Nuclear physicist Enrico Fermi planning the world’s first atomic explosion while working at Los Alamos, New Mexico, in 1945, worried that the blast might produce an infinitely expanding chain reaction, incinerating the whole state, the planet, perhaps even the solar system. It shouldn’t happen, but would nature act in conformity to their theoretical human calculations and produce a finite nuclear explosion and not destroy the world?

This was the crucial question, the ultimate risk. That first nuclear test reaction in the New Mexico desert on July 16, 1945, and the subsequent Hiroshima blast, were apparently finite, yet far more powerful than anyone had imagined, destroying the scientists’ instruments, leaving the theoreticians stunned with this awesome, successful release of energy from matter. Fermi had vowed to disassemble the atomic nucleus, to take matter apart at its primogenitive level, and here was the apocalyptic result.

Fermi, a key player in this epochal event, had “taught the neutron a lesson, which it in turn passed on, unto many generations,” reflects Susan Griffin in *A Chorus of Stones* (Doubleday, 1992), her new book which explores the secret life of radiation in the lives and generations after Los Alamos. Here Berkeley poet, feminist, playwright, and social critic Griffin offers a sustained, poetically luminous, meditative inquiry into the “private life of war,” which she tracks through the intimate interweavings of public and personal history, private suffering and national tragedy, before and after this world-changing moment in which “atomic structure was altered to mirror our civilization’s idea of the true nature of matter.”
As with her previous and deservedly acclaimed books—considerations of the feminine (“the roaring inside Her”), rape (“the power of consciousness”), and pornography (“culture’s revenge against nature”)—here, with a poet’s chastening sensitivity, Griffin delves directly, courageously into the complex nuances of a single if awful fact—war and its most dangerous icon, the nuclear explosion. How does war among nations arise from the domestic facts of individual lives and how do civilians participate in the intense life-churning that war produces?

Griffin weaves her story, which is a contemplation on these questions, as a complex narrative skein: her family’s chronicle, her daily journal, the history of weaponry, elementary molecular biology, the biographies of numerous 20th century men (like the Nazi concentration camp director, Heinrich Himmler) who developed the technology of war, and the tragedies of a few women artists and poets (like Käthe Kollwitz, the German expressionist printmaker) who salvaged life and meaning under the looming pall of the mushroom cloud.

As with her previous books, Griffin’s style and narrative tone are unique and appropriate to the subject and its requirements, comprehending large-scale public events from the perspective of the domestic, the intimate, the personal frame. The great movements of history live equally, synchronously in the small turmoils of the family—“all history, including the history of each family, is part of us.” Approaching history from this personal, familial frame helps us understand its monstrosities, the numbing banality of evil that commissions terrible acts. Her mother’s alcoholism, her father’s factual omissions, her grandmother’s enforced exile from the family—these, too, are legitimate elements of the world war.

“That terrible stunning violence and then the silencing pall which proceeded from it, did not stop at the doorsteps of our homes.” All homes were violated, everyone lived it, all lives were diminished by it. War is waged unilaterally in our private lives and we are all war correspondents. We’re not used to thinking this way, but the histories of
families cannot be distinguished from the chronicles of nations; they’re equal parts of a field of gravity created by the movements of many bodies. “To divide them is part of our denial. Each life is influenced and in turn it becomes an influence.” We must speak what we know because silence is death. “For deep in the mind we know everything. Nowhere is there a record of all that has happened in human history, except in living consciousness.”

We know that Fermi, for example, back in Italy as a young man immersed himself in science to assuage his grief and to prevent his tears over losing a brother with whom he had enjoyed a close, inventive relationship, designing airplanes, building electric motors. Years later he was instrumental in retooling matter itself. Fermi’s fears about an infinitely expanding nuclear chain reaction were in a profound sense correctly intuited, only in not quite the sense he envisioned, suggests Griffin.

The world’s first nuclear explosion was in fact infinite, in a poetic, ontological, and sociological sense—it was “one vast breaking” in the fabric of physical reality that has been exploding now for almost fifty years, producing consequences largely beyond our everyday recognition only because they are so fundamental. Griffin’s artistic genius is to bring this to our astonished, shell-shocked awareness.

The Alamogordo explosion set the stage for the bombing of Hiroshima and Nagasaki in August 1945, which vaporized thousands of people and leveled the cities, and launched a decade of American atomic testing in Nevada, the Marshall Islands, and when the Russians, French, and Chinese got the bomb, many other places as well. The Earth became pockmarked with the shells of atomic explosions; She convulsed inwardly from these unnatural detonations. But what really happened at Alamogordo? What has been its true, unacknowledged long-term effect? We crossed a threshold, perhaps impermissibly, says Griffin.

According to one Japanese survivor she interviewed, during the blast time froze for an instant, sound and color disappeared, and “an unimaginable number of incidents
took place.” This is an image of compressed time that has taken, since then, experientially a half century to live out. The explosion is, literally, still happening, inside us, at the cellular, immunological level of human life, says Griffin. The body doesn’t shed its radioactivity, but stores it as a kind of invincible toxicity. Radioactivity, on the human molecular level, is like minute, continuous nuclear explosions that cumulatively damage the cells’ ability to make intelligent immunological decisions.

When the atom is fragmented, up to 80 different particles are released, each emitting ionizing radiation that transforms the chemicals in the air and water into toxic radioactivity—a process of fragmentation and toxicity that will last for hundreds of thousands of years. This is radioactivity’s strangely named secret half-life. And the bomb is still exploding, outwardly, too, wreaking “a geography of lost and missing pieces.”

The explosion, separating energy from matter (a consummately unnatural, unlawful event), injured, probably rent the fabric of physical existence, Griffin explains. It violently tore apart “the matrix of meaning in the material world.” By tearing the neutron away from its atomic environment, its source of connection and gravity, the nuclear chain reaction destroyed the reason, however ineffable, that holds matter together, and with this, at an elemental level, the matrix that sustains and makes sense of our experience. Even our perception is disintegrated, says Griffin. “The matrix in which the neutron lived is torn apart, and the world of connection becomes a diaspora.”

Look at our cultural life since the blast, at the collapse of centuries’ old traditions, both social and intellectual, advises Griffin. Here we see radioactivity’s half-life. “On this earth there have been many diasporas, many refugees, and many living, hence, subtle and intricate, communities torn apart that were once whole.”

Our cultural experience since 1945, increasingly entropic, irrational, and aberrant, has been informed by that world rending dispersion of the elements of life, when matter itself was violently deconstructed. The global and the atomic equally impinge upon us and our private life may well bear their signature. All consequences of events in the world,
whether we perceive them or not, are intimately embedded in our experience, as Griffin illuminates in this remark: “I know such a loneliness as I imagine the neutron possesses in its journey through the void. Sometimes it feels a part of my flesh. As a child, I saw everyone I loved leave me in one day.”

The nuclear diaspora is pandemic in our generation. “I am not so different in my history of abandonment from anyone else after all. We have all been split away from each other, the earth, ourselves.” If the neutron is sundered from its fabric of meaning, struggling in exile, so are we all, whose bodies and thoughts are woven from these elementary constituents of matter. The explosion produced an ontological rupture, Griffin suggests. Truly, the bomb changed the world, reconfigured reality, and through a “chain reaction of silences” in a sense turned us all to stone.

By implication we are all casualties of war suffering and shell-shocked to a degree we haven’t yet realized, colluding in a numbed, vacant cultural silence, refusing to speak what we know, says Griffin. We deny, forget, erase, keep secrets, disown our acts, create soulless, disembodied bureaucracies of the psyche and body politic. The rage of a past generation moves our arm to strike; the nagging, forgotten truth is still told if only as the “mute legacy of deeds endured and enacted by the living.” Stones may be mute, yet they have memory if we have the patience and skill to listen. “It is said that the close study of stone will reveal traces from fires suffered thousands of years ago.”

Griffin, by tortuously reconstructing the private lives and acts of men who have in effect killed many thousands of humans through their war technologies of rockets, bombs, firestorms, concentration camps, bears testimony to this private life of war. Griffin offers herself as witness to the hermetic history of our times on behalf of all the people psychologically turned to stone. “My book is about knowledge and denial, testimony and secrets. The subject matter is nuclear weapons, gender, and private life, witnessing the awful application of human intelligence.”
 Appropriately, atomic warfare was born in silence, shrouded in secrecy, developed in fragments around the country for an unrevealed purpose; even Paul Tibbetts, the American pilot of the Enola Gay, didn’t know until the last moment the bomb he was to drop on Hiroshima was the world’s first nuclear weapon. History only becomes accessible to us when we’re willing to hear it, but increasingly we’ve made ourselves deaf, suppressing what we know, whether it’s child abuse in the family or radioactive contamination in public places—we live the cover-up, terrified of the truth, afraid the unspoken will be said. Like stones, we know everything, yet the air is unnaturally heavy, oppressive with secrets and rumors, with the unspoken truth, says Griffin.

Who can deny that the American psychic atmosphere during the 1992 election season was saturated with lies, distortions, negativity, dirty politics, and the truth, yet so few claimed what they knew. “Everybody is thinking it but nobody says it out of some silent agreement. One wants to trust others, yet when a lie is told the body is cast into a state of profound disturbance.” But every time we deny the truth, maintain the secrets, we commit another small suicide, further erasing our real presence, says Griffin. “For perhaps we are like stones; our own history and the history of the world embedded in us, we hold a sorrow deep within and cannot weep until that history is sung.”

In A Chorus of Stones Griffin lives empathetically into her subjects, despite the personal anguish of living so intimately into the motivations and deeds of such warlords as Germany’s Heinrich Himmler, who exterminated millions in the concentration camps, or Britain’s Hugh Trenchard, who introduced the deliberate bombing of civilian targets as a terrorist weapon of war. “There is a sense in which we all enter the lives of others. All the lives that surround us are in us.” We sense the suffering of many out at the edge of what we see and hear; their cries may not survive in our waking knowledge, but “they live on in the part of ourselves we have ceased to know.”
This secret, shared life is what Griffin, moved by the “urgency of testimony,” seeks to restore to our awareness, thereby redeeming generations of suppression and forgotten, disowned memories. “We keep secrets from ourselves that all along we know. What is hidden, kept secret, cannot be loved. It exists in a place of exile, outside the realm of response.” We learn denial in the family then carry it back into the public sphere, notes Griffin. But how much lighter and clearer do our lives become when suddenly secrets, whether familial or public, are revealed and the truth is at last spoken.

The task cost Griffin, now 50, a decade of her life. During the ten years of research and reflection for *A Chorus of Stones*, she became chronically sick with Chronic Fatigue Immune Deficiency Syndrome, or CFIDS, whose symptoms, she contends, are remarkably similar to radiation sickness. “I believe the widespread occurrence of at least two major diseases, CFIDS and AIDS, are related to radiation in the environment. We represent the avant garde of suffering. Having this illness certainly helped me understand the suffering of people who are war refugees, whose lives were disrupted, who were wounded in battle.”

For Griffin, the symptoms of shell-shock, CFIDS, radiation sickness—weakened, numb limbs, disorientation, memory loss, lassitude, tremors, coldness—begin to blur into a single signature. Griffin acts on behalf of Clytemnestra, the mythic Greek matron who lost her memory, who forgot that Agamemnon, her husband, was killing her own children. Griffin wants to restore Clytemnestra’s memory: “I’m trying to remember for her.” To do this, she must clear the air of all the unspoken, heavy secrets; she must coax the stones to speak again. Griffin contemplates her family life in the context of war history, she travels to key sites like Oak Ridge, Dachau, and Hiroshima, she listens to survivors, prying their truths from out of the “mantle of silence, invisibly shaping lives.” Keeping the silence is “a kind of erosion, diminishing the capacity to see as well as speak.” We must *not* grow used to the unspeakable, warns Griffin. Yet we have; how did this happen?
The great ontological rent in the fabric of physical reality was made possible from the profound rupture resulting from the social construction of gender, Griffin contends. How we artificially define the masculine and feminine is a distortion of true human nature, an “unnatural bifurcation,” and one of the causes of the 1945 nuclear explosion. “We’re just torn apart in childhood in the name of gender. Our civilization is based on division.”

Back in mid-18th century Germany Frederick the Great conceived of a new way to train soldiers for warfare. Individual soldiers are mere cogs in an invincible war machine, reasoned Frederick, and how much more efficient they could be if they were drilled to respond automatically, without thinking or flinching, to orders, rather than to the natural, fear-driven dictates of their bodies. The military definition of the good soldier began to blur into the social definition of masculinity, says Griffin: courage under fire, repression of emotions, unquestioned obedience to authority, a suppression of sensuality, rigidity of muscle, tough, physical prowess, a willingness to sacrifice for others.

“Some of these are human virtues we would celebrate in anybody, but others are distortions of human nature and you cannot say they belong naturally to biological masculinity. If as a soldier, you’re trained away from your natural bodily responses, there is nothing left; you’re an empty shell and you’re destroying your soul as well.” Schism of being is drilled ruthlessly into soldiers, into men, eventually into scientists. “The requirements of gender are like the omnipresent yet partly hidden plans of a secret bureaucracy.”

Yet that secret bureaucracy is faceless, disembodied, “purged of feeling,” issuing orders in officalese and doublespeak, “a language of disguises.” Though it is spiritually painful, Griffin tries to grasp the inner state of one of modern history’s monsters, Heinrich Himmler, who condemned millions of European Jews to concentration camps and death, including Camp Dora at Dachau where the V-2 rocket, the prototype of today’s ICBM, was developed by scientists with the enforced assistance of the prisoners.
His ruthless, efficient detachment—this she can see sprouting in his childhood where he was trained by his autocratic father to deny his own thoughts, to erase his secrets, to purge his feelings, to construct an artificial image of himself, and to vow it’s himself.

“A small war is waged in his mind. Daily implosions take place under his skin, by which in increments something in him seems to disappear.” He becomes an instrument of Hitler’s will; he becomes absent to himself, his feelings are inaccessible; there are no connecting threads in his thoughts, “only opinions, standing in an odd relation to gravity, as if hastily formed, a rickety, perilous structure.” A man of iron, Himmler has distanced himself from the consequences of his actions; standing outside himself, a stranger, he has expunged his soul. “This ghostlike quality, the strange absence of a knowing conscience, as if the living creature had abandoned the shell, was spread throughout the entire chain of command. A mind separated from the depths of itself cannot easily tell right from wrong. And in this he is not so different from the civilization that produced him.”

That civilization, meanwhile, is rapidly uncovering the secrets of matter and its “strange light.” In 1895 Wilhelm Röntgen, observing X rays emanating from a glowing cathode tube, ponders on behalf of Western civilization the astonishing vision that matter produces light. Prior to this moment, Western physics was immured in the old religious paradigm that spirit (or energy) and matter were incontrovertibly separate, locked in that primordial moral duality of heaven and earth, in the tacit contention that the masculine and mind belonged to the spiritual world, and the feminine and nature belonged to Satan.

Then in the early 20th century Albert Einstein upset that milennial polarity proposing that matter and energy exist in a continuum, are in fact the inverse of each other, if not identical. “That should have changed the whole way we see the world, our value system, how we live,” says Griffin. “Instead of making this paradigmatic shift, the dominant scientific culture used its technology to split energy and matter apart. They began using the physical universe to destroy itself, to tear itself apart.” In only 50 years our culture progressed from Röntgen’s strange light to Fermi’s vaporizing illumination.
Is the inexorable analytic logic of science war itself? War’s implicit goal, expressed through technological innovations in weaponry, appears to be the destruction of matter itself. Perhaps, says Griffin. “I believe the subtextual—I don’t want to say subconscious, because that locates the motivation too reductively in some Freudian region of the brain—motive of the nuclear arms race was literally suicide, in the sense of destroying matter, the material universe. The scary part is that at some level there is a belief that physical death won’t matter because we have this spiritual side which will survive our destruction. How did we end up with the possibility that in the name of national defense we might destroy the entire earth?”

It’s as if the old Christian schism of matter versus energy provides carte blanche for an imaginable nuclear holocaust—mistakenly. “We still don’t get it that we are Nature and that what we call spirit is Nature, too.” So here is the powerful human intelligence at work analyzing nature, comprehending minute, delicate natural biological processes and devising destructive weapons. “I wanted to deposit these two perspectives in my text as a choice for the reader,” explains Griffin, who interweaves a brief history of weaponry with advances in cellular biology, inviting the reader to struggle towards a moral resolution.

Redemption is possible and Griffin shows us how it might happen. It was essential that she physically visit many of the sites involved in the development and deployment of nuclear technology and that she personally listen to the stories of survivors, witnesses, and the shell-shocked. “I felt things, what had happened there, walking over the gravel at Dachau.” Physical presence and compassionate dialogue help redeem the stony half-life of denial, Griffin implies. She offers an astonishing formula: “Sensual perception becomes an event of transmutation.”

Alfred Wolfsohn, a Jewish music teacher with radical ideas, was carrying a stretcher with a wounded man through a field weighted down with dying, eviscerated, groaning soldiers in World War I Germany. Amidst the agony, he listened to their voices
and was shocked to hear men singing out like women in the higher register of the voice, beyond the vocal sanctions of gender. “In the proximity to death, extraordinary capacities are revealed. The sensual world grows more vivid. In the cries of the dying he had heard a range of the human voice beyond all conventional expectation.” Men with untrained voices were crying out death songs in the highest soprano; hearing this, Wolfsohn felt empowered to “pass into an undiscovered country,” believing this larger capacity reflected “the fullest dimensions of the human soul.” In effect Wolfsohn heard the stones speaking and taught Griffin the secret.

Our socialization and heavy enculturation become blinders upon us, turning us affectively to stone so that we become insensitive to our own experience and knowledge, says Griffin. “It teaches us to ignore the essential evidence around us and to believe instead what we’re told—and we’re subjected to this from birth.” For Wolfsohn, the immediate shock and horror of war breaks this carapace; his sensual perception of the extreme range of male voices literally transmutes him, changes his life, making his own nature more accessible to him. Stones record history, unto many generations, but how can we turn their silence into a chorus, queries Griffin.

We must embrace matter again, embrace the fact we are material beings in a natural world, accept all of ourselves, our history, our biography, and above all, tell the truth. “All official history is accompanied by another history. That history is told by word of mouth, the stories we pass between us. We have to meet the world in its wholeness with this knowledge. Everywhere one sees signs of something different, possible, another way of being.”

Griffin deliberately leaves her book open-ended, the door wide open for the reader. She entitles her final chapter “Notes Towards a Sketch for a Work in Progress”—amorphous, beyond summary and easy grasping, it’s meant more as an incitement. Anything else would play into “that old authoritarian model, that rigidity that tries to posit ideal truths, forever.” Griffin wants to break through “this notion of the author as
somebody who knows all the truths and tells the reader what to do.” She’s aiming at
something more fluid. “I’m opening up an insight I would like readers to continue,
opening a door I would like others to walk through.”

Imagining the experience of a woman artist who survived Nazi Germany, Griffin
watches her “begin, after the war, to put down on paper all this that you saw and heard.”
Gandhi, who figures prominently in Griffin’s narrative as the positive expression of the
strange light, called this stance satyagraha, standing by the truth. “I must learn to listen to
myself, not to abandon myself,” Griffin notes on the reader’s behalf. I must stand upright
like the stone for truth, yet I must speak what the stone knows.

One recalls the European legends of standing stone circles, how once living
women, merry maidens, danced and sang on the Sabbath and were turned to stone as
punishment by a vengeful church. When enough of us break the infernal chain reaction of
silences and give honest testimony to our painfully lived truths and biographies, then the
chorus of stones swells into multitudinous voice, says Griffin. “That will fuse together
our view of the universe and then things will begin to take care of themselves.”