

Immortality, Memory,  
Creativity, and Survival:

The Arts of Alice Lok  
Cahana, Ronnie Cahana  
and Kitra Cahana

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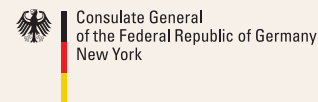
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# Immortality, Memory, Creativity, and Survival:

## The Arts of Alice Lok Cahana, Ronnie Cahana and Kitra Cahana

Edited by Ori Z Soltes

The Fritz Ascher Society for Persecuted,  
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In memory of Alice and her sister Edith  
and all of those whose lives were destroyed  
or altered by the Holocaust.

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## SPONSOR'S GREETINGS

The year 2020 marks the 75th anniversary of the end of the Second World War and Europe's liberation from the havoc and the destruction that the National Socialist Regime unleashed upon humankind.

For Germany today, this anniversary is above all time to remember the unspeakable horrors that the Jewish people suffered during the Holocaust; it is also a time to reflect on the course of our history. This is what Richard von Weizsäcker, who served as Federal President of Germany from 1984 to 1994, rightly pointed out in his seminal speech commemorating the 40th anniversary of the end of the Second World War in Europe on May 8th, 1985. Arguing that the more honesty Germans showed in commemorating this day the freer the country would become to face the consequences with due responsibility, Mr. Weizsäcker solemnly committed Germany to the shared norm and responsibility of historical consciousness and the culture of remembrance. Many years later, his successor Federal President Joachim Gauck reiterated this commitment, establishing again that the Holocaust remembrance culture was a fundamental part of Germany's identity and thus remained a moral duty for every citizen as well as every person living in the country.

Honoring this duty, this year Germany holds the presidency of the International Holocaust Remembrance Alliance (IHRA). In our view, strengthening, advancing, and promoting Holocaust remembrance and research, as well as the education of future generations remain essential.

The Holocaust and its aftermath have left irreparable losses and a trauma that endure today. This publication is dedicated to the survivors and their families, as well as to the strength and resilience, the creativity and hope of those who continue to negotiate this trauma. Investigating the art of Holocaust survivor Alice Lok Cahana, and two artists in the following generations of her family, Ronnie and Kitra Cahana, in the context of today's knowledge of the nature of memory and trauma gives us a deeper understanding of the past and present and allows us to build a better future.

We find great joy and humility in supporting this important interdisciplinary project initiated by The Fritz Ascher Society for Persecuted, Ostracized and Banned Art, Inc. Founded in 2014, this nonprofit organization researches, publishes and exhibits artists whose lives and careers were stymied by oppression or persecution by the German National Socialist regime between 1933 and 1945. With its dedicated work The Fritz Ascher Society aims to reintroduce such unique artistic voices to the world.

Ambassador Michaela Küchler,  
Special Representative for Relations with  
Jewish Organisations, Issues Relating to  
Antisemitism, International Sinti and Roma  
Affairs and Holocaust Remembrance

Berlin, October 2020

## FOREWORD

It was a magical space that I entered when I met Ronnie Cahana, a rabbi with a strong poetic voice, in 2014. A space radiating love and acceptance, spirituality and eternity—a “temple,” in his daughter Kitra’s words. It was also a geriatric center in Montreal, where Ronnie was and still is recovering from a severe brain stem stroke, which initially left him in a locked-in state, with his mind intact in a paralyzed body. As he was slowly regaining his speech, my daughter Noemi transcribed his poems, thoughts, and sermons, and I have been captivated by them ever since.

The year 2014 was also when I officially founded The Fritz Ascher Society for Persecuted, Ostracized and Banned Art, together with Ori Z Soltes and Steven Orlikoff. We exhibit, publish, and discuss artists whose careers were interrupted or destroyed by the German National Socialist regime, and who themselves were persecuted, ostracized, banned, or killed. Even today, most artists in this group are not known to a larger public and have not become part of art history. By introducing their unique artistic voices and telling their life stories, we memorialize them and celebrate their achievements, and we fight the fulfillment of Hitler’s plan to erase them forever. Their art and our commitment as individuals and as communities to never forget makes them immortal.

Was it a coincidence that Ori Soltes intimately knew the textured artwork of Ronnie Cahana’s mother, Alice Lok Cahana, a survivor of four concentration camps? Her art is an outcry that transforms the darkness of her Holocaust experience into light, “from ashes to the rainbow,” in her words.

At the same time, I learned about Ronnie’s daughter Kitra Cahana’s immersive work as a documentary photographer and filmmaker. We wondered how Alice’s Holocaust experience and its artistic expression affected the following generations of her family, both in who they are and in how they express themselves. We decided on a deep-dive exploration.

We gained important additional insights from an interdisciplinary exploration into recent

research on memory and trauma transmission—in general and specifically in the context of the Holocaust.

For us, this is an unusual project, because it goes beyond the exploration of the impact of the Holocaust on an individual artist. By investigating the transmission of this impact through three generations of artists in one family, and including scientific studies in biology and psychology about what memory is and how it works, we gain a deeper and more differentiated understanding of the effect of the Holocaust beyond the generation that experienced it directly. Today fewer and fewer Holocaust survivors are among us, so this is a very timely investigation.

Judaism annually remembers both the individual on her day of death and days of national tragedy. “We owe it to the past to remember all that has been lost, to keep those who have come before us, and to continue to yearn in the midst of mourning for all that is yet to be,” said Rabbi Meir Yaakov Soloveichik recently. This positive, future-directed orientation expresses itself in the art of Alice, Ronnie, and Kitra Cahana.

Rachel Stern  
Executive Director, The Fritz Ascher Society  
for Persecuted, Ostracized and Banned Art  
New York City

## PREFACE

This volume is a rather unusual one, in its interweaving of a series of different disciplines: theology and philosophy, art and art history, Holocaust studies, and psychology and biology. The question of how humans achieve immortality—and the ways we have, over the millennia, engaged this question—is embedded in the story of an unusual Holocaust survivor who pledged to herself, while a teenager negotiating the ugly terrain of four concentration camps, that she would one day become an artist and reshape that world on her canvases into something evocative and yet different—and did so, many decades later.

That personal, Holocaust- and art-driven narrative includes an account not only of her own life but of its effect on those around her—in particular, the son who became a poet and the granddaughter who became a photographer and filmmaker, each influenced by her both as a human being and as an artist.

Thus the narrative intersects questions of trauma and its overcoming, and its transmission from one generation to the next. And it addresses our increasing understanding of how memory operates—which parts of the brain engage which kinds of memory, including that of visual forms and colors—and of how both memory and trauma function in terms of psychology and biology.

In the end this story offers an intensified microcosm of human experience and human being, suggesting some of the interesting ways in which, as a species, we are composed of a range of impulses and interests that make us, above all, very complicated creatures.

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This publication has been made possible through the support of the Consulate General of the Federal Republic of Germany in New York. It is our pleasure to acknowledge the Honorable David Gill, Consul General, and Yasemin Pamuk, Head of Cultural Affairs and Susanne Krause in New York, and Andreas Goergen, Director of the Department for Culture and Communication, and Michael Nowak at the Foreign Office of the Federal Republic of Germany in Berlin.

The unique interdisciplinary dimensions of the volume could have never taken shape without the insightful contributions of my fellow-writers—Larry Squire, John Wixted, Natan Kellerman, and Eva Fogelman—each of whom eagerly provided work for a project directed beyond their usual worlds of focus. So, too, a timely outcome worthy of its subject required the careful and thoughtful copy-editing of Jane Bobko, the stellar photography of Aaron Johanson and the sensitive and handsome design efforts of Jessica Green and Tom Griffiths. They all accomplished their tasks within an unusually swift production time-frame. And the same is true for Berghahn Books, our intrepid publisher, and certainly Chris Chappell, Berghahn’s senior editor: one could not have asked for a more wonderful partner in making this volume a reality.

Finally, and most fundamentally, this project could not have reached fruition without the extraordinary assistance of so many members of the Cahana family. From my pre-Covid visit to Portland, home of Michael, Ida Rae, and their family (and of Rina and, in the end, of Alice), to which Karen and Kitra also flew—to innumerable emails, Zoom discussions and interviews—I have consistently emerged from family conversations not only refreshed but with practical suggestions of all sorts. From Michael and Ida Rae’s overseeing the task of getting Alice’s work photographed to Karen’s drawing up a family time-line, the Cahana clan has been a magnificent partner.

We dedicate this book to the memory of Alice and of her sister Edith—and to those whose lives were lost or significantly altered by the Holocaust. One might say that Edith most directly inspired Alice’s work; Alice very directly inspired significant aspects of the work and the lives of her children and grandchildren; and you all continue to inspire us.

Ori Z Soltes and Rachel Stern

## INTRODUCTION

Memory is one of a range of features that separate humans from other species. Other species have forms of memory, but the particular instruments with which we express and transmit memory are unique to us. We use complex arrangements of words to express present and past experience, whether recalling earlier moments in our lives or conveying thoughts and ideas from one generation to the next.

While words extend our capacities beyond those of other species, there are experiences that defy words. Even in the context of the everyday world, do words exist that definitively describe the beauty of parental love or of a sunset? And when it comes to the realm beyond the everyday—the spiritual realm about which humans have maintained an endlessly varied sense across the millennia—word-shaped myths and prayers serve only to a point. So we have evolved other instruments that carry us where words cannot go: music, dance, visual art. The last of these has left continuous evidence for more than forty thousand years—from cave paintings to contemporary art—of its status as a defining aspect of human being-in-the-world, responding both to our world and to that which is beyond the here and now.

Visual art through so many millennia, reflecting interest in both human and divine realities, resonates with one of the fundamental paradoxes of the human condition: the coexistence of our mortality (we become ill, we grow old, we perish) with our yearning for immortality. Questions about the nature of immortality have been asked as long as humans have had the capacity for questions.

Every culture across humanity engages this paradox and this question in its own terms. Immortality is construed as a state of body or a state of spirit; it is promised as a reward for proper acts or proper faith; it is conceived as a matter of permanent removal to another reality or as a return to or reincarnation into this realm. As each culture wrestles with immortality, it also strives toward an understanding of divinity, perceiving immortality as a state of greater closeness to its gods.

From Paleolithic grave sites to Egyptian pyramidal tomb markers to Homeric epics to Socratic dialogues, and from the ancient Israelites to Judaism, Christianity, and Islam to the secularizing context of early twenty-first century Western civilization, death, immortality, and divinity have been the subjects of ongoing artistic expression.

Beyond culture- or religion-specific engagements, we can recognize certain universals. Parents are immortalized by the children whom they leave behind: children reflect parental being, physically and spiritually—from turn of nose and shape of mouth to tone of voice and quality of intellect—even as they are unique unto themselves. A child is an individual with her own proclivities, talents, interests, and ways of engaging the world. Often these two elements—continuation and separation—offer a powerful tension.

So, too, artists are immortalized by the artwork that they leave behind. The poems or musical compositions, the drawings or paintings, the sculptures or works of architecture—these are the consequences of human intellect and imagination that carry the personality imprints of their creators beyond the grave. They are also a bridge between the humanity of the artist and divinity, for, in creating art, the artist functions on a microscale as God does on a macroscale. She functions in *imitatio Dei*—imitation of God—in re-visioning reality through the particular lens of her own consciousness.

An artist who is a parent, and whose child becomes an artist, can be immortalized exponentially. Not only does the child live on after him, not only does his own work remain when he is no longer alive. That child's own work—especially should the child admit to artistic influence from the parent—is a further immortalizing extension of the parent. At the same time, if the child artist becomes a serious artist in her own right, her work will be stamped by her own unique personality.

The question of artistic relationship in such a context is part of the larger, familiar art historical enterprise of observing, describing, and understanding the influence of any given artist on the work of any other. But it involves the additional

layer of filtering the issue of influence through the lens of the primary human relationship, interweaving particularly intense aesthetic and psychological elements.

All this becomes still more complicated if one focuses on not two but three generations of artists in the same family. The basic questions—of how the artistic DNA is transmitted from parent to child and how the child, as an artist as in so many other ways, asserts himself as distinct from his parent—multiply. This calculus of processes and questions expands further if the specific art form taken up by the child is different from that taken up by the parent—and further yet if that difference works its way from grandparent to parent-child to child-grandchild.

---

In Jewish culture and thought, the issue of memory is emphasized with particular intensity, beginning with the implied imperative that introduces the first of the Ten Commandments in the Torah (Pentateuch): “[Remember that] I am the Lord your God who brought you out of the land of Egypt and out of the House of Bondage!” (Exodus 20:2).

That imperative resonates through the life and festival cycle of Judaism. Memory is marked on the calendar by holidays that focus on aspects of the experience referenced in that commandment, which shaped the people Israel through a divine covenant. It resonates, too, as Jews mark the passing of a loved one not only by an initial seven-day process (*shiva*) but by a commemoration after thirty days (*shloshim*) and again after a year (*yahrzeit*); the *yahrzeit* continues to be observed year after year, and prayers for the deceased are recited five times annually. The imperative of memory intersects with the admonition, found elsewhere in the Torah, to “teach them [the commandments that guide one's life] to your children and your children's children” (Deuteronomy 4:9, 6:7, 11:9).

The notions of memory and generational transmission in Judaism echo with a specific and haunting power in the context of the Holocaust and its aftermath. The will not to forget those whom the world largely forgot—many of whom,

thanks to the unprecedented, systematic genocidal efforts of the Nazis, were left with no immediate living family members to remember them—has gradually come, in the last fifty years, to occupy a significant place in the ongoing life of the Jewish people.

How, one might ask, do the issues of immortality and transgenerational continuity translate into artistic expressions when the first figure in the passage from grandparent to parent-child to child-grandchild was a Holocaust survivor? How might the specifics of that ineffable unspeakable and indescribable experience radiate through the artistic DNA of the following two generations, each marked by its own experiences, its own traumas, and its own triumphant being-in-the-world and employing its own particular modes of artistic expression?

With these questions in mind, the first essay in this volume, by Ori Z Soltes, focuses on a particular family of artists. Alice Lok Cahana survived the Holocaust, after making her way as a teenager through four concentration camps, and became an artist whose images—often embedded with words, word fragments, and numbers—both resonate with and transform into painful beauty experiences that were, like the Name of God in Judaism, ineffable: beyond verbal articulation. Her descendants went in other artistic directions; her son Ronnie is a poet—whose poetry only intensified in power in the aftermath of his own personal trauma: a stroke that initially left him without the capacity even to breathe unassisted. His oldest daughter, Kitra, became a photographer and filmmaker—and among her photographs is an extraordinary series of studies of her father; in both media she is drawn to the disenfranchised and to people who are struggling—inspired, in part, by the lessons repeated in direct and oblique ways by her grandmother.

The three essays that follow place this rich family narrative and its humanistic implications in larger historical, psychological, and biological contexts. Larry R. Squire and John T. Wixted discuss recent research on memory and how it functions, both conceptually and physiologically. Elements of that discussion, which distinguishes different *kinds* of memory and references

“forming memories of visual objects” and “perceptual processing,” have a direct connection to Alice Lok Cahana’s art—given that her work is fundamentally about processing her Holocaust experience in visual terms and rearticulating that reality, to yield, in her words, “rainbows from the ashes.”

Natan P. F. Kellerman contributes an account of cutting-edge research addressing the question of whether and how trauma can be transmitted from one generation to the next. The exploration is both broad—applied to a range of different kinds of traumas—and specific to the trauma of the Holocaust.

How the different factors that affect the transmission of trauma might apply to Alice Lok Cahana and her family is taken up in the final essay, by Eva Fogelman. She addresses the question of trauma transmission in the context of the Holocaust and the repercussions for the growth and development of the generations born to Holocaust survivors. Her discussion is also specific: she has interviewed Ronnie Cahana, Kitra Cahana, and other members of the family, in order to shape an essay that applies universal principles to the particulars of this family narrative. In doing so, she brings the overall arc of the volume’s essays back to the ground from which it sprang.



Alice Lok Cahana in her studio by Mark Seliger.

Survival and Intimations of Immortality:  
The Art of Alice Lok Cahana, Ronnie Cahana,  
and Kitra Cahana

Ori Z Soltes

The Child is Father of the Man;  
And I could wish my days to be  
Bound each to each by natural piety.

—William Wordsworth, from the epigraph to his  
“Ode: Intimations of Immortality from Recollections of  
Early Childhood”

I

Immortality is an obsession that separates humans from other species. Explored across history and geography, diverse cultures and religions have offered diverse understandings of how endless life might be constituted. Certain perspectives are universal. Parents are immortalized by the children whom they leave behind: children are reflections of parental being, physically and spiritually—from turn of nose and shape of mouth to tone of voice and quality of intellect—even as they are unique unto themselves. More than the mere reflection of his parent, a child is an individual with her own proclivities, talents, interests, and ways of engaging the world. Often these two elements—continuation and separation—offer a powerful tension.

So, too, artists are immortalized by the artwork that they leave behind. The poems or musical compositions, the drawings or paintings, the sculptures or works of architecture—these are the consequence of human intellect and imagination that carry the personality imprint of their creator beyond the grave. The circle of immortality is furthered by the viewers, listeners, readers, whose engagement of the artwork next year, next century, and next millennium extends beyond the artist’s own lifetime. And other artists’ responses further extend the process. Velazquez is immortalized not only by his painting, *Las Meninas*, but by the myriad explorations of it refracted through Picasso’s eye.

Unless otherwise noted,  
all images of Alice Lok  
Cahana’s work (#1–23, 51)  
are courtesy of the Cahana  
family archives. All images  
of Kitra Cahana’s work  
(#24–48) are courtesy of

the artist, and images by Idit  
Cahana (#49) and Tamira  
Cahana (#50) are also  
courtesy of Idit and Tamira,  
respectively. All measure-  
ments in inches (h × w).

An artist who is a parent and whose child becomes an artist, is immortalized, as it were, exponentially. Not only does the child live on after him, not only does his own work remain when he is no longer alive. That child's own work can be a further immortalizing extension of the parent. Yet at the same time, if the child becomes a serious artist in her own right, her work will be stamped by her own unique personality: the turn of its sculpted nose, the tone of its painted voice, the pattern of its shaped verbiage, will be as individual as is the developed child of any parent.

This artistic relationship is part of the familiar art historical enterprise of assessing the influence of any given artist on the work of any other. But it offers the additional layer of focusing the question of influence through the lens of the primary human relationship, interweaving complicated aesthetic and psychological elements.

As in every other aspect of such relationships—from physiological detail to psychological disposition—the issue of artistic influence has its own dynamic. It may be direct or indirect; acknowledged and embraced or fought against and denied; it may be a function, strictly speaking, of art—the style or medium of the parent leading to the style or medium of the child—or it may be a function of life. The life-experience of a parent may profoundly affect the art of the child.

All of this becomes still more complicated if instead of two one focuses on three generations of artists. The basic questions—of how the artistic DNA is transmitted from parent to child and how the child, as an artist as in other ways, asserts himself as distinct from his parent—multiplies. This matrix of issues further expands if the specific art form taken up by the child is different from that taken up by the parent, and is still furthered in complexity when the shift from one mode of artistic expression to another is articulated through multiple generations.

And all of this is framed by the unique instrument of human memory and its concomitants. In the present context, one might note that, within the specifics of Jewish culture and thought the issue of memory is emphasized with particular intensity, beginning with the implied imperative that introduces the first of the Ten Commandments highlighted in the Torah—[“Remember that] I am the Lord your God who brought you out of the land of Egypt and out of the House of Bondage!” That prescription resonates through the life and festival cycle of Judaism. Concomitant with the instruction to remember is the further commandment within the Torah to “teach them diligently to your children and to your children's children.” Both memory and generational transmission within the Jewish historical and spiritual experience resonate with a specific and haunting power in the

context of the Holocaust and its aftermath: the imperative not to forget those whom the world so largely forgot—and many of whom were left with no immediate living family members to remember them—has come gradually, in the last fifty years, to offer an iconic presence in the ongoing life of the Jewish people.

Memory is a particularly disturbing and necessary feature of coming to grips with the Holocaust, that most intensely traumatic period in human and Jewish history. One of the ironies of memory, where Holocaust experience is concerned, is that the primary human instrument of expressing and harnessing it—*words*—falls so drastically short of effectively conveying it, because it is *beyond* words. Repeatedly in the last half-century, a growing array of individuals has managed to shape the summary emotive content of that experience by means of the *image*. There is some irony here: Jews are stereotypically thought of as a people of texts, not images, and yet the image has emerged in the past half-century as perhaps the most effective means of expressing that most heinous of dark Jewish historical moments, in diverse media, styles, degree of representationalism and abstraction, and quality of subtlety or directness.

The Holocaust has nonetheless also engendered a plethora of words addressing the question of divine justice—theodicy—particularly given the massive destruction of children. In seeking answers to the unanswerable question, “why?” some theologians have turned as a starting point to the biblical book of Job, if not for solace and comfort then at least for confirmation that the reward-punishment formula articulated by the Prophet Jeremiah is not the only one offered within the biblical tradition. The suffering of Job, as a paradigm for the suffering of the Jews in the Nazi-administered concentration camps, illustrates the proposition that there is not always an equation between behavior and reward/punishment. God's ways defy our understanding.

We might then ask: are there specific and unique issues of immortality and trans-generational continuity that might translate into artistic expressions when the first figure in the passage from grandparent to parent-child to child-grandchild is a Holocaust survivor? How might the specifics of that indescribable experience radiate through the artistic DNA of the following two generations, each marked by its own experiences, its own traumas, and its own triumphant being-in-the-world, and expressed in its own particular artistic mode?

In the case of Alice Lok Cahana, Rabbi Ronnie Cahana and Kitra Cahana, not only was Alice a Holocaust survivor but Ronnie is a survivor of a major stroke—from which he gradually recovered the ability to breathe

unassisted and to use his voice, and is slowly re-gaining some ability to move. Thus from two different angles one might ask what “survival” is—physical, mental, psychological-spiritual—and how the interwoven layers of that concept may be said to have affected the life and the art of all three generations in this family line.

As such, this discussion encompasses the broadest understanding of art as personal self-expression, as carrier of familial and communal identity, and as resonator of universal issues, including that of immortality gained through creativity and through memory.

## II

Alice Lok Cahana (1929–2017), a Hungarian Jew, born and raised in Sárvár, who as a teenager survived the passage through four different concentration camps in the last year of World War II, in the midst of a personal and historical whirlwind, swore to herself that if she survived, she would somehow, one day, as a visual artist, transform the ashen world of her Holocaust experience into a reality with colors like those of the rainbow. It took her more than three decades to fulfill that promise to herself. Her stridently colored and richly lyrical *Whirlwind* (ca 1980) is an emphatic symbol of how, by the late 1970s, she had begun to produce a series of large, dynamic works of art (and poetry) that, as a totality, she called *From Ashes to the Rainbow: A Tribute to Raoul Wallenberg*. The whirlwind is transmuted into an explosion of pigment (FIG. 1).

Cahana’s moving memoir, *Empty Windows*, emerging in the late 1980s, includes some of these works and a poem, but is centered on the prose account of how her sister Edith (aged seventeen), her younger brothers, her mother, and she (aged fifteen)—and her grandfather, uncles, aunts, and cousins—were deported from Sárvár to Auschwitz in 1944, and how all the others, separated from Alice, disappeared soon after their arrival. She writes about finding Edith and their managing, together, to survive what was and remains an ineffably hellish reality—a tribute to the unique capacity of humans to shape a systematic art and science of torture and torment for other humans. She describes how Edith became very ill and how, after liberation, she was taken to a hospital—though Alice never saw her beloved sister again or found out what had happened to her: she could find no record of either her death or her survival.

No words and no images can fully articulate the pain of that loss—particularly harsh because it occurred when it might have seemed that the end of the horror had arrived, that the whirlwind had subsided. The last



FIG 1. *Whirlwind*, 54 × 62 inches, acrylic and water color on canvas, ca 1980.



FIG 2. *Lamentation*, 37 × 29 inches, mixed media on paper, ca 1980.

words of the memoir are simple and stark: “Liberation for us came too late. For I never found Edith.” Cahana’s *Lamentation* (ca 1980)—its fragment of Hebrew text surrounded by flowers and overrun by barbed wire; its yellow at once recalling the six-pointed stars attached to Jewish garments by Nazi decree and connoting sunlight, filling the entire window-like frame of the image—is biblical in conceptual size. The parchment-like text, flanked by black smudges—pillars of smoke, from both the tabernacle in the wilderness and the crematoria in a different wilderness—can be seen as a Jeremiah-like cry for Alice’s loss of Edith, for the loss of virtually her entire family, and for the loss of all those for whom no family survived who could lament their eradication (FIG. 2).

Cahana left unwritten the epilogue to all of that loss in that memoir: the events of her life after the war: her reunion with her father, who had been away at work in Budapest when the deportation order came in Sárvár—a reunion that proved difficult given the divergence of their experiences. Her subsequent time in Sweden and in Budapest, and then in Israel. Her meeting her future husband in Israel: a rabbi, Moshe Cahana, who made her feel beautiful after such intense ugliness. Their five years together in Sweden—he serving as a rabbi for a congregation composed largely of Holocaust survivors, and she as an educator. Their ultimate settling in the United States.

With their move to Houston, in 1959, Alice took up the formal study of art, and was influenced in particular by the transcendental, light-suffused color field paintings of Morris Louis. From her studies at the University of Houston and at Rice University, where color field painting was dominant, and from her interest in the work not only of Louis but of Helen Frankenthaler and Kenneth Noland—who were also color field painters and were collected by the Museum of Fine Arts, Houston—she evolved a style based on pure abstraction, light, and pigment.

Developing as a colorist, she also emerged as a social observer in the tradition of Goya when she found herself on suddenly new ground, rather than expected familiar territory, more than a generation after the Holocaust. In 1978 she decided to visit Sárvár—where no memorial to its slaughtered Jews stood; where no recollection of her wiped-out, thousand-year-old community, or even of her mother, was evinced by individuals with whom she spoke (including those residing in what had been her family home). The need for visualized memory, the artistic imperative to wrestle *kosmos* (order) out of chaos, and Cahana’s self-imposed obligation to convey a transcendent positiveness in the context of overwhelming negative power—these elements combined to engender a new group of works: the abstractions and collages of dark, but often also pastel, coloration that, continuing through

1985, became *From Ashes to the Rainbow*. These works rise to meet the hope embodied by Wallenberg, the Swedish diplomat responsible for the rescue of twenty thousand Hungarian Jews, which efforts cost him his freedom and probably his life.<sup>1</sup>

It is clear that Cahana's color field inclinations—the rainbow—are now wrestling with the ashes that resurfaced after her visit to Sárvár. As Barbara Rose noted,<sup>2</sup> Cahana's Wallenberg works bear comparison with Robert Rauschenberg's 1958–60 illustrations of Dante's *Inferno*. Unlike artists in earlier centuries whose illustrations of Dante were most often created only by power of imagination, Rauschenberg had access to literal images of the damned, in newspaper photographs. For all his incorporation of scraps of these images in his *Inferno* illustrations, however, his drawings are still second-hand, whereas Cahana embedded her canvases not only with torn paper, sand, ashes, and fragments of texts but with her memories of her personal experience in hell.

The very materials and techniques that Cahana used, beyond details of style and subject, are metaphors for the reality they convey. The surfaces of her works are burned and scratched with blackened patterns, scarred and stained with blood-red pigments. Images are grafted, buried, partially eaten away, echoing the fate of human beings swallowed up in the camps. One sees this in *No Return*, from 1979–81 (this is Thomas Wolfe's literary masterpiece *You Can't Go Home Again* squeezed through a glass darkly!), with its torn central motif—suggesting a face in profile, with a gaping mouth—and flesh and blood colors against a devouring background of black darkness (FIG. 3).

A chronological sibling, *Arbeit Macht Frei: Concert in Auschwitz* (1979–81) is a diptych in which an array of prison-bar-like vertical stripes punctuated by a trio of black, blurry squares are contained by an arch that links the two parts of the image together. The phrase "Arbeit macht frei" (Work makes one free), which was inscribed at the entrance to that infernal camp, graces that arch, but in fragments, with the words almost blotted out. Across the upper part of the image, with its torn and singed holes, more vertical lines compete with a series of horizontals, among which one can discern some musical notes. This thus becomes a distorted musical stave, alluding to a particular aspect of Nazi perversity: forcing some inmates to play music to accompany the march of other inmates to the gas chambers (FIG. 4).

The crucible of destruction is repeatedly symbolized by the arched form, whether open, like the gateway to Auschwitz, or closed, like the doorway to the ovens to which the nameless were consigned. In *No Exit*



FIG 3. *No Return*, 67½ × 42 inches, acrylic, collage on canvas, 1979–81.



(1979–81), the arched oven-door form is trebled (no redemptive spiritual symbolism of Father-Son-Holy-Spirit is intended here, for redemption was not in evidence when those who prayed to a triune God gassed and cremated those who prayed to God the Father alone<sup>3</sup>), and the thick blackness of the doors is an impenetrable black-hole-like darkness, sucking nearly all light into itself, and marked by pronounced passages of blood-red hue. It is punctuated, nonetheless, by shards of light and an infinity of numbers and letters insistently referencing those who passed through those arched openings (FIG. 5).

So Cahana was an abstractionist who survived hell. She was also a student of Jewish mysticism, aware of the Kabbalistic inquiry into how to understand the transmutation of matter into spirit—the aspiration to ascend to union with the singular God—embedded in an array of often dark, inscrutable questions pertaining to the relationship between God and ourselves (like her 1982 painting *Kabbalah*, with its darkneses embedded with hidden colors and geometric forms). Primary among them is how an intangible, invisible, and singular God created a universe that is tangible, visible, and endlessly multifarious (FIG. 6).

Jewish mysticism addresses that question in its first, pre-Kabbalistic text, ascribed to Rabbi Akiba in the early second century: the *Sepher Yetzirah* (*The Book of Formation*). It asserts that God created the universe through thirty-two conduits. These conduits are the twenty-two letters of the Hebrew alphabet and the ten numbers. In other words, these abstract conceptual building blocks of the human means of addressing and understanding reality are the bridge between the absolutely ungraspable God and the graspable universe of which we are a part.<sup>4</sup> They are the basis of the speech, unique to our species, with which we address and explore the universe, but are themselves ungraspable.

In Cahana's work, that question is interwoven with another: How does a God that is all-powerful, all-good, and interested and engaged in human affairs permit the torture and extermination of so many—most inexplicably, more than a million children? This question, pertaining to theodicy, or the justice of God, has, since the 1960s, gradually become a preoccupation of theologians and philosophers. The Holocaust was the ultimate act of *de-creation*, in its dehumanization of its victims (in order, by dehumanizing them, to more easily victimize them) by their *reduction* to numbers and letters. Those who were rounded up were stamped on their arms with numbers and letters. Names, which typically connect humans to the essence of what we are, were eliminated, replaced by those narrativeless numbers and letters.



FIG 4. *Arbeit Macht Frei: Concert in Auschwitz*, 80 × 86 inches, mixed media, 1979–81.

FIG 5. *No Exit*, 46 × 86 inches, mixed media, 1979–81.



FIG 6. *Kabbalah*, 57 × 30 inches, mixed media, ca 1982.



FIG 7. *Calendar: Days and Nights*, 67<sup>3</sup>/<sub>8</sub> × 42<sup>1</sup>/<sub>2</sub> inches, acrylic on canvas, 1979–81, Skirball Museum of Art.

One of the noticeable features in many of Cahana's works is the presence of numbers and letters—those from the tattooed arms of the dead, those from the calendar of counting the endless days which had lost their coherent cycle in the concentration camp, particularly when, as Alice observed, “every day ... was an eternity!”<sup>5</sup> The tortured structure of *Days and Nights* (1979) offers numbers arrayed as if on a calendar—as if one could count the time left till the end, with no foreknowledge of when the end might eventually arrive and what sort of end it might be—and puns on the transmutation of human names into numbers (the word “name” repeats in the lower left corner of the canvas): numbers with more meaning for the victimizers than cipher-humans in the meaningless technology of their destruction. There is irony in the rising and falling line across the middle of the canvas: it suggests the graph of some economic analysis, with its ups and downs, but going from right to left, as in Hebrew, the diagonals lead to the letter *shin*, suggesting a reference to *Shaddai*, God's name as the ultimate source of power and protection (FIG. 7).

In turning the numbers and letters imprinted on inmates' arms into art and thus memorializing them, Cahana reverses the Hitlerian process of de-creation and dehumanization: she re-creates in shaping a particular art of memory. In the work *No Names* (1991), railroad tracks plunge into a dark night overwhelmed not with stars but with letters and numbers (that railroad track is at the same time an ironic Jacob's ladder connecting heaven and earth): the insistent, Kabbalistic repetitions will into memory those whom the Nazis sought to consign to oblivion (FIG. 8).

Hovering toward the central upper part of the painting is a yellow-brown, bulbous cloud and above it the numbers 1939. These mark the year when World War II began, sandwiched between the first six years of Hitler's expanding, increasingly systematic prewar campaign of terror against the Jews and the following six years of an expanding, increasingly efficient Holocaust campaign embedded within the war, as German armies overran much of Europe and its diverse Jewish populations. (The end of that process is more difficult to discern on Cahana's canvas: the numbers 1945 hover less clearly, just to the right of 1939.) This painting was acquired by the Vatican Museums' Collection of Modern Religious Art, and when Pope Benedict XVI asked Cahana about that large, miasmic smudge, she responded, “Every night I wake up with the smell of Auschwitz in my nostrils. How do you paint an odor?”<sup>6</sup>

These numbers and letters thus constitute a response to the questions of the divine-human relationship created specifically by the Holocaust: How can such loss have been permitted to occur, and how can such loss—and



FIG 8. *No Names*, 83 × 42 inches, acrylic on canvas, 1991, Vatican Museums, Collection of Contemporary Art.

such questions—be endured? Part of the answer is by remembering the dead with a visual voice whose act of witnessing now speaks, describing the indescribable. The letters ascend as intelligibly wordless words beyond the surface of the canvas. They are restored into names in the realm addressed by prayer. They soar beyond our everyday reality of kitchen tables, rose-bushes, and railroad tracks.

The later Jewish mystical tradition—eighteenth-century Hassidism—offers the tale of an all but illiterate Jew chosen by the *tzadik* (righteous leader) to begin leading the prayer service, because of the purity of his heart; the *tzadik* instructs him simply to repeat the letters of the Hebrew alphabet, asserting that, as they float upward, toward heaven, God will gather them up into proper words of prayer. Somewhat earlier, late sixteenth- and seventeenth-century Kabbalah speaks of the role of humans in *tikkun olam*, or repairing the world, which has been damaged by the evil that we humans have allowed into it. Kabbalah speaks of that process of repair as one of gathering together the sparks of light—the primordial light announced in Genesis as God’s first creative act—that were scattered at the moment when humans disobeyed God.

Cahana’s art is filled with images of such sparks. She takes the fallen letters from the arms of the dead and lifts them up—letters intended to obliterate humans by denying the letters a place as parts of names. Her work restores the lettered names and the memorialized humans to whom they were attached. She gathers in the letter-number-sparks of six million broken souls and repairs their *being*.

Moreover, as she incorporates in her work not only groups of numbers and letters but diverse fragments of texts—prayers and biblical and Talmudic pages from her pre-Holocaust childhood—she draws our attention to the role of letters in the larger Jewish tradition. They make up the words found in the Torah—the ultimate book of moral instruction that centers Jewish history and geography—and rabbinic words of discussion and interpretation. *Gemara II* (1982) embeds a tiny scrap of text in a field of grayish color punctuated by black and red—the colors, in Italian Renaissance symbolism, of purgatory (a place of cleansing and atonement before the soul’s ascent to heaven).<sup>7</sup> Horizontal lines run across the top and bottom. At first glance, we might associate the lines at the top with a musical staff, but upon closer examination we recognize the lines, both above and below, as stretches of barbed wire (FIG. 9).

The Torah is the basis for Jewish identity as a People of the Book. The addition of images to written words has, in the last two centuries, become essential to the ever-evolving redefinition of what Jews *do*—that includes



FIG 9. *Gemara II*, 35¼ × 26⅞ inches, acrylic on paper, 1982.



FIG 10. *Untitled Scroll*, 29 × 9½ inches, mixed media sculpture, 1989.

producing visual art. This augmentation of words with images reaches a paradoxical apogee in the series of Torah-like scrolls created by Cahana. In a procedure analogous to extracting rainbows from ashes, she has suffused these shapes with colors, often eliminating *words* altogether (even in her scroll that references the *Shema*, the central dictum of Jewish belief: “Hear [*Shema*] O Israel, the Lord is Our God, the Lord is One”), transforming and transmuting forms with concepts (FIGS. 10, 11). One of these works, the *Raoul Wallenberg Scroll* (1989), alludes to the source of salvation for the many Jews who survived the Holocaust because Wallenberg transmuted and transcended human laws—ignoring human texts and words in favor of a divine imprimatur to value the lives of humans over ideology (FIG. 12). Another *is* in fact embedded with multiple textual fragments, and intended to represent one of the many thousands of Torah scrolls that survived the Nazi program for destroying all but a handful of them (FIG. 13, 14).

In the context of the Torah itself, the ultimate narrative symbol of divine salvation is the passage in Exodus 14:13–23 in which the Israelites cross safely through the Sea of Reeds—conventionally known as the Red Sea—and their pursuers are swallowed up by its surging waves. Cahana’s painting *The Red Sea* (ca 1985), with its twisting, roiling tower of reddish pigment, implicitly questions God’s salvational presence at Auschwitz: there were those who were saved but there were many more who were not (FIG. 15).

In her huge triptych, *1940–44* (1984), the still-present hope, before her community was deported to Auschwitz, is intertwined with despair, connoted in multiple ways. The central element, a black-and-white photograph of members of the gathered Jews of Sárvár, is surrounded by fragments turned every which way of pages of texts, both biblical and rabbinic, in Hebrew. The entire surface is pockmarked with burned edges of paper and splattered layers of black pigment, but also with splotches of color—and the entire image is dominated by a sinuous, river-like line that rises in the upper half of the painting as both a flower blossom and, more significantly, the Hebrew letter *shin*—again connoting God’s power-protective aspect connoted by the name *Shaddai*. On a bright June day in 1944, the entire community was removed from Sárvár and by the late spring of the following year, before the liberation arrived, most of them had perished (FIG. 16).

If most of these works lead down into a lived Dantean hell, Cahana’s art eventually features, rather, *ascents*. In the delicately colored *Jacob’s Ladder, Dream* (1982), a visual pun turns the ladder rungs of the patriarch’s nighttime vision into railroad tracks, just as the railroad tracks, a persistent image of the Holocaust, have become ladder rungs of upward motion. The patriarch’s name—a stand-in for the man himself—reclines in Hebrew



FIG 11. *Untitled Scroll (Blue)*, 29 × 9½ inches, mixed media sculpture, 1988.  
FIG 12. *Raoul Wallenberg Scroll*, 29 × 12 inches, mixed media sculpture, 1989.



FIG 13, 14. *Saved Scrolls*, 12¼ × 17½ × 6¼ inches, mixed media sculpture, 1989–90. United States Holocaust Memorial Museum Collection, Gift of Jeshajahu “Shaiké” Weinberg.



FIG 15. *Red Sea*, 53 × 45¼ inches, mixed media, ca 1985.



FIG 16. *1940-44 (Triptych)*, 47 × 31½ inches (× 3), acrylic, collage on canvas, 1984.



FIG 17. *Jacob's Ladder, Dream*, 99 × 26½ inches, acrylic on canvas, 1981-2.

along the bottom of the image. Fluttering around and about are abstract suggestions of angels, which Cahana referred to as souls floating up with their ashes from Hitler's crematoria.<sup>8</sup> One is reminded of the beginning of Nelly Sachs's 1947 poem "O the Chimneys":

O the chimneys  
On the ingeniously devised habitations of death  
When Israel's body drifted as smoke  
Through the air—  
Was welcomed by a star, a chimney sweep,  
A star that turned black  
Or was it a ray of sun?

O the chimneys!  
Freedomway for Jeremiah and Job's Dust.<sup>9</sup>

For Cahana, the ashes, floating up out of the dark ground, have indeed become the rainbow from which covenantal promise emerges (FIG. 17).

In *Love I Send* (1978–79), fragments of poems recall the verse written by Cahana as she recovered in Sweden—Raoul Wallenberg's country<sup>10</sup>—for some time after the Holocaust. Those fragments are overwhelmed by a lush chaos of colors and abstract shapes. They also recall the so often hopeful poems composed by the children of Terezín, whose poetry and art inspired the artist early on[—as words emerge from splashed and smeared pigment]. Not surprisingly, she also produced images that directly reference children and the hopes and convictions that so many, both in Terezín and elsewhere, managed to hold on to—both the children who perished and the fewer who survived. Her *Children's Poem, I Still Believe* (1978) offers a startling swath of sky blue and tawny earth beyond the dark lines that suggest barbed wire. On the more than two-thirds of the image on which a deep black dominates as if it were a curtain slowly being lowered, the poetic fragment is faintly inscribed, its pigment echoing the earth color (FIG. 18).<sup>11</sup>

A combination of hope and despair—resonating in Cahana's combinations of strident and paler colors with blacks, browns, and grays, and surface textures of alternating rough and smooth patches—reverberates from images like *Now in Auschwitz the Flowers Grow* (1989), a work of sweeping breadth whose white ground is populated by bright splotches of color and divided by three painted lines into a kind of tetrptych (FIG. 19). Fragments of verses in small print punctuate the left-most "panel," and the right-most offers the image's title, to which the artist appended a paraphrase

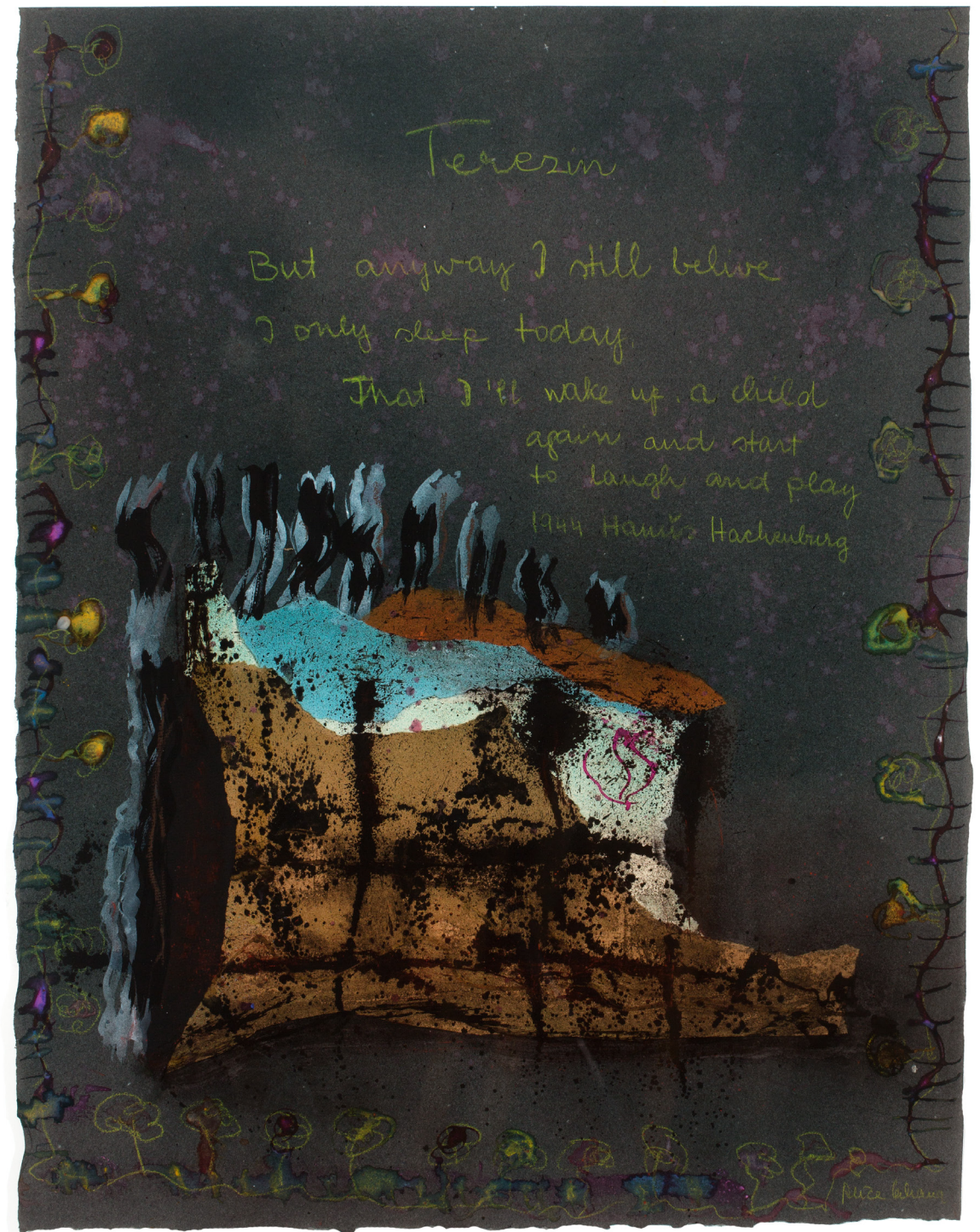


FIG 18. *Children's Poem, I Still Believe*, 32 × 26 inches, mixed media on paper, 1978.



FIG 19. *Now in Auschwitz the Flowers Grow*, 29½ × 87½, watercolor and ink on paper, 1989.



*New Day II*, 30¾ × 22¾, watercolor and acrylic on paper, ca 1980.

of arguably the best-known line from perhaps the best-known poem from Terezín: “And now the flowers are growing in Auschwitz. But I never saw another butterfly.”<sup>12</sup> After the long and brutal winter, spring returns—even to this landscape—but the butterflies are gone and the flowers that grow emerge from soil fertilized, literally, with the blood and bones of more than a million victims of Nazi cruelty. There is, every morning, a *New Day* (ca 1980), with its diagonal swath of yellow-green—but only for those who somehow managed to survive (FIG. 20).

Far too many did not: in Terezín alone, a mere way station on the path to Auschwitz for most of its inhabitants, where more than fifteen thousand children were confined between 1942 and 1944, as few as one hundred or as many as one thousand (depending upon whose statistics one accepts) survived. How many children from Alice’s own village of Sárvár perished and how many survived? Her *Kaddish for the Children of Sarvar* (1989) embraces them all—her own sister and brothers, her own cousins, and those she knew well or not well but all of whom she *must* remember.

No loss of a child is more searing in the pain that it induced—to the very end of the artist’s life—than that of her sister, Edith, however. The early 1980s collage, “Have You Seen My Sister?” offers layers of darkness—as if shades of ashen grey and black, with their hidden pigments, were infinite, like the endless bright stars in a scintillating night sky. The darkness is punctuated by swatches of pale color. In the central one of these, a small image of Edith as a little girl stares out at us; in a second, we see a figure—Edith again, no doubt, but as the teen-ager she was when Alice last saw her—standing with her back eternally turned toward us, hopelessly inaccessible (FIG. 21).

Still, from the same hopeful Lurianic branch of the Kabbalistic tree that yields the fruit of *tikkun olam* springs the greenery of *gilgul*—a theory of transmigration of souls. For those who perish—even, or perhaps especially, children or one’s beloved sister, who perish far too soon—there is the hope of rebirth, which Cahana expresses in a scintillating, shimmering image, from the mid-1980s, that bursts away from the canvas surface toward the viewer as a virtual abstract relief sculpture (FIG. 22).

*Raoul Wallenberg—Schutz Pass* (1981) offers a monumental polyptych, whose vertical sweep is dominated by the Swedish diplomat’s name, written along the left side of the top panel. This abstract dialogue between brightness and darkness rises from the conceptual ashes—photographic images of ordinary people sent to extraordinary deaths—toward the spiritual rainbow of the hero’s own photographic image. He serves as a commanding symbol of how one person’s efforts can and did make a difference, in contrast to



FIG 21. *Have You Seen My Sister?*, 44 × 61 inches, mixed media on canvas with photo collage, ca 1980, United States Holocaust Memorial Museum Collection, Gift of the Finn family.

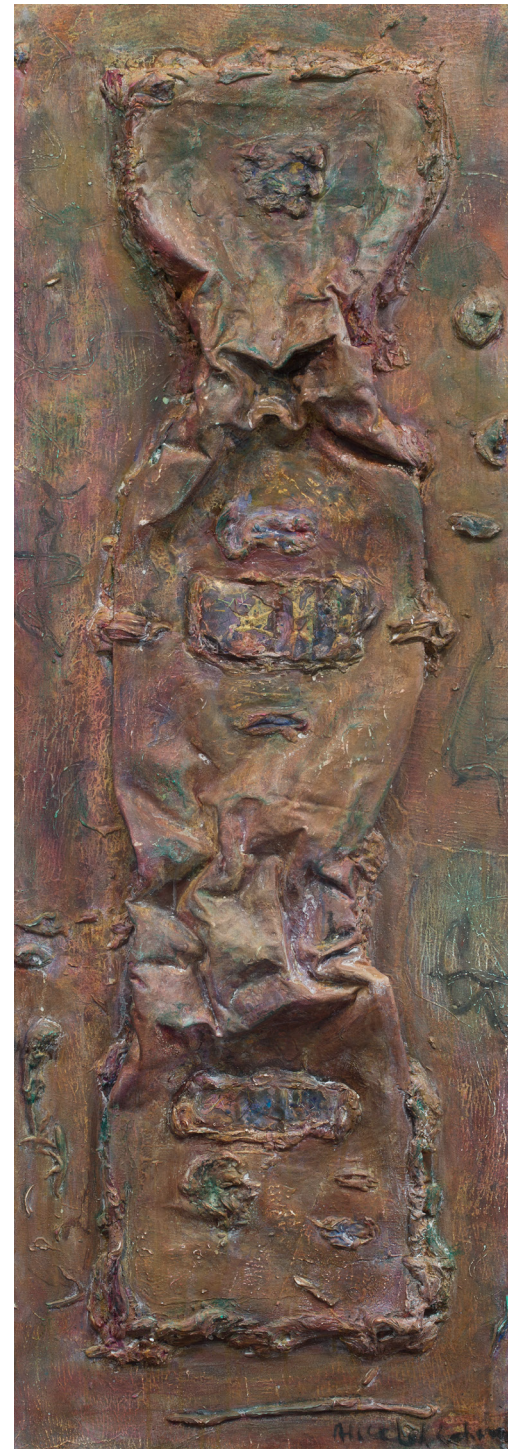


FIG 22. *Gilgul*, 69 × 23 inches, mixed media, ca 1985.

the active and passive collaboration in the destruction detailed in the lower horizontal sweep of visuals (FIG. 23).

Wallenberg's face is the ultimate metaphor of transmutation: the would-be deaths that became, instead, lives saved by his hands, by way of the *Schutzpasse*, (the letters of protection), that he issued—including Cahana's own father; the rescuer who vanishes; the hero who fights against the silence, which then turns against him when people fail to ask, to press, to demand: Where? Why? And fail to remember well enough not to repeat the silences—from Cambodia to Uganda, by the time this mixed-media work was made (the list of countries has grown in the decades since). The imperative to speak against the silences, even if only in yearning and hope, impels Cahana's artistic efforts.

Well before the creation of *Raoul Wallenberg—Schutz Pass* and other works, she had not only emigrated from post-Holocaust Europe and moved to Houston but begun to have children: Ronnie, Michael, and Rina. She had thus defeated Hitler on four fronts. That she lived. That in producing children she was engulfing Hitler's annihilationist intentions in a brilliant, future-looking sea of flowering reeds. That the last of her three children, Rina, who was born with Down syndrome and would therefore have been among the first consigned to slaughter, was fiercely loved and nurtured by the family into adulthood. That she was not only producing art but turning the destructive realm in which Hitler had sought to swallow her up into a positive outcry of creativity. An outcry, to be sure, but a brilliantly, expressively defiant outcry subsumed into a rich smile.



FIG 23. Raoul Wallenberg—*Schutz Pass*, 93¼ × 112 inches, mixed media on canvas and paper, 1981.

## REMEMBERING

Larry R. Squire and John T. Wixted

Memory is a large topic, growing out of the fundamental fact that the experiences we have can modify the nervous system such that our mental life and our behavior can be different than they were in the past. The study of memory ranges widely—from cellular and molecular questions about the nature of synaptic change to questions about what memory is, whether it is one thing or many, which brain systems support memory, and how those systems operate. We will consider in particular the structure and organization of memory with a focus on brain systems.

The idea that functions of the nervous system can be localized was well accepted by the end of the nineteenth century. Yet these ideas concerned mainly sensory-motor functions and language and did not speak to the topic of memory itself. In the early twentieth century, an influential program of research in the rat concluded that memory is not localized but is distributed through the neocortex (the outer layer of the cerebral hemispheres of the brain of mammals involved in higher functions such as sensory perception, attention, memory, and action) such that each region contributes equivalently to the whole.<sup>1</sup> Memory was thought to be distributed and well integrated with intellectual and perceptual functions, and no particular brain region was thought to be dedicated to memory function.

All of this changed in the 1950s when profound effects on memory were reported following the bilateral medial temporal lobe resection (the removal of the inner structures of the temporal lobe) of the patient known as H.M.<sup>2</sup> This experimental surgery successfully relieved H.M.'s severe epilepsy, as was intended, but it also resulted in severe and debilitating forgetfulness, which occurred against a background of apparently intact intellectual and perceptual functions. For example, the patient could copy a complex drawing as well as controls, suggesting that his ability to perceive visual information was intact; and he could continuously rehearse (and then repeat back) a string of five or six digits as well as controls, suggesting that his “working

memory” was also intact. But when his attention was diverted, he soon forgot the drawing and the digits. Early descriptions of H.M. can be said to have inaugurated the modern era of memory research and strongly influenced the direction of subsequent work. Most significantly, this work identified for the first time a particular area of the brain as important for memory.

H.M.'s bilateral lesion included the hippocampus, amygdala, and the adjacent parahippocampal gyrus. The immediate question was which structures within this large surgical removal were responsible for his circumscribed memory impairment; that is, which structures and connections within the human temporal lobe have dedicated memory functions. These matters became understood gradually during the 1980s following the successful development of an animal model of human amnesia in the nonhuman primate.<sup>3</sup> The important structures proved to be the hippocampus and the adjacent entorhinal, perirhinal, and parahippocampal cortices, which make up much of the parahippocampal gyrus (fig. A).<sup>4</sup> (Anatomically related structures in the thalamus and hypothalamus in the diencephalic midline, an area not part of H.M.'s lesion, are also important for memory, but these will not be discussed.) Damage limited to the hippocampus itself causes moderately severe memory impairment, but the impairment is greatly exacerbated when the damage extends to and includes the parahippocampal gyrus (as was the case with H.M.).<sup>5</sup> In all cases, the disorder is characterized most prominently by an impaired ability to form new memories (anterograde amnesia), but also by difficulty in accessing some memories acquired before the onset of the impairment (retrograde amnesia). Memories acquired shortly before the appearance of a brain lesion (such as during the previous year) tend to be more impaired than memories acquired in the distant past. Thus, the structures that compose the medial temporal lobe memory system are essential for the initial formation of enduring long-term memories as well as for their maintenance and retrieval for a time after learning. The fact that very remote memory tends to be preserved after medial temporal lobe damage indicates that

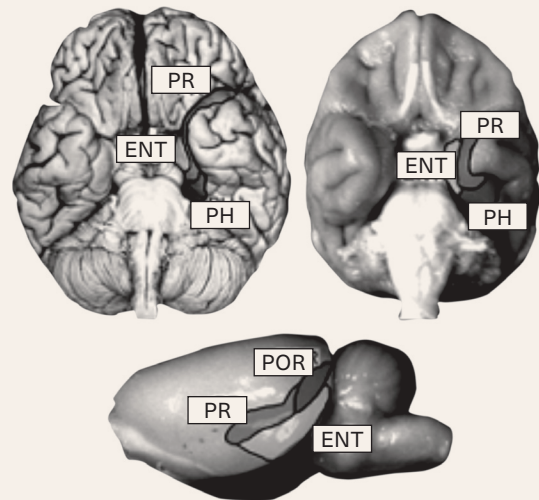
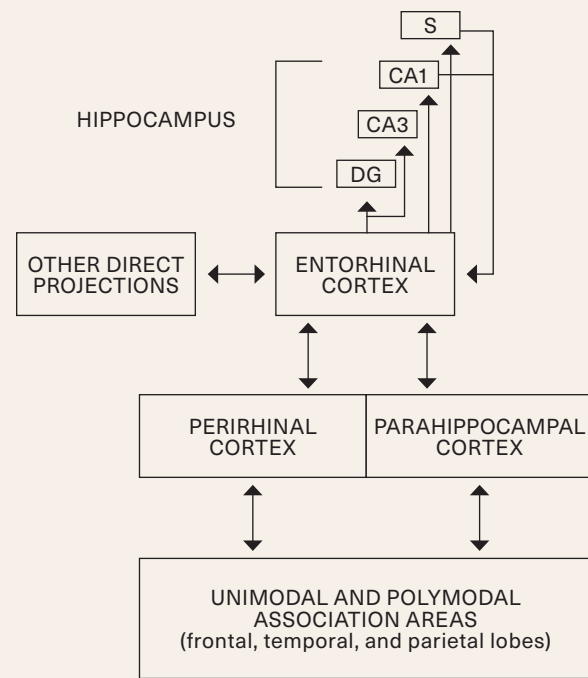


Fig. A. *Top*: Schematic view of the medial temporal lobe memory system, which comprises the hippocampus and the perirhinal, entorhinal, and parahippocampal cortices. In addition to the connections shown here, there are also weak projections from the perirhinal and parahippocampal cortices to the CA1-subiculum border.

*Bottom*: Ventral view of a human brain (*upper left*) and a monkey brain (*upper right*) and a lateral view of a rat brain (*lower center*). The major cortical components of the medial temporal lobe are highlighted and outlined. The hippocampus is not visible from the surface and, in the human, lies beneath the structures of the medial

these structures are not the ultimate repository of long-term memory.

Once the important structures of the medial temporal lobe were identified, the question naturally arose whether the different structures have specialized roles. An early view held that the hippocampus plays an especially important role in spatial memory.<sup>6</sup> This idea was based on the common finding that rodents with selective hippocampal lesions are severely impaired on spatial learning tasks, such as learning to navigate a maze. However, subsequent work involving humans and monkeys with selective hippocampal lesions demonstrated pronounced spatial *and* nonspatial memory impairment. For example, patients with hippocampal lesions were impaired in their ability to recognize words that had appeared on an earlier list—a task with no obvious spatial component.<sup>7</sup> Findings like these suggest that the hippocampus plays a broader role in memory encoding and consolidation (the gradual process by which a temporary, labile memory is transformed into a more stable, long-lasting form).

Another popular idea about specialization of function within the medial temporal lobe was based on a long-standing psychological distinction between familiarity and recollection.<sup>8</sup> Familiarity involves knowing only that an item has been previously encountered (for example, when you recognize a face but cannot recall who the person is), and recollection involves recalling specific details about the prior encounter (such as recalling where and when you met the familiar person). Initially, a number of findings were interpreted to mean that hippocampal lesions selectively impair

temporal lobe. Its anterior extent lies below the posterior entorhinal and perirhinal cortices, and the main body of the hippocampus lies beneath the parahippocampal cortex. In the rat, the parahippocampal cortex is termed the postrhinal cortex. Abbreviations: DG, dentate gyrus; ENT, entorhinal cortex; PH, parahippocampal cortex;

POR, postrhinal cortex; PR, perirhinal cortex; S, subiculum complex.

Source: Adapted from figure 2 in Larry R. Squire and John T. Wixted, "The Cognitive Neuroscience of Memory since H.M.," *Annual Review of Neuroscience* 34 (2011): 259–88.

the recollection process but leave memory based on familiarity intact.<sup>9</sup> In addition, neuroimaging studies were often interpreted to mean that recollection-based decisions generate elevated activity in the hippocampus, whereas familiarity-based decisions generate elevated activity in other medial temporal lobe structures, particularly the perirhinal cortex.<sup>10</sup> However, subsequent studies found that bilateral hippocampal lesions in humans have comparable effects on recollection and familiarity, and neuroimaging studies found that both familiarity-based and recollection-based recognition generate elevated hippocampal activity when both kinds of memory are strong.<sup>11</sup> Thus, the specialization of function within the medial temporal lobe does not seem to be informed by this distinction.

Because the functions of the different medial temporal lobe structures do not apparently divide up along the lines of spatial versus nonspatial memory or recollection versus familiarity, we must look elsewhere to identify functional differences between the structures. An important consideration is the fact that the inputs to each structure are quite different.<sup>12</sup> For example, the perirhinal cortex receives the majority of its cortical input from areas supporting visual object perception. Thus, the perirhinal cortex may be particularly important for forming memories of visual objects. Similarly, the parahippocampal cortex receives significant input from areas supporting spatial processing (for example, the ability to perceive that objects A and B are closer together than objects C and D). This area may therefore be particularly important for forming memories about the spatial locations of objects. A growing body of evidence is consistent with these ideas.<sup>13</sup> That is, the functional specialization of different medial temporal lobe structures is sensibly related to the domain of information they process—information that is carried to these structures from upstream regions supporting different kinds of perceptual processing.<sup>14</sup>

Within the medial temporal lobe, the hippocampus is the ultimate recipient of convergent projections from the entorhinal, perirhinal, and parahippocampal cortices. Thus, the hippocampus itself is in a position to play a role in the encoding and consolidation of all aspects of

an experience (its visual, spatial, auditory, and olfactory qualities, as well as other contextual information). These anatomical facts can therefore explain why damage to the hippocampus results in broad memory impairment that covers all modalities and extends across multiple domains. Current studies are using new genetic methods in mice and other techniques to analyze the separate contributions of specific connections and cell types within the hippocampus.<sup>15</sup>

The memory impairment associated with medial temporal lobe lesions is narrower than once thought, since not all forms of learning and memory are affected. The first clue came in 1962 when H.M. was found capable of acquiring a motor skill (mirror drawing) over a period of three days, though he could not recall these periods of practice. While this finding showed that memory is not unitary, discussions at the time tended to set aside motor skills as a special case representing a less cognitive form of memory. The suggestion was that the rest of memory is of one piece and is dependent on medial temporal lobe structures.

Yet during the subsequent years, it was discovered that motor-skill learning is but one example of a large domain of abilities that are independent of the medial temporal lobe. An early discovery was that perceptual and cognitive skills—not just motor skills—are intact in patients like H.M. Thus, memory-impaired patients acquired at a normal rate the skill of reading mirror-reversed words, despite poor memory for the words themselves.<sup>16</sup> This finding led to the proposal of a brain-based distinction between declarative and procedural knowledge. Declarative knowledge referred to knowledge available as conscious recollections about facts and events. Procedural knowledge referred to skill-based information: knowledge expressed through performance rather than recollection.

Soon after this discovery was made, the phenomenon of priming was also found to be spared in amnesia.<sup>17</sup> Priming refers to an improved ability to detect or identify stimuli based on a recent encounter with the same or related stimuli. For example, memory-impaired patients could (like healthy volunteers) name recently presented

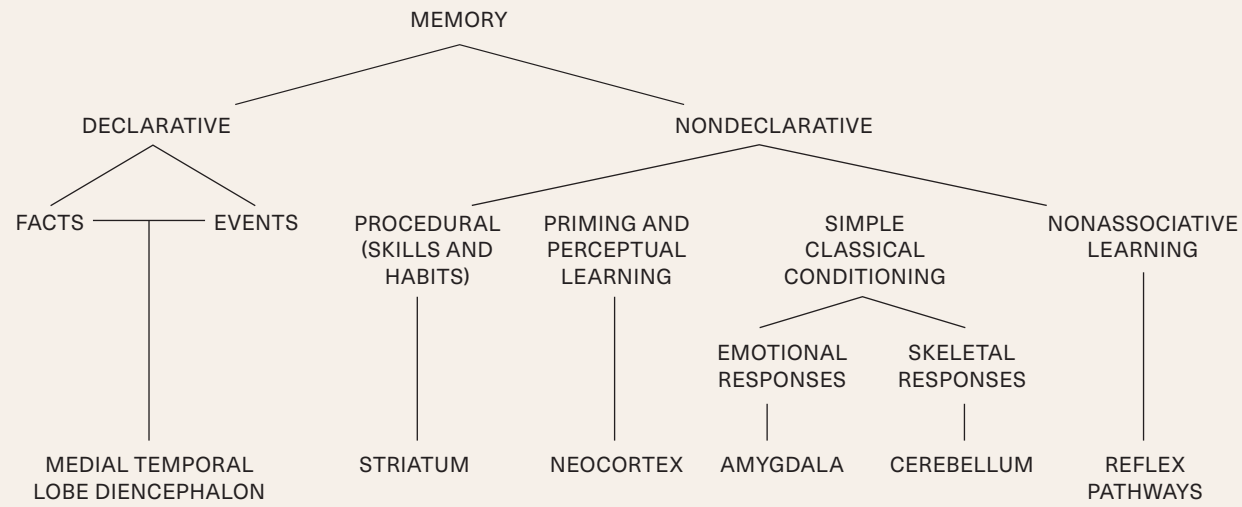


Fig. B. Organization of mammalian long-term memory systems. The figure lists the brain structures thought to be especially important for each form of declarative and nondeclarative memory. In addition to its central role in emotional learning, the amygdala is able to modulate the strength of both declarative and nondeclarative memory.

object drawings one hundred milliseconds faster than new drawings, despite having poor memory for the drawings themselves.<sup>18</sup> Perhaps the most compelling evidence for the independence of priming and ordinary memory ability was that severely amnesic patients can exhibit fully intact priming when repeatedly exposed to items, while performing only at chance levels on conventional recognition memory tests for the same items.<sup>19</sup>

Another important insight was the idea that the neostriatum (a subcortical region of the brain that includes the caudate nucleus and putamen), and not the medial temporal lobe, is important for the sort of gradual, feedback-guided learning that results in habit memory.<sup>20</sup> For example, memory-impaired patients learned tasks at a normal rate when the outcome of each learning trial was determined probabilistically, and performance therefore needed to be based on a gut feeling rather than on conscious memory of past events.<sup>21</sup> Work with experimental animals was also the source of new insights, including the discovery made in the early 1980s that the cerebellum is essential for delay eyeblink conditioning,<sup>22</sup> a kind of learning entirely preserved after hippocampal lesions.<sup>23</sup> Still other types of learning, which involve attaching a positive or negative valence to a stimulus (as in fear conditioning), depend on the amygdala.<sup>24</sup>

Given the variety of tasks explored in these studies and the number of brain structures implicated, an account of memory based on a two-part dichotomy (declarative versus procedural)

began to seem too simplistic. Accordingly, the perspective eventually shifted to a framework that accommodated more than two memory systems. At that time, the umbrella term “nondeclarative memory” was introduced with the intention of distinguishing between declarative memory (which refers to one memory system) and other types of memory (in which several additional systems are involved).<sup>25</sup> Figure B illustrates this idea.<sup>26</sup>

Declarative memory is what the term “memory” signifies when we use it in everyday language. The stored representations are flexible and thought to be accessible to conscious awareness. Declarative memory is representational; it provides a way to model the external world and is either true or false. In contrast, nondeclarative memory is neither true nor false: it is dispositional and occurs as modifications within specialized performance systems. Thus, the various memory systems can be distinguished in terms of the different kinds of information they process and the principles by which they operate. These systems work in parallel to support behavior. For example, an aversive event in childhood (such as being knocked down by a large dog)

can lead to an enduring declarative memory of the event itself (dependent on the hippocampus and related structures) as well as a long-lasting, nondeclarative fear of dogs (a phobia, dependent on the amygdala) that is experienced as part of the personality rather than as a memory.

The hippocampus and related structures in the medial temporal lobe have a time-limited role in the formation and storage of memory. Two lines of work underlie this idea. First, damage to these structures typically spares remote memory and impairs more recent memory in a temporally graded fashion. In humans, hippocampal lesions affect memory for up to a few years after learning. In experimental animals (usually rats or mice), similar damage impairs memory for up to thirty days after learning.<sup>27</sup> Thus, long-term, stable memory develops more slowly in humans than in experimental animals. Discussion in the field continues about the possible special status of spatial memory and autobiographical memory in humans and the idea that these forms of memory might depend on medial temporal lobe structures as long as memory persists.<sup>28</sup> Yet there have been cases of patients with medial temporal lobe lesions in whom remote spatial and autobiographical memory has been spared.<sup>29</sup>

The second line of work involves studies of experimental animals that track neural activity or structural changes in the hippocampus and neocortex after learning. For example, expression patterns of activity-related genes like c-Fos describe gradually decreasing activity in the hippocampus after learning and parallel increases in activity in a number of cortical regions.<sup>30</sup> These findings and others describe the increasing importance of distributed cortical regions for the representation of memory as time passes after learning.<sup>31</sup> Similar findings have been obtained in neuroimaging studies; for example, when volunteers attempt to recall news events that occurred anywhere from one to thirty years earlier.<sup>32</sup> The idea is not that memory is literally transferred from the hippocampus to the neocortex. Memory is always in the neocortex, but gradual changes occur to increase the complexity, distribution, and connectivity of memory representations among multiple cortical regions. At the same time the role of the hippocampus gradually diminishes (fig. C).

One way to view this process is to suppose that a time-and-place-specific new memory (a so-called episodic memory) is represented initially by an ensemble of distributed changes in the neocortex and by changes in the hippocampus (and related structures) as well. The neocortical ensemble is viable so long as the episode is maintained

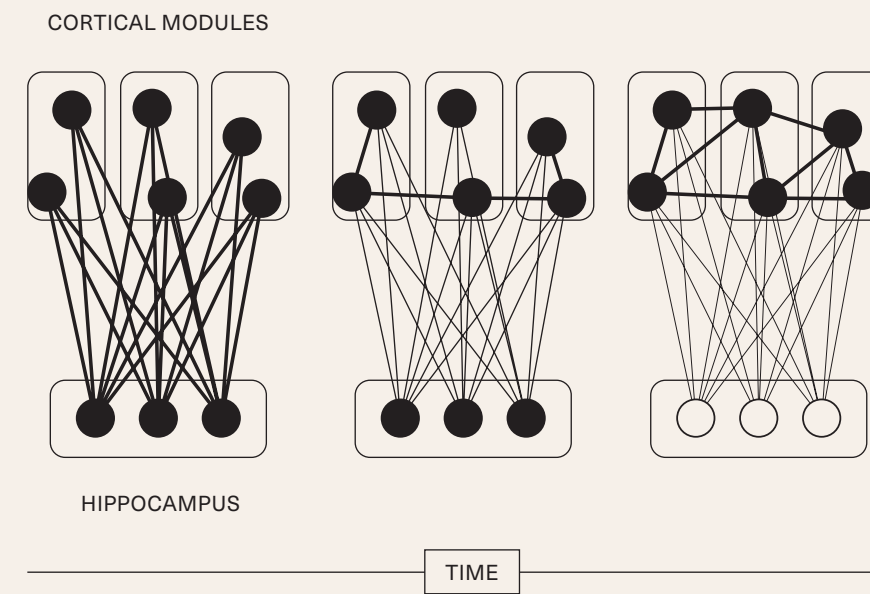


Fig. C. Encoding of new information initially engages the hippocampus and a distributed set of specialized cortical areas (left panel). Subsequent reactivation of this hippocampal-cortical network progressively strengthens cortico-cortical connections or establishes new ones (middle panel). Eventually the cortico-cortical connections are sufficiently strong and stable such that memory can be maintained and retrieved independently of the hippocampus (right panel). Source: Paul W. Frankland and Bruno Bontempi, “The Organization of Recent and Remote Memories,” *Nature Reviews Neuroscience* 6 (2005): 119–30.

within active memory. However, when one's attention is directed elsewhere, a problem arises. How can the unique distribution of sites that represent this new memory be revived by unaided recall or after the presentation of a partial reminder? The notion is that remembering becomes possible because medial temporal lobe structures, by way of their widespread, divergent connections to the neocortex, effectively bind together the distributed neocortical sites that together constitute the new memory. This connectivity supports the capacity for remembering during the consolidation process until the connectivity among the relevant cortical sites becomes strong enough to represent a stable memory without the support of the medial temporal lobe.

A long-standing idea, which has received renewed attention in recent years, is that retrieval of memory provides an opportunity for updating or modulating what was originally learned and even the possibility of severely disrupting it.<sup>33</sup> The process by which a long-term memory transiently returns to a labile state (and then restabilizes) has been termed reconsolidation. Although it is clear that memory can be modified or distorted by memory retrieval, questions remain about the conditions under which memory can actually be abolished. Some studies in experimental animals report that a reactivated memory can be disrupted but that the disruption is transient.<sup>34</sup> Other studies in animals report that only recent memories (ones that are one or seven days old, but not fourteen or twenty-eight days old) can be disrupted after reactivation.<sup>35</sup>

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Consolidation presumably requires some relatively long-lasting form of communication between the medial temporal lobe and the neocortex. One proposal for how this could be accomplished is through the phenomenon of neural replay. Recordings of neural activity in rodents showed that firing sequences of hippocampal neurons during waking behavior are then spontaneously replayed during subsequent slow-wave sleep.<sup>36</sup> Later it was found that hippocampal replay was coordinated with firing patterns in the visual cortex, which is consistent with the idea

that a dialogue occurs between hippocampus and neocortex.<sup>37</sup> This coordination could be part of the process by which recent memories eventually become consolidated remote memories. Interestingly, disrupting replay activity in rodents during a rest period (filled by quiet wakefulness and slow-wave sleep) following spatial learning impairs later memory for the task.<sup>38</sup>

These studies with rodents led to conceptually similar studies with humans. For example, volunteers memorized the locations of card pairs on a computer screen while being exposed to a particular odor (the smell of a rose). Later, odor reexposure specifically during slow-wave sleep increased hippocampal activity (measured by neuroimaging) and improved volunteers' memory of the card pair locations following sleep.<sup>39</sup> In another study, the hippocampus and parahippocampal gyrus were active while subjects learned routes in a virtual reality environment and were active again during subsequent slow-wave sleep.<sup>40</sup> The degree of activation during slow-wave sleep correlated with memory performance the next day. Studies like these have been interpreted to mean that consolidation results from the reactivation of newly encoded hippocampal representations, specifically during slow-wave sleep.<sup>41</sup>

An important question is whether neural replay and the consolidation process are specific to slow-wave sleep or whether these events might occur whenever the brain is not actively encoding new memories, such as during quiet wakefulness.<sup>42</sup> We know that neural replay in rodents can occur during wakefulness.<sup>43</sup> Moreover, in a neuroimaging study with humans, coordinated hippocampal-cortical activity occurred during a rest period that followed learning, and this activity predicted later memory performance.<sup>44</sup> Accordingly, an intriguing possibility is that the neural replay activity proposed to underlie memory consolidation may occur whenever the brain is in a quiet state (not just during slow-wave sleep).

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Where are memories ultimately stored in the brain? A variety of evidence has converged on the view that the different aspects of remembered information are stored in the same regions of

the brain that initially perform the processing and analysis of that information. According to this view, remembering a previous experience consists of the coordinated reactivation of the distributed neocortical regions that were activated during initial perceptual processing.<sup>45</sup> While the memory is still new, this reactivation of distributed cortical activity depends on the hippocampus and other medial temporal lobe structures, but once memory is fully consolidated reactivation can occur within the neocortex itself. Each neocortical region operates within a specific domain and stores only the features of an experience—such as visual, auditory, or spatial information—that belong to that domain. Thus, as proposed by psychologist Karl Lashley long ago, memories are distributed throughout the neocortex.<sup>46</sup> However, contrary to his view, memory is not uniformly distributed. Some areas are more important for storing the visual aspects of an experience, and other areas are more important for storing other aspects.

An implication of this view is that neocortical lesions that selectively impair perceptual processing in a particular domain (such as the perceptual processing of color) should also cause correspondingly specific anterograde and retrograde memory impairment within the same domain. This circumstance is illustrated by “The Case of the Colorblind Painter,” a case that caught the attention of neurologist Oliver Sacks.<sup>47</sup> An accomplished painter was involved in an automobile accident at the age of sixty-five, which rendered him color-blind. The disability was striking: he could discriminate between wavelengths of light, even though the different wavelengths gave rise to the perception of various shades of gray rather than the perception of different colors. Because his condition was acquired (it was not congenital), it was possible to interrogate not only his ability to form new color memories, but also the status of previously established memories that had once included the subjective experience of color. The case description leaves little doubt that the patient's experience—both going forward and looking back—as now completely (and selectively) devoid of color. Although he retained abstract semantic knowledge of color, he could neither perceive nor later remember the color of objects presented to

him (anterograde impairment). In addition, he could not subjectively experience color in his earlier (and once chromatic) memories. For example, he knew that his lawn was green, but he reported that he could no longer visualize it in green when he tried to remember what it once looked like.

Note the difference between the effect of this cortical lesion on memory and the effect of bilateral medial temporal lobe lesions. With respect to remote memories that have already been fully consolidated, medial temporal lobe lesions have little effect. In contrast, focal cortical lesions can selectively abolish one feature (like color) of a long-consolidated memory. With respect to new experiences, bilateral medial temporal lesions lead to severe anterograde amnesia (no subsequent memory for a recent experience). In contrast, focal cortical lesions of the kind suffered by the painter prevent the encoding and retrieval of only one aspect of the experience (color in his case). Because the processing of color in the painter's neocortex was impaired, his experience of color was eliminated in both perception and memory.

Selective deficits in long-term knowledge of the kind suffered by the painter are not limited to perceptual experience. Semantic knowledge (knowledge about names and the concepts associated with them) is also stored in neocortical regions that can be selectively damaged.<sup>48</sup> Thus, damage limited to lateral regions of patients' temporal lobe (close to, but not including, medial temporal lobe structures) can disrupt previously stored information—such as what an animal looks or sounds like. Such patients have difficulty naming pictures of animals and providing information about them. Other patients with damage to the parietal cortex can have difficulty identifying small manipulable objects (like spoons and brushes) and knowing how to use them. Neuroimaging studies support the findings from lesion studies and show that the properties of objects, together with how they are perceived and used, influence which brain areas store long-term knowledge about their identity.<sup>49</sup>

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The information in the preceding sections helps illuminate some of the memory deficits

associated with normal aging and dementia. One of the most common experiences associated with normal aging is the decline in memory function. Oftentimes, the memory difficulty is characterized as poor “short-term” memory. In its common usage, a short-term memory problem means having trouble remembering recent experiences (such as when someone tells a story for the second time without remembering having told it before) while at the same time having no trouble remembering events from decades ago. Older adults who exhibit these symptoms are having difficulty encoding and consolidating new memories, while memories that were acquired and consolidated long ago are easy to retrieve. These changes in memory ability are related to changes within medial temporal lobe structures. In experimental animals, the dentate gyrus within the hippocampus is most sensitive to the effects of aging.<sup>50</sup> Studies in humans have reported between 1 and 2 percent annual hippocampal atrophy in nondemented adults older than fifty-five years.<sup>51</sup> Aerobic exercise can reverse age-related volume loss by one to two years.<sup>52</sup>

Alzheimer’s disease, the most common form of dementia, is a progressive neurodegenerative condition. It is a distinct condition, not an acceleration of the normal aging process. The first targets of the disease are the entorhinal cortex and the CA1 field of the hippocampus, which explains why memory is especially affected in its early stages.<sup>53</sup> The rate of hippocampal volume loss is at least 2.5 times greater in Alzheimer’s disease than in normal aging.<sup>54</sup> The disease progresses to involve intellectual functions quite broadly. The neocortex becomes involved (though sensory and motor areas are relatively spared) and patients develop difficulty with language, problem solving, calculation, and judgment.

Semantic dementia, another progressive disorder, begins elsewhere in the brain and is associated with a different pattern of symptoms.<sup>55</sup> This condition prominently involves atrophy of the anterior and lateral temporal lobes.<sup>56</sup> Unlike patients with Alzheimer’s disease, these patients have severe loss of previously stored and long-consolidated semantic knowledge (that is, loss of conceptual knowledge about objects, facts, and word meanings). Yet their ability to

form new memories can be relatively spared. Thus, patients could recognize which drawings of animals they had seen recently but failed at tests of conceptual knowledge about the same items.<sup>57</sup> Not just the name of the item is lost—the concept itself is degraded.

The understanding of memory has changed in ways that might have seemed revolutionary to Karl Lashley when he searched for sites of memory storage in the brains of rats.<sup>58</sup> All that has been learned about the structure and organization of memory and about brain systems is the result of basic, fundamental research, mostly in rodents, monkeys, and humans. Although we did not review it here, much has also been learned from studies of the cellular and molecular basis of memory, an enterprise that has depended heavily on mice as well as invertebrate animals like *Aplysia* and *Drosophila*. As this work continues, one can expect not only new insights into how memory operates but also improved understanding of human health and disease, including improved ways to diagnose, treat, and prevent the diseases that affect memory.

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## NOTES

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*“And you shall teach them diligently unto your children...”*  
(Deuteronomy 6:7)

As it turns out, both Alice Lok Cahana’s sons followed in their father’s footsteps in becoming rabbis. Ronnie Cahana (b. 1953) also followed Alice in becoming an artist—but of verbal, not visual images. He had been writing poetry since he was a child; as a college student, he was particularly taken with the poetry of John Ashbery, who visited Houston to give a reading and was a guest in the Cahana household, and who invited Ronnie to study with him in Brooklyn. He was also inspired by Shakespeare and by his father’s Hebrew-language poems.

As a rabbi, Ronnie Cahana offered a particular poetry to the lives—and, in eulogies, the deaths—of his congregation members. This included five years in Sweden, where he rather literally followed in his father’s footsteps, administering to aging Holocaust survivors and their children, and a little more than three years in Toronto, serving a congregation founded by survivors from the Lodz ghetto and their families. Both his life and his words were—are—informed by an acute awareness of his parents’ lives; as a boy, he told his mother, “you survived so that I can bring you joy.”<sup>13</sup>

His turn toward poetry was also informed by his childhood predilection for exchanging poems with Alice. So besides her influence on Ronnie’s choice of life—“I promised her to dedicate my life to our people to help ease the sting,” Ronnie has said—hers were the first poems to inspire him to write poetry. The interweave of these two elements of parent-child imperative/immortality are particularly evident in a look at even a few lines from her poem “The Shadows at Night” (1946), which appears after the prose memoir in *Empty Windows*:

The shadows in the dark question me  
Are you defeated?  
I answer—Oh no! Not me!

*... And you who got life instead  
What will you do with the memories of that long night?*<sup>14</sup>

I have added the italics to those last two lines, to underscore the sense of an extended imperative attached to the actual question, directed to herself, and an implied rhetorical one, directed toward her children (and grandchildren).



Adolf and Sara Schwarz, Alice's grandparents, on vacation at Hévízi Tófürdo.



Juda (Jeno) Lok, Alice's father, 1950, Budapest.



Alice in grade school class in Sarvar (3rd row from the top, 5th from the left).



Teri Schwarz Lok, Alice's mother.



Imri Lok, Alice's brother.



Ernsti Gluck (cousin), Alice Lok, Teri Lok, Jeno Lok, Adolf Schwarz, Edith Lok, David Lok, Imri Lok, last family summer holiday (ca 1940).



Alice in Israel, February 5, 1950.

Ronnie Cahana's verbal images were escalated in their intensity and direction by a dramatically untoward event: his own intense shadows in the night. One might say that he transformed the passage of painful experience from his mother's generation to his own, reducing it to a unique personal level while extending it toward experience limited by no individual or group. In 2011 he sustained a major brain stem stroke and found himself reduced, physically, to quadriplegia at the age of fifty-seven.

The closing up of his ability to move physically (he was initially in a locked-in state, able to control only his eyelids) opened up his voice poetically. In defiance of his earthbound condition, his mind soars and his words carry the reader into airlessness with him: his words leap off from the clinical edge into the wide-open abyss of the phantasmagorical and offer an unprecedented understanding of his unique condition:

When my nape exploded, I entered  
 another dimension: inchoate, sub-planetary,  
 protozoan. Universes are opened  
 and closed continually. There are many when low,  
 who stop growing. Last week,  
 I was brought so low, but I felt the hand  
 of my father around me,  
 and my father brought me back.<sup>15</sup>

The ineffable moment of explosion and implosion (different from and yet resonating with his mother's extended ineffable moment of whirlwind), of transmutation and transformation, reaches, paradoxically, deep into words and into memory—specifically, the memory and *actuality* of the poet's father, long gone from this world, who pushes him back from the mortality that pulls at us all—to reengage: to proceed with the immortalizing processes of family love and the art of poetry.

There is considerable irony to Ronnie's new "condition" when one reads the transcript of an interview given by him and his wife, Karen, in 2009, after twenty-six years of marriage, in which she describes, among other things, the moment when he first caught her eye:

So, I remember sitting in this open field area. ... And I see this figure, moving through the woods. You know, Ronnie walked like a gazelle. He moved with one leg out and the other one pulled in very straight. ... And I was mesmerized, as a young child. I remember thinking: Who is that? Who is that creature? That was the first time I ever saw

Ronnie, and then he came and he was absolutely such another kind of force. ... It was really magnificent.<sup>16</sup>

One juxtaposes this imagery with one of Ronnie's post-explosion poems, "Tortoiseshell" (February, 2020)—the title suggesting his sense of connection to that slow-moving reptilian caught on its back, trapped within its carapace:

(1) *to be read breathlessly*

Praise the Releaser of prayer:  
 please release me!

Bound in Your ground  
 underground lies  
 a gamboling-on man

Who manifests  
 Your prayer within

Who will not reveal a  
 leave from Heaven

Who only knows  
 what I do not now

(2)

Make room for G-d above you  
 for the summit of love for the  
 airy song of bygone lungs

My word will not move until I  
 re-member

(3)

Re-sembling your wide  
 disassemble

Re-fusing your  
openshut flame

A conscience within  
dismantles

the signature faint  
in your nape

Remand your guarded mind  
to regard you

Allow grace  
Eternal its gains

Wander in the weights  
that confound you

I am sod re-  
positioning veins

The youth who was gazelle-like, who gamboled through the woods, has been transformed, not by age, but by a sudden divine intervention of sorts, into something tortoise-like, with earth (*adamah*) rather than blood (*dam*) flowing through his veins. But the transformation, rather than turning him to ash, has yielded rainbows of grace-filled words: words impelled by the covenantal commandment to remember. Prayer floats upward, its initially inchoate words, disassembled, deconstructed into letters and numbers, to be gathered in by God. His sudden disassembling has forced a reassembling that is a rekindling: not the fires of destruction but the warming flame of creation.

Yet he also insistently disbelieves in the paraplegic reality of his new condition; he has achieved what Socrates, in a very different time and place, hoped for in Hades: to be able to pursue the Good without the mind being imprisoned by the body's demands. And besides:

In my mind,  
and in my dreams,  
every night,  
I, Chagall-man,  
float over the city.

Like Chagall, he was buoyed up by love. Always. Karen remembers, in the same 2009 interview cited above, the full-throated contours of this:

When we would gather ... together and he would lead group discussions, there was always this child with him ... with Down syndrome. She must've been about, at the time, six or seven or eight. And he would hold her hand while he was teaching, and he was eighteen years old or nineteen years old. And she would look up at him, and then he would walk off and he would bring her everywhere and it was his sister. And that's when I made this other assessment of Ronnie—what teenager would not feel in some way burdened or stigmatized or something to bring their mentally challenged sister with him, everywhere he went. And he would always bring her along, and she looked at him so longingly, and he was so gentle, that I really felt that there was a very special person inside.

Ronnie's verse moves in a range of directions. Here, I focus on three particular groups: poems that reference Alice; poems that, like those noted above, reference himself; and poems that reference his family: his father, his wife, Karen, and his children. The crucible of his experience has forged purified strands of love. The first poem—more precisely, a prose poem—written after the explosion, "A Glad and Grateful Goodbye" (June, 2013), is his own eulogy, addressing all of them:

PSALM 1

We are driven you and I. My soul and my body. To the farthest skies, we have a world not here not there; Of journeys. In drop down valleys to upside spheres. We encounter ourselves. In gravitas and in extremes. And the whether is besides us. We see our mother's eyes through translucent skin. Feel the heave of her tummy. Breathing, pumping, rocking our head. Her long hand under our whole back. And her left thumb rubbing the inner corner of the left eye to the nose. She hums a Swedish purr. *Min perfection, min lilla gubbe* [My perfection, my little old man]. My talking tongue leaves my mouth. Why is this heaven?

PSALM 2

I go to my father's synagogue higher than his head. He carries me above his chest in the strongest arms in the crook of his folded elbows. At that moment I became him, seeing the world and I knew forever how to be imperious. I tell the world you are not subjects. We are



Moshe.



Alice, Ronnie, Moshe, Sweden, 1955.



Ronnie, Michael, Moshe, Alice, Houston, 1960.



Moshe, Alice.

G-d's thank yous for the furniture of the beautiful queen nature that surrounds us. We are in a field of his hills. We are in my father's arms. We are singing our thanks. Oh dance me dad. Oh wander with me my growth. Kiss my upper lip and my lower chin. I never want to leave this life. I'm dizzying with your busy universe, able *aba* [father]. perfect papa. I sway.

PSALM 3

Where is Israel in the brooks? Where is Tzion, under your sleeves? It is in the study of your sunny head tefilin. Is this in the knot on G-d's brainstem? You are a torch, you bereaved torso. You have been hunted by the heel and stick to groundlessness. Now. There is a muddy brown that is exchanged for your blood and it is rising.

PSALM 4

Oh my wife. I belong to you. I see the skin fold hurry under your eyelids. I want to be your sleep. I walk along your long grace. Your bones are hard to everyone's stance but not to my fingers' touch. There are tender demands when you open your lips, your tongue, your teeth. Your teeth are teaching my empty throat. Am I only just now breathing? G-d has given me this. We are face, two legs, alike. We have no weight. Wherever we are, the world is turning. This is nonesuch time.

PSALM 5

I love you each, you little bean balls of being. All that sand rolled on to you. Little specks of gravel will be your experiences. I will have big pockets to ever carry you home.

The biblical Psalms are praise-and-prayer poems to God traditionally ascribed to King David. Ronnie's psalms offer the frame in which images blur time: the poet dances between pasts and presents, between being a small child already anticipating manhood and being the lover who is the husband-become-the-father. His offspring, like Abraham's, are as many as the sands on the shore. From that beach, contouring the edge between the land of now and the endless sea of later, he who once carried his children carries home pockets filled with grains of love.

One of the more moving expressions of love and the importance of memory came in January, 2020—more than two years after his mother's death—in his "Eulogy (Chasing Her Death:Wish)":

Go, mother, don't go!  
 Meet me under the canopy  
     if I live while you won't.  
 I'll meet you in the green haze of your hazel.  
 I won't remiss your love again. I was  
     torn to the piffling rip in my soul.  
 You've given away to the cumbersome breach of my  
     silence.  
 The truth is when you love me too much.  
 Could I save you from the fire in  
     memory?  
 So close

The poem alludes to the startling green hazel eyes that saw so much—too much—and that carried kindness, calm, ferocity, and pain that could not be missed by her oldest son. (Those eyes are also referenced in Psalm 1 of “A Glad and Grateful Goodbye,” quoted above; in a Zoom interview in July 2020, Ronnie said of Alice’s eyes, “I swam in them every night.”) The enveloping love of a mother—who, as a daughter and a sister, lost all those who loved her and whom she loved—provokes one wish in her oldest son: to save her from the fire of memory that cannot be extinguished. Like the Kabbalist seeking the innermost recess of God who, however close, remains separated from that *mysterion* by an infinitesimal veil, the *pargod*, the poet touches those moments when, *almost*, her love for him and his for her can disentangle her from the loves lost to the fires of the camps: *so close*, but not quite—as the poem’s last words fade into the conceptual distance without final punctuation.

Ronnie’s December, 2017 prose-poem eulogy for Alice asserts, in part, that

Through us—and for us—she defeated Hitler. At liberation from Bergen-Belsen, when a soldier in the British Army told her she was now free, he asked her what she might need. She asked not for food but for a crayon. She wanted to draw the light out from the dark. In recovery, she laughed at the Angel of Death who proved unable to take her down, just like she laughed at Josef Mengele when responding to his question: “*Haben Sie Kinder?*” In her fifteen-year-old mock, she retorted: “Children? I *am* a child ... what about you?”

... Mother went with Father to march in Birmingham. But when she



Alice and Moshe, Sweden, 1979, after meeting with Queen Silvia who received Alice as “ambassador of good will” for the International Year of the Child.



Late teen-aged Ronnie, photograph by Randi Freundlich.



Alice and Rina.



Alice and Rina, photograph by Kitra Cahana.

saw that violence was festering, she flew home because she was pregnant with Rina. She went with Father to demonstrations all around Houston, to churches and cinemas and theatres that confined the black population to the balconies. “Live what you believe” is the underpinning principle of a valiant religious life, along with “believe always in the dignity of people.”

... Soon thereafter—at 3 in the morning—a man who claimed to be the Grand Dragon of the Ku Klux Klan called. I answered the phone. He spoke, mispronouncing my father’s name, “Moshee? You Jews go back to New York where you came from.” I tried reasoning: “Why is that? Why can’t we live here?” In a huff, Mother cut in: “Who is this? What kind of man calls a family at 3:00 in the morning? Does your wife know that she’s married a coward? Let me speak to her! I would like to know who would put up with a person so weak.” He stammered and apologized: “I’m sorry, ma’am, sorry.” That was our last contact with the KKK.

... Mother was my light source which I’m now struggling to recapture. I had shrill hopes that she’d return. Father and Mother gave their worlds to each other, two orphaned children finding their most sacred love in relation and through creation. Mother, your grandchildren adore you and thank you for that love, through that love. Amen.<sup>17</sup>

Many of Ronnie’s poems, particularly since 2011, reflect lovingly on his mother and her legacy, which includes traits in himself that he recognizes as derived from her and thus part of a transgenerational transmission. Thus, for instance, “Mangoes Mangled” (Dec, 2014) begins:

I seek you in my own nature—not G-d’s

Longing naturally, lungs like mine, lunging lungs

A proof that you love me

...

Mother left on a smoggy day—wouldn’t look my way—kept her eyes on the blue song faraway vapour waves:

Mediterranean

But I am queasy am  
tear-slinging lonely

Her only child of lonesome bother  
We weep  
with glances  
when we never notice  
You, chérie,  
please look at me ...  
My damp eyes keep their hug upon you  
I will never  
be done<sup>18</sup>

There is, again, a focus on his mother’s eyes (the windows to the soul, in a tradition extending back to the most distant reaches of the ancient Mediterranean world and Middle East), which link her distant past to the inquiring present of her firstborn son; her tears that he could only guess at then link to his tears at her being gone now: a moment in which the sky and sun were occluded from his eyes.

Alice, still so lost after the Catastrophe, found herself through Moshe’s eyes—wedded to her own resilience, and Ronnie underscores the incalculable power of Alice and Moshe’s interweave as a shaper of his childhood already thrusting upward to the adult he would become, his being an immortalizing echo of the *being* of both mother and father. His gentle opening command, in “Man Akin” (March, 2015), links God’s spirit breathed into Adam in Genesis to Adam as the ultimate male progenitor, to his father, and, through the continuity of spirit from both Adam and his father, to himself, who—like every man and woman since the Garden of childhood innocence—is imperfect and not without sins:

Adam-breathe your  
wind into me  
Father-blow your  
blues into me  
Brash sins traduce  
the man in me,  
the many I  
was  
The woman she  
cohorts angles oh  
so magnolia blossom  
when demons forgotten

G-d thunders lightning Sinai ...

Father's voice grew weaker. Weaker. He huskied dulcet the short harsh words, hushed himself. Where did he ...?

Many men are known for their bluster. Rich and dark, brothers of hard, but I became your turnaway man. Even as you turned around. What dream do I sniff in your atmosphere? A Gaul away from sport. I was too little to apprehend that you, too, I would copy.<sup>19</sup>

There is longing and love for the gentle ferocity of—the direct continuity of becoming the richness that was—his father. Not the brutish power of athletic machismo—certainly not now, when he is confined to his bed and free to wander only with his mind and the words engendered by that mind—but the thundering lightning (and the bright, world lightening) of his father's personality, re-remembered through the thunderous lightning of his own exploded brain stem, and elevating his be-souled, spirited being.

Love, like divinity and like immortality, cannot be bound by time or space: one can fit many hearts within the confines of a single heart. The poet's love carries, in a natural and accelerating flow, from one generation to the next—from love of his mother to the unbearable lightness of loving his wife. On 8 November 2014 Ronnie composed "Födelsedag (for Karen's 56th birthday)"—its Swedish title conjuring that particularly halcyon stretch of his and Karen's life together, as he recalls the time before their meeting as an onerous emptiness, transmuted by her arrival in his life into light-filled fullness:

I recall the burden of not knowing you

An imaginary time since the  
broad expanse of that kiss  
spreading the universe  
to an endless  
colour

Bygones and unbeguns

Hearts are won by lakeside  
where stars pierce warming waters

I can see you then again



Ronnie and Rina.



Ronnie holding baby Kitra.



Karen holding baby Kitra.



Ida Rae, Alice, and three grandchildren.



Cahana family at Bergen-Belsen for  
*The Last Days* film shoot.



Alice and Rina with Pope Benedict XVI.



Tamira, Kitra, Alice, Rina, and Briah.



Michael and Ida Rae.

The mind went dizzy

*-Upp och ned-*

Jerusalem in your eyes

That pre-Karen burden is reconstrued as a virtual non-time: imaginary, like the time that preceded the moment in Genesis when God commanded light into being—light, whose reality is a spectrum of “endless colour.” The poet, returning to that time and to the time between Karen and the brain stem stroke, and again to the present when his mind and memory and thoughts and words returned to him, floats (in Swedish) *up and down*—and if, out in history, the wandering Jews longed for Jerusalem for two millennia, he has found his Jerusalem in her eyes. Again he swims in beautiful eyes.

Ronnie dedicated many poems to Karen—Ketzal (“kitten” in Yiddish)—especially on her birthday. One of them (“Undermind: Because We Love”—written, he notes, for Ketzal’s Birthday 5777), written in the year of Alice’s death, though it summarizes his feelings for Karen in one word, “love,” extends its tendrils outward to encompass the world: not only his parents and his children, or humanity at large, but all of God-wrought nature (and the angels beyond nature):

Springtime follows the Fall  
Faces hide nothing at all.  
Earth Shadows the Moon  
Clouds sprinkle Our tune  
Grounds stand us from Above  
Because we love.

Innocence is Air—  
Seekers Everywhere  
Becoming the Love we Dare  
Hidden in an apple grove;  
Your heart is my Treasure trove.  
Eternity cannot Dissolve  
Because we love.

Little syllables Kneel and Dance  
Eyes you nighted by Real romance.  
Even Angels have a Point of view,

In the Dim dawn, quite a few—  
All aflutter over You  
Time is Sudden, shan't Evolve.  
Always this because we Love.

Every artist embeds part of her/himself in the works that s/he produces—as God embedded Itself in the universe, and most particularly in the be-souled clod of earth (*adamah*) that became *Adam*, the first human, and all of that human's descendants. In Ronnie's poems he both is embedded and embeds those whose love—from his already deceased father to his youngest child—kept him floating when he might have sunk, lifting him up so that he has continued to lift up his voice. He asserts, in "Man I Cure" (March, 2020), that

(1)  
I just touched  
the incontrovertible recoil,  
the G-d-sung lyric, the  
man sprung of me.  
Possession voiding my  
starling syllables I  
fly love again.  
You are mine though I own no me.

Brine and wildlife shearing  
a present brainwork green  
in past passion, *in situ*:

a walkaround sculpture  
between us.

(2)  
Darling, hold my hand. Tell me where we lie in upper space. I cannot know you unless you take in my break-in spirit. G-d has Given me back the distance from before we met.<sup>20</sup>

Who, one might ask, is "Darling"? It is, of course, his wife (there was distance—obviously—before they met, to which his stroke temporarily returned him and his "present brainwork green")—but it is also his father and his mother (who lie with him in an upper space different from that shared with Karen). They all connect him to the God of all things (brine and wildlife) large and small.

These stanzas, as so often in his poetry, reflect the ambiguous dexterity of love, which can reach out simultaneously in multiple directions, particularly when that reaching out is relieved of its specific physicality, but which also—to use the phrase shared by Ronnie Cahana the rabbi with Ronnie Cahana the poet—"inheres to the sanctuary within."<sup>21</sup> This spills out most distinctly in "I'll smile the while we reap in sleep" (June, 2020):

Love's penumbras

(1)

I reach for your smell in my dreamtalk

Blood racing  
Pulse erasing me

I sniff us into Oneness  
without recourse or sorrow

Brill puff-puff

We are scions of mother  
in wanderlustre

Are you afraid I might die now?

Keep me sweet deep, my weeping goddess

Temper quiet our bliss-making  
chants

to belong in this bursted truth  
buffering the abyss  
as I puff-puff pursue us  
puff

(2)

Brilliancy borne as us  
we alight behind your deathbed head  
with the blaze of Heaven

fingering skyward  
flinging promises

*Shema Ima—  
V'ahavta ...*

And you will love me our liferhyme  
Your worn soul born deep

I'll smile the while  
for suite tempo sleep

Perfecting puissance over  
cold wild earthlight

Cadaverine alone

(3)

Holy artist	<i>Imi morati</i>
of	and she went straight-a-way to Olam HaBa' and
Love	pranced, yes, Edith, their wherewithal within without
Enter your Eternity	the awaiting Garden. <sup>22</sup>

The first stanza would seem to be directed to Karen, whom he sniffs into oneness, and who might worry that he might die now, after his stroke; distinctive senses are remembered when sense has been denied. But the second is directed to his mother, on her own deathbed. And he puns: *Shema* (Hear!)—the first word of that most essential, Torah-based statement of Jewish faith—and *v'ahavta* (And thou shalt love ...), the first word of the extended sequel to and continuation of the *Shema*. Sandwiched between these words is *Ima* (Mother), and thus this is not Moses (which happens also to be his father's name) addressing the Israelites to love God but Ronnie (or is it his father, for both parents are in the same spaceless location, “fingering skyward”?) addressing his mother to love him who is alone and so cadaverine. The third stanza clearly references his mother: *Imi morati* (my mother my teacher), holy artist, reunited now in *Olam HaBa'* (the World to Come) with her long-gone, much-loved sister, Edith.



Karen and Ronnie.



Alice and Ronnie.

The lines among loved ones are blurred indeed. And the poems continue to flow: for his youngest daughter, Sapira, on her seventeenth birthday (in July 2014), he writes “The Tree of Life Whispers, *Ayekem? Where Have They Gone?*”:<sup>23</sup>

Won't envision what you'll become. Can't.  
But who you were was all awe.  
Bounteous beautiful G-dly you.  
Did not my eyes swell in remembering?  
There was a time before you.  
Preparing the maple sap. There was a time in snow land. Blinking the re-creation.  
But G-d made the earth to replenish itself. And so did this family. The strain on the clouds crowded and crowed. A fall-out; let this family have shape. The sky contumely rehearsed its protest. Another life again.  
With you Eden's garden returns.  
What splendor and glory in a little girl's eyes.

One hears echoes: in the first stanza, the notion of remembering, which connotes Alice. In the second, the division of time between “before you” and “after you,” connoting Karen; and family replenishing itself, connoting Alice—and connoting the entire Jewish people in the aftermath of the Holocaust. “With you,” in the third stanza, “Eden returns”: a recurrent motif of connection from the beginning of biblical time to the future of messianic hope, and from “Man Akin” to “I'll smile the while we reap in sleep.”

Ronnie dedicated other poems to his children: he composed “Lovewonderunderstands” for Briah in June 2014, and “Everything About You Brings Nighttime Mystery” a year later, on her twenty-third birthday. Poems for Tamira, which date back *before* the stroke, include “Off Course,” from 2009. Its last two verses are almost prophetic:

I have no bitter, it stings in glitter, its banter rather, (grant it father), is cheapened in distanced strain

I have no recourse, this whittled voice, I can't regard the refrain. And so the loss—of man off course, remorse, endorse and whither as sure as there was Cain.

Who could have predicted that two years later Cain, in the form of a stroke, would strike the poet, Abel, down? One of the first to translate his early



David and the triplets: Sarit, Liora, and Idit.



The nine grandchildren.



Alice and Moshe surrounded by their children and grandchildren.

post-stroke utterances, with their difficult-to-shape syllables, was his first-born child, Kitra. His October 2015 birthday poem for her, “Selffound,” rethreads Ronnie’s tapestries of words into the weave of generational continuity (father and mother, wife, daughters and son) that forms the weave and counterweave, the Edenic innocence, the intimation of immortality, of the poet:

Innocence—  
 In innermost movement I conceived  
     of falling  
     in lovely love  
 With your mother,  
     In this sense  
 I conceived of you  
     Immortal you.  
 In itself, it’s wonders of lives,  
 Inner self found its wonderland—inconceivable no!, conceivable.  
 Tender tendons and sinews  
 Mightily bound on bone.  
 You always were  
     er  
     Are  
     or

May your softer sleeps ever -wear  
 the glories of God’s breathtaking Eden.<sup>24</sup>

Conception of love becomes conception of his own immortality—through his daughter’s immortal being, her simultaneous softness and strength, extending, in retrospect, from her grandmother to her mother and father to herself, seeking to help fix the world (*tikkun olam*) in her own work: a legacy of responsibility extended both from that familial continuity and from a larger communal continuity that extends all the way back to Jeremiah and Job and their texts.

MAJOR VARIABLE OF HOLOCAUST  
 TRAUMA TRANSMISSION  
 Natan P. F. Kellermann

Trauma transmission was initially hypothesized as psychological responses of offspring to parental behaviors that influenced the process of transmission under different circumstances. This conceptualization has been expanded to include *particular* parents (P) who transmit *various* influences (x) to *certain* individual children (O) under *specific* environmental circumstances (EC) and at *different* critical time periods (TP).

The dependent variable – (x) – is a function of various extraneous or independent variables, creating the equation  $f(x) = P+O+EC+TP$  (and possibly others) (fig. A).

After some brief remarks on the ambiguous terminology in transmission studies, I will discuss conceptual issues within the different kinds of transmission (x), parental diversity factors, offspring diversity factors, environmental diversity factors, critical times of transmission, and the process of transmission.



Fig. A. (P) = parental diversity factors. (x) = the content (*what was transmitted?*). (→) = the process (*how was it transmitted?*). (O) = offspring diversity factors. (EC) = environmental factors. (TP) = time periods.

### *Ambiguous HTT terminology*

It is often difficult to make an exact distinction of survivors, offspring, and grandchildren in transmission studies, and to clearly define to which group a specific person belongs. This ambiguity is caused by the fact that a variety of labels have been used to designate the major players in this multi-generational drama. Within transgenerational studies, Holocaust survivors regularly belong to the F0 generation, even though they are not necessarily the first generation.

They can also be the second or third generation considering that they may be the offspring of trauma survivors from World War I, or children of parents and grandparents who experienced pogroms, violent revolutions and economic hardships during the Great Depression. However, even when disregarding this ambiguity, and including only those who experienced the Second World War firsthand, nine vastly diverse groups of this first generation have evolved during the post-war years. These include persecuted Jews, displaced persons, war refugees, former camp inmates, victims of Nazi persecution, survivors of the Holocaust, war-witnesses, eligible survivors and hardship survivors. The designation Traditional Generation has most recently come into use, including Veterans, or the Silent Generation.

OHS is generally known as the Second Generation, the F1 generation within transgenerational research, or Baby boomers in post-war history studies and the popular media. They differ significantly from offspring of child survivors, who are not only younger than those born immediately after the war, but also grew up in a different period, and are called “Generation X” in popular media. Their diversity will be further discussed below.

The grandchildren of survivors are a highly heterogeneous age-cohort and have been lumped together as the “Third Generation,” even though it is unclear how many survivor grandparents they must have to belong to this group. They would constitute the F2 generation within transgenerational research, and “Millennials” or “Generation Y” in popular media.

The most important difficulty to separate the various generations, however, comes from the

fact that transmission of trauma does not always represent a “true” transmission from exposed F0 to unexposed F1. Since abuse in itself tends to “run in families,” it is often difficult to differentiate the exposed generation from the unexposed one. Harmful child-rearing behavior by the F0 parent in effect transforms the offspring from being (unexposed) F1 to becoming (exposed) F0. OHS who became traumatized by growing up with abusive parents who had PTSD may, for example, be included in this group, and be regarded as both F0 and F1.

Because of these ambiguities, and in order to more accurately describe how environmental influences propagate across generations, it is essential to distinguish between “intergenerational” and “transgenerational” transmission of parental trauma. The influence of parents upon their offspring (F0 to F1) is called “intergenerational transmission” (between generations) while the more stable transmission to further generations (F0 to F1, F2, F3 and further) is called “transgenerational transmission” (across generations). For a transgenerational inheritance to be epigenetic, it must be transmitted through gestational exposure to epi-mutations in the gametes, and can only be confirmed with evidence from F2 male subjects or F3 females because the ovum of a granddaughter is present already in the ovum of the grandmother. To date, there is a growing body of evidence for intergenerational transmission of environmental exposures in animals and humans (see reviews mentioned above), but still little data on transgenerational inheritance in humans.

## X

### *Different Possible Kinds of Transmission (x)*

The theory of HTT postulates that something (x) is passed on from parent to child. But what is it? Can it be anything or only something specific that is associated with the Holocaust? Should it focus on stress-related psychopathology? If so, should it primarily emphasize intangible or tangible aspects of traumatization? A more precise description of the contents of transmission is needed because as long as we have not defined what we mean by

Holocaust traumatization in the first generation, it is not clear what we are trying to find in the second.

Studies on transmission consider whatever is transmitted (x) as the dependent outcome variable. It has mostly been described in terms of a mental disorder. However, there is a great deal of diversity among the clinical population of OHS, and a lack of consensus regarding the possible mental health manifestations of HTT. It is, therefore, unclear whether the assumed psychopathology in OHS should be described in terms of an already established diagnostic entity, or if it should be given a new label, such as transgenerational disorder, cultural trauma, or anything else.

When asking OHS what they have absorbed from their Holocaust survivor parents, a great variety of answers will be received. Some will talk about their identity conflicts, their cognitive dissonance of “knowing and not knowing,” their persistent worries and sadness, their interpersonal difficulties, and their struggles to cope with stress. Others will mention their (more or less adaptive) survival mechanisms, which can later be interpreted as resilience, or post-traumatic growth. Can these self-reported characteristics be regarded as possible manifestations of HTT? Can any sign of distress found in the second generation be evidence of HT from the first generation? If so, should the classic symptoms of PTSD be a focus of study, with intrusion, avoidance, and hyperarousal, also in OHS, or should some “milder version” of this disorder, such as “post-traumatic stress symptoms” (PTSS),<sup>2</sup> or “post-traumatic embitterment disorder” (PTED)<sup>3</sup> be the assumed outcome?

Many of these conceptual questions are open for discussion. OHS cannot be assumed to be aware of all the traits that they absorbed from their parents, and self-report studies will not provide all the answers. The tendency of some OHS to suffer silently and not to ask questions (also found in survivors of abuse who claim that “it does not hurt”), make self-reports very unreliable. Studies using close-ended questionnaires tend to minimize symptomatology while disclosing such manifestations after some more in-depth interviewing. As a result, and despite numerous reports on the

manifestations of HTT, it is still difficult to fully delineate all possible kinds of transmission in OHS. What can be concluded, however, is that OHS obviously did not “inherit the trauma” of their parents. According to Yehuda, Lehrner & Bierer,<sup>4</sup> “terms such as ‘inherited trauma’ ... obfuscate rather than clarify what is being transmitted and how —indeed, how can an experience be inherited? It is clearer to frame the discussion around how the impact of trauma occurring to the parent can affect the offspring. Thus, the term ‘intergenerational trauma’ is misleading because it is meant to refer to the intergenerational manifestation of the effects of parental trauma.”

Investigating the *impact* of trauma or its *effects* in OHS, however, is not less ambiguous than studying trauma in itself. There is little consensus regarding the meaning of trauma, and there is even more disagreement about its effects. Attempts to define stress disorders clearly, including PTSD, have been met with all kinds of objections for a long time. These objections have been voiced because “stress” is not a monolithic concept but rather, an “emergent process” that involves interactions between individual and environmental factors, historical and current events, allostatic states, and psychological and physiological reactivity. Even if it is possible to show with some certainty that the war left an indelible impact on Holocaust survivor parents, it remains difficult to conceptualize this impact within the lives of the offspring. If, for example, parents feel “accumulated emotional pain from the past,”<sup>5</sup> or suffer from anxiety symptoms with complicated grief, it is not possible to infer with certainty that these same symptoms, also found in the offspring, is a result of transmission. They were possibly caused by other lifetime adverse events, rather than by parental trauma transmission, or by various visual & verbal representations of the ancestral trauma that were disseminated in social media.

Most theories of traumatization are based on the notion that time has stopped, and that painful memories from the past are coming back, like a broken record that is spinning around and around. The strange thing about trauma transmission, however, is that the most critical event in the lives of OHS happened before they were born.

How can a past that is “coming back,” not in the form of one’s own memory, but in the form of the memory of someone else, be conceptualized? Researchers from psychology and psychoanalysis have struggled to answer this question for a long time and used different metaphoric terminologies to describe it. They have for example described the effects of the Holocaust upon offspring as “shadows,” “echoes,” “psychic holes,” “ghosts,” “knowing the unknown,” “the presence of absence,” or “radioactive,” and “projective,” identifications. From an ethnographic perspective, Hirsch suggested calling the unconscious manifestations of parental repressed memories “post-memories” since they could be neither understood nor recreated by OHS.<sup>6</sup> In cognitive neuroscience, such memories are categorized as “non-declarative” or “implicit” because they make people perform thoughtless and automatic tasks, such as the sudden Holocaust association in OHS that may appear when faced with hunger, frost and physical pain.

While some of these concepts are useful in clinical and research settings, they remain fuzzy and imprecise and difficult to operationalize and measure objectively. Psychobiological research, therefore, attempts to conceptualize the manifestations of HTT in more concrete terms, as “scars,” “footprints,” or “psychophenes” (behavior genetics) that can be measured within endophenotypes, neuroendocrinological correlates, or within the neuronal circuits of the brain. These “embodiment” concepts are based on the assumption that thoughts, feelings, and behaviors are grounded in physical interactions with the environment, and that traumatic experiences influence body morphology, sensory systems, and motor systems. While such conceptualizations of trauma allow for a more precise definition and measurement, the drawback of using them is that they are too reductive and simplistic to answer the “hard question” on how a mental process can create the experience of HTT. As a result, psychobiological studies may, therefore, study something that becomes irrelevant to traumatization itself. Perhaps this is the reason why it is difficult to translate the various experiences of OHS into tangible biomarkers.

Earlier studies have been unable to agree on a standard demarcation of what was passed down from parent to child. Utilizing the simple phrase “emotional residues” to delineate the x may incorporate much of what is known from earlier traumatology studies. This neutral construct will enable future elaboration of the contents of HTT in both psychological and biological terms as a memory, or a scar that remains after a harmful event that happened to someone else.

## P

### *Parental diversity factors (P)*

Holocaust survivor parents come in all shapes, and there is an almost endless number of parental characteristics that can influence OHS. The most crucial parental diversity factors, as reported in studies of Holocaust survivor parents, are gender, age, traumatic experiences, mental state, *child-rearing*, *family functioning*, communication patterns, coping styles, and positive parenting qualities.

*Gender* is perhaps the most crucial parental diversity factor. Even though there is evidence that both maternal and paternal stress can affect the neurodevelopment in offspring, some studies have identified different underlying mechanisms for transmission depending on parental gender. During pregnancy and intra-uterine development, the maternal impact will be critical, as well as immediately after giving birth. Later in life, women have a more significant investment in maintaining relationships with their children than do men. Paternal influence, if not studied in the sperm, can be similarly investigated in paternal child-rearing practices. If both parents were survivors, the impact of HTT was found to be more apparent.<sup>7</sup> Worse subjective impressions of emotional and physical health were related to maternal but not paternal exposure to the Holocaust<sup>8</sup> and lower cortisol level in offspring were associated with maternal, but not paternal, PTSD.<sup>9</sup> Maternal PTSD significantly enhanced the risk for PTSD in OHS, while paternal PTSD significantly elevated risk for depression.<sup>10</sup> Both fathers’ and mothers’ PTSS were positively related to offspring’s PTSS

in a prospective study of the intergenerational transmission of captivity trauma.<sup>11</sup>

The *age* of parents during the war is an additional important diversity factor. Older survivor parents usually developed general resilience in most life domains, while those who survived the war at an earlier age were more vulnerable. For example, OHS with mothers who were younger than eighteen during the war and survived alone reported more symptoms of anxiety and depression. Traumatization adversely impacts young children’s mental representations of self and others, and a significant predictor of later psychopathology was the age at which children were separated from their parents during the Holocaust. After liberation, younger parents who were still recuperating from extreme starvation were more likely to influence their offspring than those who had some time to create a new life for themselves. Any such adverse childhood experiences, early life stress, childhood trauma, childhood maltreatment, and damaging attachment-styles have been found to be prevailing risk factors for many mental disorders.<sup>12</sup> Such life-changing defining moments at an early age seem to have made a fundamental difference, not only in how each responded on a long-term basis to the adverse events of the war, but also how they raised their children. The growing literature on offspring of such early maltreated mothers suggests that, if they also suffer from PTSD or depression, they are more likely to give birth to more vulnerable offspring.

Any *traumatic pre-war, war and post-war experience* that affected the parent’s anxiety levels would also influence their parenting style since offspring would perceive such specific parental traumatic experiences differently. Parents who were hidden as children, would, for example, be distinguished from parents who survived in ghettos or camps, and parents with unresolved grief may have been particularly likely to transmit their trauma. Taking such particular stressful events into account will be central to understanding the trauma transmission process as a whole. Survivors who lost previous children during the war, and who related to their “post-war children” as “replacement children,” might

have been especially likely to pass on their unresolved grief to their offspring. How parents dealt with their past victimhood and their learned helplessness during post-war readjustment also influenced the kind of atmosphere that each family established on a long-term basis. When parents were unable to “let go” of the past, and mourn their losses, they tended to become more abusive towards OHS.<sup>13</sup>

The *mental state* of the Holocaust survivor parent is an additional diversity characteristic since parents with some stress disorder are more likely to transmit their emotional burden than parents who are more balanced.<sup>14</sup> Regardless of parental traumatization, however, it was found that children of parents with mental illnesses in general experience significantly more secondary trauma than children of non-ill parents.<sup>15</sup> Since parental trauma increased the risk for mental health problems in offspring, the 2013 DSM-5 (Diagnostic and Statistical Manual of Mental Disorders), issued by the American Psychiatric Association included a stressor criterion related to learning that a close relative or close friend was exposed to trauma. If Holocaust survivor parents suffered from primary PTSD, it was likely that their offspring would have absorbed some secondary traumatic disorder.<sup>16</sup>

Similar to “vicarious traumatization,” OHS would gradually absorb the distressful experiences of their parents during childhood and later. In addition, if the post-traumatic stress symptomatology of the parent increased over the years, it also led to higher rates of symptoms in OHS, and PTSD was found to be more common among Israeli OHS who had experienced combat fatigue. When survivor parents displayed more dissociation, cortisol levels in OHS decreased, which is a common find in psychobiological studies in this population. There is also evidence for the impact of parental depressive symptoms on offspring temperament and of other mental disorders that were transmitted through emotional contagion. However, it is important to remember that some survivors may have suffered from mental disorders before the war and that their children possibly inherited the same disposition regardless of the effects of the war.

Various *child-rearing factors* will have been found to influence HTT. Such factors include over-protective parenting, an enmeshed family system with “invisible loyalties”, parental authority, and emotional contagion. In one comparative study, OHS perceived their parents as more worrying,<sup>17</sup> and in another study OHS felt that they had absorbed the inner pain of their parents even though these parents were not different in affection, punishing and overprotection from other Israeli parents.<sup>18</sup> Walker<sup>19</sup> found that victimized parents who had difficulties with trust and intimacy impacted their ability to develop a healthy attachment with their children and often led to a cycle of continued inter-generational violence. Probable PTSD, in conjunction with unhealthy behavior, such as smoking, alcohol consumption and lack of physical activity was also found to be highly correlated in Holocaust survivor parents and OHS. However, since parenting behaviors in themselves are both intergenerational, and also multi-determined, there will always be a particular “transmission gap” between parental qualities and transmission outcomes, as exemplified in the divergence between maternal sensitivity and transmission effects.<sup>20</sup> Decades of research has suggested that child-rearing is associated with a wide range of other contextual characteristics, such as ethnicity, cultural and religious affiliation, financial stress, social class, education, employment, and physical health. Furthermore, various kinds of parenting habits, such as overly permissive parenting, difficulties in providing consistency and warmth and in responding empathically to a child in distress also affected the transmission process.

Deficient *family functioning* and a stressful family atmosphere have often been described in OHS families.<sup>21</sup> OHS who for example grew up with parents who had constant marital conflicts and low positive emotional bonding were at higher risk to develop psychological disorders than those who grew up in harmonious surroundings.<sup>22</sup> There were no other socialization experiences in closed family systems of isolated immigrant families. Some of these OHS became “parentified” and assumed the adult role of caring for their parents, often acting as intermediaries (and translators)

between their parents and the community. Any such PTSD-driven parent-child interactions will aggravate the effects of HTT.<sup>23</sup> Some OHS changed their views of their parents after having children of their own and were able to forgive them for some of their earlier behaviors.<sup>24</sup>

Different *patterns of communication* in Holocaust survivor families have often been found to be a mediating factor of transmission.<sup>25</sup> Some parents tried to find the most age-appropriate and non-frightening ways to talk with the children about their war experiences. Others repeatedly shared gruesome details of their tormenting experiences with their children. A few of them kept silent for their entire lives. Despite these early findings in studies of communication styles, many Holocaust survivor parents modified their narratives as the Holocaust became more generally talked about in society and as the children grew up.

Different ways of *parental coping* is an additional diversity factor. Parents who were consummated by their loss and remained in a state of overt or covert depression, as well as those who expressed anger and resentment for their entire lives, were more problematic role models for their children than those parents who were able to function adequately. Highly charged parent-child relations, such as those found in Holocaust survivor parents with wounds that did not heal would produce increased anxiety in their children. Parents who continued to blame the Germans, the world, God, or themselves for the agony inflicted upon them, while others took a more conciliatory stance, and started to trust people again.

*Positive parenting qualities* are rarely mentioned in the study of transmission, but should also be included in the study of parental diversity factors. After all, some studies found that Holocaust survivor parents were fully functioning, without severe mental disorders and not overly occupied with the Holocaust by a group of clinical offspring.<sup>26</sup> Such parents seemed to have adapted well to environmental challenges and helped their children to develop functional coping mechanisms in life.

They established clear family structures and provided “good enough mothering” to their

children. These qualities contributed to the fact that most OHS became well-integrated members of their communities with successful professional achievements.

## O

### *Offspring diversity factors (O)*

A wide variety of offspring diversity factors have been shown to impact the likelihood of each child to absorb the emotional residues of their parents. Clinical observations suggest that many OHS are “highly sensitive persons.”<sup>27</sup> Since this trait is associated with greater responsiveness to the environment, OHS may, therefore, be more attuned to their parent’s emotional pain. As a result, *susceptible* OHS may be more likely to absorb their parents’ HT “radiation,” than resilient OHS.<sup>28</sup> A key challenge is to discover the cause of such *differential susceptibility* from the point of view of genetic makeup, child-caregiver interaction, or temperamental characteristics. Studies that attempt to explain how offspring respond, for better and for worse,<sup>29</sup> in various environmental contexts have been, and are still, conducted, but no decisive conclusion have yet been made. It is perhaps the most central question in all research on the origin of stress-related psychopathology in general. According to Lurie-Beck, Liossis, and Gow,<sup>30</sup> the differential impact of demographic factors on HTT has been found to explain much of the variation of HTT on OHS. Except for the nature of parents’ Holocaust experiences during the war, this includes time and place of birth, birth order, and gender, as briefly described below.

Time and place of birth: OHS born immediately after the war seem to have absorbed more parental traumatization than those born later. Being born in a displaced person camp was an additional aggravating factor. The country of origin, as well as being born before or after immigration, also had a substantial effect on HTT. Birth order: Being the first child seems to have resulted in more severe HTT for various reasons. For example, if this child was also a “replacement child,”<sup>31</sup> and received the same name as a child killed during the war, it often led to a substantial

additional burden. Accentuated sibling differentiations were also observed among OHS.<sup>32</sup> Gender: While studies on gender differences among OHS are scarce, a higher number of female OHS in most HTT studies, and the higher prevalence of PTSD in women,<sup>33</sup> suggest that females are more vulnerable than males.

There are an infinite number of additional individual differences, based on personality, physical abilities, social class, culture, religious affiliation, political beliefs, and immigrant status, that also affect how each offspring dealt with his or her unique manifestations of HTT. For example, Novac and Huber-Schneider<sup>34</sup> reported increased comorbidity in previously healthy OHS who were treated for anxiety and depressive disorders. A more personalized approach in the study of transmission is required to illuminate such differences. As found in psychoanalytic case studies, such an approach will emphasize within-individual (as opposed to group average) symptom clusters. The individualized approach will also be able to assess and control for possible non-Holocaust related traumatic life-events, such as the loss of parents, serious accidents, wars or severe personal crises, which were either sufficiently stressful on their own or triggered HTT.

## EC

### *Environmental conditions (EC)*

Various environmental conditions will also influence the likelihood of OHS to absorb the emotional residues of their parent. The social and cultural context in which OHS grew up, and the support systems present in the community, profoundly changed how much they absorbed the emotional residues of trauma from their parents. Even if OHS grew up with severely traumatized parents and were predisposed to suffer from stress-related problems, they may not have developed any symptomatology due to such protective factors in the environment (Cummings, Davies, & Campbell, 2000). Such gene-environment interactions (G × E) may clarify why environmental risk factors have a significant effect on some persons but not on others, and why relatives who

are genetically at risk for a disorder do not all get the disorder.

The impact of environmental circumstances that reduce distress should not be underestimated when trying to understand the process of transmission. For example, offspring who grew up in an accommodating Jewish community, with many survivors and immigrants, and had a close-knit peer network outside their own families, were more protected than those who grew up in isolation non-Jewish surroundings where they felt different and estranged. The different immigrant statuses in Israel, the US, Australia, Brazil, Europe, or the former USSR were very large and had a substantial impact on OHS adjustment.<sup>35</sup> This was confirmed in the meta-analysis by Barel, et al,<sup>36</sup> who found that the effect of the Holocaust was stronger among survivors living abroad vs. those living in Israel, so it is possible that the effects of HTT were also greater abroad.

Various forms of “outside-the-home” socialization frameworks in the peer groups of childhood and adolescence are especially important in mitigating the transmission effects of Holocaust survivor parents. In young adulthood, some OHS joined commemorative organizations and self-help groups, thereby defining themselves as a group of people with a lot in common.<sup>37</sup> Such groups have existed all over the world for more than fifty years and they have helped to mitigate the deleterious effects of HTT.<sup>38</sup> As the level of emotional residues of HTT decreased, the framework of these groups changed to become “channels of memory” and “communal remembrance” within an ethnographic setting.<sup>39</sup>

## TP

### *Time periods (TP)*

When are OHS more susceptible to HTT? At which critical periods in child development is the transmission of stress symptoms likely to occur? The “three-hit concept of vulnerability and resilience,”<sup>40</sup> is a useful overall framework to answer these questions. This concept is based on the assumption that stress tends to accumulate, one upon the other, to increase the likelihood of

absorbing parental traumatization in different ways and during different time periods. Offspring born with a genetic predisposition (first hit), to a mother who endured a difficult pregnancy (second hit), and who also experienced a troubling childhood and adolescence (third hit), will be more vulnerable to stress later in life. If these “hits” were predated by parental traumatization during the Holocaust, the likelihood of OHS to develop stress symptoms would be increased.

Different time perspectives are considered in any such analysis of HTT. From the perspective of biological theories, the transmission begins before birth and possibly even before conception. The delineation of “critical windows” of possible epigenetic alterations is crucial since it determines when offspring are particularly malleable to epigenetic changes due to environmental influences. The following time-periods have been delineated as more or less “critical”: (1) hereditary transmission via gametes, (2) transmission during pregnancy (in utero), and (3) transmission through early postnatal care.<sup>41</sup> Accordingly, transmission is assumed to have occurred either through the sperm or ova, during pregnancy, or immediately after birth through breastfeeding and caretaking of the newborn child.

Prenatal periods are at particular risk to environmental insults. In pregnant mothers, placental signaling creates changes in inflammatory, nutrient-sensing, and epigenetic pathways.<sup>42</sup> In fathers, transmission of preconception paternal stress exposure is associated with changes in epigenetic marks in sperm, with a focus on the reprogramming of methylation, histone modifications, and small non-coding RNAs. Even though there is little data available on such effects in OHS, we may assume that such effects are substantial. Eitinger reported on a study from 1948 of newborn children of camp survivors with a higher percentage of congenital malformations.<sup>43</sup> The challenging physical conditions which mothers endured during pregnancy, besides early childhood experiences, severely affected their offspring. Hazani and Shasha postulated that maternal hunger and stress-induced high levels of maternal steroids during crucial stages of fetal development possibly exposed the unborn child

to risks of increased cardiovascular morbidity and mortality in adult life.<sup>44</sup> Future longitudinal, epidemiological, prospective genome- and epigenome-wide multi-generational studies may detect the endophenotypes (heritable phenotypes associated with illness risk) that are measurable independent of illness state. Such endophenotypes emphasize the genetic, environmental and individual preconditions for secondary traumatization in OHS, and the “sufficient cause” for HTT to occur.

From the perspective of psychosocial learning theories, HTT starts from birth. Time factors have been traditionally emphasized in conjunction with the delineation of specific stages of child development. Such stages will be critical when interpreting earlier findings from OHS cohort studies<sup>45</sup> since the developmental timing of trauma exposure will influence emotional dysregulation also in adulthood.<sup>46</sup> Observational and empirical studies on OHS found developmental arrests during various phases of child development. A brief summary of such milestones, during which trauma transmission was found to have occurred, includes the first toddler years of attachment and bonding,<sup>47</sup> the early childhood and adolescent years of identity formation and separation-individuation,<sup>48,49</sup> and the young adult years when OHS had obtained a more fundamental understanding of the impact of their parents’ Holocaust past on their own lives.<sup>50</sup> Early life exposure to maternal distress was associated with poor psychological health in children. The stages of puberty and adolescence<sup>51</sup> were also considered to be particularly critical to the impact of HTT because, during this time, the child’s emotional, social, and cognitive skills grew the most and became increasingly complex. In young adulthood, OHS continued to consolidate their understanding of their parents’ war-time past and started to integrate it within their sense of self.

When becoming parents themselves, this entire process was combined with a deeper understanding of parental roles.<sup>52</sup> Now the aging process among OHS has become the focus of some studies since it is again reshaping the intergenerational relations in Holocaust survivor families.<sup>53</sup> The main conclusion from this brief

overview of different time periods is that HTT gets a different meaning, and a disparate impact, on OHS depending on their age and life-cycle stage when they were studied. Even though the influence of parental HT was substantial during childhood, this influence appears to decrease (or change) in adulthood, similar to other kinds of heritability.

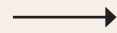
Defining a population at risk within a specific time perspective, however, is a continuing challenge because both biological and psychosocial risk factors contribute to our understanding of the transmission process. The first will be based more on heredity, while the second on psychology and socialization, reflecting the nature or nurture focus of the study design. While it is essential to include the earliest stages of life, beginning well before birth and immediately following to determine possible hereditary disposition and epigenetic pathways, the stages of puberty and adolescence cannot be overlooked from a psychosocial developmental perspective. During this latter period, a second separation-individuation phase has been identified that determines if the possible predispositions of OHS will result in a curse or a legacy.<sup>54</sup>

Because even though epigenetic alterations may occur throughout life, these physiological and cellular processes will interact with additional cumulative experiences to either minimize or maximize the harmful effects of trauma transmission. From this point of view, transgenerational cycles are mediated by epigenetic mechanisms through environmentally driven neuronal and behavioral adaptations.<sup>55</sup> Such long-term effects of HTT have been shown to interact with family constellations and aging processes in general; and interdisciplinary and cross-cultural study designs are therefore required.

A suitable model to study HTT from a time perspective is the “life-course developmental theory.”<sup>56</sup> With an emphasis on time and age, it incorporates the biological foundation and possible epigenetic alterations of early life experiences with later social patterns and environmental demands. All of these processes together help to understand how OHS think, feel and behave as they age over time. A life course perspective

distinguishes significant life events over the lifespan and attempts to discover how social processes influenced the developmental paths of each person.<sup>57</sup>

Studying OHS from such a life-course perspective holds considerable promise because it allows a longitudinal perspective of individuals based on their patterns of stress adaptation. It covers a large variety of responses, such as chronicity, recovery, delayed onset, and resilience.<sup>58</sup> The lives of OHS can thus be described as a story of generational change, with a beginning, a middle and an end; a universal story of endurance, adaptation, evolution, and transformation.



*The process of trauma transmission (→)*

How can traumatization be transmitted from parent to offspring? What does the term “transmission” actually mean? Is it similar to an infectious disease being carried over from one person to another, or to a hereditary trait being passed down from parents to their offspring? Which mechanisms are involved in the process of HTT?

Many theories have been suggested to answer these questions, either from a psychosocial or from a biological perspective. The psychosocial perspective includes psychoanalytic notions, behavioral conditioning models, principles of cognitive appraisal, attention bias/information processing, interpersonal coping styles, parent-child interaction schemes (e.g., contagion, modeling), socialization models and family systems perspectives.<sup>59</sup> The biological perspective suggests a hereditary transmission of neuroendocrine, neuroanatomic, and epigenetic systems. All of these theories tacitly assume that there is a “mediating agent” between the transmitting parent and the absorbing child, similar to the one observed in the transmission of a virus, in which a mosquito carries the virus from one person to another.

The psychoanalytic theory assumes that the unconscious may in itself be “infectious,” especially if it is disavowed. If the Holocaust survivor parents become aware of their loss and

work through their repressed emotions, they will be less likely to pass them on to their children. Family system theory assumes that unhealthy communication is the main mediating agent. If the Holocaust trauma is talked about in a balanced manner, it is easier for the child to digest it. However, if it is talked about too much or too little, it will become malignant. Socialization theory assumes that parenting style is the primary mediating agent of trauma transmission. Inadequate parenting that leads to enmeshment will affect the general family atmosphere and have a detrimental effect on the child’s behavior. Biological theories are based on the assumption that there is a genetic predisposition to a person’s illness and that parents pass on “acquired traits” to their offspring through physiological pathways.

Manifestations of HTT can thus be understood, first, as displaced unconscious fears in parents. The children internalize what the parents themselves cannot handle. Second, it can be explained as the result of social learning and parenting. The child responds to the anxieties indirectly expressed in unhealthy child rearing behavior. Third, it can be the result of family enmeshment and tacit communication. The child is trapped in a closed setting where it adopts a threatening world view that regulates thoughts, feelings, and behavior. Finally, it can be the result of hereditary transmission of the parents’ neural fear network, allostatic physiological stress-response system, and HPA-axis regulating system. As a result, OHS will become physiologically predisposed to vulnerability, even though they do not necessarily manifest psychopathology.

At first glance, these theories of the process of trauma transmission seem to make perfect sense. Upon further examination, however, they are too general to explain the specific process of how the impact of trauma can cross generations. First, psychoanalytic theories cannot fully explain how repressed traumatic experiences in parents can enter into the minds of offspring, even with concepts such as “projective identification,” “transposition,” “internalization” and “role induction.”<sup>60</sup>

Neither is the theory of a disruption of the dialogic self, sufficient to explain the process of

HTT. Second, while deficient parenting and flawed socialization had important effects on OHS, these factors cannot fully explain the process of HTT, since “good-enough” parenting was also found to transmit the emotional residues of the Holocaust to OHS.

Third, family systems and communication models have produced a similar indefinite explanation of the transmission process. Emotional ties in Holocaust survivor families have consistently been reported as being strong, but there is also much ambivalence manifested in such families, and it is not clear how changes in family structures during their lives affected the impact of HTT, as both the parents and their offspring grew older.<sup>61</sup> Also, while too much talk about the Holocaust would lead to a burden being passed upon the children, many parents did not share their traumatic experiences, but the children still absorbed much of their past trauma. Finally, HTT has also been reported in harmonious families with plenty of opportunities for separation-individuation.

Fourth, while findings from animal studies have indicated that acquired traits from the past can be transmitted to offspring, there is insufficient evidence on the epigenetic transmission of such characteristics in humans,<sup>62</sup> and fundamental questions remain regarding the transgenerational transmission of epigenetic alterations to future generations.<sup>63</sup> Holocaust survivor parents suffered from malnutrition during the war, and also experienced extreme death anxiety that may have caused their cortisol to be elevated for long periods. However, there is still insufficient evidence of the assumption that the stress responses of Holocaust survivor parents became permanently dysregulated, and that OHS inherited stable constitutional tendencies or robust epigenetic alterations. It is, therefore, currently impossible to attribute transmission effects in humans to a single set of biological or other determinants.

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NOTES

This article is an abbreviated form of a longer, unpublished 2019 article that may be accessed on Dr. Kellerman's website, which also offers more extensive notes. See <http://peterfelix.weebly.com/publications.htm>

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*“Teach them to your children and to your children’s children...”*  
(Deuteronomy 4:9)

So Ronnie Cahana married and had five children, further extending the future beyond the grasp of Nazi anti-Jewish nihilism. And his oldest daughter, Kitra Eden Cahana (b. 1987; her middle name honors Alice’s sister, Edith), became an artist. Her choice of medium was documentary photography and filmmaking, and she has already, in her early thirties, achieved both substantial artistic success and public recognition. In her documentary work, she embeds herself in communities, often for months at a time.

As a photographer and filmmaker, Kitra often pushes the possibilities of the photographic medium. One recognizes in her work a continuation of that sense—articulated verbally by her father, and evident visually in the works of her grandmother—of finding art in religion and spirituality in art. The physical and the metaphysical, the ephemeral and the eternal, intertwine in the photographs she took, following her father’s stroke and incapacitation, that portray him and those attending him. The room of his ever-so-slow recovery became, in her words and in her images, a “temple” (FIG. 24).<sup>25</sup>

To the painful concreteness of her father’s condition Kitra has applied an abstract visual poetry that resonates with his softly pigmented words and her grandmother’s textured paintings; conversely, much of her other photographic work, and certainly her documentary filmmaking, is rooted in concreteness. It is also rooted in the imperative to champion the disenfranchised and disadvantaged that—as she has commented in conversation—she absorbed as a small child, running around her grandmother’s studio and looking and listening to her comments.<sup>26</sup>

Alice’s intense post-Holocaust awareness of the human capacity for evil—her very vocal commentaries on the highs and lows of what we do as a species, and her own aesthetic, offering dark and heavy elements with those rainbow glimpses of hope (the textures and *layerings* of media)—reverberates through her granddaughter’s work.<sup>27</sup> Kitra has observed how her own penchant for “storytelling from the inside out,” for turning herself into “a vessel through which individuals speak,” was infused in her by Alice.<sup>28</sup>

Alice grew up with traditional, rabbinic Judaism, with its emphasis on concrete actions rather than ethereal questions of belief,<sup>29</sup> but ultimately turned to abstraction as a vehicle for wrestling the concreteness of her own experience to the canvas. Ronnie grew up and became a rabbi, immersed in



FIG 24. *Still Man: Temple of Healing I* 2014.

FIG 25. *Still Man: Transcendance*, 2013.

that same tradition of concrete action, but both became a poet and imbued his rabbinate with the abstract complexities of poetry. Kitra chose documentary photography and filmmaking, with their concrete narrative lines, but turned her eye in an unprecedented ethereal direction as she followed her father's mind into an uncharted, extraterrestrial realm.

The images of her father, collectively titled *Still Man* (2012–20), defy the traditional presumptive aim of photography: the straightforward naturalistic capturing of images of objects in space on a sheet of chemically treated paper, through the interplay of light, darkness, and those chemicals. That process impelled the creation of Impressionist painting in the late nineteenth century. Pissarro, Monet, Renoir, and their contemporaries sought an alternative mode of re-visioning reality: the blurred edges of their work require a particularized distancing until the focal length of each given viewer's eye enables the brush-slabs of paint to coalesce as identifiable objects.

Kitra Cahana has returned the favor. Her images multiply the edges of her father beyond any focal point in the here and now (FIG. 25). His edges transcend the separation between his physical body and the space around him—visually concretizing the abstraction of his disconnectedness from his own physical being—as he seems to float in that space; paradoxically, his very concreteness becomes abstract. His eyes are closed, hiding from the viewer the turbulent energy transmuting his mind into the vision of his father and the poetry being called forth.

In one image, the female figure lifting him up, or laying him down, is just discernible enough to suggest an angelic being, intermediating between our realm and that other on the border of which he hovers (FIG. 26). In another, she appears by his bedside; we can discern that white-sheeted surface and the beautiful creature, his deep stillness dominating the image (FIG. 27). The identity of that second figure shifts from one image to another: it is Karen, it is a daughter. In still other images, the fluttering edges of his indistinct physical being pause into sharp-edged concreteness. One image, made up of a series of five parts laid side by side, underscores the nature of the stroke's initial increments, shutting the body down from toes to lungs to just below the eyes. The body, stretched out before the viewer's eyes, recalls the image of the dead Christ in the many Depositions, Lamentations, and Entombments of Christian art. This remarkable pentptych, with a tallit-like cloth and the umbilical feeding tube arresting the viewer's eye in the middle panel, articulates the condition of its subject: he is between realms—for living and dead are analogues of human and divine in the larger vocabulary of theology and art (FIG. 28).



FIG 26. *Still Man: An Angelic Presence*, 2013.



FIG 27. *Still Man: Guardians and Healers*, 2012.

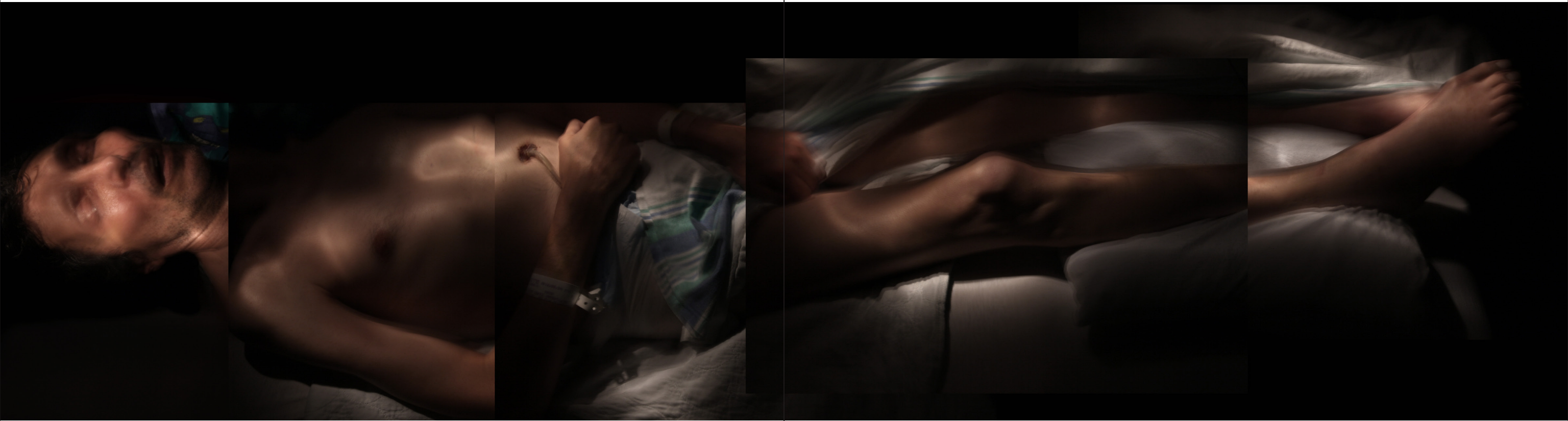


FIG 28. *Still Man: Pentptych*, 2013.

Other areas of Kitra's body of work carry her camera's eye into different varieties of liminal reality, as in the magnificent expanse of *Above as Below* (2017), with its snow-covered peaks repeating themselves into an infinity of cloud-suffused skies, and its sibling, *Jerusalem Above/Jerusalem Below* (2013), with its agglomeration of figures, instead of mountains, which plays on the mystical idea of the imperfect, earthbound Jerusalem's seeking to more effectively mirror the perfect heavenly Jerusalem (FIGS. 29, 30). A completely different aesthetic infuses her American Teen series (made to accompany a *National Geographic* article, "Teenage Brains," published in 2011), which sweeps along a very different kind of border, that between childhood and adulthood (FIG. 31). She captures teenagers by day and by night, in the sunlight and in shadows, playing and pausing, pensive and mindless, alone and in groups—or both simultaneously. The window into their reality through which she enters is empathy (FIG. 32).

That window opens yet further in the photographs by her that were used in 2017 to illustrate a book by Chris Urquhart, *Dirty Kids: Chasing Freedom with America's Nomads*.<sup>30</sup> The text—a memoir of a three-year-long journey with and among American homeless teens, who have chosen a particularized freedom in exchange for swatches of insecurity and loneliness—finds an eloquent partner in the far-reaching lens (FIG. 33). The interesting thing is that, as one reads Urquhart's book—beginning on the first page of chapter 1, introducing "Rainbowland," the floating world (from New York to New Mexico; from Louisiana to Michigan; in varied urban and rural settings) of the diversely sourced and styled nomadic kids—one realizes that Kitra was not merely the photographer on this expedition, a kind of passive, background, observer. "I'm not sure where Kitra found this man," Urquhart writes, "but he's hooked us up with a ride into Rainbowland. I trust Kitra without question."<sup>31</sup>

The further one reads, even *without* looking at the images, the more one realizes how much a progenitor of the action Kitra is—which is part of how she produces such compelling photographs (FIG. 34). That is, empathy extends into and out of the images that complement the text. Which might lead to two related questions: Where else has her camera taken her? And where does that constant, profound level of empathy come from? This is an issue different from the impact on her of the photography of the Iranian artist Shirin Neshat, or the inspiration she takes from cinema vérité.

In the context of the present narrative, the second question yields an easy answer: empathy is in her DNA. As much as the talent and inclination toward artistic expression can be traced through several generations, so can the twist to which she turns those gifts. So it is Kitra just *being Kitra*—but

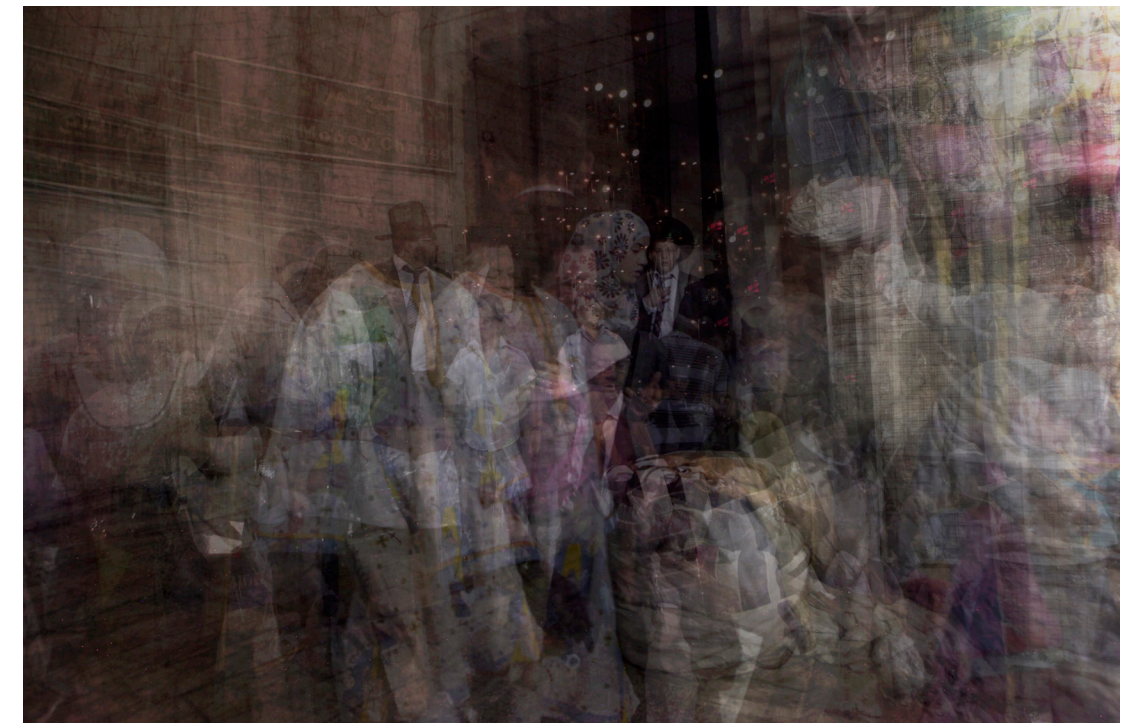


FIG 29. *Above as Below: Gulkana Glacier*, 2017.

FIG 30. *Jerusalem Above/Jerusalem Below: Damascus Gate*, 2013.



FIG 31. *Teenage Brains: Celebration*, 2011.



FIG 32. *Teenage Brains: Contemplation*, 2010.

“being Kitra” is also being the daughter of Ronnie and Karen and the granddaughter of Alice and Moshe. And she spent most of her unconscious and conscious life seeing and hearing them do and express what they do and express, both as artists and as human beings. While she and her sister were doing their own little art projects in their grandmother’s studio, they were also listening to directed and offhand comments that she made—and they soaked it all in.

Put otherwise: she is entirely herself—her own unique self with her own unique art—and she is also a compendium of a long line of transmission and transmutation of diverse genetic uniqueness that includes certain moral imperatives. As much as that long line proceeds through a Jewish historical topography, the imperative itself compels a reaching out into the narratives of all peoples (you must welcome the stranger, it is written in Exodus 22:20, “because you were strangers in the land of Egypt”—and thus nobody is a *stranger*) as surely as it does to all of nature (over which the earthperson, Adam, was granted stewardship and thus *responsibility*). And this, in turn, leads as organically as intergenerational DNA to the other projects in which Kitra has been engaged.

This is not only a matter of the burden of gravitas handed down from Alice to Ronnie to Kitra—a sense, at age seven or eight, that “she [Alice] survived so that you could be born, so what will you make of your life?”<sup>32</sup> It is also the idea of art as salvation: as offering a potential to get out of the darkness; photography came to be an instrument of “joy” and of “grace” for Kitra. What art-as-salvation meant for Alice in one sense it meant for Kitra in a very different sense. The medium of photography felt instinctive, and photojournalism offered her permission to be in other people’s worlds and lives: *to respond to her own anxiety to be greater than herself*.

She photographs the series *Teen Mom Graduates* (May, 2016), each young woman in a pure white graduation gown and each with her child, looking frankly out toward the viewer—each as innocent as the innocent in her arms and as innocent as the long history of art connects to the mother of Jesus through the pure white elements in her garments (FIG. 35).<sup>33</sup> And she defies our expectations through the straightforward imagery of the everyday people living far from luxurious lives in her *In the Suburbs* series (2013). These faces and figures transmute the term “suburb” back—like a visual act of Kabbalistic word deconstruction—to its etymological roots: under (*sub*) the city (*urbs*), while simultaneously addressing the everyday understanding of the term. We are outside the city; there are separated houses and lawns and trees. But there is something more beneath the surface of these suburbs about which, perhaps, we did not know (FIG. 36).



FIG 33. *American Nomads: Rainbowland*, 2009.

FIG 34. *American Nomads: Subway Song*, 2010.



Kitra’s involved and observant eye—“a subject passes through me,” she has commented—travels from the transcendental reality of her father’s stroke and its aftermath to everyday lives of everyday people of all ages and back again to the phantasmagoria of religious rituals far from *our* everyday reality. Her series *The Cult of Maria Lionza* (2019) captures its practitioners in the mountains of northwest Venezuela. Kitra’s photographs reach into the interstices between the religion’s fire and water elements, embedded between land and sky, to locate its human expressions of yearning to connect the here and now to something beyond us—to bridge the immanence of our world to a transcendent Other beyond our borders and bursting beyond our boundaries (FIGS. 37–39).

The lens moves from stasis to action in film projects that follow the same trajectories of empathy with the yearning toward an improved condition in whatever place one finds oneself. These are projects that are both stark and, because of their very starkness, poignant. Young people, particularly teens (again), feature in the film *Dancing Toward the Light* (2016), whose brutal this-world fabric weaves dream-threads into its tangled skein. Its subject is the hamlet of Arviat—population twenty-eight hundred, 75 percent of them young people—located on the northwestern shore of Hudson Bay, in Nunavut territory, which has the highest suicide rate in Canada. But between the flickering aurora borealis and the swirling, wind-driven snow, the community began a deep-winter break-dance-type competition. They created an instrument to push back against the desperation born in large part from a growing disconnection with Inuit traditions, which are disappearing with the precipitous shrinking of the older population and in the aftermath of the cultural genocide produced by a long colonial process and ongoing government neglect.

As Kitra and her collaborator, Ed Ou, follow different pairs of dancers preparing to compete, one young man speaks of how “it does not matter if I am in my body or not, I will still dance.” Another notes that “once I start dancing, they—those to whom I dedicate my dancing—go inside me,” referring to the dead, to loved ones, specifically, to those who have died by suicide (FIG. 40). So this carefree and yet carefully calibrated and choreographed art becomes a bridge between past and present, the dead and the living, even as it is a mechanism for inspiring its practitioners and audience not to abandon life.

A third competitor—one of two sisters who, performing together in the 2016 competition, ended up winning first prize—speaks of her grandfather Issumatarjuak, who had been a traditional drum dancer—and who, when he danced, was so happy. And now, “when I am dancing, there’s

FIG 35. *Teen Mom Graduates*, 2016.



FIG 36. *Suburbs: Mother and Child*, 2013.





FIG 37. *The Cult of Maria Lionza: Fire*, 2009.



FIG 38. *The Cult of Maria Lionza: Water*, 2009.

FIG 39. *The Cult of Maria Lionza: Light*, 2009.



FIG 40. *Dancing Toward the Light*, *Winter Dusk at the Cemetery*, film still (CBC), 2017.



FIG 41. *Dancing Toward the Light: Drum Dance*, archival film still, (CBC), 2017.

FIG 42. *Hijabi Boxer*, 2017.

FIG 43. *Caring for Tor: Stephane and Tor*, film still (CBC), 2018.

just this connection between me and him.” When the two sisters begin to dance, the viewer “sees” what they see: the space in which they are moving and the audience and judges watching them are interspliced with images of their grandfather drum dancing; the connection between past tradition and present reassertion of life’s power eradicates normative time-space boundaries (FIG. 41).

One cannot miss the source of the power that Kitra brings to this narrative: she who films those connected to deceased loved ones—and in one instance, to the life-affirming grandfather—is herself connected to her deceased loved ones, and in particular, to her own life- and art-affirming grandmother, and to her life-affirming father. One of the epilogic moments in the film is when one of the boys who did not win comments that his daughter had been born the previous August, which saved him from suicidal despair: “I was lost but I was found. My daughter found me.” One can hardly miss the melodies of Ronnie Cahana’s poems to Sapira and to Kitra resonating in a different key. Varied threads of immortality weave in this work.

They weave themselves through other documentaries, ranging from *Amiyya Zafar, The Hijabi Boxer* (2017), whose subject maintains a dynamic tension between her aspirations as an athlete and her championship of her Muslim faith and its sartorial demands (FIG. 42), to *Caring for Tor* (2018). In eight minutes this narrative captures intensely and effectively the life ramifications for twenty-four-year-old Stephane Alexis of being a key caregiver for his twenty-one-year-old brother, Tor, afflicted since birth with cerebral palsy. There could hardly be a more eloquent reflection on the meaning of family and family love than this film (FIG. 43). It is also hard to imagine a work that more deeply intersplices Kitra’s personal and professional realities.

Kitra’s 2019 Peabody Award–winning *A Different Kind of Force: Policing Mental Illness*, codirected by Ed Ou, explores the complications that ensued when, some years back, many people were let out of state psychiatric hospitals and had nowhere to go but the streets. It has fallen mainly to the police to deal with the problem. “It became a police matter,” Officer John Sabo observes in the film. “And we [the police] are expected to fix the situation, and we can’t fix the situation.” The film makes an implicit demand that we solve the problem; we must *fix* it.

The documentary touches on several stories in several cities, but primarily interweaves two: that of Christopher Rimmey, whom we watch being increasingly devoured by his demons—his ex-girlfriend and his mother and grandmother are frightened of him and for him; “All I can do

is watch him waste away,” his ex-girlfriend mourns—as the police try to keep him, his family, and themselves safe (FIG. 44). And that of Danny Ray Thomas, moving slowly with his pants around his ankles, who is fatally shot by a frightened, undertrained sheriff’s deputy (Cameron Brewer) in some sort of twisted act of self-defense—concerning which case Thomas’s loving sister and her children still await justice. And concerning which her eleven-year-old son is already discussing forgiveness (FIG. 45).

From opposite ends of the issue, this is a story about the limits of proper training for the police as part of the larger issue of the incapacity of the American public to understand what mental illness is—a *disease*—and what it is not: an act of *criminality*. One of the more interesting small moments of reality is when we hear Kitra’s voice, off camera, asking Christopher Remy if it is okay for her to be filming him (he says that it is) and reporting the conversation to his mother, who is pleased by that interchange. One could hardly make the line between the story and the viewer more blurred. We share conceptual space (again) with the era and intentions of Impressionist painting in this extremely different medium.

The breadth of Kitra’s interest in those whose stories need to be told—“telling a story can be a healing process, for both teller and listener,” she has observed—extends to recent three-minute films focused on individuals, used as part of the amicus briefs provided to the Supreme Court in its deliberations regarding the DACA (Deferred Action for Childhood Arrivals) program and the Trump administration’s attempts to destroy it, and to extensive photographic work in 2018–19 focused on the *caravane migrante*: the train of thousands of refugees from Central America seeking asylum in the United States, by way of Tijuana, Mexico, their way blocked—literally—by the administration’s refugee and immigration policies, and, of course, its wall (FIG. 46).

Defying prohibitions from the US government, Kitra found her way into the flood of people.<sup>34</sup> The viewer is connected to individuals and groups, calm and excited, concerned and hopeful—and brave—as they push into unknown territory, whose inscrutability is evident on many levels: topographic, political, and psychological (FIG. 47). This series, one might say, runs on a track parallel to, however different from, Ronnie Cahana’s explosive journey into the unknown, or Alice’s experience as a teenager during the Holocaust. In particular, the tearing apart of families at the border by US authorities offers not just a general Holocaust echo but a specific familial resonance. As in all of her work, Kitra’s calmly ferocious empathy allows her to connect with her subjects and thus to connect them with us (FIG. 48).



FIG 44. *Policing Mental Illness: Christopher Remy*, (NBC News), 2019.  
FIG 45. *Policing Mental Illness: The Sister, Nephew, and Niece of Danny Ray Thomas*, (NBC News), 2019.



FIG 46. *Caravana Immigrante: Children at the Barrier*, 2019.



FIG 47. *Caravana Immigrante: Waiting*, 2019.



FIG 48. *Caravana Immigrante: The Question of the Future*, 2019.

*We recall Your Name  
 in the size of our tribe  
 Know we have been unaltered  
 in our unfaltering call  
 Still we're not the same:  
 a doughty aim not to die  
 Never fear feeling  
 Your breasty breath  
 We say it love our  
 loveliving self-taut  
 Clouds are cumulative  
 tears, wan tender irises  
 There is woman  
 to sample  
 in You  
 She becomes me*

This poem by Ronnie Cahana, from December 2014, is called “*Kohanim*.”<sup>35</sup> The word *kohanim* means “priests,” referring in the Jewish, Hebrew-language tradition to those who once served God in the Jerusalem Temple when it stood. Thereafter the term came to be associated with those deemed descendants of that extended priestly family (its progenitor was Aaron, the brother of Moses), who were identifiable by their family names. Thus the title puns, alluding to the family name, Cahana, and therefore to a kind of family legacy.

Like priests and prophets, poets and artists play a sacerdotal role in their communities and the world at large: they emulate God Itself, creating on a small scale as God does on the macroscale. Moreover, we repeatedly refer to their being “inspired.” Inspiration is *in-spirit-ation*, and in an earlier, more religion-centric world everyone understood what many of us in the modern Western world have forgotten: that the poet and the artist, in whatever media, are in-spirited (by God/the gods) to create what s/he creates: like Moses, Samson, and David, Alice and Ronnie and Kitra Cahana can be said to be “filled with the spirit of the Lord,” each connecting us, in a different way, to something beyond ourselves.

The power to create is an analogue of the strength to survive—and it extends in the Cahana family tree beyond the three branches upon which this narrative has been focused. Ronnie’s brother, Rabbi Michael Cahana, and his own wife, Cantor Ida Rae Cahana, have been writing a dynamic

annual Purim Shpiel for many years, each a clever and humorous transmutation of a Broadway musical wedded to the Purim story. They also wrote and performed a rich and serious evening of Yiddish art songs, interspersed with prose and poetry readings from *Empty Windows*. The entirety, reflecting on Alice’s experience and refracting it through an expanded lens, was called *Through My Mother’s Eyes*. They performed it in conjunction with several of Alice’s exhibition openings.

Their child, Idit, produces paintings that range from the straightforward to the surreal (FIG. 49). One of Kitra’s sisters, Briah, produces beautifully conceived *ketubot* (marriage contracts). A second sister, Tamira, creates enormously intricate abstract ink drawings with hidden words and embedded texts, and streamlined installations. Her installation *Jacob’s Ladder* (2012) offers an oblique connection back to the painting of the same name by her grandmother (see FIG. 16). Her drawing *Re-remembering* (FIG. 50), from 2014, directly alludes to this entire sweep of family history, in which, generation to generation and artwork to artwork, so much of the most intense aspects of the human experience have been transmitted and transformed.

This tree has odd twists to some of its branches. Alice gave part of her bread ration at Auschwitz to a woman she heard singing George Gershwin’s “Summertime”—in exchange for the woman’s teaching her that beautiful song. She had forgotten this until the first time Moshe and she went to a performance of *Porgy and Bess* at the Houston Grand Opera; she did not know that this was the opera’s show-stopping opening song. Michael did not know that thread in his mother’s story when he first met Ida Rae, for whom, in her noncantorial singing, her signature piece is “Summertime.”

The seriousness of artistic enterprise is counterbalanced by a powerful sense of humor that also runs through the branches of this family tree—evident in the Purim Shpiels, the *Wortspiels* (wordplays), and casual table conversation. It recalls biblical Sarah’s need to laugh when she knew that the birth of Isaac would carry the line of Abraham and Sarah forward. As Ronnie has written,

Though we are meant to re-create the Garden of Eden outside the Garden, G-d grants us the possibility of a return to the *Etz Chaim* [Tree of Life]. The small gardens we build are where we source the Eternal within us, within each of us and all of us together. . . . [W]hen we choose to befriend the joy of life, our signposts lead to *Etz Chaim*. Mother was never cut down. She was ever-building her family garden, a place to sow her endless love.

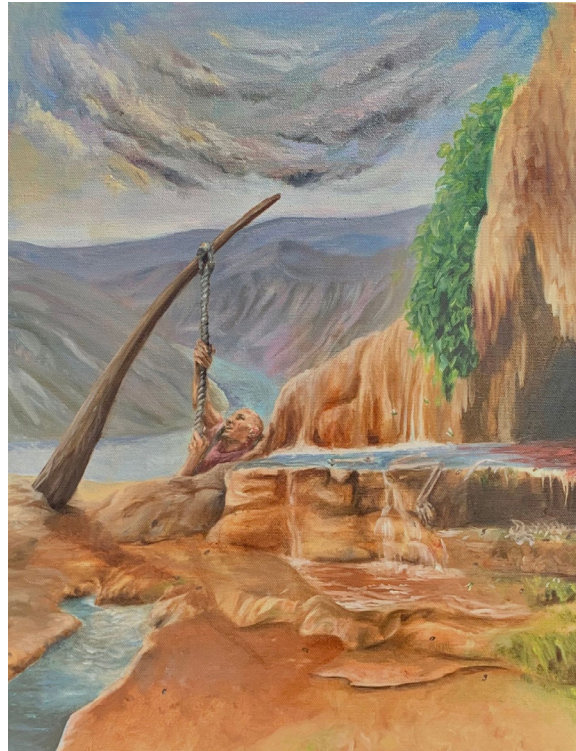


FIG 49. Idit Cahana, *It Lurks Within*, 16 × 20, oil on canvas, 2018.



FIG 51. Alice Cahana, *Waiting for the Magic Bird*, 84 × 80, mixed media on canvas, (ca 1985).

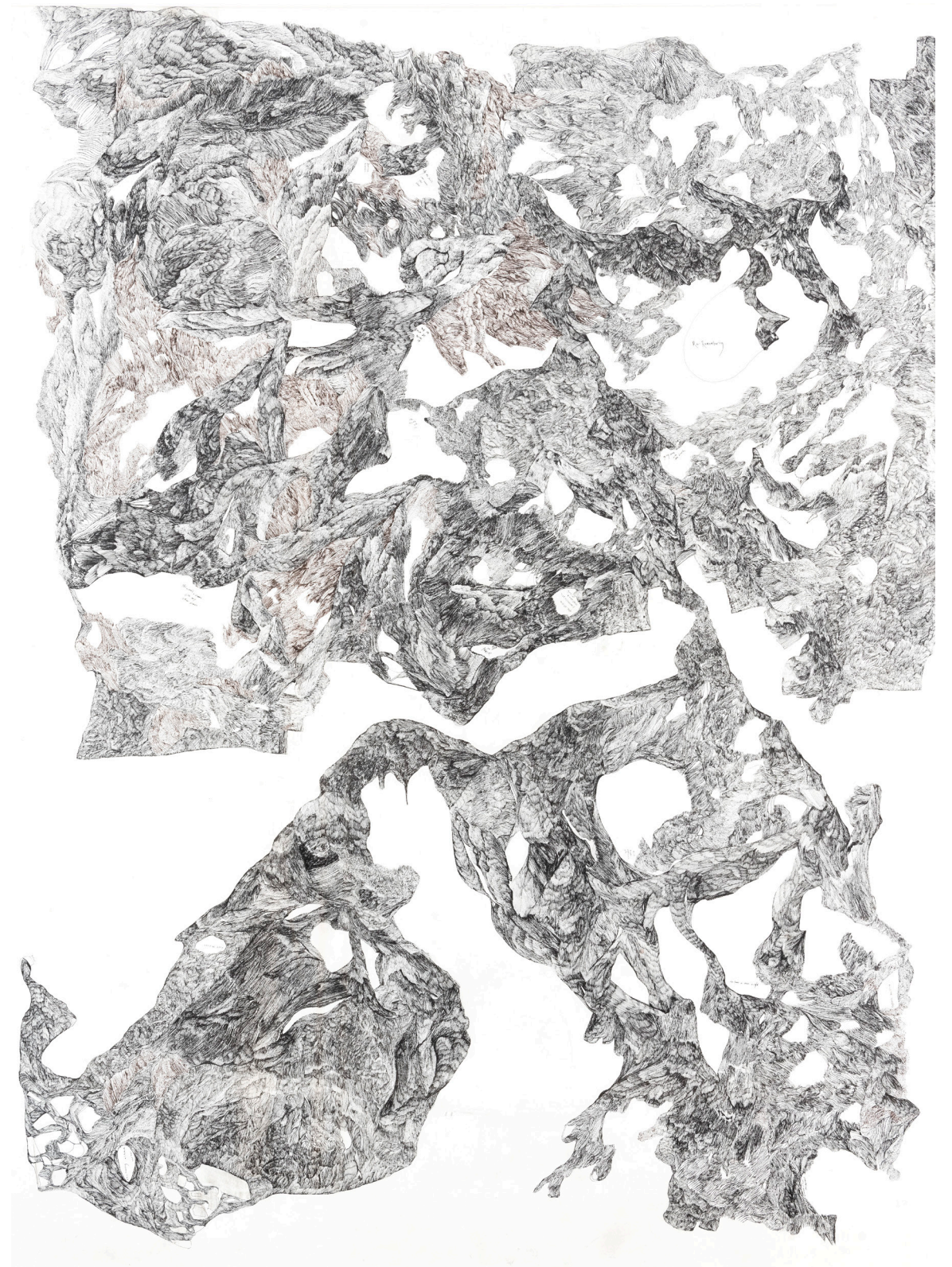


FIG 50. Tamira Cahana, *Re-remembering*, 55 × 41<sup>3</sup>/<sub>4</sub>, ink on paper, 2014.

The phrase *Etz Chaim* (*ayin-tsadi, chet-yod-yod-mem*) carries the first three letters of the name *Yitzchak* [Isaac, meaning “laughter”], plus the word *ami*, “my people.” There is one letter still missing. When we write the final *kuf* of *Yitzchak*, the letter is written in the shape of a *kaf* joined to a *nun sofit*, spelling *ken*—a hidden “yes.” *Yitzchak* met G-d at the sharp margin of life and death, at the *aqeidah* [“binding,” in Genesis 22], where the Holy Temple came to stand a thousand years later. *Yitzchak* owed his life to a hidden “yes.” He survived to create our people who choose to pronounce “*ami*” in utter reverence. Such is our Aliza [Alice]. Mother’s hidden “yes,” her inner light source, was her constant response to life. What is the Image of G-d breathed into us? It is the light of the first day, the original Heavenly light that redounds upon our world. Mother used her talents to paint this light as it refracted about her.<sup>36</sup>

And her family has continued to refract it, as part of a multivalent intimation of the magic bird of salvation and immortality (fig. 51).

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NOTES

1. Wallenberg disappeared into Soviet hands shortly after the war ended and has never been heard from since. Over the decades there have been occasional claims that he was in a Soviet prison, none of which was ever definitively verified, so that he may have been in prison for decades or may have been executed shortly after his arrest. His is one of the great post-Holocaust questions: What, most obviously, would have been the Soviet motive(s) for either imprisoning or executing him?
2. See the opening paragraph of Barbara Rose, “From Ashes to the Rainbow: The Art of Alice Lok Cahana,” in *From Ashes to the Rainbow: A Tribute to Raoul Wallenberg: Works by Alice Lok Cahana*, exh. cat. (Los Angeles: Hebrew Union College Skirball Museum, 1986), 15–25. Rose’s essay is reprinted in Alice Lok Cahana, *Empty Windows: The Art and Writing of Alice Lok Cahana* (Houston: Alice Lok Cahana, 1987), 49–60, and on Alice’s website: <http://alice-lokcahana.com/index.php?/-/essay-by-barbara-rose/>.
3. If anything, the triple arched form in its darkness offers an ironic reference to the Christian God-concept in the Holocaust context, resonating with uses of “threeness”—either with this sort of an ironic intention or in seeking to articulate a Jewish presence in Western Christian art—in works by Jewish artists, from Barnett Newman’s *The Name II* (1950; National Gallery of Art, Washington, DC) to Susan Schwab’s Creation series (1986–90; with two additional works in 1993 and 2008).
4. We can distinguish one from five, conceptually, and we can point to two fingers as opposed to five books, but we cannot touch, see, taste, hear, smell “oneness,” “twoness,” or “fiveness.” We use sounds/letters to build the words with which we grasp the

- world—but we cannot touch, see, taste, hear, smell *a*-ness, *l*-ness, or *s*-ness.
5. *Empty Windows*, 7.
6. This conversation was reported by several family members in conversations with the author on February 28–30, 2020.
7. The symbolism derives from the combination of red as the color of passion and sacrifice but also with a joyful association; and black, the color of death and with a hellish association.
8. She made this comment in March, 1993, in discussions regarding the installation of an exhibit of her work at the B’nai B’rith Klutznick National Jewish Museum.
9. I am quoting the translation by Michael Hamburger in Nelly Sachs, *O the Chimneys* (New York: Farrar, Straus & Giroux, 1967), 2–3. The first book to present a substantial selection of her poetry, it came out shortly after she shared the 1966 Nobel Prize for Literature with the Israeli novelist S. Y. Agnon.
10. Sweden was also the place to which Nelly Sachs was able to flee, from Germany, as a refugee in 1940. There she began her poetry—she observed that, in exile, language was all she had left. She has been variously (definitionally) referred to as the last Jew to write poetry in German and the first German-language poet to write about the Holocaust.
11. The lines are “But anyway, I still believe / I only sleep today / That I’ll wake up a child / again and start / to laugh and play.” They are from a longer poem written by Hanus Hachenburg, a thirteen-year-old inmate of Terezín who perished at Auschwitz on 18 December 1943. For the poem in English translation, see ... *I never saw another butterfly...*: *Children’s Drawings and Poems from Terezín*

- Concentration Camp 1942–1944* (New York: Schocken Books, 1978), 22–23.
12. The poem, by Pavel Friedmann, was dated 4 June 1942; he perished at Auschwitz on 29 September 1944. For the poem in English translation, see ... *I never saw another butterfly...*, 33.
13. He was punning on his own name. “Ronnie” comes from the triconsonantal Hebrew root *r-n-n-*, meaning “to make joyous music.” All quotes from Ronnie come from a Zoom interview with the author on July 19, 2020. I might further note the unique manner in which the early post-stroke poems were transcribed: when Karen and Kitra realized that Ronnie could control his eyelids, they developed a system with him whereby they would go painstakingly through the letters of the alphabet and he would blink his eyes as they hit the right letter, gradually spelling out the words and then their placement on the page, letter-blink by letter-blink, with family members and friends transcribing. Gradually, as Ronnie began to recover enough voice, he could—very slowly—dictate whole words and phrases. This was related in several conversations with Kitra Cahana and Karen Knie-Cahana: in the July 19, 2020 interview and also in a Zoom discussion, with Kitra, Ronnie, Karen, Michael Cahana, Ida Rae Cahana, and Rachel Stern, on August 3, 2020.
14. For the poem in its entirety, see appendix 1.
15. This poem and, unless otherwise noted, all those by Ronnie Cahana quoted on the following pages may be found on his website: <https://rabbicahana.wordpress.com>.
16. The interview was conducted in 2009 by Marilyn Bronstein and Philip Belove for their radio program, *Love Triangle*. The transcript may be found on Ronnie Cahana’s website, in the

- May, 2012 “Monthly Archives” entry.
17. As with his poetry, Ronnie Cahana’s prose, including commentaries on Torah passages and other meditations, may be found on his website (<https://rabbicahana.wordpress.com>). This eulogy is located in the December, 2017 “Monthly Archives” entry.
18. In the December, 2014 “Monthly Archives” website entry this poem is referred to as “Psalm 6.”
19. In the March, 2015 “Monthly Archives” website entry this poem is referred to as “Psalm 14.”
20. This poem is not on the website as of this writing. It was transmitted to the author in a June 30, 2020 google doc communication from Kitra Cahana.
21. Ronnie made this comment in the previously-referenced Zoom interview with the author on July 19, 2020.
22. This poem is not on the website as of this writing. It was transmitted to the author in a June 30, 2020 google doc communication from Kitra Cahana.
23. The poet deliberately twists—takes poetic license—with the Hebrew word “*ayekem*” in his title. The Tree of Life—speaking, one might say, on God’s behalf, in Genesis, would be addressing Adam and Eve: “where are/were you?” (and God *does* address Adam—in the singular, *ayeka*—in Genesis 3:9, as noted in the first of the *Divrei Torah* on Ronnie’s website, *Bereishit* 5773, and one of the most recent, on November 15, 2019). But Ronnie, speaking here, as it were, on Alice’s behalf, asks Sapira where *they*—all those Alice lost, for whom her expanding family (including Sapira) are a replacement, a “replenishment”—have gone.
24. This poem is not on the website as of this writing. It was

transmitted to the author in a June 30, 2020 google doc communication from Kitra Cahana.

25. The works by Kitra Cahana discussed in this essay may be found on her website: <https://kitracahana.com/home/>

26. Kitra reflected on this in her eulogy for her , which begins with the assertion, “Everything I am, everything I create, is owed to my *safta* [] Aliza—Alice.” See appendix 2 for the full eulogy.

27. Kitra comments that Alice “had no boundaries in that area”: when, as children, Kitra and her siblings were getting haircuts, Alice would tell them stories about how Edith, she, and others had their hair shorn at Auschwitz. This was related in a Zoom conversation between Kitra and the author on August 6, 2020.

28. Quotes from Kitra come from several offhand conversations in spring 2020 and in the previously-referenced long Zoom discussion on 6 August 2020.

29. I am thinking, by comparison, of Christianity’s intense focus on the mystery of God as Christ and on proper belief in that mystery.

30. Urquhart, like Kitra, was a student at McGill University in Montreal, where they became fast friends. Urquhart studied anthropology and focused particularly on nomadic groups. Coming out of college, she realized that she knew nothing about nomadic groups in America, which led to her undertaking this project with Kitra.

31. Chris Urquhart, *Dirty Kids: Chasing Freedom with America’s Nomads*, with photographs by Kira Cahana (Vancouver and Berkeley: Greystone Books, 2017), 7.

32. What was it like for Kitra to turn fifteen with such strong Holocaust awareness, knowing

where her grandmother had been at age fifteen? By then Kitra had a camera. By then, too, her father was in the habit of dropping her off for an entire day at Houston’s Rothko Chapel, with its dark, mystical ambience, leaving her to meditate on her own. These and the issues raised in this paragraph came up in our 6 August 2020 Zoom conversation.

33. The Virgin Mary is typically swathed in three colors: red, which is the color of blood and thus of sacrifice; blue, which is the color of the heavens and thus of divine truth; and white, which is a symbol of purity and thus of her unique status as a virgin mother.

34. The outcome was a concerted harassment campaign by the US government at the US-Mexico border against Kitra and four photojournalist colleagues, which has led to an ACLU-led lawsuit against the government for abrogating their First Amendment rights. That suit is still in process as of this writing.

35. On the December, 2014 “Monthly Archives” website entry this poem is referred to as “Psalm 7.”

36. These paragraphs are extracted from Ronnie Cahana’s eulogy for his mother, written on December 31, 2017.

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## DESCENDANTS OF HOLOCAUST SURVIVORS: MYTHS AND REALITIES

Eva Fogelman

On the surface, children and grandchildren of Holocaust survivors are no different from their peers. For the most part they are well adjusted overachievers who can be found in all walks of life. In the United States, where my research has been focused, they range from local public-school teachers to the president, since 2018, of Harvard University; from lawyers and judges to criminals who are incarcerated; from nurse’s aides to doctors; from cantors and rabbis to rabbinical leaders; from heavy metal headbangers to classical musicians of the highest order. Some have a presence in Hollywood, or are documentary filmmakers or noted theater directors. They are in the US Congress and occupy city and state bureaucratic jobs and boardroom positions in major corporations, as well as roles in Jewish national and international organizations.

Some feel a mission of *tikkun olam*—repairing the world—offering a model for other Jews of their generation. They encompass Jews of all denominations, from Atheists to Hassidim to those who are just finding out that they are Jews because their parents raised them as Christians in order to protect them from the next mass persecution.

But if one looks deeper, many descendants of survivors feel a responsibility to make up for all their families’ losses. In particular, the offspring feel themselves to be as symbols of rebirth—of life after death.

The experiences and responses—the patterns and behavior—that arise or occur in children and grandchildren of Holocaust survivors do not meet the common definition of mental illness. They do not make up what psychologists call a personality syndrome, borderline or narcissistic personality, psychosis, schizophrenia, dependent or antisocial personality. And indeed, when personality tests like the Minnesota Multiphasic Personality Inventory (MMPI) are administered, for example, to children of survivors and to a control group of American Jews of a similar age group, there are no differences in personality factors

such as depression, anxiety, or paranoia: children of survivors are not more depressed or anxious than others Jews in the United States. What does stand out is that children of survivors are drawn more than others to morbid subjects, but that does not constitute a diagnosis of depression. In essence, members of the “second generation,” the children of survivors, whom I will discuss first, are just as well adjusted emotionally as others.<sup>1</sup> Later I will describe the distinction in identities between the second generation and the “third generation,” the grandchildren of survivors.

It is disturbing that when a group becomes identified in society—such as children of alcoholics or Vietnam veterans—various symptoms are attributed to the members of that group as a whole and extreme clinical cases are generalized. When Daniel J. Goldhagen’s book, *Hitler’s Willing Executioners* was discussed in the *Washington Post*, Marc Fisher, a reputable journalist, reported that children of survivors have a high rate of suicide.<sup>2</sup> A colleague of mine wrote that most children of survivors are self-mutilators. She happened to have had one child of survivors in treatment whom she sent to me for group therapy and that individual was a self-mutilator. Among hundreds of children of survivors whom I have treated, I have had one serious self-mutilator. As for suicide, in my forty years of working with this population, one patient committed suicide, a few attempted suicide prior to coming to treatment, and a few who were not patients killed themselves. Gross generalizations are misleading and damaging.

Another misdiagnosis is that children of survivors are plagued with a post-traumatic stress disorder as are some Holocaust survivors, Vietnam veterans, and others who have experienced massive psychological trauma. The symptoms of this disorder include nightmares, living in the present as if it is the past, anomie, paranoia, psychosomatic illness, and depression. Studies that have shown that cortisol levels of children of survivors are not sufficient to cope with stress are based on small, skewed samples and have limited generalizability. Epigenetic research, which is focused on gene changes in traumatized individuals who may then transmit

the changes to their offspring, is in its infancy and does not sufficiently explain what those changes would mean in terms of behavior or ability to cope with stress.<sup>3</sup>

So, if children of survivors are not necessarily affected biologically or in their personality structure, how are they affected? What makes children of survivors different from their American Jewish peers? For there are underlying commonalities that pervade their lives. Children of survivors are challenged with a mourning process for family members they never knew, an identity development shaped by growing up with dehumanized and persecuted parents, a world view and attitude profoundly influenced by the reality of annihilation and family dynamics rooted in a tragic sense of loss and grief. In psychological parlance I refer to it as a “second generation complex.” This means that very child of survivors goes through a process—which changes over time and in different situations, affecting not only personal feelings, attitudes, and perceptions, but also interactions with others.

#### *Quantitative Research*

One must begin by defining who is considered a child of Holocaust survivors or a member of the “second generation” of survivors—known as “2G”. Identity formation is based on whether one feels that one does or does not belong to this group. What complicates matters is that the determination of who is part of this group has not been static over the years. In 1952, when the West German government was forced to acknowledge Nazi wrongdoing and provide reparations to the surviving victims, Holocaust survivors were defined as those Jews who had been incarcerated in ghettos and concentration camps for eighteen months. These criteria became the point of reference for acknowledging who is a survivor, and also affected who is considered a descendant of Holocaust survivors.

These narrow definitions left out many Jews who were persecuted during the German occupation of their countries. Hungarian Jews who survived internment in Auschwitz were not viewed as “survivors”: the Germans invaded Hungary on 12 March 1944 and Auschwitz was liberated on 27

January 1945, less than eighteen months later, so these internees were deemed ineligible for reparations. Yet Hungarians imprisoned in the camps naturally considered themselves to be survivors. Also excluded were German Jews persecuted as soon as Hitler became chancellor on 30 January 1933, who managed to escape before or after Kristallnacht, the night of 9–10 November 1938 (some of whom had nonetheless been incarcerated in Buchenwald and Dachau); and Austrian Jews who escaped after Kristallnacht; both were considered by others to be refugees, not Holocaust survivors. Children who survived, even in concentration camps, were denied reparations until recently. Jews who fled to Siberia or central Russia were likewise ineligible for reparations.

In recent years the criteria for reparation payments have broadened and therefore more descendants of Holocaust survivors are identifying with their traumatic family history. What they all have in common is that their Jewish parents and grandparents lived under conditions of total terror and fear of annihilation because they were Jews.

The current definition of a child of Holocaust survivors is anyone at least one of whose parents lived in Germany after Hitler became chancellor or in German-occupied areas, or who survived the persecution in ghettos, in labor or concentration camps, or by hiding, disguising themselves as Aryans, fighting as partisans, or escaping. How, one may wonder, did research, in North America and Israel, come to focus on Holocaust-survivor families? How did this group capture the attention of the mental-health field? How did the intergenerational transmission of trauma to the second generation of Holocaust survivors engender scrutiny?

In 1966, Vivian Rakoff, then a psychiatric resident at Montreal's Jewish General Hospital noted that 25 percent of families seeking help in his department were Holocaust survivors, a number disproportionate to their population. *The Montreal Star*, in a story entitled “Children of Survivors Are Delinquents,” reported Rakoff's impressions of psychopathology, including behavioral disturbances and inadequate coping skills, among such children. The night the article was published,

Rakoff received a furious phone call that began, “Hello, Dr. Mengele. Isn't it enough that Hitler did experiments on us? Now it's your turn?” His enlisting help from Holocaust organizations was unsuccessful and Rakoff, while continuing to treat survivors, withdrew from public view on the issue.

His first article on the subject described the problems of adolescent children of survivors whom he had seen in treatment. He wrote “It would be easier to believe that they, rather than their parents, had suffered the corrupting, searing hell.... With the accumulation of knowledge and the unfolding of the concentration camp experience through the damaged generations, one may fairly ask if indeed there were any survivors.”<sup>4</sup>

Presenting symptoms included attempted suicide, severe phobias, chronic depression, and anger. These findings evoked intense, varied reactions in children of survivors. Some sought psychological treatment and heard interpretations responsive to their feelings and experiences. Others were enraged at clinicians for generalizing severe psychiatric symptomatology to the entire population, though often disregarding clinicians' empathic reactions to patients in distress.

Around this time, Henry Krystal, an American psychoanalyst and Auschwitz survivor, organized several conferences for doctors, social-service providers, and West German government officials on the after-effects of “massive psychic trauma” for survivors of Nazi concentration camps and the Hiroshima nuclear disaster. Krystal learned of the intense, unique family dynamics centered on the children of survivors, observing that “related to the subject of object-loss [of beloved relatives] is the yearning (hope) that the lost people would be restored magically. The most common expectation is that such love objects would return in the form of children... [who would] represent the new versions of parents, close relatives or offspring lost in the Holocaust.”<sup>5</sup>

While organizing a conference at Wayne State University in Detroit, in 1966, Krystal learned about Rakoff and his Canadian colleague John J. Sigal and invited them to present. Sigal explained that children in such families suffer from parental deprivation. While cautioning against generalizations

based on dysfunctional Holocaust families, he announced plans for a more scientific study.

An Israeli psychiatrist, Hillel Klein, who had conducted research on Holocaust survivor families on a kibbutz, disputed Rakoff's and Sigal's findings. He maintained that survivors spent more quality time with their children than other parents and that survivors' children had a rich fantasy life that enhanced security and provided relief from anxiety.<sup>6</sup>

Other studies with large representative samples, such as a study by Zahava Solomon of Tel-Aviv University, concluded that many children of Holocaust survivors were as well adjusted as their peers whose families did not have a history of persecution.

At professional meetings of the American Psychoanalytic Association (APA) concerned professionals such as Krystal continued to convene psychoanalysts to explore the transmission of trauma. The first meeting was held in Boston in 1967 and the second in New York in 1968. There was considerable resistance from the APA to starting a study group on the effect of the Holocaust on the second generation, and only in 1975 did such a study group form and begin to meet at the APA's annual gathering.

A blatant denial in the profession of the impact of the Holocaust was recognized by New York City psychoanalyst Judith S. Kestenberg. She sent a questionnaire to 320 analysts around the world, inquiring about their treatment of children of survivors. Reporting in 1972, she concluded, “A vast majority of those questioned revealed an amazing indifference to the problem. ... Some were startled by the questions because it never occurred to them to link their patients' dynamics to the history of their parents' persecution.”<sup>7</sup>

In the 1960s and 1970s, children of survivors who did pursue therapy did not identify themselves as heirs of the Holocaust, and most psychotherapists and psychoanalysts were oblivious to the second generation's collective identity. As for the survivors themselves, they largely did not seek out professional help for their problems.

In the mid-1970s an invisible group became visible. Helen Epstein's watershed 19 June 1977 article in the *New York Times Magazine*,

entitled “The Heirs of the Holocaust,” articulated feelings and thoughts that many members of the second-generation of Holocaust survivors experienced, but about which they did not know how to speak.

Once a group becomes visible, all sorts of labels are used to describe it. The 2Gs were compared to adult children of alcoholics, incest victims, and physically abused children. But there is a crucial difference: 2Gs’ parents suffered dehumanization, persecution, and genocide. Fortunately, most nonetheless did not become criminals, addicts, or abusive.

Since the late 1970s scores of doctoral dissertations and scholarly books and articles have focused on the effects of growing up with Holocaust-survivor parents. The psychological literature presents two very different depictions of children of survivors. One stems from clinical case material, people who are hospitalized for psychiatric problems or seek help to alleviate severe emotional pain; the other has its origin in nonclinical studies.

The clinical cases may be seen to have a relationship to the parents’ trauma. For example, Sylvia Axelrod and her team at the South Amboy, NJ, psychiatric hospital found that children of survivors can suffer from an “anniversary reaction.” They are often first hospitalized at the age and possibly the time of year their parents were deported to a ghetto or concentration camp, or went into hiding.

The problem with these clinical cases, however, is that many clinicians then generalize their observations and project them onto *all* children of survivors, in contradiction to the general research findings—and they do not include discussions of ego strengths, coping and adaptation.

In the 1980s, in Montreal, John Sigal and Morton Weinfeld conducted one of the few scientifically reliable studies on the long-term effects of the Holocaust on survivors and their children.<sup>8</sup> In Israel, Hillel Klein and Zahava Solomon had a critical mass of individuals with whom to conduct studies. Both teams of researchers confirmed that this population does not suffer more personality syndromes than other populations. In fact, the survivors are often functioning better than their

peers. Although fewer survivors are in professional occupations, because they did not have an opportunity for education, they have succeeded financially. These findings are very different from Sigal’s earlier findings, which reflected only hospitalized children of survivors.

Among children of survivors, differences have been discerned between sons and daughters. In Israeli society, sons of survivors attempt to undo their parents’ victimization by being extroverted, assertive, dominant, aggressive and competitive. They display courage, take risks, seek excitement, and look for novelty. They also tend to be less neurotic, more independent and more suspicious. In sum, they present a relatively consistent personality structure with low inhibition as its main feature. And sons of survivors, serving in the military, tend to volunteer for front-line combat. They cope better than their peers in severe combat situations.

Generally, daughters of survivors in Israel have a more emotional approach to life, with their behavior directed by feelings of melancholy and depression rather than by objective rationality. This may be because Holocaust survivor mothers tend to talk more than the survivor fathers, and thus the father serves as a role model of instrumental coping, while the daughters identify more with the mothers’ internalization of past victimization.

This explains the rate of depression and lower self-esteem found among Israeli daughters of survivors—but I would note that these symptoms are within the normal range and are not considered clinical depression. Women being more emotional and men being more cognitive is a common finding in all populations.

A comparative study of 2Gs in Israel and America and control groups in each country found that 2Gs in the United States are more inhibited about expressing their anger than are 2Gs in Israel.

Some clinicians have suggested that 2Gs cannot separate from their parents and thus cannot become independent human beings who assume adult responsibilities. One study found, however, that children of survivors do have the capacity to separate from their parents, but that it takes them longer to go through this phase of development.

Daughters of survivors in the United States are less separated and individuated than daughters of American-born Jewish parents. These results are not statistically significant, though, when considered against more projective measures like the Rorschach exam, which taps the unconscious.

#### *Second and Third Generation Identities*

The essence of being a child or grandchild of Holocaust survivors cannot be measured effectively in quantitative studies. My analysis of the psychological consequences of growing up in a Holocaust-survivor family is based on qualitative research derived from narrative interviews with this population, and from participating in organizations, social action activities, and Facebook chats; observing my patients in treatment, training mental-health professionals; and attending pertinent visual art exhibitions and performing arts performances.

Each person has many different identities. These are not static: at different times in one’s life, one identity becomes more salient while others may be more dormant. Identities include, but are not limited to gender, sexual orientation, religion, political viewpoint, social class, race, nationality, profession, life stage, and education. In the 1970s a movement developed of individuals identifying with different victim groups, many of whom banded together in self-help and informal discussion groups. It is in this milieu that children of Holocaust survivors emerged as a group identity.

Most children of survivors knew that their parents were Holocaust survivors, but it was not a defining identity until the appearance of Helen Epstein’s seminal article “Heirs of the Holocaust”, in 1977. The article reached more than two million readers, including the baby boomer children of survivors, whose consciousness was raised regarding their specific identity as children of Holocaust survivors. It was followed, in 1979, by her groundbreaking book *Children of the Holocaust: Conversations with Sons and Daughters of Survivors*.

While many continued to be unaware of this identity, and some with whom it did resonate chose to remain private about it, others began to

search for other children of survivors in groups, organizations, gatherings, commemorations, and educational venues. Interestingly, in the early years of this process, children of survivors whose parents had not been in ghettos or concentration camps or whose parents had been children during the Holocaust often felt that they didn’t belong.

The two sons of Alice Lok Cahana (1929–2017), whose Holocaust experience and its artistic expression were the impetus for the present volume, always knew that their mother survived Auschwitz and other camps, and that their father, Moshe Cahana, a rabbi born in Palestine, was an active fighter in the Irgun for Israel’s independence who, in 1965, led a delegation of Conservative rabbis to march with Martin Luther King Jr. from Selma to Montgomery, Alabama, in the civil rights movement. But it was not until Cahana’s younger son, Michael, was in his twenties, and accompanied his mother to the World Gathering of Holocaust Survivors in Jerusalem in 1981, that he considered himself a child of Holocaust survivors, and took a pledge with others from his generation to keep the story alive, to be the witness to the witnesses.

Michael Cahana (b. 1959) did not feel a need to participate in second-generation activities, per se, because he had heard about his mother’s experiences from an early age, whereas other children of survivors were just beginning to find out about their parents’ suffering. In the external world he was identified more with political action and Zionist organizations. When Alice Cahana was to be filmed for James Moll’s 1998 documentary *The Last Days*, Michael accompanied her to Auschwitz. This experience had a profound impact on him, and he switched professions, leaving lighting engineering for the rabbinate. Today he is a rabbi in Portland, Oregon. He has said, “My personal life and rabbinate are tied with bearing witness, upholding the image of never again to mean not to allow anti-Semitism to flourish and to watch paths of discrimination not only towards the Jews but for everyone.”<sup>9</sup>

Ronnie Cahana, the older son (b.1953), who likewise explored other professions before deciding to study for the rabbinate, was interested in joining a group for second generation rabbis

when he was a rabbinical student in New York. As with his brother, his external salient identity also embraced Zionism and Israel.<sup>10</sup> Ronnie's son, Dvir (b. 1994), perceived that the Holocaust was a "very big part" of his father's identity. He recalls that 20 percent of his father's sermons focused on the Holocaust and his mother's survival and heroism. Dvir, too, switched his studies (from engineering) to attend rabbinical school. He feels connected to the Holocaust because it intertwines him with Jewish history. Like his father, he feels that Israel and Judaism are salient parts of his identity.<sup>11</sup>

As is illustrated by the Cahana family, being a child or grandchild of survivors is just one element of one's identity. Some third-generation members of the Cahana family are publicly identified more with their gender and sexual identity, and their own traumas. This does not mean that they are not connected to their traumatic family historical roots. Rather, this aspect of their identity is only a part of who they are; it is not their sole identity, and not necessarily their public identity.

The descendants of Alice Lok Cahana grew up in a milieu that embraced Judaism in a vibrant religious and spiritual manner, which was a counter-action to the horrific persecution of her family because they were Jews. Jewish traditions in the home also represented a continuity with the world that was destroyed. Alice spoke frequently about her incarceration in Auschwitz and Bergen Belsen, the death march, and losing her sister in the camp and finding her only to lose her again after liberation when they were separated in different facilities for rehabilitation—and never seeing her again. Alice's stories always had an uplifting ending about her own courage or goodness amidst evil.<sup>12</sup>

Children of survivors who at a young age—before the age of ten—hear about the persecution that Jews endured during the Holocaust, are prone to fits of anger and rage. This was not the case in the Cahana family because of the way Alice told her stories. And when Alice visited her sons and their families, she was able to make each grandchild feel special, through the presents she brought them, the advice she gave each grandchild to suit their interests and talents, and the activities that they pursued together. Alice

enthusiastically encouraged the artists among the grandchildren to develop their talents.<sup>13</sup>

How family members perceive the survivors and themselves, and develop a "second-generation of Holocaust survivor self" or a "third-generation of Holocaust survivor self," is affected by Societies' attitudes toward Holocaust survivors in their midst. In the United States, for most of the third generation of survivors, their grandparents' Holocaust background was a source of pride because this generation grew up at a time when Holocaust survivors were celebrated. By contrast, when the baby boomer members of the second-generation were growing up, their parents were often shunned socially, which prompted a feeling of shame in some of their children.

The identity of descendants of Holocaust survivors can take many forms. Some children and grandchildren of survivors identify with their victimization, others with their heroism. Descendants sometimes identify with their namesakes, and live not only their own lives but the lives of the family members who were murdered. A not unusual form of identity is to incorporate some aspect of how a parent or grandparent survived, such as keeping a low profile, hoarding, or being part of group whose members help one another, among other such adaptations to extreme situations.

Whether one hides that part of one's identity or makes it one's total self, whether it becomes a public or private identity, whether one affiliates with a group or goes it alone, the goal is to integrate the "Holocaust self" into one's total identity. Alice Lok Cahana's sons were leaders in their own communities and did not seek out a second-generation group with which to affiliate to strengthen and support their "Holocaust self."

Within the last fifteen years, the third generation has coalesced as a group primarily in New York City. Given the scattered physical locations of Alice Cahana's grandchildren, there was no opportunity for them to become, together, part of such a group. With the advent of online video conferencing, however, the third-generation New York group began reaching out globally and most of the Cahana grandchildren expressed eagerness to get involved and meet others like themselves when informed of the opportunity.<sup>14</sup>

### *Communication*

Communication within the family has meant, except in rare cases, that children of survivors knew that their parents were persecuted. Even when the details of their lives before, during, and after the Holocaust were vague, the children could sense that their parents had survived mass murder. For the most part, children of survivors heard bits and pieces about their parents' traumatic years as they eavesdropped on conversations that survivors had whenever they got together. Most descendants, however, did not receive a sequential narrative of their parents' traumatic history.

Children of survivors were often reluctant to ask too many questions. There was a fear that a survivor might break down if his or her wounds and pain were brought to the surface. To most 2Gs a "breakdown" has meant that their parents would start crying uncontrollably. In my role as a clinician I often have to reassure descendants that it is appropriate for the survivor and for the offspring to cry, and thus, a dialogue can begin. With American society's becoming more interested in Holocaust survivor stories, and with oral history projects mushrooming (perhaps the most renowned is the USC Shoah Foundation, established in 1994 by Steven Spielberg as the Shoah Visual History Foundation), many survivors have become less reluctant to share their stories. As survivors have aged, memories of their early years have become more pronounced, and some survivors speak about the past incessantly. Many survivors are, of course, deceased.

Today, some descendants are frustrated by their past reluctance to have engaged in more dialogue with their then-healthy, then-living survivor-relatives. Some offspring of survivors lost their parents when they were in their teens or early twenties—a time when young adults are often separating and individuating from their parents and are not overly interested in questioning adults about their lives. Some descendants regret having the historical details but not the emotions, while others have the feelings and not enough narrative details. Many descendants are bereft at not knowing their traumatic family histories and are attempting to piece together bits and pieces to develop a coherent narrative.

In the Cahana family, Alice shared stories of her survival with her children and grandchildren when they were very young. One of the granddaughters, Idit (b. 1998), recalls how "Alice's horrific tales were bedtime stories and I did not take in that it was real at the time." When Idit visited the United States Holocaust Memorial Museum in Washington D.C. and heard a part of her grandmother's recorded testimony in one of the exhibits her stories became very real. Idit describes her eighteenth year as "the worst year of my life because that is when my grandmother died."<sup>15</sup> Despite hearing stories, there are always unanswered questions.

### *Mourning Process*

Quantitative research is particularly inadequate for studying the Holocaust-survivor family atmosphere, which was different in each home, and had such a significant impact on the psychological well-being of children of survivors. The mood was permeated with a sense of loss and mourning whether it was expressed verbally or nonverbally, particularly in families in which the parents or a parent was the sole survivor of a large extended family.

In some families, dozens of memorial candles were lit along with holiday candles—mitigating the joy of the holiday. Festive meals in some homes were used as reminders of all those who were not there to celebrate with them. Survivors tended to name their children after relatives who were murdered in the Holocaust. And a child mourns the person she or he is named for—not the direct loss of someone they loved, but the memory of someone they feel they have lived with—without ever having known that person. It is through the process of mourning that 2Gs and 3Gs come to identify with those aspects of the deceased that are positive and life-affirming, moving away from identifying with images of the deceased as either victims or heroes.

Children and grandchildren of survivors knowingly or unknowingly undergo a mourning process. From the shock of learning about the persecution and losses in the family, they shift into a period of denial, and then what psychologists refer to as "transforming moments" often jolt

them into a state of confrontation, which evokes a whirlwind of emotions that eventually need to be channeled into a constructive search for meaning. This leads children and grandchildren of survivors in many directions, whether it be maintaining the continuity of the Jewish people and heritage that was destroyed; or raising consciousness about the Holocaust and other manifestations of racism and genocide, which can take the form of education and commemoration or visual and performing arts, or political action and helping others in distress.

In the Cahana family, both children and grandchildren heard stories of Alice's survival before they entered school. The story that they most remember is that when Alice was deported to Auschwitz, her parents were gassed upon arrival, and she was separated from her sister Edith. Through the grapevine Alice heard that her sister was alive, and managed to bribe a guard to reunite her with her sister. He was a good Nazi. At liberation in Bergen Belsen both Alice and her sister had typhus but were taken by the British liberators to different hospitals. Alice was transferred to Sweden to recuperate and she never saw her sister again. For years Alice had hope that her sister was still alive. Alice's stories always emphasized some form of goodness amidst evil, hope despite desolation, and a belief in a higher power and how she continued to hold onto spirituality.<sup>16</sup>

Alice would repeat the story of how she arrived at Auschwitz and stood before the infamous Dr. Mengele, who decided who would live and who would be gassed immediately. When Alice appeared before him, she said: "Today is my birthday." She was sent to the line in which prisoners were ordered to strip, have their hair shaved, and take real showers, not gas ones. At one of the daily roll calls she was sentenced to the gas chamber. Some technical failing prevented the gas from pouring out, and that is why she is alive.

My own favorite story which I heard from Alice more than thirty years ago, was about how on Friday nights she would go to the latrine and start humming "*Lecha Dodi*," a *Kabbalat Shabbat* [Receiving the Sabbath] prayer. She was soon joined by other women in the barracks and they

ended by chanting *Shalom Aleichem*. They discussed the favorite dishes that they used to cook for the Sabbath and exchanged recipes.

Alice was gifted in telling stories of dehumanization and near-death experiences to young children that were shocking, of course, but with an uplifting message, of goodness amidst evil. The initial shock experienced by her sons was followed, as in other children of survivors, by denial—not a denial that such atrocities happened, but, rather, a continuation of daily life without dwelling on the victimization of a parent or grandparent. Alice's sons got involved in Zionist activities and were not publicly verbal about the Holocaust, nor did they dwell on the losses in their family. Then began the phase of confrontation, which manifests itself in seeking details about survival and the life before the war, the trip to discover one's roots, reading books, searching for documents. Michael began to focus more directly on his Holocaust family history when, as noted above, he accompanied his mother to the World Gathering of Holocaust Survivors. At the gathering, as one of a thousand children of Holocaust survivors who accompanied their parents, Ronnie did not feel alone in confronting a traumatic family history.<sup>17</sup> Years later, in the mid-1990s, Ronnie was a father and introduced his children and wife to the subject of his mother's survival of Auschwitz, when his mother was filmed for *The Last Days*.

With confrontation comes survivor's guilt, a desire to undo the pain and suffering of the parents, anger, rage, a desire to take revenge, loss and sadness, depression, identification with victimhood. Over-identifying with victimization or heroism can at times result in transposition—living in the present as if it is the past, for example, putting oneself in a dangerous situation. Because Alice always had an optimistic façade, the grandchildren kept to themselves whatever feelings they had. This is not an unusual response among descendants of Holocaust survivors, because they do not want to cause survivors any more pain. Confrontation often begins, as noted above, with "transforming moments." For the oldest grandchild, Kitra (b. 1987)—named after Alice's grandmother, Katarina, via the Hebrew name derived from "*keter*" ("crown"), as in *Keter Torah*

(crown of the Torah); her middle name, Eden, is for Alice's sister, Edith—her transforming moment was at age seven when she read the graphic novel, *Maus*, by Art Spiegelman. Its comic-book-like format made the book accessible to her at such a young age, and she read it innumerable times. Kitra did not have to ask her grandmother questions because Alice often shared her stories with her. Kitra continued to be obsessed with Holocaust literature from Viktor Frankl's *Man's Search for Meaning* to Elie Wiesel's *Night*. Kitra has reflected on how "nothing was censored." When Kitra turned fifteen, she said, "I marked the date because it was at that age that my grandmother was forced into Auschwitz."<sup>18</sup>

What Kitra most remembers is her grandmother's poem, "The Shadows at Night," with the lines "you got life instead [of death], what will you do with the memories of that long night?"<sup>19</sup> Alice meant, Kitra asserts, that "it is imperative to do something with your life." What also stands out for Kitra is how Alice encouraged her family members "to live a life of joy." Alice delighted in good food, dressing elegantly, and self-care. Her painting series, *From Ashes to the Rainbow: A Tribute to Raoul Wallenberg*, echoes an optimistic air and recognition of goodness.

For those individuals who are not stuck with their feelings, the emotions generated by confrontation and transforming moments can be channeled into constructive life-affirming behaviors. This is the search-for-meaning phase of mourning, and includes raising consciousness about man's inhumanity, through Holocaust education, human rights work, creative projects, helping other oppressed groups, raising Jewish families, and connecting to the culture and Jewish knowledge that was destroyed.

Alice's descendants became engrossed in channeling emotions into life-affirming endeavors, and she was undoubtedly a role model. She painted, wrote poetry, and gave lectures to young and old, not only about man's inhumanity to man, but also about humans' ability to make moral choices for good, and a victim's capacity to endure life and death conditions. Most amazing about Alice is her role as a mother to her third child, Rina, who was born with Down syndrome.

Alice was a loving mother who took Rina out to eat in restaurants, and dressed her as fashionably as she dressed herself. Alice kept Rina at home until she herself in her waning years was mentally and physically not able to care for her herself.

Alice's attitude toward her survival, and toward having given birth to a disabled child would be a model for family members in other catastrophes. The most extreme calamity was the massive brain stem stroke Alice's son Ronnie suffered in 2011, which left him, initially, in a locked-in state and mute. Instead of bemoaning his inability to function, he embraced it as an opportunity. His loving family rallied around him to assist him toward rehabilitation. He started writing by blinking in response to letters as transcribers recited the alphabet to him. He has amassed a large body of poetry and is now able to speak and, though he remains a paraplegic, to sit up in a chair. He is rabbi emeritus at Congregation Beth-El outside Montreal.

Each descendant in the Cahana family has struggled to find his or her own meaning and expression. In the second generation, Alice's two sons Ronnie and Michael had five and four children, respectively, to make up for the losses in the family, and to feel they are contributing to the continuity of the Jewish people. The rabbinic pulpit of each son is a position they use to fight for justice for all, to teach about the Holocaust, to educate congregants to appreciate Jewish texts, and to embrace the belief in a Jewish state. Both Ronnie and Michael chose denominations in Judaism that focus on social action.

Third generation Holocaust survivors in general have a deep affection for humanity, which is a conversion of the post-Holocaust trauma. This process is the ability to transform the emotional effects of the Holocaust by letting go, and thus increasing the quest for meaning in one's life and concern for social issues.

Kitra Cahana, a third-generation survivor in her family, feels she inherited her grandmother's "artistic sensibilities of horrific imagery and elevating it to have a spiritual method." All her life she has felt "a weight, and it is difficult to feel that you are not living up to the calling." That calling, as noted above, is "to make something profound with

your life.” And this is where survivor’s guilt sets in for Kitra, who says, “no matter what I accomplish as a photojournalist and videographer, I feel incapable of living up to the task to fulfill the purpose for which I was created.”<sup>20</sup> This feeling haunts her and is exacerbated with shame, even though she has been recognized—with many awards for her photojournalistic work on the separation of families that came to the American border in a caravan from Honduras and Guatemala, on policing mental-illness, and on the lives of nomadic children; for her documentary, with Ed Ou, *Dancing Towards the Light*, which highlights the town of Arviat, situated in the territory of Nunavut, with the highest suicide rate in Canada; and with her TED Talk about her photographic documentation of her father’s rehabilitation from his stroke.

Among the other grandchildren are others who were encouraged to pursue their artistic talents by their grandmother. Tamira is a graphic designer who is seeking a career as a nurse. Idit is a painter and focuses on trauma, using artistic forms to express her emotional challenges. Two of the grandchildren, Dvir and Briah, are studying to be rabbis. Another grandchild, David, started out as a molecular biologist but is now devoting his professional career to management for non-profit organizations—for people suffering from homelessness. Even as a biologist, however, David found a helping research project, studying the quality of life in long-term survivors of pediatric cancer.

The professional choices that the grandchildren of Alice Lok Cahana made are not surprising given what research has revealed about third-generation Holocaust survivors. Psychologist Elissa Ganz’s 2002 doctoral dissertation showed that 3Gs have a heightened sense of empathy, are twice as likely as a control group unconnected to the Holocaust to be drawn to helping professions, and are a highly motivated group.<sup>21</sup>

An important paradigm shift has occurred between the second and the third generation. As the world validated the suffering and resilience of Holocaust survivors, the central dynamic has been the transformation from shame to pride. This has changed the mindset of descendants, especially those who have found meaning in the

post-Holocaust world. It seems that among 3Gs, there is an ability to alter effects of the Holocaust by letting go, which increases the quest for meaning in one’s life and one’s concern for social issues.

Psychologists Tal Litvak Hirsch and Julia Chaitin at Ben-Gurion University of the Negev in Beer Sheva, Israel, found that it was much easier for survivors to communicate with their grandchildren than with their own offspring. Researchers have found that, while for some 3Gs, the Holocaust either has no relevance, which they call “under-generalization” or is the prism through which everything is seen, which they label “over-generalization,” many more 3Gs have normalized the dialogue through a sense of “partial relevance,” an “in-between” and more balanced perspective.<sup>22</sup>

Another case study of the second and third generations found that grandchildren of Holocaust survivors felt a sense of pride in and awe at the survivors. Awareness of their grandparents’ suffering is part of the fabric of their lives, but is channeled into empathy, political activism, greater consciousness of others suffering, and a reluctance to intermarry.

In my interviews with grandchildren of survivors for whom the Holocaust is a central part of their identity, I found that they had a close relationship with at least one grandparent. Such a relationship increases the propensity to embrace a commitment to remember the destruction of European Jewry. A strong Jewish education that combined the Shoah with other relevant historical aspects of Jewish peoplehood is another factor that enhances the likelihood of Holocaust remembrance. The children and grandchildren of Alice Lok Cahana certainly share these ingredients to engage in remembrance in their own ways. As psychologist Dina Wardi wrote, most Holocaust-survivor families have a member who has become a “memorial candle” for those who did not survive. An observer of the Cahana family notices more than one memorial candle.

The psychological wounds of racism and genocide are forever present among the generations of the Shoah. But the resilience of the human spirit enables these wounds to be transformed into a desire to make a difference in the world.

Some descendants of the Shoah refuse to be passive bystanders, as most of the world was during World War II. They, like most committed Jews, feel a moral obligation to help other Jews in distress, such as Jewry in the former Soviet Union and, more recently, Ethiopian Jews, and also the poor, the elderly, refugees from genocide, victims of earthquakes and tsunamis, and so forth. It is their way of showing those who said about the Holocaust, “We knew nothing,” that they in fact had a choice to know and act. The obligation to speak up regarding bigotry, hatred, and intolerance is pervasive among those who have found meaning in their family’s Holocaust-survival past.

The late Rabbi Harold M. Schulweis with whom I founded the Jewish Foundation for the Righteous (formerly the Christian Rescuers) understood that “[m]emory is an ambiguous energy; it can liberate or enslave, heal or destroy, the use of memory carries with it a responsibility to the future.”<sup>23</sup> The descendants of Alice Lok Cahana, in his, her, or their own way find memory to be a healing art, rather than an oppressive force.

After the dead are grieved “fully and deeply,” mourning has to cease and it cannot take over our existence, suggests Eva Hoffman, a child of survivors and author of *After Such Knowledge: Memory, History and the Legacy of the Holocaust*.<sup>24</sup> While it is appropriate for the generations after the Holocaust not to be consumed with death and to embrace life, the search for meaning enables one to live in the present while honoring the lives of the deceased.

*Eva Fogelman, PhD is a psychologist in private practice in New York, an author of the Pulitzer Prize nominee Conscience and Courage: Rescuers of Jews During the Holocaust, among hundreds of publications for professional as well as the general public, and filmmaker of the award-winning Breaking the Silence: The Generation After the Holocaust. Dr. Fogelman is a pioneer in developing therapeutic techniques for generations of the Holocaust, a co-founder and Co-Director of Psychotherapy with Generations of the Holocaust and Related Traumas, TIMH. She is the Founding Director of the Jewish Foundation*

*for Christian Rescuers (ne, Jewish Foundation for the Righteous), a Founder of the Hidden Child Foundation and Co-Director of Child Development Research, Co-Founder of Descendants of Holocaust Survivors in cooperation of the Museum of Jewish Heritage: A Living Memorial to the Holocaust. Dr. Fogelman serves on various boards and has served as an advisor to the United States Holocaust Memorial Museum.*

## NOTES

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2. Marc Fisher, "The German Question," *Washington Post*. 25 April 25 1996. The referenced book is Daniel Jonah Goldhagen's *Hitler's Willing Executioners: Ordinary Germans and the Holocaust*. (New York: Alfred A. Knopf, Inc., 1996).

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7. Judith Kestenberg, "Psychoanalytic Contributions to the Problem of Children of Survivors of Nazi Persecution." *Israel Annals of Psychiatry and Related Disciplines*, 10, (1972) 311–325.

8. John J. Sigal & Morton Weinfeld, *Trauma and Rebirth: Intergenerational Effects on the Holocaust*. New York: Praeger Press, 1989.

9. Michael Cahana, discussion with the author, 16 August 2020.

10. Ronnie Cahana, discussion with the author, 9 August 2020

11. Dvir Cahana, discussion with the author, 19 August 2020.

12. Kitra Cahana, discussion with the author, 7 August 2020.

13. Kitra Cahana, discussion

14. Briah Cahana, discussion with the author, 15 August 2020; David Cahana, discussion with the author, 18 August 2020; Idit Cahana, discussion with the author, 19 August 2020; Kitra Cahana, discussion; and Sarit Cahana, discussion with the author, 17 August 2020.

15. Idit Cahana, discussion.

16. Briah Cahana, discussion; David Cahana, discussion; Idit Cahana, discussion; Kitra Cahana, discussion; and Sarit Cahana, discussion.

17. Ronnie Cahana, discussion.

18. Kitra Cahana, discussion.

19. See appendix 2 for the full poem and its precise words.

20. Kitra quotes are all from the 7 August 2020 discussion.

21. Elissa Ganz, *Intergenerational Transmission of Trauma: Grandchildren of Holocaust Survivors*. (PhD Dissertation, Adelphi University, 2002).

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## CONCLUSION

The trajectory of this volume has followed a distinctive arc. The initial discussion revolved around two concentric issues. The first pertained to the relationship between the human potential for immortality and both art and family—and on the exponential increase in the complexity of immortality's concomitants when art and family are intertwined and extended through several generations. The second pertained to the role of memory in general and in the Jewish tradition in particular, and to the shape assumed by these concepts in the specific context of the Holocaust and its aftermath.

Thus the initial discussion, by Ori Z Soltes, of Alice Lok Cahana and her work, resonated from her survival of the exterminationist world of Hitler and its affect both on her art and on her children and grandchildren; and then assessed the implications of this for the art of her son Ronnie and his daughter, Kitra. The analysis of art considered the specific sorts of influences on each of these three individuals—including, in the case of Ronnie, the influence on his poetry of his mother's life, her unique story and story-telling; and in the case of his daughter, Kitra, the influence on her photography and filmmaking of the traumatic events within the lives of both her grandmother and her father—and how art intersected the psychological reality of each as a particularized mechanism of survival.

This discussion led organically into a further, more detailed and more scientific—as opposed to art historical—narrative, by Larry Squire and John Wixted, pertaining to how memory works: which parts of the brain are actually activated as memory proceeds within the human organism. This second discussion led into a third, by Natan P. F. Kellerman: a second science-based analysis of research into the question of whether and how traumatic experience may (or may not) be transmitted from one generation to the next within the DNA.

This third discussion acknowledged the wide range of ways in which trauma is transmitted, given the range of types of traumas, cultures, and individual personalities associated with radically negative experiences. The Holocaust—one profound trauma among many—is itself rife with an endless range of traumatic specifics (for instance:

the age and gender of the survivor, and the experience of, say, having been hidden as opposed to having been in a labor or concentration camp) and its victims were inherently both culturally and individually diverse. Similarly, different factors such as the gender of the offspring of Holocaust victims, and the age when first confronted by the parent's experience would yield different outcomes in terms of trauma-transmission.

In brief, risk factors for intergenerational traumatization are multi-determined and to specify and disentangle all the origins of transmission is a daunting task. A range of vulnerability and resilience factors, environmental pressures (and provisions), psychological outfit and subjective appraisal of the traumatic event will all influence the process of trauma transmission

This discussion led in turn to the fourth essay in this volume, in which Eva Fogelman, interviewing Ronnie, Kitra, and other members of the Cahana family, offered a focused consideration of the effects of the trauma of the Holocaust—the loss of most of her family and in particular her sister, Edith—on Alice Lok Cahana, and how that trauma was conveyed in different ways to her children (and not only Ronnie) and to her grandchildren (and not only Kitra).

Fogelman's essay, providing a broad discussion of quantitative and qualitative analyses of the psychological development of second-generation and third-generation members of survivor families, and embedding within that discussion the specifics of the inter-generational Cahana family dynamic, brought the arc of the overall narrative back to the ground from which it sprang in the first essay.

The diverse and often intense ways in which humans have for so many millennia pursued the chimera of immortality and how we have reflected on and expressed that pursuit has included a brilliant and multi-valent range of art forms—even within the confines of one extraordinary family. Drawing from the larger worlds of art, psychology, theology, biology, and the varied forms of individual and group trauma inflicted by nature and, more so, by humans on other humans, the layered discussion within this volume offers a compelling articulation of key elements shared by all humans with each other—interwoven with those reflecting the truth that each of us is a unique individual.

APPENDIX 1

(from Alice Lok Cahana's *Empty Windows*, 47–48)

THE SHADOWS AT NIGHT

The shadows in the dark question me  
Are you defeated?  
I answer – Oh no! Not me!  
Then you must be mad, child!  
Don't you see the long line...  
Children, grown-ups, in the endless night  
The first around them engulfs their faces  
But they still whisper prayers.

And you who got life instead  
What will you do with the memories of that long night?  
Will you listen to casual chatter,  
Or will you scream, that does not matter!  
The people –the people in the line,  
Their eyes and faces; they pray for help  
They pray for forgiveness  
Of sins they never committed!  
They hoped for an answer, they hoped for help  
And their eyes pierced through the iron gates  
Their hands reached to heaven with requests:  
Where are our brothers,  
The strong free men?

But the silence was  
Choking and bold  
And the rain brought  
The unexpected cold  
The flames killed the soul of all men  
Silence was the answer of the free man.

The shadows at night talk to me.  
Why are you not mad?  
They question me...

*Written in Sweden while in rehabilitation  
directly after the war.*

APPENDIX 2

Eulogy Delivered at Alice Lok Cahana's  
Funeral by Kitra Cahana

Everything I am, everything I create, is owed to my *safta* [] Aliza—Alice. She put her entire self into her children—our parents and Rina—and gave us all eyes through which to see the *vurld*. Her lens was never neutral. It was never just another day, or just another moment, or just another person. Everything she lay her gaze upon bore gravitas. Every interaction could expand into infinity. Her love was endless, her disappointments could feel the same way. Everywhere she looked she would splash a little bit of her paint, her dyes, her color. We wear it all, each of us, and live in the world she created for us to inhabit.

I may have the most memories of all the grandchildren, but each and every one of you live in her gaze. Each of you and I, Rina, Aba, Uncle Michael, Karen, and Ida are the greatest living and breathing poems she could have ever imagined composing, that could come from her body, the body of a fifteen-year-old girl surviving the death camps. I know that and I can say that fully, because in every interaction she made that so clear. When I sat with her in her final moments, I promised to love each of you the way she loved you, and to love myself as well through her eyes. To never self-harm, to never hurt with intention, the way I believe she never intended to hurt anyone else.

The last time I really spent with my *safta* was this past Pesach [Passover] at Uncle Michael's house. David and I were assisting *safta* out of the car. As we approached the front door Rina came running out of the house to embrace her mother. As their faces inched closer, the sunlight broke into a thousand pieces, framing Alice and Rina in a halo glow. "I love you, Mommy," Rina said into her mother's embrace as they held and held and held each other. Theirs was a lifelong love story. Symmetry lived in their love. Alice never stopped fighting for others to see Rina through her eyes. To become compassion and love through Rina's example. In Alice's final years I witnessed time and again as Rina ushered her mother along on her slow transition to the next world. As Alice's memory lapsed, Rina guided her through the maze

of her old age home, "No, this way, Mom," and the maze of living with your mind slowly slipping away. I loved watching and photographing them together. Rina is her greatest masterpiece without a doubt. We all are a piece of her collection. We too will live and die, and with each of our deaths Alice's fullness will be lost as well. That is why I am so thankful that her art and her poetry exist and that it is ours to share with the world.

My father remembers her nightmares, the night screams that would reverberate throughout their home on Ferris Drive as she relived each terror from the ghetto, Auschwitz, the death march, losing Edith again and again and again. She would wake up from those tremors and find her way to the studio to paint. There, she painted each loss into the thick layers of canvas. [When we were children] she would invite us into her studio to paint alongside her. We grew up in the shadows of her deepest joys and her deepest pain. Inheriting both. It's our *yerusha* [inheritance]. We all hold the legacies of trauma that came before us. Trauma of the liberators. Of the persecuted. Of those who were silent witnesses and even the persecutors. We wear the evil and the good that we all know exists within our histories. But we get to choose which story to live out. That was Alice's message, and she placed it deep in the crevices of her art.

In her final days Alice's caretakers told us that she held out her arms grasping the air in front of her, maybe for a loved one, maybe for Edith, her sister whom she lost and spent a lifetime searching for. She called out in Hungarian, her mother tongue, a language I've never heard her speak.

I dedicate this breath of mine to Edith, whose name I carry in my middle name, Eden, Alice's sister who made it to liberation with her, but through a separation [they] never saw each other again. In Bergen, just after liberation, too weak to walk, Alice crawled up the steps to an office to search for her sister's name. But it was not there. "Liberation for us came too late," Alice wrote, "for I never found Edith." My only comfort today is that her search is over, and they can hold each other in an endless embrace the way she has always and will always hold us. Till the day I die, my breaths are for Alice—who gave us her all.

APPENDIX 3

(a) Cahana Family Timeline

January 14, 1922	Moshe Hillel Cahana born in Tzfat, Mandatory Palestine, to Rabbi Mordecai Kahana and Tzipora Barol Kahana, (fifth of seven children)—Sanzer Hassidim <sup>1</sup>
August 29, 1929	Kahana Family home was set on fire by terrorists during the Safed Massacre
February 7, 1929	Alice Lok born in Sarvar, Hungary to Jenő Yehuda Lok and Teri Schwarcz, (second of fourth children)—Mitnagdim <sup>2</sup>
March 25, 1938	Terrorist attack on taxi near Karmiel, kills 6, including Moshe's Mother, Tzipora Kahana, and her mother, Moshe's grandmother, Basha Barol. His youngest sister, Rivka Yaniv, 5, survives the incident.
ca 1939	Moshe derails plans to study in Poland at Lomza Yeshiva and joins the Irgun Tzva Le'umi (Jewish underground in Palestine).
April 1944–45	Lok family forced to live in Sarvar Ghetto, set up in a brick factory; deportation to Auschwitz-Birkenau where Alice's mother/grandfather/ two brothers/ aunts/ uncles/cousins are murdered; Alice (age 15) and sister Edith (age 17) are sent to perform slave labor in a munitions factory in Guben, a sub-camp of Gross-Rosen
October 7, 1944	Alice reports being in the gas chamber; she was released when the chamber malfunctioned; this was the day the Sonderkommando of Crematorium IV revolted.
February 1945	Death March to Bergen-Belsen
April 15, 1945	Alice is liberated at Bergen-Belsen; two days after liberation her sister Edith is sent to Red Cross Hospital and permanently separated from Alice. Alice never sees her again and can find no record of her fate
July 24, 1945	Alice taken to Halmstad/ Vikingskill/Vasasjukhuset in Goteborg, Sweden as one of 30,000 Jews brought by Swedish Red Cross for recovery from typhus and tuberculosis
1946	Alice returns to Budapest, Hungary, to live with her father, Jenő Yehuda Lok and his new wife, Aranka Lok, both survived in Budapest, possibly in Raoul Wallenberg "Safe Houses"
1947	Alice arrives in British Mandate Palestine, as an illegal immigrant during <i>Aliyah Bet</i> and the <i>Bricha</i> resettlement program shaped by the Jewish Brigades. Alice lives initially with her Aunt Muncie Herman, her mother's sister, who had made <i>aliyah</i> [immigration to Palestine/Israel] before the war
1949–51	Alice attends Talpiot Beit Midrash for Kindergarten Teachers, Tel Aviv and works with Yemenite children.
1949	It was <i>bashert</i> [divinely intended] that Alice and Moshe meet at a bus-stop on the way to Kfar Saba
1950–51	Moshe studies Social Work at the Sorbonne, France
December 25, 1951	Alice and Moshe marry
1952	Alice and Moshe move to Borås, Sweden to work with a community of Shoah survivors, Moshe as a spiritual leader and community organizer; Alice as a teacher

November 15, 1953	Ronnie David Zishe born, Borås, Sweden, a community of Shoah survivors
1957	Alice, Moshe and Ronnie move to NYC and Moshe qualifies as a rabbi and affiliates with the Conservative Movement by invitation of Rabbi Wolfe Kelman; he takes a pulpit in Avenel, N.J.
1959	Cahana family moves to Houston, Texas. Moshe takes a position as Rabbi of Congregation Brith Shalom
November 17, 1959	Michael Tzvi Shraga born, Houston, Texas
December 1961	Rabbi Moshe goes to Albany, Georgia to participate in civil rights protests after the arrest of Rev. Ralph Abernathy and Martin Luther King, Jr
May 7, 1963	Moshe helps organize the delegation of 19 rabbis from the Conservative Movement's Rabbinic Conference in NJ to show support for the civil rights struggle in Birmingham, Alabama
1962–66	Alice is an art student at University of Houston
June 1963	Moshe spearheads the Houston Conference on Race and Religion, advocating for civil rights issues
November 2, 1963	Rina Edith born, Houston Texas
March 1965	Moshe participates in the Selma march following Bloody Sunday with three fellow Houston clergy
1969–77	Alice audits art classes at Rice University
1972–76	Ronnie gets his BA in Philosophy with a minor in literature at University of Texas, Austin, and writes copious poetry under the direction of poets, Charles Doria and David Wevill
October 1973	Moshe has a devastating heart attack and retires from congregation but continues activism, civil rights work, ecumenical work, teaching, creating ceremonies, like Yom Yerushalayim [Jerusalem Day] for the remainder of his life
1974–78	Alice tries her hand at Real Estate; Fashion Design; travels as a speaker/fundraiser for United Jewish Appeal, while creating art
1976–77	Ronnie studies poetry with poet, John Ashbery at Brooklyn College and develops very close relationship with poet, Babette Deutsch
1977–85	Michael attends University of Texas and University of Houston in the Honors Program in Liberal arts and theatre. Graduates from University of Houston Clear Lake with BA in Theatre. During this time, he also works as the Technical Director for the Kaplan Theatre of the Houston Jewish Community Center
1978	Alice makes a trip back to Sarvar, and decides to dedicate her art-work to the memory of the <i>kedoshim</i> [holy/sacred ones] of the Shoah
1979–80	Alice and Moshe spend one year in Stockholm, Sweden, substituting Chief Rabbi Morton Narowe, during his sabbatical; Alice gets a studio and has an exhibition
1978–80	Ronnie lives in Israel, connects with family story, leads a Young Judea Gap Year program and attends Yeshivat Ohr Sameach [an Orthodox religious academy in Jerusalem]
March 1980	"The Triumph of Rina Cahana" article appears in <i>Reader's Digest</i> reporting on Rina as one of the first children with Down's Syndrome to have Had a Bat Mitzvah ceremony
1980–84	Ronnie attends rabbinical school at Academy for Jewish Religion, New York City

March-April 1981 Ronnie and Karen Knie are part of a month-long mission to the former Soviet Union to contact Refuseniks

April 13 1984 Ronnie and Karen marry in Livingston, NJ

1984–86 Ronnie receives his rabbinical ordination and joins the Rabbinical Assembly as a Conservative Rabbi; Karen receives her MA, JTS and MSW, Columbia University; Ronnie and Karen honeymoon in Central and South America, working itinerantly in Jewish communities with extended work contracts in Quito, Ecuador and La Paz, Bolivia

September 1986 Ronnie and Karen move to Galveston, Texas; Alice and Moshe launch a Jewish Group Home in Houston; Alice and Moshe take a year-long sabbatical post in Cleveland, Ohio

September 1987 Ronnie and Karen move to Miami Beach, Florida

October 13, 1987 Kitra Eden Rakiya (Ronnie and Karen) is born in Miami Beach, Florida

May 9 1987 Michael earns an MFA in Architectural Lighting from Parsons School of Design in NYC. Becomes the first person ever to hold this degree. Works for NYC Lighting Design firm Wheel-Gerstoff.

July 1989 Michael attends rabbinic school at Hebrew Union College–Jewish Institute of Religion. First year in Jerusalem where he meets Cantorial student Ida Rae Hersh.

February 18, 1990 Tamira Raziell (Ronnie and Karen) is born in Vancouver, BC

October 20, 1990 Michael and Ida Rae Hersh marry in Pittsburg, PA

April 30, 1992 Briah Clielle (Ronnie and Karen) born in Vancouver, BC

June 16, 1993 David Yehuda (Michael and Ida Rae) is born in New York City

May 13, 1993 Ida Rae is ordained as a Cantor by Hebrew Union College, Jewish Institute of Religion, NYC; family moves to Toledo, OH where Ida Rae serves as Cantor at Temple Shomer Emunim, Sylvania, OH. Michael continues his rabbinic studies off-campus.

August 1993 Ronnie and Karen +3 move to Goteborg, Sweden to serve the Jewish community, near where he was born 40 years before.

May 22, 1994 Michael is ordained as a Rabbi by Hebrew Union College—Jewish Institute of Religion, NYC. Serves Temple B'nai Israel in Kalamazoo, MI

August 29, 1994 Dvir Maor Kavod (Ronnie and Karen) is born in Goteborg, Sweden

1994–97 Ronnie spearheads The Nordic Center for Interreligious Dialogue

September 1995 Ronnie runs a peace and solidarity mission to Bosnia-Herzegovina, during the Bosnian War, with a religious delegation including an Imam and a Lutheran minister, for which the three win the Swedish National Peace Prize

July 1996 Michael and Ida Rae serve together at Temple Beth-El in Providence, RI

July, 1997 The Cahana Family has a memorial service for Edith Lok in Bergen-Belsen and Alice and Michael return to Auschwitz-Birkenau, all filmed for James Moll's Shoah Foundation film: *The Last Days*, which wins the 1999 Oscar for Best Documentary Feature

August 4, 1999 Sapira Tzalel Koli-Chen (Ronnie and Karen) is born in Goteborg, Sweden

August 1998 Ronnie and Karen +5 move to Toronto, Ontario; Ronnie serves The Lodzer Congregation, founded and made up entirely of Shoah survivors from Lodz and their Second- and Third-Generation families.

November 14, 1998 Sarit, Liora, and Idit (Michael and Ida Rae) are born in Providence, RI

July 2000 Michael and Ida Rae move family to New Rochelle, NY where Michael becomes Senior Rabbi of Temple Israel

November 2001 Ronnie and Karen +5 move to Montreal, QC

July 2002 Ida Rae is named Senior Cantor of Central Synagogue in NYC

May 29 2004 Moshe dies on Shabbat, *Parshat Naso*, surrounded by family with Ida Rae singing him into the next world

September 2004–September 2005 Kitra attends Hebrew University and begins career as a photojournalist working for photo agency, Flash 90 in Jerusalem; documented disengagement of 7500 Israelis from Gush Katif settlements in Gaza and iconic front-page image in *The New York Times*

July 2006 Michael and Ida Rae move family to Portland, Oregon, where Michael is named Senior Rabbi of Congregation Beth Israel

September 2008 Kitra graduates from McGill University with a BA in Philosophy.

September 2010 Kitra completes MA in Visual and Media Anthropology, from Freie Universitat in Berlin, with her Masters Thesis on Traveling Kids, which wins a 1st Prize World Press, 2010 and is documented in Chris Urquhart's *Dirty Kids: Chasing Freedom with America's Nomads*

July 15 2011 Ronnie has a bilateral medial medullary infarction—(brain-stem stroke); Kitra embeds with him for months; he begins blinking out poetry for transcription almost immediately; this process continues to the present

2005–present Kitra active as an award-winning photojournalist and filmmaker

April, 2012 Alice and Rina move to Portland, Oregon

2013–19 Kitra is part of the “Women of Vision” *National Geographic* travelling exhibition, and published in: “Women of Vision: National Geographic Photographers on Assignment”

May/October 2014–18 Kitra receives Ted Fellow and Senior Fellowships, giving talks; TED MED talk addresses Ronnie's stroke and her personal work

November 28, 2017 Alice dies in Portland, Oregon, surrounded by family

May 12, 2019 Ronnie gives poetry reading at *Wired on Words and Music Event*, Casa del Popolo, Montreal.

October 2019 Launch of film and book, *The Portal*, Australian production, directed by Jacqui Fifer, and features Ronnie with Kitra, among others, who have overcome challenges

July 2019 Release of documentary, Kitra co-directed, *A Different Kind of Force—Policing Mental Illness*, which garnered World Press for Long Form Video and a Peabody Award for News

1. Eastern European Jews in the late eighteenth- through early twentieth-centuries fell broadly into three camps: the secularists; and within the religious community, the Hassidim, drawn to the mystical tradition; and the Mitnagdim, intense legalists. The Loks and Kahanas were thus from opposite sides of the ideological religious fence. [ed.]

2. See previous note

(b) Alice Lok Cahana: Exhibition History, Acquisitions, and Significant Recognition

1977 Robert I. Kahn Gallery, Temple Emanu-El, Houston, Texas  
1978 Blaffer Gallery, University of Houston, Houston, Texas  
1979 "To Everything There is a Season", Painting presented to President Jimmy Carter, President Anwar Sadat of Egypt and Prime Minister Menachem Begin in honor of the Israel-Egypt Peace Accord  
1980 Ateljehuset Gallery, Stockholm, Sweden Work presented to Yad Vashem  
1981 *Qumran Series*, Robert Molina Gallery, Houston, Texas  
1982 *From Ashes to the Rainbow*, Houston Art Council/ National Conference of Christians and Jews, Houston, TX  
1983 Drawing Room Gallery, Houston, TX  
1985 From My Mother's Prayerbook, Greater Hartford Jewish Community Center, Hartford, Conn.  
1986 *From My Mother's Prayerbook*, Live Oak Gallery, Lafayette, Louisiana  
1986-88 *From Ashes to the Rainbow: A Tribute to Raoul Wallenberg*, presented by ARCO and Hebrew Union College  
The Judaic Museum, Rockville, Maryland  
Skirball Museum, Los Angeles, California  
Blaffer Gallery, Houston Texas  
The Jewish Community Museum, San Francisco, CA  
The Museum of the Pennsylvania Academy of Fine Arts, Philadelphia, PA  
Acquisition of "Shabbat in Auschwitz" by Skirball Museum  
1987 *The Paintings of Alice Lok Cahana*, The New Gallery, Houston, TX  
Recognized in the U.S. House of Representatives as artist and educator and cited in the Congressional Record  
1988 Solo Exhibition, in The Rotunda, U.S. House of Representatives, Washington, D.C.  
1989 *Walls*, The New Gallery, Houston, Texas  
1991 *Remembrance*, Bortizer Gallery, Santa Monica, CA  
1993 Sacred Image, Sacred Text: Art of the Holocaust (Three-person exhibit), B'nai B'rith Klutznick National Jewish Museum, Washington, DC  
1995 Exhibition at Yad Vashem, Jerusalem, Museum Acquires "Sarvar-Auschwitz"  
Recognized at the American Gathering of Holocaust Survivors, Washington, D.C. by President William Jefferson Clinton  
1995 *Witness and Legacy* exhibition, Minnesota Museum of American Art, St. Paul, MN (Travelling group exhibition to 17 American cities, organized by Prof. Stephen C. Feinstein, Center for Holocaust and Genocide Studies at University of Minnesota)  
1996 *Remembering Not to Forget*, Solo Retrospective for the opening of the Holocaust Museum Houston, Houston, TX  
1997 *History, Memory, and Representation: Responses to Genocide*, List Gallery, Swarthmore College, Swarthmore, PA (Three-person exhibition)  
1998 *Art out of Atrocity*, Picker Art Gallery, Colgate University, Hamilton, NY  
"Wannsee Conference" on permanent installation at the Holocaust Museum Houston

1998 Featured in "The Last Days," produced by Steven Spielberg and The Shoah Foundation  
2000 *Mirrors and Memories, Images of the Holocaust*, Hunt-Cavanaugh Gallery, Providence College, Providence, RI  
Presenter at Berman Centre for Jewish Studies International Conference, Representing the Holocaust: Practices, Products, Projections", LehighUniversity, Bethlehem, PA  
CIA Days of Remembrance 2000, with a Recognition Certificate of Appreciation  
2001 Work cited in Encyclopedia Britannica, (Holocaust Art entry), including color plates of "Concert in Auschwitz and "No Names"  
*From Ashes to the Rainbows: A Tribute to Raoul Wallenberg*, Pittsburgh Presbyterian Theological Seminary, Pittsburgh, PA  
2002 *The Soul of the People: Commemorating the Shoah*, Iona College, New Rochelle, NY  
2003 Interviewed in BBC Video and Book, *Auschwitz: A New History*, by Lawrence Rees  
Cited and included works, "Lamentations" and "Concert in Auschwitz," in *A Promise to Remember, The Holocaust in the Words and Voices of its Survivors*, by Michael Berenbaum  
2004 *No Kaddish for the Children*, Florida Holocaust Museum, St. Petersburg, FL  
2005 Solo Exhibition, St. Peter's Lutheran Church in conjunction with Central Synagogue Holocaust commemoration program, *Through My Mother's Eyes*, a work created by Rabbi Michael and Cantor Ida Rae Cahana, using Alice's poetry and Yiddish music, New York City "Minutes Before the Wolstein Family Enters the Crematorium," a work that commemorates Jolan, Ervin, Izidor, Tudel and Noemi Wolstein, presented to Yad VaShem in honor of president of USHMM, Mr. Fred Zaidman, Yad VaShem, Jerusalem, Israel  
2006 Acquisition of "Requiem—Sarvar" for Yad VaShem, Jerusalem, Israel  
Pope Benedict XVI accepts gift of "No Names" to the Vatican Museum, Collection of Modern Religious Art (Made possible by the efforts of Archbishop Oscar Lipscomb and Drs. Harvey and Judith Rosenstock)  
2007 Cited and included work, "No Names" in *The Ashen Rainbow: Essays on the Arts and the Holocaust*, by Ori Z Soltes  
2009 *Alice Lok Cahana: From Ashes to the Rainbow*, Oregon Jewish Museum, Portland Art Museum and Portland Center Stage, Portland OR  
2010 Words are Not Enough, talk given at University of Portland, published in Philip Zalesky, *The Best Spiritual Writing 2011*  
2016, 2020 Cited and included works, "Days and Nights" and "Jacob's Ladder: Hope" in *Tradition and Transformation: Three Millennia of Jewish Art & Architecture*, by Ori Z Soltes

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