach to inquiry shows those connections and dynamics in which they interact.

Research That Integrates the Inquirer

One important aspect of transdisciplinarity that I highlight is the integration of the inquirer (Montuori, 2010; Nicolescu, 2008). In addition to thorough scholar work, my personal experiences have been important to be transparent about because in the last eight years, while I was working on my research, I did not learn only from the literature. As a Turkish person, I have been an active member of my community, and have been socially active in organizing dialogue groups and peace-building workshops amongst Turks, Kurds, and Armenians. Even though those workshops were independent of my research process, because timing-wise they overlapped with my research process; they have also become instrumental in arguments made in my research. Furthermore, in these workshops, from both personal experience and through the experiences of other Turks, I saw how Turks respond to Kurdish and Armenian suffering, which ultimately challenged my relationship with my Turkish identity and community.

Due to ethnic, historical, and national sensitivity of historical trauma amongst Turks, Kurds, and Armenians, integration of the inquirer fairly quickly presented a particular challenge. As a Turkish person, when I

study the historical traumas of Turks, Kurds, and Armenians, I am situated in the inquiry question from the perpetrator collective identity. In terms of my gender identity, as a woman, I belong to the category of the victim within patriarchal societies, such as in Turkey. However, as a Turkish woman, due to being Turkish, I also have had a privileged stance within societal hierarchies. A careful examination of my own identity: my own biases, feelings, and thoughts toward Kurds or Armenians—what I know or do not know prior to the research—became important to understand and be transparent about. Because my biases, what I know, what I do not know, my partial knowledge, or what I know wrong consciously or unconsciously affect the arguments made in the research (Tuana & Sullivan, 2007). I had to overcome my own ignorance as much as I humanly can.

Conclusion

In summary, in my research, using Alfonso Montuori's approach to the transdisciplinary inquiry as an underlying paradigm, I explored the complexity of history, psychology, and identity; this theoretical research illustrated the multidimensional and transgenerational aspects of present-day conflicts in Turkey: how collectively and historically shared traumas have become inherently more complicated generation by generation. Furthermore, drawing from feminist philosophers Shannon Sullivan and Nancy Tuana's theory of the epistemology of ignorance-the promotion and maintenance of ignorance for domination and exploitation, I argued that the uses of epistemologies of ignorance in Turkey have been suppressing the transgenerational experiences of trauma for Armenians, Kurds, and Turks and preventing appropriate healing modalities.

Consequently, one major finding of my research is how the evolution of Turkish national identity ("Turkishness") through wide and uncompromising state-enforced processes, created effects on a societal level of ignorance, which amplified ethnic tension and conflict (Soyalp, 2019). Furthermore, the Turkish state and society consciously and unconsciously created and maintained denial of the Armenian Genocide and the Kurdish ethno-political place in Turkey. These multiple layers of ignorance have caused dehumanization, denial, lack of empathy, perpetuation of violence, and collective traumas within the society (Aras, 2014; Göçek, 2015; Şeker, 2007; Ünlü, 2016).

As one of the members of the Turkish nation, growing up with epistemologies of ignorance in the society (Mills, 1997; Tuana, 2006; Tuana & Sullivan, 2007), the actions I have taken or not taken due to my own ignorance even in most innocent cases contributed to the collective level

perpetuation of violence against Kurds and Armenians. I could say "but I did not know" and argue that "I am a nice person" or "I did not do anything personally," and I can try to separate myself from the collective and say "I am not like them," all of which I tried at different stages of my research. However, because the collective violence was perpetuated in the name of my national identity and for the maintenance of the Turkish nation that I have taken advantage of, perpetuation of violence at a collective level, either I was the perpetrator, bystander, or the witness, which leaves a particular weight and grief on my shoulders. Weight that I had to learn to accept.

Therefore, the concept of "identity" became an important inquiry thread. The exploration of "what is identity?," "Who am I?," "Who do I take myself to be?," "Who am I in the presence of an Armenian person?," and "Who am I in the presence of a Kurdish person?" with variations of Kurdish and Armenian identities and the dynamism of my responses at different times needed to be woven into the research process.

Therefore, to be able to address the interdependent and complex nature of transgenerational trauma, cultural identity, and history, I propose transdisciplinarity as a framework. Using transdisciplinary inquiry as a framework, researcher can present the complexity of history, psychology, and identity. Furthermore, through transdisciplinary research, the researcher can explore their multiple identities and the ways and which their identities allow them to have fuller insights about the study and in some other cases, how their identities may posit obstacles.

In my research, I grounded my research from my perspective as a Turkish person while I attempted to understand historical events and their intersectionality amongst Turks, Kurds, and Armenians. To posit, my identity transformed as I engaged with the research process, whereby what I have learned and interpreted has changed my identification with my Turkishness thereof. In studying transgenerational (historical) trauma of Anatolia, reflecting on complex thought and transdisciplinarity, I examined literature between and across different disciplines, and beyond all disciplines (transdisciplinary) to answer my inquiry question of how trauma transmits across and beyond generations (transgenerational).

Note

1. I will occasionally be referring to "we," "us," and "our" throughout the study. I will be using "we" for reasons of inclusion (or other informed reasons) throughout the paper, for example, we as "humans"; we as "classmates."

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