

Photomacrographic analysis of used books:

Revealing damages on used books with high mag photography

By: Charlie Gray

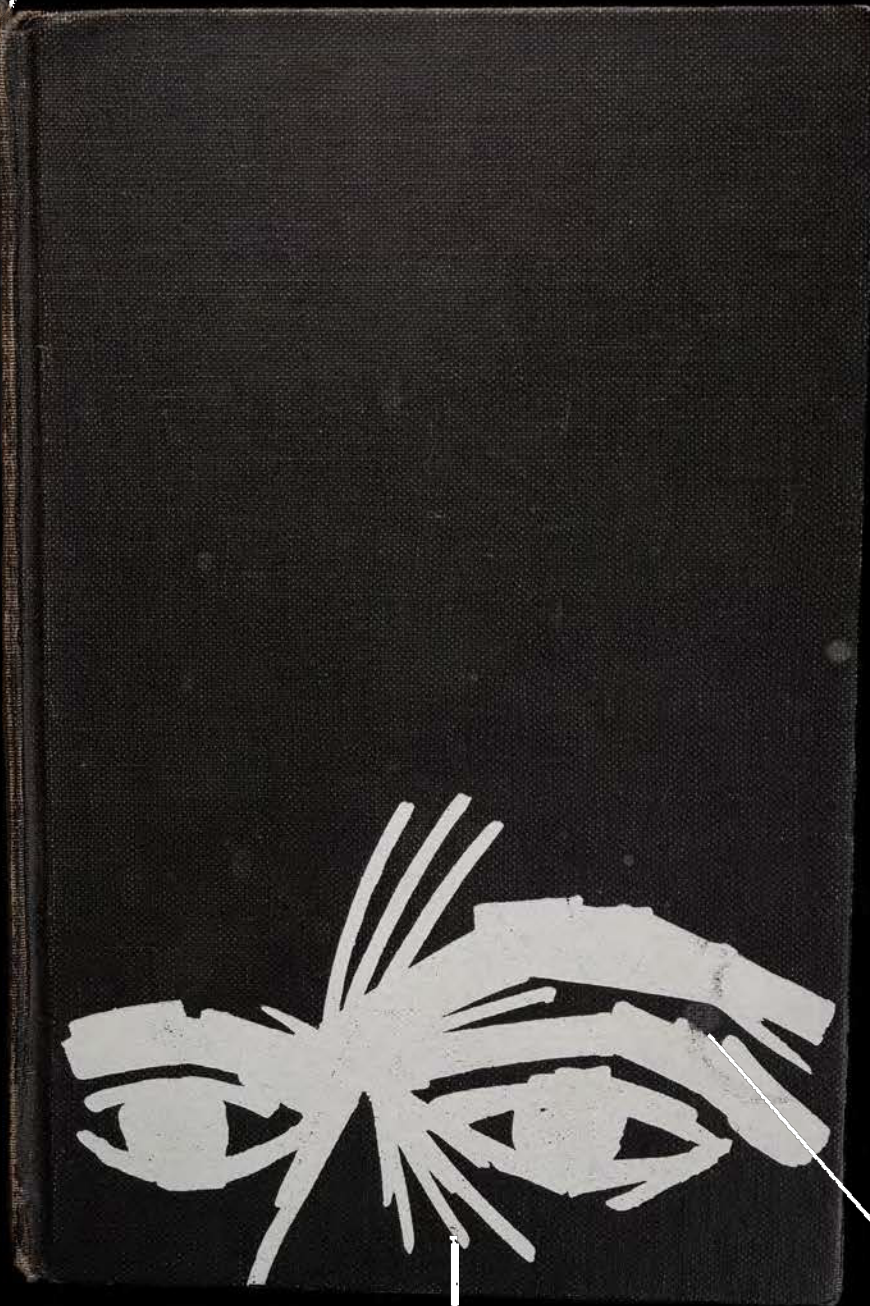
The books featured in this paper were put into my hands through providence. Many were recovered in used book stores, more came from library book sales and at least one was borrowed and never returned. The purpose of this paper is to investigate and summarize the damages wrought on the books with the aid of high magnification photography to gain a better understanding of the paths they've taken and owners they've had. I picked these 8 books because I felt they presented a diverse selection of damages, binding styles and sizes.



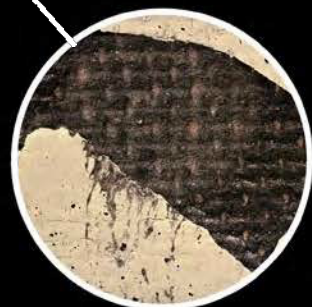
One Day in the life of Ivan Denisovich

By: Aleksandr Solzhenitsyn

Soviet dissident Aleksandr Solzhenitsyn's opus is both a damning critique of Stalin's justice system and a moving account of daily life in the gulag system. Much of the novel's impact is in its terse and minute descriptions of the protagonist's life and actions from the side work he does for cigarettes to the methodical way he eats.

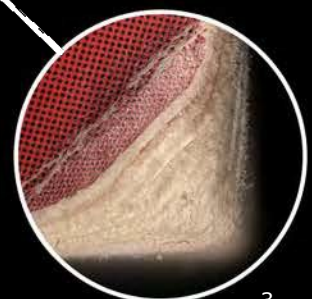
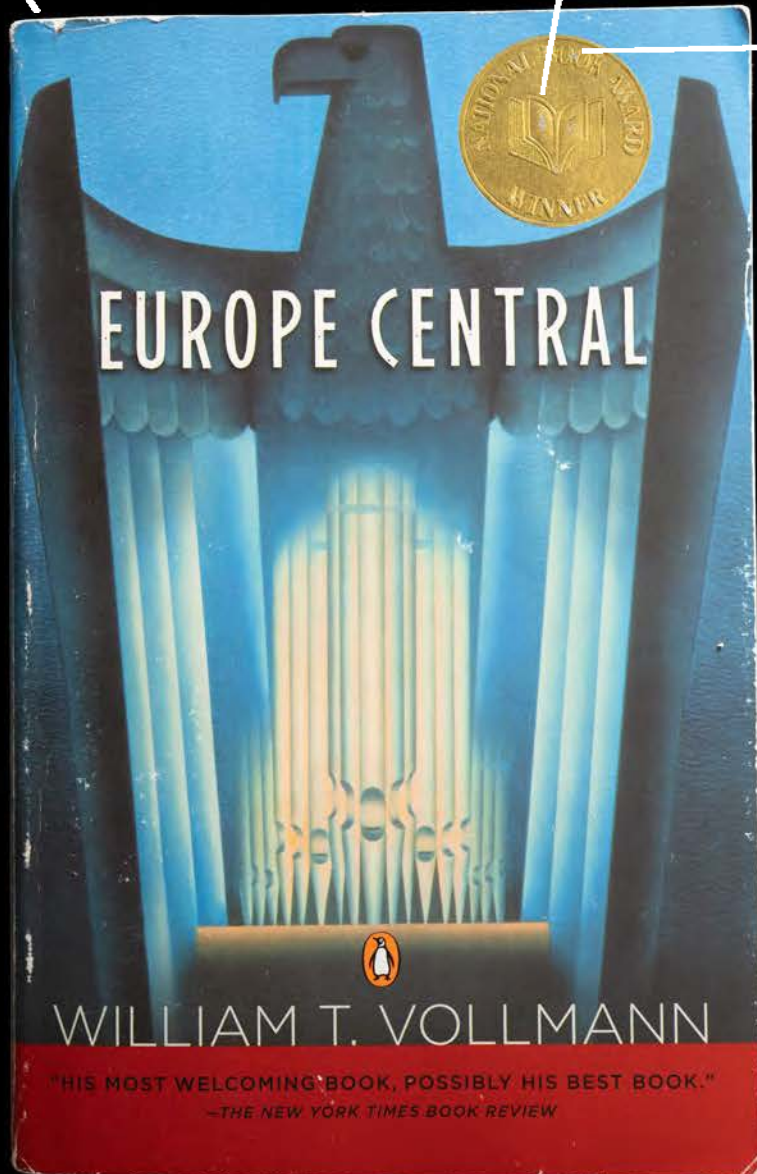
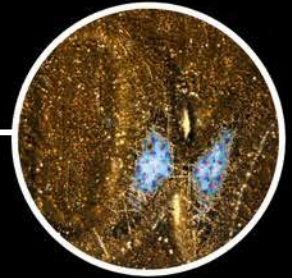
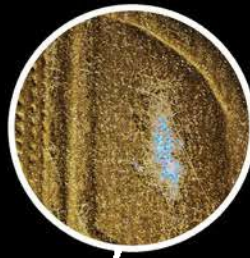
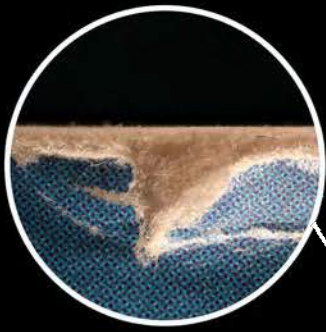


This hardcover copy is showing scratches (bottom left) and smudges (bottom right) from heavy reading in a Vermont rainstorm as well as fraying on the corners (top left) sustained before it made its way to the used bookstore where I bought it.



Europe Central

By William T. Vollmann

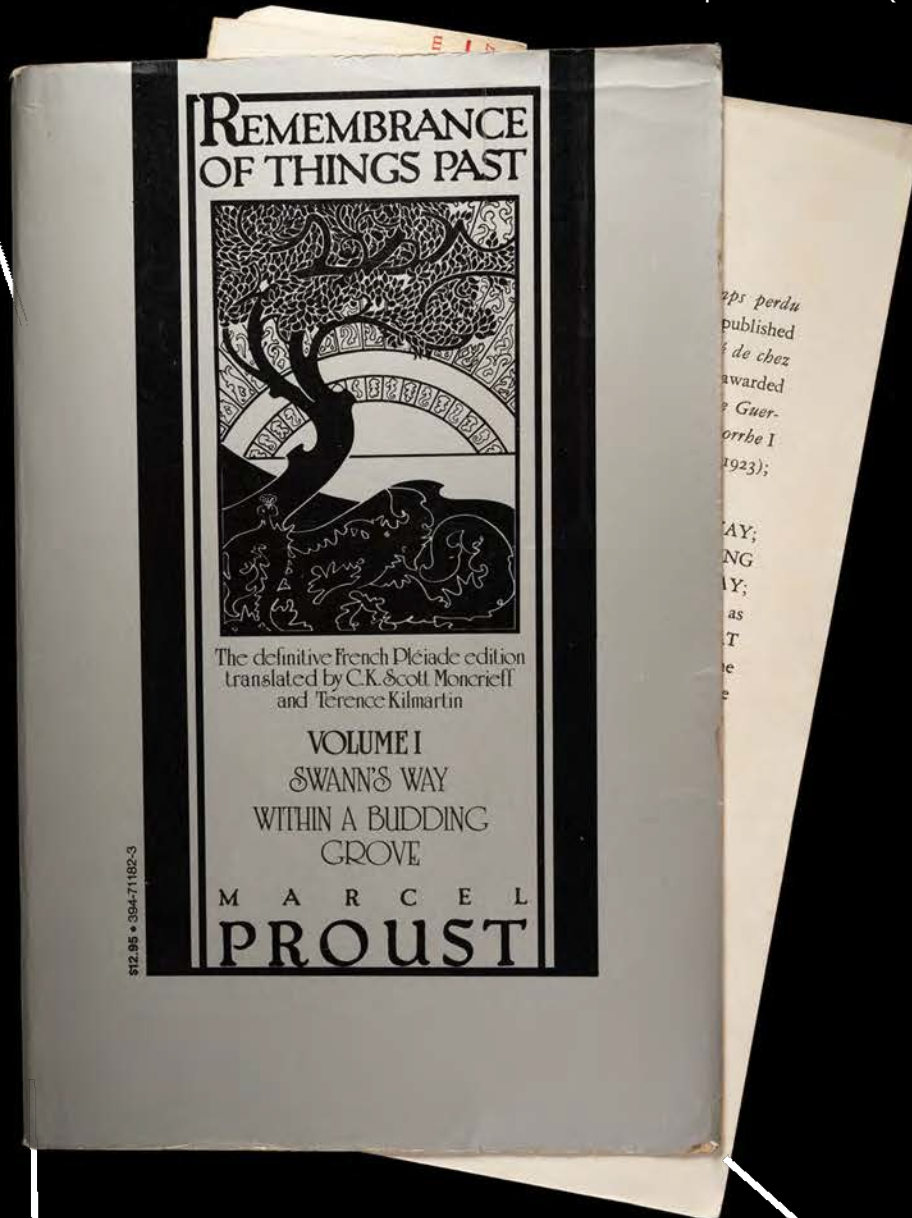


In this extensively researched novel, William T. Vollman set out to write parables from the eastern front in WWII. Each of the shorts within the book paints a character caught in between the power dynamics of Nazi Germany and Stalinist Russia making an all consuming moral choice. The incredibly dense novel shows the wear from several successive readers pulling it through their busy lives as they struggle to finish it. The National Book Award seal at the top right is scratched (top right), the cover is cut in several places (top left) and all the corners are bruised (bottom right).

Remembrance of Things Past Volume 1

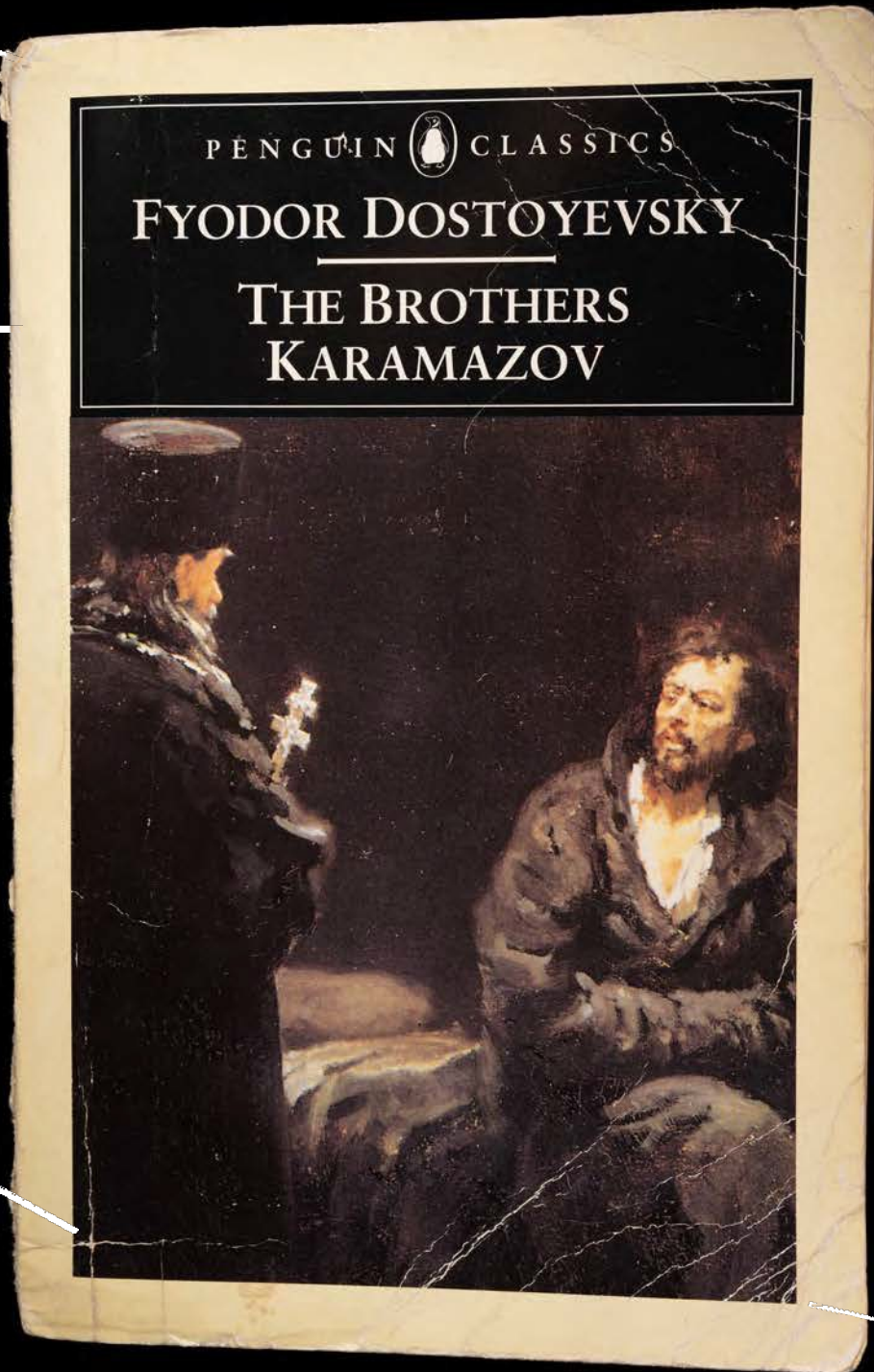
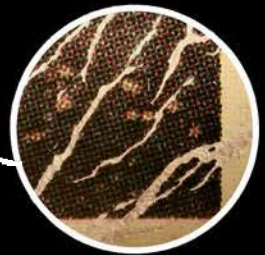
By: Marcel Proust

This unfortunate copy of Marcel Proust's debut novel has come fully unbound from its cover, shedding dried glue at every opportunity. This work, brimming with nostalgia, is a compendium of intricate descriptions of the narrator's memories. The remaining glue is stuck to both the cover (top left) and the spine of the pages (bottom left), it appears smooth and almost ceramic (center left). The rest of the novel has not escaped unharmed and the cover is scraped and torn (bottom right).



The Brothers Karamazov

By: Fyodor Dostoyevsky

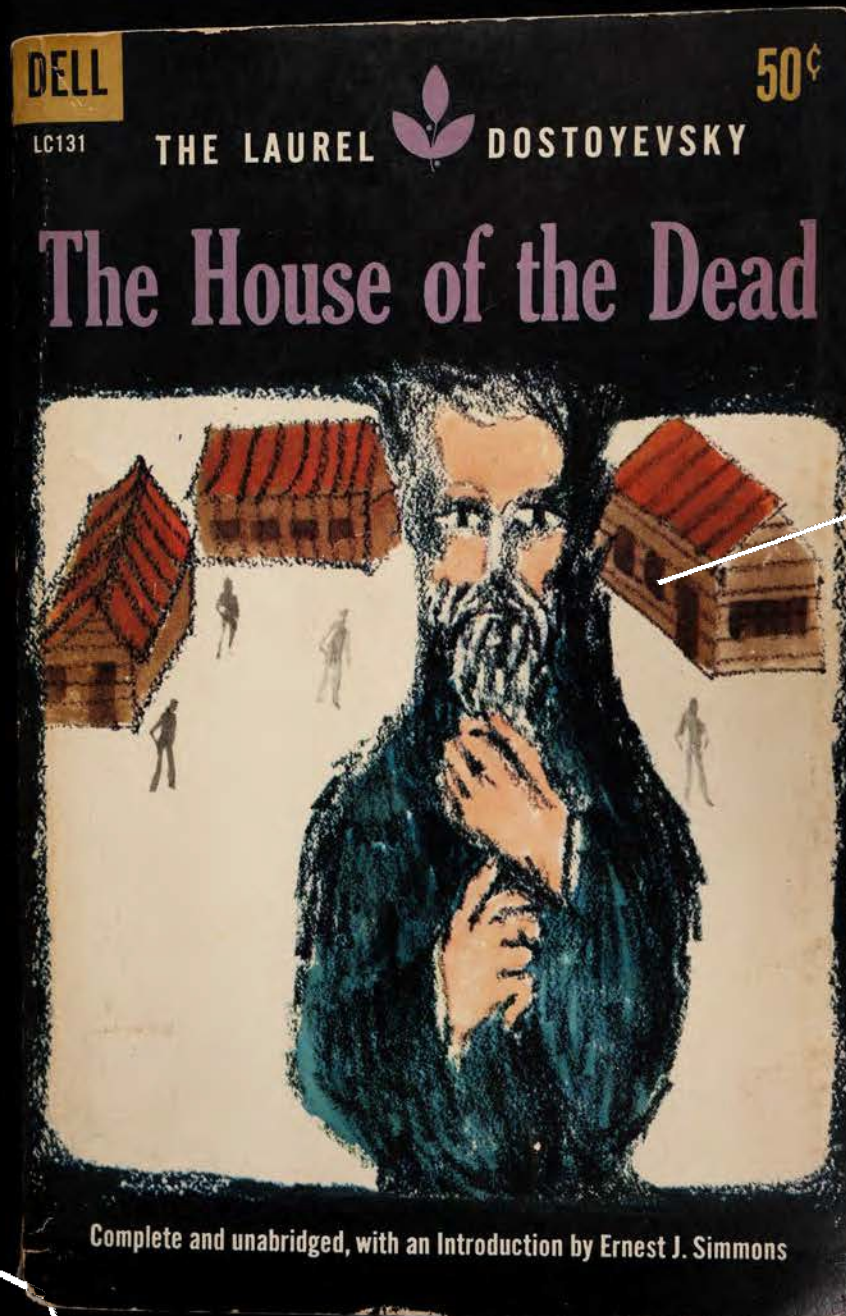


Dostoyevsky's final and longest novel centers around the apparent patricide of Fyodor Karamazov and the battle for the Russian soul. Similar to his other great works, each of the brothers represents a moral philosophy that Dostoyevsky tables for discussion. Published four months before its author's death, the misdeeds, wanderings and debates of the brothers immortalize his final messages regarding faith, freedom and the future of Russia. This copy was lugged around in a backpack for my reading of its 880 pages and in the process the spine was wrinkled (left) and frayed (top left) as well as significant wrinkles on the cover (bottom left & right).

The House of the Dead

By: Fyodor Dostoyevsky

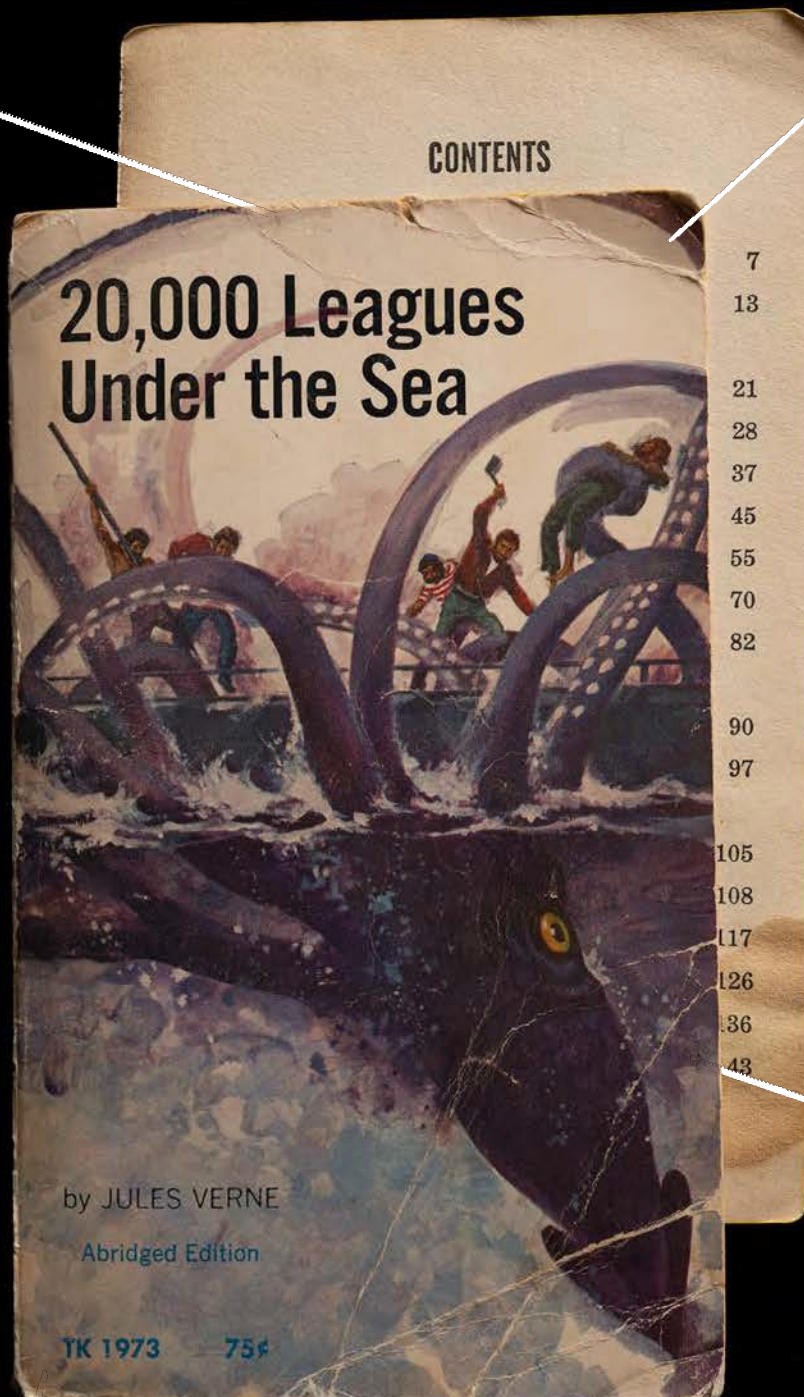
Dostoyevsky's fictionalized account of his experiences in a tsarist gulag stands out from his oeuvre as a shorter novel less focused on philosophical argument; it is considered by Tolstoy to be his greatest work. The novel's framing device claims that the enclosed story was found in the personal effects of a dead ex-con who remained in Siberia to tutor after serving his term.



This ex-con's constant habit of pacing his room while composing foretells the entire novel, it's the story of a man trying to escape his memories by sealing them within a book. A chance find in the 'pre 20th century' section of a book sale, this copy is showing its age considerably; the cover is detaching from the binding (bottom left) and the cover is cut (top right).

20,000 Leagues Under the Sea

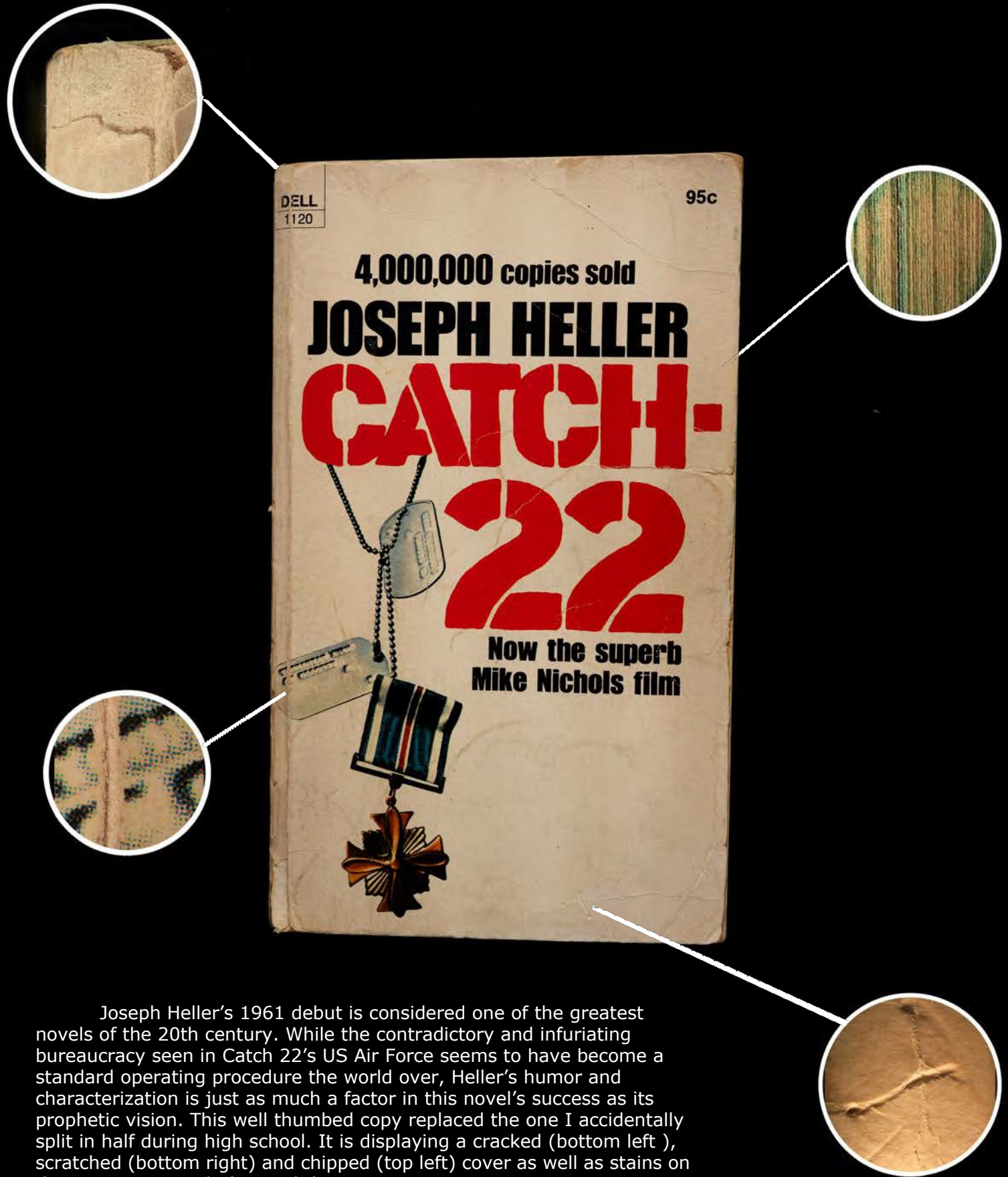
By: Jules Verne



Published serially, Jules Verne's 20,000 Leagues Under the Sea is one of his major works. Reading like a break-neck tour through an encyclopedia on aquatic life, the novel's nautical vignettes leave little room for plot or characterization. Much like Captain Nemo's Nautilus, this used copy has sustained several injuries on the long route it took between various owners before I recovered it at a book sale. The first page has been written on (top left), been stained with coffee (bottom right) and has finally been ripped out (bottom left). The cover is also extensively wrinkled (top right).

Catch 22

By: Joseph Heller

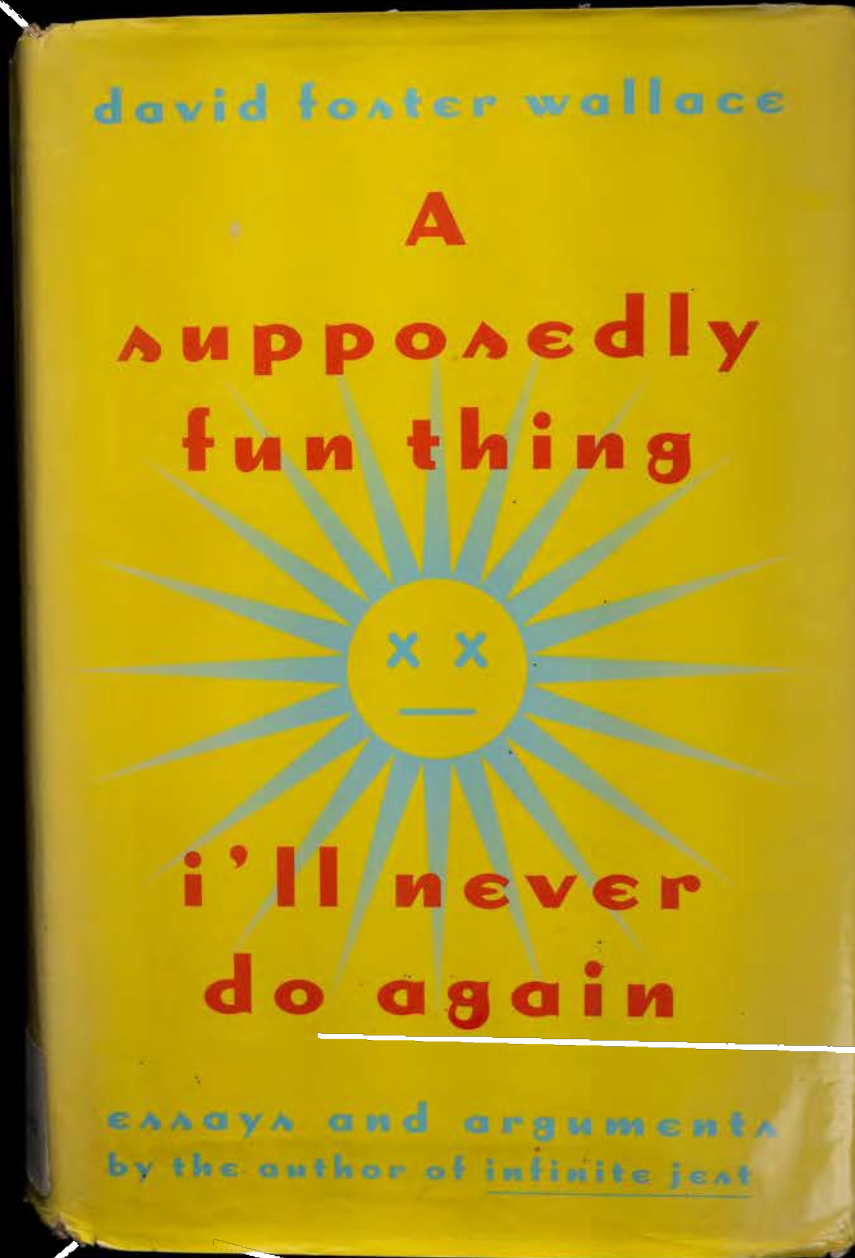


Joseph Heller's 1961 debut is considered one of the greatest novels of the 20th century. While the contradictory and infuriating bureaucracy seen in *Catch 22*'s US Air Force seems to have become a standard operating procedure the world over, Heller's humor and characterization is just as much a factor in this novel's success as its prophetic vision. This well thumbed copy replaced the one I accidentally split in half during high school. It is displaying a cracked (bottom left), scratched (bottom right) and chipped (top left) cover as well as stains on the green page ends (top right).

A supposedly fun thing I'll never do again

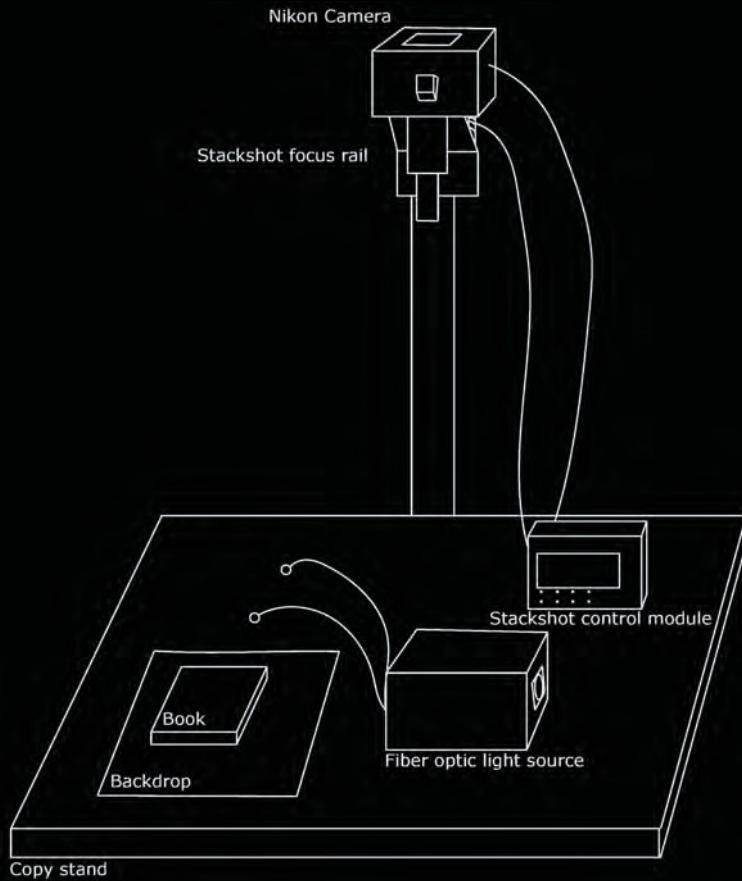
By: David Foster Wallace

This collection of short nonfiction pieces by the infamous David Foster Wallace presents a deconstructed memoir of the writer at a pivotal point in his career. Written in parallel with his monumental *Infinite Jest*, the collection shows the evolution of Wallace's style towards complexity while providing the reader with myriad anecdotes of his Midwestern upbringing. The mustard yellow copy pictured here started life as a public library copy before it was sent to the book sale where my parents picked it up. Along the way the second half of the book has nearly slipped from its binding (center bottom) as the dust jacket (bottom left) and hardcover (top left) have been victimized by untold numbers of uncaring hands. This copy is also bearing stains (bottom right).



Shooting information:

The macro images were shot on a Nikon z 7ii with a Lowa 2.5-5x lens mounted to a StackShot focus rail. The subjects were illuminated with dual fiber optic lights against a black velvet background and placed on a copy stand. The non-magnified pictures were taken on the same camera with the same background with two diffuse lights from a studio stand.



About the author:

Charlie Gray is currently a senior at the Rochester Institute of Technology pursuing a degree in scientific photography with a minor in literature and media. He's passionate about books and hiking and hopes you've enjoyed this paper.

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