First, Kill the Witches. Then, Celebrate Them.

OPINION

BY STACY SCHIFF

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HOLIDAYS restore us, reassure us and remind us of who we are — a reason some of us hesitate to head home for Thanksgiving. They also tend to develop by accretion and misconception. While we like to think them wholesome and organic, they more resemble our breakfast cereals; an awful lot of fluorescent marshmallow charms have crept in among the toasted oats. St. Valentine never met a metallic red Cupid. The Pilgrims would be astounded to discover they laid any claim to the fourth Thursday in November.

Even allowing for an especially American elasticity, you have to engage in some wacky contortions to come up with Halloween, a holiday most of us would be hard-pressed to explain. You have to be more inventive yet to brand yourself as a Halloween capital — extending a one-night affair into a monthlong celebration and inviting hundreds of thousands of visitors into your streets — when for centuries you were known as the community that put innocents to death for witchcraft. How did Salem, Mass., repackage a tragedy as a holiday, appointing itself "Witch City" in the process?

Insofar as we can chart its murky origins, Halloween derives from Samhain, an ancient Celtic harvest festival. Irish and Scottish immigrants carried its otherworldly imagery to America, largely in the mid-19th century. Black cats arrived along with their broomstick-flying consorts in the 1890s. The witches' origin is unknown; they played no role in the Celtic tradition. The costumes came later, as did the witches' basic black. Trick-or-treating began in the 1920s. The candy companies saw to the rest.

Salem transmuted its secret shame into its saving grace.

That the least decorous, most disorderly of holidays should have established permanent residence in eastern Massachusetts is incongruous on any number of counts. Our Puritan forefathers had a horror of holidays. They renounced even saints days, to wind up with a calendar that has been described as "the dullest in Western civilization." They feared that boatloads of nefarious Christmas-celebrating Irishmen were to disembark imminently on American shores. They were off by only a few centuries.

Among the oldest settlements in the Massachusetts Bay Colony and for years among the wealthiest cities in America, Salem had many claims to fame. It preferred not to count the witchcraft delusion among them; no one cared to record even where the town had hanged 19 innocents. It addressed the unpleasantness the New England way: silently. When George Washington passed through Salem in October 1789, he witnessed neither any trace of a witch panic nor of Halloween. Sometimes it seems as if the trauma of an event can be measured by how long it takes us to commemorate it, and by how thoroughly we mangle it in the process.

The stigma lifted gradually, in fits and starts. About 200 years after the trials, a Salem silversmith issued a souvenir spoon, featuring a witch holding a broomstick. Other mementos followed. It was difficult to hit the right note: The Salem-based Parker Brothers company issued, then quickly discontinued, a witchcraft card game. When Arthur Miller visited Salem in 1952 to research what he considered "one of the strangest and most awful chapters in human history," he discovered that the subject was taboo. "You couldn't get anyone to say anything about it," he complained.

Meanwhile the city fell on hard times. It was years past its maritime prime. Its manufacturing base slowly evaporated out from under it. As if by magic, a different kind of enchantment arrived in the form of the ABC sitcom, "Bewitched." Already the show had winked and nodded at Salem; it seemed that an ancestor of Samantha, the main character, had been convicted of witchcraft during the trials.

For various reasons, it made sense to shoot a number of episodes in Salem in 1970. With them the show delivered a history lesson. "There were no real witches involved in the witch trials," Samantha reminds her all-too-mortal husband as they drive through the city on vacation, if attending a witches' convention is your idea of a vacation. "It was only mortal prejudice and hysteria," adds his mother-in-law from the back seat, dissolving years of shame in a single television season.

Samantha goes on to do something no mere mortal could, venturing back to the 17th century. Accused of witchcraft in old Salem, she winds up manacled, on trial for her life. She admits to the charge. But she announces to the courtroom that she will also prove that no 17th-century suspect was a witch. (She seems to forget her ill-fated ancestor.) "How can you imprison someone who can vanish before your very eyes?" she demands. Firmly she sets our Puritan forebears straight: "The people that you persecuted were guiltless. They were mortals, just like yourselves. You are the guilty," she informs the old Salemites, before she vanishes, at long last clearing the air. Not for the first time, it fell to a fiction to restore the history.

In Samantha's wake, Salem recast its inglorious past, or at least some version of it. Other enchantresses followed: A community of Wiccans established themselves in Salem, soon pulsing with New Age energy. A witch museum opened in a former church. A medium turned up on the police force. The restored home of a 1692 judge recast itself as the Witch House. It neither belonged to an accused witch nor stood where it had in the 17th century, but no matter; Frankenstein wasn't the monster, either.

Across the board, the nomenclature fails us. By a "haunted house" a Puritan meant one infested by diabolical agents, not by zombies and ghouls. A witch as a 17th-century New Englander conceived her (or him) was generally a foot-stamper or troublemaker, though in 1692 a witch could also be someone who doubted the existence of witchcraft. In league with Satan, she worked her magic with diabolical cats, dogs or toads. She had as little to do with perky Samantha as with a Wiccan or Professor McGonagall. Since time immemorial we have conflated two very different brands of sorcery: There was the ugly old woman in league with the devil. And then there was the beautiful young woman, noted Ambrose Bierce, "in wickedness a league beyond."

By the time Salem reconnected with its past, Halloween had found its commercial footing; the city transmuted its secret shame into its saving grace. In 1982 it introduced "Haunted Happenings," later extending the holiday into a four-week festival. "Salem owns Halloween like the North Pole owns Christmas," The Boston Globe declared, the difference being that no one takes his tourist dollars to the Arctic in December. In fact Halloween is to some extent year-round in Salem, where you might well bump into a goblin in a sandwich shop in July.

THREE HUNDRED years after the trials, Salem unveiled an elegant, understated memorial to the victims. Three hundred and thirteen years after the trials, it unveiled a gleaming statue of the "Bewitched" star, Elizabeth Montgomery, on a broom. Not everyone liked the idea: A former historic district commissioner clucked that one might as well plant a likeness of Colonel Klink at Auschwitz. But the 1992 memorial was arguably not itself possible without "Bewitched." It isn't easy to commemorate an atrocity. ABC's domestic goddess had both laundered and folded the history.

While the celebrations have subsumed the trials, there's something apt about the popular hijacking. On Oct. 31 we express a great deal of what could not be articulated in 1692. We allow our delusions, our goblins and gremlins, our anxieties, our little changeling-children to walk about in the open air. We inhabit our fears (or those of our parents, which might explain all those scantily clad teenagers). We celebrate the unsavory and the unsettling. A 1641 body of laws lent witchcraft its validity; with juvenile antics, we thumb our noses at authority on Oct. 31. The holiday is as much an insult to propriety and fundamentalism as to bedtime. On Halloween you can choose precisely who you want to be, a deft rejoinder to a year when someone browbeat you into believing that you were what he said you were, a true horror story.

The holiday isn't for everyone. Samantha considers it "amateur hour." At one point she reports that her mother flies to the south of France until the whole thing blows over. You can leave Salem today without a hint of what happened in 1692; in a sense we've moved from tragedy to farce without the pause for history in between. Pressed to confess to a crime of which she knew nothing, one 17th-century suspect protested that she had no business with the devil. She was uncertain sorcery even existed. "I know not what a witch is," she cried, leading her interrogator to ask how, then, she could be sure she was not one. She hanged. The Commonwealth of Massachusetts cleared her finally of witchcraft charges in 2001, on Halloween.

MARTHA COLBURN

Can You Get Smarter?

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ple, playing the math puzzle KenKen will obviously make you better at KenKen. But does the effect transfer to another task you haven't practiced, like a crossword puzzle?

The researchers recruited 11,430 viewers on the popular BBC online science program "Bang Goes the Theory" for six weeks of brain training, with 10-minute sessions three times each week. Subjects were placed at random in three groups: one experimental group playing games of reasoning and testing problem-solving skills; a second experimental group that emphasized tests of attention, short-term memory and math skills that were typical of commercially available brain-training games; and a control group that performed the equivalent of Google searches by answering obscure test questions.

All subjects took a benchmark cognitive test, a kind of modified I.Q. test, at the beginning and at the end of the study. Although improvements were observed in every cognitive task that was practiced, there was no evidence that brain training made people smarter. Scores on the benchmark test, for which subjects could not train, did not significantly increase at the end of the study.

There was, however a glimmer of hope for subjects age 60 and above. (Full disclosure: I'm 59, so I've got skin in this game.) Unlike the younger participants, older subjects showed a significant improvement in verbal reasoning, one of the components of the benchmark test, after just six weeks of brain training, so the older subjects continued in a follow-up study for a full 12 months.

Results of this follow-up study, soon to be published in a peer-reviewed journal, generally show that continued brain training helps older subjects maintain the improvement in verbal reasoning seen in the earlier study. This is good news because it suggests that brain exercise might delay some of the effects of aging on the brain.

OF course, skeptics might argue that older people are already on a downward cognitive trajectory, so their

At the end of eight weeks, students who had been encouraged to view their intelligence as changeable scored significantly better (85 percent) than controls (54 percent) on a test of the material they learned in the seminar.

These findings appear to have profound implications for educating young people because they suggest that a relatively simple intervention — teachers encouraging their students to think of their own cognitive capacity as a quality that they can improve — can have a powerful effect: enhancing learning and motivation.

(The adolescent brain is more malleable than the adult brain, so whether Dr. Dweck's findings might hold for adult learning is an open and intriguing question.)

Perhaps it is not the same as increasing innate intelligence, but helping young people hit their intellectual potential is critically valuable — and apparently not so difficult to do.

So we can clearly enhance learning, even if mental gymnastics won't make us smarter. Don't worry: there is still more you can do for your brain. It turns out that physical exercise can also improve cognitive function and promote the growth and creation of neurons.

Mental gymnastics may not make us more intelligent, but physical exercise can help.

Mice, for example, that are allowed to run on a wheel for just 45 days had more neurons in their hippocampus, a brain region critical for memory formation, than sedentary mice.

In humans, one recent study randomly assigned a group of older people with mild cognitive impairment to three groups: one that engaged in resistance training, one that did aerobic training and a control group that did balance and tone exercises. Random selection ensures that any observed differences between the three groups is a result of the type of exercise, not any other characteristics of the subjects. The researchers found that while both resistance and aerobic training groups improved equally on spatial memory, only the

depression. Aside from making people feel better, antidepressants can block the depression-induced drop in BDNF, so these drugs are, in a sense, neuroprotective.

I know, exercise is work, so you undoubtedly want to know if there is a smart pill, like Adderall or Ritalin, that will do the trick. Well, there is little question that these stimulants increase focus and make the world feel more interesting by releasing dopamine in key brain circuits. But when it comes to their effects on memory and learning, the data are mixed.

The only consistent cognitive benefit of stimulants is their effect on the consolidation of long-term memory, meaning that they strengthen the ability to recall previously learned information — an effect that might confer some advantage in the real world.

Some worry that stimulants might somehow boost efficiency at the cost of creativity, but research suggests otherwise. The concern reflects a common notion of creativity, namely that you need to be a little unfocused to think in a synthetic, novel way, and that stimulants will impede this mental process.

For example, one study compared two groups of healthy young adults who were randomly assigned to Adderall or a placebo. Both groups were give four different tests of creative thinking. Adderall enhanced performance on one of the tests, the embedded image test, which requires subjects to reassemble a whole image from a scrambled one.

Still, these are subtle effects, and there is no evidence that any prescription drug or supplement or smart drink is going to raise your I.Q.

But there is one thing that doesn't require a prescription that seems to help preserve cognitive fitness: other people.

There is strong epidemiologic evidence that people with richer social networks and engagement have a reduced rate of cognitive decline as they age. Lisa F. Berkman, a professor and social epidemiologist at the Harvard School of Public Health, and other colleagues examined data from the Health and Retirement Study, which followed a nationally representative sample of nearly 17,000 subjects age 50 and older from 1998 to 2004. Subjects were cognitively assessed with a simple word-recall

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red walls of fire.

We slept at a friend's house on the western flank of the Sierra Nevada. The next morning, as we began our drive home to San Francisco, this sense of unraveling — of California coming apart at the seams — worsened by the mile. The air was more Beijing than Yosemite, and the Merced River, normally a white-water pleasure ground, was a muddy sequence of black pools below mountains covered with dead ponderosa pines, a tiny sample of the more than 12 million California trees killed by drought and the bark beetles that thrive in this now-warmer climate.

The San Joaquin Valley, still farther west, is depressing on good days, with its endemic poverty and badly polluted air and water. But driving in freeway traffic through endless housing developments on that particular weekend encouraged a fugue state of bleakness in me. Somewhere in that haze lay an industrial-agricultural plain where the unregulated pumping of groundwater has gone on for so long that corporate farms pull up moisture that rained down during the last glacial period — with two paradoxical and equally strange geological effects.

First, the evacuation of so much water from underground pore spaces is causing the surface of some parts of the valley floor to collapse downward by nearly two inches a month. Second, the lifting of water weight — all those trillions of gallons from underground, and more vanishing from reservoirs and snowpack throughout the West — is now causing the rocky crust of the Earth, which floats on our planet's molten interior, to push upward.

As a result, the Sierra Nevada mountain range is gaining about 1 to 3 millimeters in elevation annually. San Francisco, normally cool and clear, completed the picture: air so murky we could barely see the bay below the bridge, yet another scorching day in a freakishly warm summer — thanks in part to the immense blob of warm ocean water parked

My Dark California Dream

Confusing one's own youth with the youth of the world is a common human affliction, but California has been changing so fast for so long that every new generation gets to experience both a fresh version of the California dream and, typically by late middle-age, its painful death.

For Gold Rush prospectors, of course, that dream was about shiny rocks in the creeks — at least until 300,000 people from all over the world, in the space of 10 years, overran the state and snatched up every nugget. Insane asylums filled with failed argonauts and the dream was dead — unless you were John Muir walking into Yosemite Valley in 1868. Ad hoc genocide, committed by miners, settlers and soldiers, had so devastated the ancient civilizations of the Sierra Nevada that Muir could see those mountains purely as an expression of God's glory.

Too soon, the next version of a new world is upon us.

"I'm in the woods, woods, woods, and they are in *me-ee-ee*," Muir wrote about the giant sequoias, in a Whitman-esque letter to a friend. "I wish I were so drunk and Sequoical that I could preach the green brown woods to all the juiceless world, descending from this divine wilderness like a John the Baptist. ... Come suck Sequoia, and be saved."

Muir got his turn when San Franciscans dammed his beloved Hetch Hetchy Valley inside Yosemite National Park, part of a statewide water grab that included Los Angeles developers' swindling Owens Valley farmers out of both their water and their economic future. But all that water helped create the coastal urban paradise that lured my grandfather west in the mid-1940s, when there were fewer than 10 million people in the state: abundant jobs in defense and entertainment, middle-class families buying homes with sunny backyards, plenty of room on wide highways to seaside coves where good surf peeled across reefs with abundant lobster free for the picking.

Dad went to the University of California, Berkeley, spent three years in the Navy and three more in law school, then moved to Washington, D.C., with my mother to work for L.B.J.'s anti-poverty program. He came back in late 1968 to find Los Angeles buried under a concrete megalopolis. Up in San Francisco, meanwhile, where Mom grew up, methamphetamine and violence were already darkening the hippie dream.

Kevin Starr, a professor of history at the University of Southern California and author of a seven-volume history of the California dream, told me recently that he considered the mid-1960s — 1963 specifically — the end of modernist California, that period for which it makes sense to speak of "an agreed-upon, commanding" version of the dream. In Mr. Starr's view, around the time I was born, in 1967, California entered a postmodern phase with multiple dreams in parallel: back-to-the-landers on communes; migrant farmworkers organizing in the San Joaquin Valley; gay and lesbian life proudly out in the open; and, of course, the outdoorsy-liberal existence that my parents found in Berkeley.

Real estate was still affordable and the public schools were among the best in the nation, so it made sense for my parents to shape life around meaningful work and just enough money to enjoy all that glorious public land. Mom sold her artwork and helped start a women's small press; Dad worked for the local branch of Legal Services and, in 1972, on a combined income of $13,000, they bought a four-bedroom Berkeley Victorian for $27,000. They joined the Sierra Club and took us backpacking and, later, rock-climbing. When my parents felt especially flush, they took us skiing near Lake Tahoe. They even considered buying a weekend home at Stinson Beach in Marin — although $10,000, the asking price, was ultimately too much.

By the time I graduated from Berkeley High School, in 1985, those Stinson Beach homes fetched more like $350,000, but even public school teachers and jazz musicians could still buy modest homes in Berkeley's lesser neighborhoods. Families like mine were building a secular religion around cross-country skiing in winter, rafting or kayaking on the springtime melt, climbing Yosemite's cliffs with great new safety gear, and enjoying cold-water surf courtesy of new wet suit technology. Food, too: organic produce, local oysters, California king salmon, Napa wine.

It was soft hedonism, admittedly, but a decent life that remained more or less available right through my early adulthood — as in 15 years ago. That's when my wife and I — "arguably the last two writers ever to buy a home in San Francisco," says Mr. Starr — bought a fixer-upper in an unfashionable neighborhood with a street gang on the corner. Even as our daughters went off to preschool, it seemed plausible that we might pass on our lifestyle to them.

I REALIZE that most Californians do not live in my Northern California bubble, and I have no doubt that it all looks very different to the brothers from Chiapas, Mexico, who once helped me remodel my house, and who then spent their modest earnings on land back home; or to fourth-generation Japanese-American kids whose great-grandparents lost everything when the federal government incarcerated their families in World War II internment camps. But I do know that all over Northern California, there is a profound mood of loss: Oakland, long a bastion of African-American cultural life, has seen housing rental rates jump 20 percent this past year; San Francisco's lesbian bars are closing, and the Castro gets less gay by the year.

Then there's the shock of raising kids with public schools ranked among the worst in the nation, and public universities that have more than doubled in cost since 2007. Most of my outdoor pleasures are still available, but it's getting scary with the desertification of subalpine ecosystems, Sierra snowpack at a historic low, as much as 20 percent of California's once-majestic forests at risk of dying, and free-

co-owner of the nearby Hog Island Oyster Company, where the big issue is excess atmospheric carbon dioxide raising ocean acidity so fast that oyster larvae struggle to build shells. "The California dream of us being wet and making a living and enjoying ourselves may be threatened," he says. "I have kids, and I want that dream intact for them, but it may not be the same dream. I may not be growing the same organism. I am hopeful, but I am extremely concerned."

Everybody is — except, of course, those living the most obvious new California dream, the technology gold rush. Try telling successful 25-year-old entrepreneurs in San Francisco that California's over and you'll get blank stares as they contemplate stock options, condos going up all over the city, restaurants packed nightly and spectacular organic produce at farmers' markets every day.

It's not only 25-year-olds saying that. "You're a naturalist, Duane, so of course you see it through that lens," said Mr. Starr, later in our conversation. "But don't lose sight of all the great new things happening, all over California. Marc Benioff just built one of the greatest pediatric hospitals on the planet a few miles from your house! And this whole tsunami of foreign investment pouring into California is really a ringing endorsement of the dream."

I drive by Mr. Benioff's hospital every day, and I know that Mr. Starr is right. I am also impressed, sincerely, by all these brilliant people making fortunes seemingly overnight. I recognize that prosperity is better than its absence, and I like the fact that Californians still help make the future look hopeful, by developing better solar panels and electric cars, sustainable agriculture and marine-protected areas that preserve fish populations and their habitats. I have also noticed the friendly crowds jostling my elbows at every surf break and on the shockingly long lines below Yosemite rock climbs. These people have as much fun as I ever did, loving the only version of California available to them.

But that's my point. Wallace Stegner, the great 20th-century novelist and envi-