

New York Times, Science Section March 23, 2003

SCIENTIST AT WORK -- JONATHAN SHAY; Exploring Combat and the Psyche, Beginning With Homer

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At age 40 Jonathan Shay had life by the tail. He had his own lab at Massachusetts General Hospital and several papers published in prestigious journals. He was focused on the biochemistry of brain-cell death, with its relevance to strokes.

But life takes sudden twists. As Sophocles wrote in Athens 2,400 years ago, no one should be counted happy who is still alive. Dr. Shay soon had reasons to contemplate that line, and plenty of time.

That year he turned 40, Dr. Shay, the professional student of strokes, had one of his own. He emerged from a coma paralyzed on his entire left side. Not long after, his marriage ended. The family business -- which had paid the bills for his lively intellectual life through graduate school in sociology, a medical degree and a Ph.D. in neuroscience -- hit hard times. Medical research grants were getting scarcer, so even as he pulled himself together he found his work stalled.

"I had two great educations," he said, sitting in his pleasantly cluttered home in this Boston suburb. "The official one started in the suburbs of Philadelphia when I was a child. Then I had this second one."

As he was recuperating, Dr. Shay passed the time by "filling in the gaps" in his education. He read English translations of the Greek epics, the "Iliad" and the "Odyssey," and the Athenian plays and philosophers. That led to another twist of fate, a different scientific destiny.

Nowadays Dr. Shay, 61, is a psychiatrist who specializes in treating the

psychological damage combat inflicts on soldiers. His approach is woven out of the different strands of his life: part neuroscience, part evolutionary theory, part psychiatric empathy and part Homer.

When he argues that the military is too prone to treat soldiers as interchangeable parts rather than people, he will cite e-mail messages from Vietnam veterans, historical studies of slavery, work on stress hormones and Book 1 of the "Iliad." He may well be the world's only author who has appeared in *Nature*, *The American Journal of Physiology*, *Ancient Theater Today* and *Parameters: Journal of the U.S. Army War College*.

Late last year, Dr. Shay published his second book, "Odysseus in America," about the spiritual and psychic pitfalls that await combat veterans returning to civilian life. His first book, "Achilles in Vietnam," published in 1994, compared the experiences of soldiers in the Trojan and Vietnam Wars to argue that war's psychic wounds -- what is now called post-traumatic stress disorder -- have always existed.

Those spiritual injuries, Dr. Shay wrote, didn't arise just from bad luck in combat. They were the consequences of soldiers' feeling mistreated by their own commanders. Grunts who didn't feel cared for by the officers felt what Achilles felt against Agamemnon in the epic.

To his surprise, that book was welcomed in military circles, and he now counts many serving officers as friends and colleagues.

Maj. Gen. James N. Mattis of the Marine Corps, for example, worked with Dr. Shay in the 1990's on a study of Marine practices and was impressed. "While his proposals are often contrary to 'efficient' use of military manpower, they are, in fact, ways to make our military much more effective," General Mattis said in an e-mail message from the Persian Gulf, where he is commander of the First Marine Division. Dr. Shay, he wrote, "has influenced us to challenge the military's current practices in many areas."

Whether the military experience is told in terms of brain chemicals like cortisol and dopamine, military concepts like cohesion and morale, or universal human feelings like trust or love, Dr. Shay says: "These are different refractions of the same beam of light. So there's no dissonance for me going from one language to another."

Even the meaning of psychoactive drugs, Dr. Shay says, is multiple. When he prescribes the class of antidepressants known as selective serotonin reuptake inhibitors, he hopes for more than a change in brain chemistry, as the drug alters the balance of serotonin in the patient's brain. The effect is also a psychological experience, as the veteran feels less prone to rages. And it is a social experience, as well. "Social recognition has a physiological impact, and an S.S.R.I. triggers some of the same mechanisms as that social experience," he said. "Though I know enough about the nervous system to know that any drug we have is a crude simulacrum."

Like many scientists who cross disciplines, Dr. Shay keeps it all together with a unified, and controversial, theory. He believes that trust-destroying trauma has a single biology and a single psychology, whether it arises from political torture, prostitution, domestic violence or combat.

He has no use for particularists who want to keep separate accounts for the pain of Holocaust victims, soldiers and abused women. The experience of trauma is unique to each sufferer. Meanwhile, its biology is common to all. So comparing one group's pain to another, Dr. Shay argues, is pointless.

Making coffee for a visitor, he moves carefully and sparingly. (Long recovered from his stroke, he says he's a little stiff from moving items in his basement with one of his four adult children.) His tranquillity clearly isn't from lack of feeling. His voice turns to a passionate rasp as he recalls 20-year-old double-crosses and tears up easily as he speaks of his father, a professor of gastroenterology whom he lost at the age of 21.

A slight, bearded man, Dr. Shay somehow manages to seem calm without distance, and reserved yet straightforward. Two decades of working with the veterans have "scrubbed off" all that was inauthentic in his manner, he says.

As he recuperated from his stroke, Dr. Shay moved into psychiatry and began working at an outpatient clinic for veterans in Boston. "I thought I was making my way back to the lab," he says, paying his dues by substituting for a vacationing psychiatrist in the hospital's Veterans Improvement Program. The program treated the most troubled veterans

and had a reputation as a tough gig.

Then that doctor died. Dr. Shay decided to stick with the program he had fallen into. He felt honored by the glimmers of trust he read in the patients.

"They saw something in me that I didn't see in myself," he says.

Meanwhile, he was struck by how much the elements in their stories resembled what he had read in Homer.

"The 'Iliad' and the 'Odyssey' depict the moral and social world that real soldiers inhabit," he says. "I thought this was something everyone knew. I wrote up the similarities only because I thought it was a good teaching piece, a way to think about this that clinicians could use to make sure they covered all the bases."

His daughter, then an undergraduate at Harvard, showed his paper to Dr. Gregory Nagy, her classics professor. Dr. Nagy encouraged him to expand the idea. He rented an office -- his second wife did not want to live with both the Trojan and Vietnam Wars -- and slowly made the paper into "Achilles in Vietnam."

A decade later, Dr. Shay's books, papers and lectures remain rooted in his work with the hospital veterans' program. "I like to say I am a missionary from the psychologically injured combat veterans whom I've worked with for 20 years," he says. "They don't want other young kids to be wrecked the way they were wrecked."

That wreckage, he added, is not completely reflected in the standard diagnostic manual's definition of something many of them suffer, post-traumatic stress disorder. The manual lists symptoms like flashbacks, nightmares and a fight-or-flight response that cannot be turned off. The deepest danger, Dr. Shay says, is a different trauma, the loss of trust in others.

Achilles in the "Iliad," revolted by his commander's betrayal of the warrior code, drops out of life, an act that leads directly to the death of his best friend. Odysseus' lack of trust in anyone makes him deceive his men, leading to the deaths of every member of his crew. (In any modern military, Dr. Shay says, Odysseus' actions would have led straight to a

court-martial.)

The need for trust, Dr. Shay argues, comes from human prehistory. Without claws, wings or other natural weapons, human ancestors survived by watching one another's backs. As a result, Dr. Shay argues, the need for trust is part of human biology. Trust makes us feel safe; feeling safe is good for our mental and physical health.

American troops in Vietnam often could not establish deep bonds of trust because men were rotated in and out of combat as individuals. The troops found themselves fighting next to strangers. Dr. Shay described it as the human need for cohesion being at odds with a military doctrine from the industrial age -- "replaceable parts, centralized control and a division of labor."

As a psychiatrist, he finds many of his patients have grievances against their leaders -- for betraying their sense of what is right -- that are as bad as Achilles' against Agamemnon. For one Vietnam veteran, Dr. Shay writes in the new book, an unforgettable violation was watching a friend lose the right side of his face and the fingers of his right hand because his gun jammed during a show staged for the secretary of defense.

Drugs can treat this kind of psychological trauma, he says, and therapy can help. But the best thing for his patients has been to connect and trust. So in addition to therapy, the program puts many clients in touch with religious congregations and arts programs.

Now, after the United States has sent thousands of soldiers to the Middle East, Dr. Shay is recommending steps he hopes will reduce the chances for psychological trauma.

Prevention, he says, is a matter of accommodating people's human needs not to be treated as replaceable parts: send units in and out of combat together, rather than replacing individuals, which leaves people with strangers. The stronger trust that fighters have in comrades they know well is experienced as a sense of safety and confidence. There is nothing touchy-feely about the concept, Dr. Shay said, adding, "Those are combat strength multipliers."