Those Who Left/Are Left Behind: Schrödinger's Refugee and the Ethics of Complementarity

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"Those left behind" was a recurring emphasis of media depictions of the emotions surrounding the departure of those who left Afghanistan. The relationship between "those who left" and "those left behind," which is characteristic of any context of forced displacement, relates to potentials, compelled by life and death questions. A decision to leave or stay is on the surface a binary choice, defined by the physical impossibility of doing both. The purpose of this paper is to explore how the ethical questions change when placed in a framework of quantum complementarity, by which phenomena, defined by what they are not, are also, in important respects, that which they are not, that is, the polar opposite. The first section develops Schrodinger's thought experiment and problematizes his focus on life and death as physical states of the cat, and the separateness of the observer, as a misrepresentation of the Copenhagen School arguments from which the thought experiment arose, and complementarity in particular. The second section examines the relationship between "those who left," "those left behind," and external observers in terms of a duality of matter and consciousness, which is complementary and mutually constituted. The third section examines the liminality that arises from a series of nested "boxes" and the various positions from which the forcefully displaced are observed within a holographic world. The final section then unpacks the ethical implications of quantum complementarity and ungrieved grief as they relate to forced displacement.

L'expression « ceux qui restent » était régulièrement utilisée dans les médias pour évoquer les émotions des personnes ayant quitté l'Afghanistan. Le lien entre « ceux qui sont partis » et « ceux qui restent », caractéristique d'une situation de déplacement forcé, évoque la notion de potentialité, elle-même soumise à des questions de vie ou de mort. La décision de partir ou de rester semble, en apparence, un choix binaire, défini par l'impossibilité de combiner les deux options. Cet article a pour objectif d'explorer la manière dont les questions éthiques évoluent face à un cadre basé sur la complémentarité quantique, dans lequel les phénomènes, définis par ce qu'ils ne sont pas, sont également, à bien des égards, précisément ce qu'ils ne sont pas, à savoir leur exact opposé. La première section développe l'expérience de Schrodinger et analyse sa réflexion sur la vie et la mort en tant qu'états physiques du chat, ainsi que sur l'indépendance de l'observateur, expérience visant à souligner le caractère erroné des thèses de l'école de Copenhague, nortimément en ce qui concerne la complémentarité. La deuxième section examine la relation entre « ceux qui sont partis », « ceux qui restent » et les observateur·rices externes dans les termes d'une dualité entre matière et conscience, à savoir deux éléments complémentaires et mutuellement constitutifs. La troisième section analyse la liminarité qui émerge d'une série de boîtes « imbriquées » et des différentes positions à partir desquelles les personnes subissant un déplacement forcé sont observées, dans le cadre d'une space holographique. Enfin, la dernière section examine les implications éthiques de la complémentarité quantique et d'une douleur non traitée dans le contexte d'un déplacement forcé.

«Los que se quedaron atrás» era un énfasis recurrente en las representaciones de los medios de comunicación sobre las emociones que rodearon la partida de los que dejaron Afganistán. La relación entre «los que se fueron» y «los que se quedaron atrás», característica de cualquier contexto de desplazamiento forzado, se relaciona con los potenciales, forzados por cuestiones de vida o muerte. La decisión de partir o quedarse es, a simple vista, una elección binaria, definida por la imposibilidad física de hacer ambas cosas. El objetivo de este artículo es analizar cómo cambian las cuestiones éticas cuando se sitúan en un marco de complementariedad cuántica, por el que los fenómenos, definidos por lo que no son, son también, en aspectos importantes, lo que no son, es decir, el polo opuesto. La primera sección desarrolla el experimento mental de Schrodinger y problematiza su enfoque en la vida y la muerte como estados físicos del gato, y la separatividad del observador, como una distorsión de los argumentos de la Escuela de Copenhague de la que surgió el experimento mental, y la complementariedad en particular. La segunda sección analiza la relación entre «los que se fueron», «los que se quedaron atrás» y los observadores externos en términos de una dualidad de materia y conciencia, que es complementaria y se constituye mutuamente. La tercera sección analiza la liminalidad que surge de una serie de «cajas» anidadas y las diversas posiciones desde las que se observa a los desplazados forzosos dentro de un mundo holográfico. En la última sección se analizan las implicaciones éticas de la complementariedad cuántica y el dolor no demostrado en relación con los desplazamientos forzados.

Introduction

The speedy evacuation of US and other Western forces from Afghanistan in August 2021 saw images of desperate people and children scrambling to get on flights. "Those left behind" was a recurring theme in the media. Given their identification with a departing enemy, "those who left," or were unsuccessful in leaving, felt endangered by the emergence

of a Taliban government. Anxiety and fear of punishment or loss of life framed the context in which life and death circumstances superimposed different potentials attached to a decision to stay or to leave. Like any other context of forced displacement, the choice to leave or to stay was not a free choice. It was propelled by rapidly changing and highly dangerous circumstances.

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Forced displacement raises profound ethical issues, regarding, for instance, the legitimacy of the movement in question or the values embodied in the practices of states. As Matthew Gibney (2016, 48–49) notes, ethics is a relative newcomer to the study of forced displacement, given an emphasis in early studies on policies to improve the plight of refugees, or legal analysis of the microdynamics of forced migration. Ethical theorists had tended to avoid the subject because of its empirical complexity; however, the ethics of forced displacement has become increasingly important, including questions of who can claim refugee status and the extent of state responsibility to admit and protect those who are recognized as refugees. The debate has revolved around claims that liberty and equality require open borders and free movement, on the one hand, and, on the other hand, claims that sovereign communities have a right to determine their own border laws and that closed borders are necessary to protect the integrity of democracy (Abizadeh 2010).

Claims about open borders and free movement build on Kantian arguments about the importance of universal hospitality, including the right of the stranger not to be treated as an enemy. Critical scholars have pointed to the conditionality of claims about hospitality (Derrida 2000) and argued, among others, that Western inhospitality to non-whites, now and in the past, has been informed by Kant's hospitality (Gani 2017). They have further pointed to the roots of nineteenth-century European empire, and constructions of migration within it, in Enlightenment assumptions, liberal and utilitarian, about the best way to promote white colonial settlement and the effective governance of non-white subjects (O'Brien 2010, 31). In the context of British empire, rights of free movement did not apply equally, either to those born within the empire or even less to those of non-European origin (Harper and Constantine 2010, 149).

The legacy remains alive in policies and institutions surrounding refugee movements that continue to keep poor and non-white refugees out of the wealthy world (Van Houtum 2010). The legacy has ethical implications as reflected in representations of refugees in the media as a security threat (Bleiker, Campbell, and Hutchison 2021); the use of surveillance in their governance, with the border as a "state of exception" where law is suspended (Salter 2008); and the biopower of the state in deciding who can live and who is permitted to die (Doty 2011). In contrast to the citizen, the refugee is often constituted as ungrievable (Auchter 2014), with a status of abjection that results in being cast off or thrown away (Kristeva 1982); often confined to refugee camps, in conditions of "bare life" (Owen 2009), the experience is one of trauma and liminality, the betwixt and between of an identity defined by belonging and not belonging, and embedded in architectures of control that limit agency. The question here is what might be gained from situating these practices and the ethics of forced displacement in a quantum world of uncertainty?

Alexander Wendt (2015) argues that most social science, including constructivism, rests on a Newtonian metaphysics including atomism, localism, and determinism, and as a result, is unable to deal with consciousness or to account for mutual constitution. Quantum physics, in contrast, emphasizes the matter–consciousness relationship, holism, nonlocalism, and indeterminism. The point, as highlighted by Milja Kurki (2020), regards the transition from thinking about the world as composed of material things or ontologically separate individuals to understanding the relational and mutual constitution of difference within seamless and dynamic wholes. Karen Barad's (2007, 160) "agential realism" is more specific than Wendt's about the ethical dimensions of taking responsibility for material entanglements,

which, although not her focus, would include that of citizens and refugees.

The debate about the relevance of quantum theory to the social sciences has encountered resistance from several angles. On the hand, the application of insights derived from the analysis of microscopic phenomenon seems to pose a question of how to scale up from one level of life, that is, the subatomic, to another, that is, the human and social, and in this respect, the language of quanta, the smallest amount, contributes to the problem, as do claims that quantum effects wash out above the macroscopic level. The fear is that the theory can never be more than analogy (Murphy 2020, 44). On the other hand, some critical theorists have expressed ambivalence about bringing science to insights, not least about relationality, that already have an established place in feminist and other critical thought (Sjoberg 2020).

Pan Chengxin (2020) argues that the growing literature on relationality has a tendency to give temporal priority to relations over entities and would benefit from attention to quantum theory. In his quantum argument, the binary, that is, either individualism or relationality, is replaced by a holography, within which parts and wholes are intertwined, and where each part reproduces the pattern of the whole. Barad (2007) and Wendt (2015) argue that the holism of a quantum universe is contrary to claims that it is divided into microscopic and macroscopic. If, as is increasingly acknowledged, quantum science provides a more correct and complete view of the universe than classical physics (Barad 2007, 85), and we are a part of that universe, it is reasonable to ask a question about the significance of this shift for what we, as observers and actors, do and the ethics of that doing (Fierke 2022).

In her exploration of the ethical implications of quantum theory, Laura Zanotti (2021) highlights the importance of context, as distinct from abstract theory, for analyzing the ethics of relational entanglements. In what follows, we situate practices of forced displacement within a particular kind of global context, while fleshing out the relational world of those who leave and those left behind. A decision to leave or stay is on the surface a binary choice, defined by the physical impossibility of doing both. Quantum complementarity makes it possible to consider that phenomena, defined by what they are not, are also, in important respects, that which they are not, that is, the polar opposite. Further, the relationship between those who left, those left behind, and external observers is an entangled and holographic phenomenon rather than a purely local decision to stay or leave across a particular border. If the world is understood in purely material Newtonian terms, the central problem is one of local physical space and how it is divided or the physical relocation of "those who leave" from one local place, such as Afghanistan, to another local space outside their place of origin. To instead approach relational worlds as holographic is to examine the presence of parts within wholes, as well as the presence of wholes within parts (Pan 2020).

Quantum complementarity shifts emphasis away from the binary construction of either real or analogy to an understanding of the world as both real and non-real, thus resting on relationships of either/and rather than either/or: "Those who left/are left behind," just as "those left behind/have left," and, in this respect, both are displaced. The equation is further complicated by a claim that the frequent resistance of host countries to seeing the refugee as human arises from a numbness to loss and a legacy of entanglements with past displacements that remain alive in contemporary populations. The existing practical and legal apparatus is first and foremost concerned with a problem of how those who cross borders are categorized and the implication

for their life within a new physical space. A quantum apparatus instead highlights a question of what happens in the severing of the relationship between those who left and those left behind within a holographic system, which is a problem of loss and grief, an experience of absence and emotion, and raises ethical questions about the systemic consequences of ungrieved grief.

The first section explores Schrödinger's famous thought experiment, which arose from a critique of the Copenhagen School. The Copenhagen School is widely accepted by physicists as the "standard" interpretation of quantum mechanics. We argue that Schrödinger's focus on two opposing physical states, i.e., life and death, existing simultaneously in the same macroscopic phenomenon, rests on a misrepresentation of the Copenhagen School and complementarity in particular. The second section examines the relationship between "those who left" and "those left behind," as well as to external observers, in terms of a duality of matter and consciousness, which is complementary and mutually constituted. The third section explores the liminality that arises from a series of nested "boxes" and the various positions from which the forcefully displaced are observed within a holographic world in which time and space are entangled. The final section then unpacks the emotional and ethical implications of quantum complementarity and ungrieved grief, as they relate to forced displacement.

Schrödinger's Cat

In a conversation with Einstein, the Austrian–Irish physicist Erwin Schrödinger devised a thought experiment. A cat is placed within a box with a flask of poison, and a radioactive substance. The poison will only be released if a Geiger counter within the box detects radioactivity from the decay of an atom, which shatters the flask and kills the cat. It is equally probable that the radioactive substance will decay or not decay. Subsequently, it is equally probable that the acid will kill the cat or that it will remain alive. In Schrödinger's experiment, the cat is both alive and dead until it is observed. When the box is opened to observe the cat, its quantum state changes abruptly and randomly, forcing the cat to be in either one physical state or the other, that is, dead or alive. Its ultimate fate is linked to a subatomic event that may or may not occur. Schrödinger was responding to Einstein, Podolsky, and Rosen's (1935) claim about the counterintuitive nature of quantum superpositions. Superposition means that a quantum state can exist as multiple potentials that relate to different outcomes, which in Schrödinger's experiment refers to life and death.

In the Copenhagen interpretation, the quantum state is described as a superposition of multiple states (that may mutually exclude each other) until an observation is made, at which point the quantum superposition collapses into an unambiguous observable form. Schrödinger objected to the special place that the Copenhagen interpretation gives to the observer. He was trying to demonstrate how, at the macroscopic level, the theory throws up weird and even absurd results, including a cat that is both dead and alive, and a physical state that is impacted by the consciousness of the observer, even while the probability of life or death resides with the radioactive substance. The experiment seeks to highlight the absurdity of superposition when applied to macroscopic phenomena. In this respect, Schrödinger, like some in the quantum social theory debate, questions whether it is possible to scale up from the microscopic to the macroscopic. Schrödinger's thought experiment seeks to explore the impact of a microscopic process, that is, the decay of a radioactive substance, on the physical potentials

of a macroscopic phenomenon, that is, the cat. As in a classical experiment, the observer of the cat is independent of the cause of life or death.

Schrödinger's thought experiment is concerned with the coexistence of two irreconcilable states—life and deathand the role of the observer in bringing about one potential or another. The absurdity is a function of the contradiction and the separation between the consciousness of the observer and physical potentials of the cat. In contrast, Niels Bohr, the father of the Copenhagen School, highlights the complementarity of opposites, wave and particle, which cannot both be seen at the same time, and are thus not only mutually exclusive, but also mutually implicated, in so far as a wave can become a particle and a particle, a wave, in certain circumstances. A more complete picture requires knowledge of both particle and wave properties (Wang and Busemeyer 2015), even while observation is from the perspective of one or the other. As the relationship is dynamic and holistic, the sequence and ordering of measurements are crucial for understanding the unfolding of a context. The observer does not measure a reality that exists independent of their observation; rather each measurement involves a cut into an entangled whole, from a particular position within that whole, which impacts on how further cuts are made.

While Schrödinger emphasizes the physical properties of the cat, Bohr's concern is the impact of the observer's position toward what, at any one moment, is seen and unseen. He suggests that the relevance of "atomic theory" to other domains of experience might be found in parallels to Buddhism and Daoism (Bohr 2010, 20). The physicist Werner Heisenberg further noted, following a conversation with the Indian poet Rabindranath Tagore, that quantum theory made more sense and could not be all that crazy if an entire culture subscribed to similar ideas (Capra 1988, 43). Schrödinger scales up from the microscopic to the macroscopic, and in separating the physical state of the cat from its observation, does not account for the mutual implication of matter and consciousness. In contrast, Bohr and Heisenberg seek insight into the nature of quantum "reality" in human forms of life, and in the relationship between consciousness and matter.

The question raised by quantum physics is whether matter is fundamental, that is, whether the world exists independent of its observation, or whether consciousness and observation of the world are bound up in the constitution of worlds.² The frequent assumption that quantum effects wash out above the microscopic level misses the point that, in a quantum world, the apparatus and the observer are entangled, which makes the key issue one of meaning and how knowledge is generated, which then has material implications. Quantum mechanics draws on the language of mathematics to say something about the nature of reality, and indeed whether any "reality" exists beyond the mathematics is a point of debate. Philip Ball (2018, 31) argues that meaning and the generation of knowledge is the main point; as such, emphasis on the interaction of wave and particle per se can become an impediment to understanding.

¹While Schrödinger did not buy the Copenhagen interpretation, scientists at Yale have since shown that at the microscopic level, unobserved matter can indeed be in multiple states at one and the same time, which is key to the potential for quantum computing, where outcomes can be simultaneously yes and no. Yale scientists Michel Devoret and Zlatko Minev recently developed an error-correcting cat, which brings the concept of superposition to addressing some of the errors that have stood in the way of quantum computation (Shelton 2020).

²Both descriptions are understood to be incomplete, although one may be more applicable depending on the context.

Bohr argued that actors of all kinds are entangled with the apparatus of observation, i.e., particular meaning structures shape the reality that is seen. He emphasized that humans intervene at every stage of science and not least in determining the very language in which laws of nature are formulated. The scientist, including Schrödinger, is an observer who is entangled in language and dependent on more classical concepts even when talking about phenomena that do not follow the laws of classical physics. As Bohr noted: "We are suspended in language in such a way that we cannot say what is up and what is down. The word 'reality' is a word, a word which we must learn to use correctly" (as quoted in Petersen 1985, 302).

The idea that we are suspended in language highlights a tendency to think in either/or binaries, such as individual or society, citizen or migrant, microscopic or macroscopic, matter or consciousness, and to define categories by opposition to what they are not. The complementarity of opposites and a willingness to embrace paradox is more at home in Asian philosophy (see Rosenfeld 1963, 47). Western thought more often places greater emphasis on avoiding contradiction.³ Ancient Asian philosophies, such as Buddhism, also rest on an understanding of life as both real and non-real, seen and unseen, which implies the mutual implication of opposing states and potentials (Fierke 2022).

The Mahayana tradition of Buddhist philosophy provides a way to think about the mutual implication of matter and consciousness within a holistic framework, absent the dividing line between microscopic and macroscopic. According to the Dalai Lama (2005, 74), the central philosophical problem posed by quantum mechanics is whether "the very notion of reality-defined in terms of essential real constituents of matter—is tenable." The concept of emptiness in Buddhist philosophy, he claims, provides a coherent model for understanding a reality that is non-essentialist. Emptiness points to an absence of ontological primitives or to what quantum field theory refers to as a quantum vacuum, which is prior to any conceptualization in words. Buddhism, unlike quantum physics, provides a framework for thinking about the significance of emptiness for understanding macroscopic phenomena, and in particular the human self.

Buddhism provides an account of the "self" as both real and non-real. Humans experience a sense of "I," but the separateness of self, consistent with the "thingness" of Newtonian materialism, rests on an illusion. Humans are relational. They arise from dependence on the causes and conditions that have shaped them over time, and that they instantiate through their intentions, agendas, and resulting actions (karma). The self is thus non-real as an essence but real in its relationality. To say that the self has no essence is not to suggest that it does not exist, but rather that it cannot be reduced to the material body, the self-interested ego, or a soul. The self may be primarily motivated by an illusion of separateness but is also capable of perspicuity, which gives rise to consciousness of entanglement with others. In this respect, the human self is not only a separate physical body but also a relational unfolding, or to use Wendt's (2015, 3) language, a "walking wave function." We explore the contiguity of this relational unfolding across generations.

Through the phenomenon of the refugee, we examine the ethical implications of the apparent contradiction that sentient life is both separate and relational as an entangled complementarity. A refugee is not a thing, which exists in the world, independent of the meaning structures surrounding it. Refugee is a formal category that specifies a person whose application for asylum has been accepted. It relies on a range of distinctions, for instance, the asylum seeker is one who claims refugee status, but only becomes a refugee when an application is accepted by a host country. A refugee is distinguished from a migrant, by the inability of the former to go home. At least in theory, if not practice, the migrant chooses to leave their home to move to another country, often for purposes of economic betterment, and can return if they wish; a refugee is escaping danger to life. Both are defined by an act of crossing a sovereign border. Both migrants and refugees can be contrasted with citizens, based on an absence of belonging, although they may with the passage of time become citizens. Less formally, those who leave, whether migrants or refugees, are distinguished from those left behind.

The distinctions provide the bare bones of a conceptual and normative apparatus that underpins a range of national and international institutions, which since the end of World War II, have shifted from a focus on repatriation; to the right of resettlement or to not return home in the context of the Cold War, a trend that was strengthened with decolonization; to an emphasis in the post-Cold War period on containing refugee flows, enhanced by a crisis of core Western normative values in the context of the European migration crisis in 2015, the UK Brexit campaign, and the 2016 Presidential election of Donald Trump. Each distinction belongs to a constellation of meanings and institutions that surround the refugee but is continuously shifting. All of these regimes assume a world divided by borders and the importance of formal membership within these borders for belonging or not belonging. Ethical reflection begins with the duties and rights of those who belong, as these impact on the asylum seeker. In the contemporary world, the experience of forced displacement is bound up with a conceptual apparatus, through which a particular context of life is observed and experienced from different angles.

Beyond Schrödinger's Refugee

In referring to "Schrödinger's refugee" we question a tendency, in discussions of forced displacement, to focus primarily on physical movements across borders or the separateness of external observers. We instead seek a more complete view, which situates the "refugee" in a larger holistic context. The relationship between those who left and those left behind, which extends across time and space, is central. Both Schrödinger's contradiction and Bohr's complementarity regard a relationship between polar opposites. However, Schrödinger's contradiction cancels out one opposing side as necessarily untrue, while Bohr's *complementarity* allows for the coexistence of opposites, even while only one half will be visible at any one time. Schrödinger's contradiction relates exclusively to material potentials, revealing the absurdity that two physical states—life and death—might coexist in the cat, or that a separate observer might impact on this relationship. His experiment highlights the autonomy of the parts rather than their entanglement in a whole. In contrast, with Bohr's complementarity, opposites arise from a conceptual positioning of an observer toward a reality, which is both real and non-real, present and non-present, relational and separate, and thus in a continuous dynamic of entan-

³The law of noncontradiction, going back to Aristotle, states that contradictory propositions cannot both be true at the same time. There are of course exceptions in Western thought. For instance, the concept of hauntology, introduced by Derrida (2006), relies on an interpenetration of past and present, non-presence or presence, or the absence of presence that is memory, which de-ontologies in a manner similar to complementarity. See footnote 6 for its further relevance to the present argument.

⁴Originally articulated by the second-century philosopher, Nagarjuna.

gled becoming. The issue is less one of the physical state of the refugee in and of itself, although important, than the embodiment of consciousness. Consciousness arises from a duality of present experience and memories of absence, which holds within it the complementarity of human separateness and relationality, and the difficulty of seeing both sides of this opposition at the same time.

In contrast to Schrödinger, our thought experiment highlights the entanglement of the observer in language and the importance of their position for what is seen or not seen. For the external observer, the apparatus of observation is suspended in the legal institutional language surrounding refugees and international relations. The study of refugees is heavily preoccupied with the movement of bodies from one physical location to another and their categorization. Observed through this apparatus, the refugee is a black box, which is only observed from outside. Those who leave/are left behind are trapped within the box. Opening the box places the forcefully displaced in a larger world of quantum entanglement, which raises a somewhat different ethical issue than that of the duties and rights of states vis-à-vis refugees.

Quantum complementarity resituates the problem to look at potentials embedded in superpositions that are entangled across time and space. The complementarity of "those who leave/are left behind" and "those left behind/who leave" is not merely about the either/or choice to leave or stay behind; it potentially becomes an emotional entanglement across generations, which then shapes how "citizen" observers view incomers. In our more holographic thought experiment, there are at least three different angles of observation, that is, that of the agent who observes their own experience of displacement; that of those left behind, who may both observe the departure of those who left, and their own experience of loss; and that of external parties, not least those whose decisions create the conditions for forced displacement or who might experience an ethical imperative to act. All of these observations are entangled in language, albeit not necessarily the same language, yet reflect a holistic pattern that is reproduced in the parts.

Those Who Leave/Are Left Behind

Both those who leave and those left behind may have experienced imprisonment, torture, loss of property, malnutrition, physical assault, extreme fear, rape, and loss of livelihood. These traumas may continue to be the experience of those left behind, or become their experience, as was evident in the humanitarian catastrophe that engulfed Afghanistan following the Western withdrawal in 2021. In the context of the post-withdrawal famine, parents sold children and individuals sold kidneys in order to survive (Mursal and Nadar 2022). In Ukraine in 2022, those left behind in cities such as Mariupol were trapped in underground bunkers, cut off from electricity, heat, food, or water, with continuous shelling going on above them. Those left behind may be even more unseen than those who leave. Like those who leave, they are dispossessed of a shared past, living on memories of what was and possibilities that could have been in a lost "shared" future. As such, they too are displaced, but with little hope of asylum.⁵

Given the difficulty of seeing both sides of a complementary opposition at the same time, and their positioning visà-vis borders, whether to external observers in the present or to generations in the past, our analysis places somewhat greater emphasis on how "those who left" remain entangled with "those left behind." While the physical experience is somewhat different for each, the displacement of consciousness that arises with the separation of mutually implicated parts within a relational whole is similar from each position. Both are defined by memories of absence, which bind each half of an opposition in a complementary relationship to the other. As Dominick LaCapra (1999, 700) notes, an absence of the past is a presence, rather than its loss per se; "Something of the past always remains, if only as a haunting presence." ⁶

"Those who leave/are left behind" are disentangled and disembodied, both emotionally and physically, perhaps from family but certainly from the social context or environment into which they were socialized (Boccagni and Baldassar 2015, 75). They are dislodged from patterns and habits of an everyday life world, and enter into a very different everyday in which the known is replaced by the unknown. Habits may not entirely lose their meaning, but must continuously be translated within a new configuration. The body may also be in continuous pain, after walking for days, or being cramped in a boat with chilling damp winds blowing against it. Further traumas might include being robbed, separated from family members, forced to inflict pain or kill or to witness the torture or killing or loss of family members and friends.⁷

The experience of forced displacement is more than a physical relocation from one local space to another. The agency of those who leave is a function of superpositioned potentials, which, upon observation, collapse into a particular physical outcome but nonetheless remain entangled nonlocally. The famous double-slit experiment illustrates the presence of waves in particles and particles in waves. As the single particle runs up against a barrier with several slits, it is transformed into a wave in order to pass through the slits, after which it reconstitutes as a particle. As the body moves along the physical landscape or boards the airplane or boat transporting it between particle "states," whether on land or sea, it does not of course become a literal wave. Rather the physical border constitutes an interference, through which persons pass to be reconstituted as displaced persons who seek asylum. A wall, literally or figuratively, separates the two sides of a border and represents the potential for diffraction. Much as light bends around an obstacle or spreads out after it moves through a small space, the displaced self broadens and spreads out as it moves through the barrier.8 Through the interference, the self is

⁵ Indeed, the holographic nature of the phenomena suggests that insides and outside, whether individual or state level is displaced. Displacements of memory within the individual go hand in hand with forced displacements that are more often inside the state, given that four out of five forcefully displaced persons stay in the region of their origin.

⁶The notion that memory as the "presence of the absent" goes back to Plato and has since been a core enigma in the study of memory. Our emphasis on the relationship between seen and unseen, presence and non-presence, is somewhat different than, for instance, Ricoeur's (2004) focus on remembering or forgetting. We are also not claiming, like the literature of hauntology, that the past is first and foremost ghost-like (Derrida 2006) or looking at the means by which states manipulate categories of life or death (Auchter 2014). While all of these studies of memory are relevant to the subject matter, our focus is memory as an absence of the presence of the relational self in a context of non-belonging, and as a source of grief and potential numbness, which can have transgenerational implications

⁷Trauma is a further displacement from self, and a rupturing of relationality (Edkins 2006). See "Traumatic Experiences of Refugees," at http://refugeehealthta.org/physical-mental-health/mental-health/ (accessed November 1, 2017) (Lindencrona, Ekland, and Hauff 2008).

⁸To illustrate diffraction, Barad (2014, 171) draws on the imagery of light behaving as a fluid, which, upon encountering an obstacle, breaks up and moves outward in different directions.

diffracted. Passing through the barrier is not merely an analogy to the particle and wave, but rather represents a change of consciousness on the part of both observer and observed, which has material implications for the life of the latter. In the act of leaving, consciousness becomes entangled with the past in the present, and several different presents.

In forced displacement, the seeming solidity of past entanglements dissolves and is replaced by more wave-like qualities of memory. On the one hand, the displaced carry the past with them as they travel and eventually occupy a place within a host country in the present. The fluctuation between these states is influenced by the "seeing" or "not seeing" of the trauma of leaving "those left behind." On the other hand, what seems to dissolve is the range of entanglements by which life had meaning as part of a social context and a web of relationships, that is, one's dependent origination, to use Buddhist terminology. Dependent origination, a concept elaborated by the second-century philosopher of Mahayana Buddhism, Nagarjuna, refers to a notion of self that cannot be separated from the relationships and conditions from which one emerged. Once understood as a product of "dependent origination," rather than standing alone, the entanglement of "self" across time and space becomes easier to grasp.9

Forced displacement represents a traumatic shattering of those structures of meaning by which one had carried out a "normal" life. 10 The primary connection that is sustained, and that arguably must be sustained, in order to maintain a sense of self, is that of memory. Memory is both an absence and an unseen presence, an entanglement by which a connection to home and prior notions of a relational self is sustained. It is not that the sense of "I" dissolves entirely upon stepping outside the boundaries of one's former life, but rather that the social world is no longer embedded within habitual memories, norms, rules, and shared understandings, which form the "thick" self of one's "dependent origination." The "self" is repositioned outside the relational world of their place of origin. In acquiring the "thin" identity of asylum seeker, the "self" comes to be defined by the rules, norms, and shared understandings of a new place, within which that self is without belonging. The asylum seeker may be overlaid by other contestable categories that determine whether they are welcomed as refugee, migrant, or even terrorist.11 The wound that is created from this loss, and the legacy that is both held onto and passed on, is painful. For some, the suffering they experience in such tragedies marks the moment that safety and their beliefs die.

In the transition from home to host state, the displaced are disentangled from a familiar everyday. At stake is not merely the physical departure, but also a superposition and diffraction of "self" between different states of being, one characterized by belonging within a relational web that includes those left behind; the other regards an absence of belonging and separation from those left behind, even while the thicker self remains with the latter. The ability of those who left to "see" their host depends on whether the host can "see" them and give a place to their pain and grief, that is, whether there is a compassionate response or not from

the host. In "not seeing" the pain, the host is effectively asking "those who left" to forget who or what there were and what they have left behind as the cost of belonging. The relational memory is alive but is pushed into the background, a non-present presence, less forgotten than mutually implicated with the separateness of not belonging in a new place. The old relational self may be enhanced and sustained by contemporary technologies, such as smart phones and visual imaging, 12 but the forcefully displaced are confronted with a very different relational world, where their physical reality and experience will be heavily impacted by what external observers "see." "Those left behind/who leave" experience a loss of both future potential and a self that is diminished by a loss of relational fiber. For both, the thick relational self remains alive only as an absence. The resulting self is diffracted through past and present.

External Observers/Refugees

In crossing a border a different identity is imposed, defined by an absence of belonging, over which the forcefully displaced have little control. In the autumn of 2021, those trapped at the border between Belarus and Poland were, as if in Schrödinger's closed box, betwixt and between, without safety or food, and unable to move. Trapped between the borders, with rapidly lowering temperatures and a scarcity of food and water, their time was limited, creating conditions like that of the radioactive poison. Unlike Schrödinger's box, the question of whether they would be allowed to die or their humanity would be recognized, hinged on the observation of others. The EU, for instance, described them as weapons of Belarus (Goldenziel 2021). Unlike Schrödinger's cat, where the probability of death was a function of the radioactive material, the physical conditions of life and death for those trapped between Poland and Belarus were inseparable from the apparatus through which they were observed, as human or other.

States make decisions that create the conditions for forced displacement and potential reception. The decision of the United States to withdraw from Afghanistan was the precipitating factor for the decision of individuals to leave or stay, as was the Russian invasion of Ukraine. On the surface, the Afghan displacement was not forced. Indeed, the problem was an inability to accommodate the willing departure of all Afghans who had contributed to the Western presence in the country, and who thus felt threatened by the imminent Taliban takeover. The life and death circumstances did, however, mean that the choice was forced. Many were already citizens of Western countries and thus could make a more seamless transition; those who managed to board a plane felt entitled to asylum given their prior service to the departing powers. *Context* impacts on how "those who leave" are received and whether "those left behind" are seen. Within months, the plight of those left behind in Afghanistan receded into the background. The country, gripped by famine, became the world's largest humanitarian crisis, with twenty million people on the brink of starvation four months after the departure. While reports of the suffering would peak through the back pages of the news, the attention of the media and of those states who left people behind shifted to a new conflict in the Ukraine and a new set of refugees resulting from a Russian decision to invade. Images of fleeing Ukrainians, welcomed with open arms in Poland,

⁹Epigenetics has accumulated evidence of the transmission of trauma across generations.

¹⁰ The sense of place can be so intense that it becomes a central element of an individual's identity, building upon everyday experiences and feelings (Mendoza and Moren-Algeret 2012).

¹¹On the visual framing of refugees and asylum seekers as security threat rather than humanitarian responsibility, see Bleiker, Campbell, and Hutchison (2021).

¹² Boccagni and Baldassar (2015) note that new media are transforming and creating new forms of sociality that facilitate the constitution and maintenance of emotional bonds across distance and over time.

given meaning in terms of a shared past vis-à-vis their Eastern neighbor, replaced images of humanitarian catastrophe in Afghanistan or of those still trapped on the border with Belarus. In early February, shortly before the massive influx of Ukrainian refugees to Poland and other former East bloc countries, at least nineteen people died at the border; most of them froze to death (Lorenzo 2022).

"Citizens" and "states" are the external observers who occupy seemingly fixed spaces and identities from which they rarely see the refugee or those left behind. Either may act from empathy but may also actively oppose the acceptance of more "migrants." What is not generally seen is the meaning and what is not felt are the emotions that come with being ripped from one's life, against one's will, and sent off into the unknown, or perhaps worst, to be left behind to suffer in even worse conditions than those that gave rise to flight.¹³ The movement, particularly when forced, may be necessitated by any number of traumas that provide the push for dislocation, from invasion, to war to starvation or climate change, to resettlement itself, ¹⁴ but the movement itself is inescapably emotional (Mendoza and Moren-Alegret 2012), giving rise to feelings of loss, grief, humiliation, and guilt. 15 "Those left behind" continue to experience trauma, along with the loss of "those who left."

The problem of seeing might be considered in relation to other binaries contained in the language of the external observer. The ethical dilemma is usually framed in terms of the duties or rights of the citizen or state vis-à-vis the refugee. The incomer is counterpoised with the citizen. The conceptual apparatus constitutes a relationship of belonging or not belonging within a physical space. What is seen by the external observer is a function of the context (is the incomer from a "terrorist" country, are they needing sanctuary because they have helped the West, are they merely economic migrants, pointing to a range of potential relationships between those who belong and do not belong). The identity is more a function of the apparatus than the background or experience of the incomer who seeks asylum, whose stories are largely unknown.

In Schrödinger's experiment, the experience of the observer is separate from what is going on in the box. Schrödinger explores the contradiction that the cat is potentially both dead and alive. However, in the human world, the material condition of being in the box is only a part of the equation, and the observer cannot be separated from the phenomenon in the box. A more complete view requires knowledge of "those who left/are left behind" and "those left behind/who leave," not purely as material bodies but also conscious sentient beings, observers of their own plight, who find themselves in conditions of radical and traumatic uncertainty, and are also impacted by the observations of others. The ethical problem starts with the relational rupture for both those who leave and those left behind in a place of origin; it becomes one not only of whether the box is opened such that "those who leave/are left behind" or "those left behind/who leave" can be seen, but how they are seen. The focus of Schrödinger's experiment is the

physical state of the cat; we are also interested in the emotional entanglements of those who leave or are left behind, emotions that relate to memories of love, loss, betrayal, grief, guilt, etc. Our thought experiment has more tangible physical and political resonance than Schrödinger's cat precisely because of the entanglement of consciousness and matter it reveals. The purpose is to rethink what binaries do, that is, that the self is not merely defined by what it is not but is mutually constituted by that which it is not, even while the parts cannot be simultaneously seen. To understand the relationship between those who leave and those left behind in the present requires looking further to the entanglements that influence the ability of the external observer to see or not see.

Nested Boxes and Quantum Time

On the surface, the external observer appears to be separate from what is going on in the box, as in Schrödinger's experiment. However, the question here is whether, when the observer opens the box they see a vulnerable human being, deserving of compassion, or someone who does not belong and should be kept out. What the observer sees may be a function of an ability to ask a question: In what circumstances would a parent be so desperate that they would hand their child to a stranger on a plane or put them into a boat in freezing stormy water? As the poet, Warsan Shire (2013), stated, against the backdrop of the deaths of twenty-seven migrants in the English Channel in November 2021, "you have to understand, no one puts their children in a boat unless the water is safer than the land." The quote appeared in the context of a toxic post-Brexit argument between the United Kingdom and France, in which the humanity of the asylum seekers was unseen. The question of whether the victims were migrants or refugees is important for determining the eventual status of those who made it across the water. However, compassion was lacking for both. The absence of compassion arises from an inability to see beyond one's own numbness to loss, which signals significant missing pieces in the observer.

An ability or inability to look at loss positions the lens through which the external observer looks in the box. Every human experiences loss at some point. Every human has in their ancestral lineage an experience of leaving or being left behind. In so far as "to see is to break an entanglement" (Fierke and Mackay 2020), the ability to see or not see the grievability of the refugee or those left behind depends on whether the observer has looked inside their own box at how "those who left/are left behind" and "those left behind/who left" in one's own lineage impact on the ability to see the displaced in the present. The experience of numbness to grief may be more present in countries heavily populated by immigrants, or historically by "those who left," but this disguises the extent to which history has been about human movement. As Harper and Constantine (2010, 1) note, a significant portion of the world could trace their ancestry back to the movements out from what is now the United Kingdom in the seventeenth and eighteenth centuries in the context of British empire, or to the forced displacements of non-European workers within that context. Whatever the direction of movement, dispossession has been the central story (Harper and Constantine 2010, 9). Dispossession may bring with it a tendency to become more defensive once owning land in a new place. Resonances of dispossession can be heard in fears expressed by citizens that incomers will come and take things away from them; their approach may be cast as an imminent "invasion." Given a history of

¹³ As Boccagni and Baldassar (2015, 74) note, emotions themselves are on the move as people move away from home. They evolve and are negotiated across novel settlings, life circumstances, and points of reference. On emotions and migration, see also Ewing (2007).

¹⁴On the multiple sources of stress experienced by refugees and immigrants, and at various stages of the migration process through to resettlement, see Lindencrona, Ekblad, and Hauff (2008), Schweitzer et al. (2011), and Steel et al. (2017).

 $^{^{15}}$ See Skrbis (2008) for a discussion of the role of emotions in the transnational relationships of migrants.

global movements, often given impetus by war or persecution, all countries are populated by people whose histories have been shaped by an experience of leaving, being left behind, or both.

To begin to imagine the possibility of entanglement across time requires taking the broader experience of "those who left/are left behind" or "those left behind/who left," as discussed above, and finding it in the lineage of the observer. Dispossession is not only the experience of those who left contemporary Afghanistan or Syria, those trapped at the border between Belarus and Poland, or those freezing in a boat in the middle of the English channel. It is the experience of those crossing the Atlantic in a boat, whether in chains, having been captured on the African continent, or emaciated as they escaped the famine in Ireland or the clearances in the Scottish Highlands, or more recently Franco's Spain or Nazi Germany, those departing mainland China for Taiwan, or departing Vietnam or Cambodia, against the backdrop of war or mass extermination, to name just a few.

'Those who left/are left behind" and "those left behind/who left" are entangled, each existing within the other. In so far as this relationship informs all of the nested boxes, there is no such thing as a neutral observer. Each observer is in a box of their own, entangled with their family or cultural lineage. 16 The ability to see or not see others as an external observer is dependent on having looked at the ungrieved grief and stories that have informed their "dependent arising," who they are and where they came from, which for many was an experience of dispossession. Numbness is a natural response to trauma, loss, or guilt. The latter becomes an emotional response/without emotions that can carry over generations, such that sentiments not felt at an earlier time become bound up in selves in the present. Given that the assumed separateness of self often blocks awareness of the relational self, the ultimate contradiction is within ourselves. Not seeing increases the sense of loss. The illusion of separateness, it is assumed, will make us happier; however, the cost is actually greater unhappiness.¹⁷

Historical migrations, forced or otherwise, have shaped both the physical and the conceptual parameters of the contemporary world. While the frequency of the experience might lend itself to greater compassion, loss and numbness more often sharpen the "cut" that distinguishes those who belong and do not belong, in a world divided by the borders of separate states. The state self, a collective "I" that is assumed to exist independent of its entanglements to other states, constitutes an entitlement for those who belong within, and is itself a box. Memories of "those who left/are left behind" and "those left behind/who left" are the relational material from which the box of the host state is woven. Memory is written into the consciousness of host states and shapes who is seen. The friendly reception of Ukrainians by Poland, Hungary, and the former Czechoslovakia, among others (e.g., Jukic 2022) was given meaning through multiple memories of suffering in the context of past European wars, and a shared experience within the former Soviet bloc. In contrast, references, for instance, by the Hungarian prime minister, Viktor Orban, in 2015 to an "invasion of migrants," and images of bread being thrown into cages, relied on very different memories of much earlier Ottoman invasions of Hungary¹⁸ (Fierke and Mackay 2020). The invocation of particular memories impacts on whether, how, and where the body is seen and able to continue on its journey.

The nation state and state system have over time been constituted from more or less forcefully displaced persons in movement, who in the first instance lacked any common identity (see Anderson 1983), but have acquired a fixity that stands in stark contrast to the experience of the contemporary asylum seeker. The apparatus through which the incomer is observed relies on the various conventions, norms, and values of the host country, or indeed, as in the case of Afghanistan or Ukraine, the political circumstances that framed the departure, which determine the ease of passage and how one fits with categories that signal that they should be welcomed, rejected, or given a particular place within society. ¹⁹

Detached from the life world of "home," and entering foreign territory, with no voice, legal or political, the asylum seeker may be continuously dehumanized and written over by the voices and memories of others (Chouliaraki and Stolic 2017) such that they are unseen, and in a manner that fits within the observer's narratives of safety (Bleiker, Campbell, and Hutchison 2021). Touched by the trauma of loss and lack of safety, "those who left" may turn away from (or learn to turn away from) "those left behind" or what was lost in their past. The host/observer may turn away and be unable to see the asylum seeker/those who left in the present. The turning away involves a numbing of emotions, of avoiding feeling, seeing, sensing, or experiencing compassion. In numbness, we leave our bodies, an act that aligns us with the displaced. The ultimate loss of home, belonging, and place is the dispossession of the relational self.

The borders, systems of passports, and surveillance are relatively recent (Jones 2017). Earlier waves of migrations and movements provided the matter for the now seemingly fixed entities that are states. The memories attached to earlier migrations are in the first instance collective expressions of transgenerational entanglements, which continue to have a wave-like presence within more fixed particle populations. So, for instance, Americans, Russians, Nigerians, or Indians, among others, have a life world and contemporary identity as citizens. What may not be seen are the wave-like memories of the past, whether relating to empire, the major displacements during or following World War II, or as a result of decolonization, or changing borders.

The flat image of the citizen who supports or contests the entrance of those who do not belong in the private space they claim contrasts with the entangled holographic phenomena, in which relations between those who left/are left behind are threaded through space and time, such that, as Barad (2010) states, "past" and "future" are iteratively reconfigured and enfolded through the world's ongoing intra-activity. Phenomena, such as the citizen and refugee, are not merely separate entities that "inter"-act in the present. Rather phenomena as entanglements are enfolded and threaded through the spacetimemattering of the universe (Barad 2010, 261), such that separability and difference are marked within a whole that is "cut together-apart" (Barad 2014, 168). Memory, from this perspective, is not only held within individual minds. The world itself "holds the memory of all traces; or rather, the world is its memory (enfolded materialization)" (Barad 2010, 260).

The ability to see is in large part a function of the citizen's relationship to the entanglements of their own lin-

¹⁶For an exploration of entanglement with family or cultural lineages as it relates to systems therapy, see Mackay (2020).

¹⁷An argument often made by Buddhists. See, for instance, Rinpoche (2002).

¹⁸ From 1541 to 1699.

¹⁹Ceccorulli and Lucarelli (2017) provide an overview of narratives surrounding migration in Europe. The narratives communicate who migrants are with respect to the receiving community and often function as legitimizing stories for specific policy actions. The narratives exist at all levels, going down to the clinical, where, as Ewing (2007, 231) notes, the medicalized discourse of the dominant "host" culture is understood as modern scientific truth, while the practices and emotional discourse of the migrant are "traditional" and wrong.

eage of leaving/left behind, whether they carry a numbness and inability to grieve those left behind or those who left, inherited from earlier generations, or a compassion that arises from seeing "those who left/are left behind" or "those left behind/who left" within the self. Quantum liminality is a function of consciousness that infuses material potentials. In the host country, the "refugee" is constituted as a relational phenomenon that is defined by separateness and an absence of belonging, yet the self remains entangled in memory with a thicker relational self and those left behind. The mediated public narratives of potential host countries are also entangled in memory. The historical experience is part of the thickness of the lens through which contemporary societies give meaning to "waves" or "floods" of "strangers." The latter are unlikely to be univocal but rather multiple and contested.

It is not that displaced persons coexist physically in the separate spaces of the departed home and the place of arrival. It is rather to highlight the liminal status of the asylum seeker, the nested boxes that extend across space and time, and how the multiple potentials remain alive in the eventual citizen, and potentially over generations. The relationship is entangled across time and infuses even the most settled societies. This liminality arises from the experience of separation and continuing entanglement in memory. The liminality is further a function of categories imposed at the place of arrival, over which the displaced person has little control, aside from the formal application for one status or another. All of the categories, whether asylum seeker, refugee, or migrant, refer to a liminality, of having left a place of belonging and entering a place where the person in question does not belong and seeks acceptance on a temporary basis.

Some refugees eventually become citizens, following a lengthy period of uncertainty, during which place is defined by an absence of place. In the meantime, a gamut of unresolved emotions may contribute to a sense of numbness. There may be guilt about having survived or left when important others were less fortunate, or shame in beginning a new life that is separate from the memory. The choice to leave or stay may itself have been so traumatic that safety can only be found in numbness. Regardless of who the forcefully displaced were in a former society, they become refugees or worse are denied even this absence of place. "Self" identity for the asylum seeker is a function of both self and other rather than self or other, both in relation to those left behind and the host state. To the external observer, the asylum seeker is other, a guest or stranger who is different. To find belonging in a new place, the asylum seeker must live within the liminality. Survival in the new environment may require taking on a new identity, which means, over time, that the old identity will recede further and further into the background. In order to belong and become a citizen, it may be necessary to forget where one comes from. Forgetting may require a numbness to loss, which then contributes to not seeing the suffering of others, as the refugee becomes a citizen who belongs.

What is seen from each position is different. Each position of observation rests on a relationship between seen and unseen, which implies the inability to see the entangled whole even while the parts are mutually implicated. Each observation involves opening a box, within which multiple potentials are contained, the materialization of which depends on what is seen when it is opened. The various boxes are nested in and through each other. The apparatus is suspended in language, no less for the external observer than the "self" who is the object of its own and other's observations. The potential may be surrounded by death or life but what is observed is a position of belonging or not belonging as a func-

tion of the observer and their apparatus. Those who leave are physically severed from a place of origin yet remain entangled in memory, suffering from the presence of an absence of what has been lost.

We Are All Refugees: The Ethics of Complementarity

The entanglements within and across the various nested boxes might contribute to a conclusion that we are all refugees, although this may seem abstract in light of the transgenerational nature of the phenomenon. The ethical problem may, at this point, be more easily understood by stepping away from the language of refugees and citizens, to understand a deeper existential experience that is part of a shared humanity and the entanglement of all life, that is, the seeming contradiction that we are both separate and relational. Shifting from an ontology of separation to a holography where parts are embedded in wholes, and wholes in parts, separation and relationality can be seen to be complementary and entangled.

Loss is a part of life and that which is lost remains a part of the one who has experienced loss. The refugee is the extreme embodiment of an experience that is a part of all life, and the lack of safety that comes with it. At some point, leaving and being left behind are unavoidable, whether in the crossing of borders between states or between life and death. The codification of the refugee in law, as a separate status, distinguished from the citizen, suggests on the surface that the experience of belonging provides a shield from loss and a place of safety that the asylum seeker, if accepted, may eventually enjoy. Belonging as a citizen is a qualitatively different experience than the absence of this status.

Judith Butler (2004, 2009) has argued that grieving one's own, for instance, American soldiers in Afghanistan or Iraq, may go hand in hand with a blind spot regarding the deaths of the populations who are victims of war, who may be considered ungrievable and thus less than human. Likewise, from the perspective of the external observer, the refugee, or those left behind, may be considered ungrievable. While the boundaries that separate the grievable from the ungrievable are one aspect of the problem, we are also concerned with the extent to which the apparatus through which others are seen or unseen is informed by the ability of the observer to see their own grief or the ungrieved grief that they carry from a past that is larger than their individual experience. Butler (2003) elsewhere argues that mourning arises from an acceptance that life will be irrevocably changed by the loss. Mourning involves an agreement to undergo a transformation, the full result of which cannot be known in advance. Grief, as suggested by C.S. Lewis ([1961] 2015), must be observed. Jinah Kim (2019) notes, the agreement to give loss a name, to know and to acknowledge it, is crucial to transformation. Trauma, or the numbness that arises from an inability to grieve, is different than grief. As Edkins (2006) argues, trauma is a betrayal of our "radical relationality." Traumatic events "tear us from ourselves" and from that which binds us to others. Its transports and undoes. In this respect, grief, as a relational witness to trauma, restores the "self" in its relationality to others, while trauma as an absence of radical relationality and a form of ungrieved grief postpones the act of witness to the pain of loss.

The literature on emotions, and grief in particular, has highlighted the extent to which emotions acquire shape, meaning, and value within affective social structures (Hutchison 2016). These emotions are not homogeneous but intersecting, contradictory, and a site of contestation. Affect, which can be distinguished from emotion categories expressed in language, is woven into the fabric of

experience (Ross 2019, 34) and can infuse the "feeling structures" (Koschut 2019) or "affective investments" (Solomon 2014) that enable the production of emotion in language, cultural norms, or discourse. As Bleiker and Hutchison (2015) argue, emotions matter and the emotional disposition of communities in the aftermath of trauma can be decisive in determining potentials for further conflict or healing. What is true of the individual is true of states, but far from ontologically separate, the two are woven together through a fabric of global life that is textured throughout by boundaries of difference.

Schrödinger's thought experiment emphasizes the physical state of the cat and an observer who is separate from what happens in the box. In contrast, the ethical problem explored here highlights how sentient beings see or do not see the pain of loss, and the importance of grieving to the realization of compassionate and transformative potentials. The physical separation of those who leave and are left behind occupies a central place, but is inseparable from consciousness and memories of love and a place of belonging that has been lost, and the degree to which, as Butler (2003) argues, we are willing to face loss and accept that life is irrevocably changed. We have all left and been left behind, which could provide entry to an experience of compassion for others who experience this in much more dramatic ways. To focus purely on the physical separation and what can be seen requires numbing. The numbing arises from a failure to look at loss, a denial that it has taken place, as if one person could exist in separateness from others.

The external observer in Schrödinger's experiment fails on all counts. She is focused purely on the physical probabilities of life and death, and her own observation of these potentials in the cat who exists as a separate phenomenon. It is absurd to consider that her seeing actually impacts on the outcome of life or death potentials. In the context of forced displacement and those left behind, the question is whether the observer sees beyond the either/or potentials of life and death, to see a sentient relational being, in whatever physical location, who has experienced unimaginable loss. The potentials exist within the observer in all three positions. An ability to see beyond the categories of citizen, refugee or left behind, which are suspended in language, to see the mutual implication of our separateness and relationality, is fundamental to a more compassionate response to those who face the immediate physical reality of forced displacement or, perhaps worse, being left behind. What is the relationship between the numbness or acknowledgment of the citizen experience of the loss of US soldiers in Afghanistan, on the one hand, and the ability or inability to see the suffering of those who left or have been left behind in the region, on the other? That which is observed contains within it the unseen; the self we see before us is nothing without those unseen relations from which we emerge, that is, our dependent origination, some of whom have been lost along the way, and their influence on what the seen/unseen self becomes.

As Pan Chengxin (2020) argues, we are "relations-inthings," rather than things in relation. Belonging is fundamentally relational rather than merely transactional. The observer can open the box and, in so far as they are entangled with language, the concepts they apply to what is seen will have significant impact on what materializes, that is, how the displaced are treated and whether they are extended a place of belonging. But what is inside the box is far more complex. That which is seen contains within it the unseen polar opposite. A set of experiences contains within it a

consciousness of all that has been lived in relation to others, which plays a significant role in the mattering of life, of who and what life matters. To open the box is to look beyond the known, to shift into "seeing" a further dimension of reality, which extends beyond the local present to an entangled past. The refugee, within the whole-part dynamic of the holography, is an enfolding and unfolding of the whole, and thus already belongs within the world as more than just a citizen of a demarcated space from which he or she has been displaced. The distinction between stranger and host is a conventional construction that stands in contrast to a larger entitlement to belong within the world. The host country is also a part within a whole, which has emerged from historical patterns of colonization and imperialism and cannot be separated from patterns of trade and the exploitation of labor and resources, through which the holographic relationship between parts and wholes has been woven.

The wholes and parts have been woven through nested boxes of distinctions that contain within them a complementary rather than contradictory relationship between those who left and those left behind. The conceptual apparatus that surrounds the refugee belongs to a particular global context, which has emerged very recently, over the last few hundred years (Jones 2017). The global context is divided by the private possession of particular spaces. Whether through private ownership, often for profit, or the setting of boundaries around spaces that belong privately to a "people," the re-appropriation of land for profit is a product of European and particularly British empire (Beinart and Hughes 2007), which rested on a conceptual world defined by polar opposites of, among others, free trade and dominion (Armitage 2000). In 2022, one hundred million people—one in every one hundred people in the world are forcefully displaced as a result of persecution, conflict, violence, and human rights violations, among others (UN 2022), of which only a quarter is likely to achieve actual refugee status.²⁰ At the end of 2021, a record 59.1 million people were internally displaced, 25.2 of which were children under eighteen years (OCHA 2022). Perhaps most tragic is the children who are lost and unseen.²¹ It is time for a rethink of the apparatus through which belonging in a holographic global space is observed and experienced such that the humanity of all "those who left/are left behind" or "those left behind/who left," that is, all of "us," is recognized and has a place within the world.

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²⁰The figures for refugee status in 2020 were about a quarter of the total number of forcibly displaced. The latter increased substantially in 2022 and in particular following the invasion of Ukraine by Russia in 2022 (UNHCR 2020).

²¹ According to the Dutch broadcaster VPRO and Germany RBB, 18,292 unaccompanied refugee children and adolescents disappeared in Europe between 2018 and 2020. In Germany, most refugee children who disappear come from Afghanistan, followed by Morocco and Algeria. The US Biden administration is said to have lost contact with approximately 40 percent of the migrant children released from custody (Macgregor 2021). By April 2022, 7.5 million children had been displaced from Ukraine, many of whom have been vulnerable to child traffickers.

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