

STAR TREK'S Half-Century Voyage



ROCHESTER FACULTY AND ALUMNI HAVE COMPOSED ITS THEME, WRITTEN EPISODES, AND REFLECTED DEEPLY ON WHY STAR TREK RESONATES.

By Karen McCally '02 (PhD)

With additional reporting by Sofia Tokar and Dawn Wendt

IT'S A VOYAGE THAT BEGAN 50 YEARS AGO, on Thursday evening, September 8, 1966. The television series *Star Trek*, a western for Cold War America, introduced us to Captain Kirk, Mr. Spock, and the starship *Enterprise*, inviting us “to boldly go where no man has gone before.”

The show attracted a small but passionate following in its three-season run. That fan base would grow exponentially in size and influence in the 1970s, as a generation of latchkey kids tuned in to *Star Trek* reruns, a staple of after-school broadcast lineups. From that decade forward, *Star Trek* grew as a franchise. Including the television series *Star Trek: Discovery*, slated for a January 2017 release, the franchise consists of six television series and 13 films, as well as books, magazines, comic books, action figures, games, and other memorabilia.

Rochester faculty and alumni have made important contributions to the show, starting with its iconic theme, the work of composer Alexander Courage '41E.

Reginald Barclay, the awkward, brilliant *Next Generation* lieutenant whom cohorts derisively nickname “Broccoli”—before he ends up saving the *Enterprise*—is the creation of Rochester English professor Sarah Higley.

From the beginning, *Star Trek* has attracted a cerebral sort. It

had geek appeal long before geekdom became the badge of honor it is today. We shouldn't be surprised, then, to find an abundance of steadfast fans among Rochester faculty and alumni.

Many work in science and technology. The series and films may not always depict scientific principles accurately (see “A Physicist's Take,” p. 45), but they invite us to imagine what a high-tech future might look like.

Humanists who love *Star Trek* say it stimulates the social imagination, inspiring us to think about a society liberated from constraints we often don't question.

Perhaps one reason for this crossdisciplinary appeal can be found in creator Gene Roddenberry's account of his own inspiration for the show. Looking to explore the changes and conflicts of the 1960s, Roddenberry found television executives wary.

“You really couldn't talk about anything you cared to talk about,” he said in an oral history conducted by Edward Gross and Mark Altman, and published earlier this year. “It seemed to me that perhaps if I wanted to talk about sex, religion, politics, make some comments against Vietnam, and so on, that if I had similar situations involving these subjects happening on other planets to little green people, indeed it might get by, and it did.”



'WAGON TRAIN TO THE STARS': The Starship Enterprise soars across space. *Star Trek* creator Gene Roddenberry envisioned the show as a modern day western—in his words, “a wagon train to the stars.”

TRANSPPOSED

PROD# M R P ORIGINAL MAIN TITLE (REVISED) 67/68

Handwritten musical score for Star Trek. The score is for a 4/4 piece, transposed. It includes parts for various instruments and voices:

- 3 Flts:** 1st Piccolo, 2nd, 3rd. Includes markings like "No vib.", "p", and "142 142".
- 100 W. W.:** Woodwinds.
- 2 Clar.** Clarinets.
- 2 Basses:** Bassoons.
- 3 Trumps:** Trumpets.
- 3 Tromps:** Trombones.
- Tuba:** Tuba.
- 100:** Percussion. Includes markings like "F.I. STARBUCK SKY", "SPACE", "PAUSE", and "THE FINAL FRONTIER".
- Soprano:** Vocal line with lyrics "AND EVERYTHING".
- Organ:** Organ part.
- BASS:** Bass line with large numbers 1, 2, 3, 4.
- 1 Harp:** Harp part.
- CELESTE 1 PNO.:** Celeste and Piano part.
- VIBRA:** Vibraphone part.

The score is divided into four measures, with a total duration of 1 1/2 minutes. The tempo is marked as 4/4. The piece is in a major key and has a 4/4 time signature.

A Memorable Score

A reproduction of the original Alexander Courage '41E score of the *Star Trek* theme is part of the Alexander Courage Collection at Eastman's Sibley Music Library. The collection includes many of Courage's original scores, scripts, sketches, notes, and recordings for films and television productions; arranged scores for pops orchestras and awards broadcasts; and sheet music, personal papers, and professional as well as personal photographs.

The Story of a Theme

Alexander Courage '41E Composer

"I have to confess to the world," said the late Alexander Courage '41E in 2000, "that I am not a science fiction fan." Oh, the irony.

From its eerie first notes, to its arresting fanfare, to its soaring climax, the theme that Courage composed for *Star Trek* in 1966 is among the most iconic in all of film or television.

Over his career, Courage was a prominent film and television composer with credits on films such as *Funny Face*, *Guys and Dolls*, *Showboat*, and *Doctor Dolittle*; and television series *Wagon Train*, *Peyton Place*, *Daniel Boone*, and *The Waltons*.

But it was his work on *Star Trek* that led to greatest acclaim.

In a tribute to Courage that appeared in *Rochester Review* following Courage's death in 2008, television and film composer Jeff Beal '85E wrote that theme music is "often at its most resonant when the use of an unforgettable melody somehow captures the feeling and essence of a dramatic world."

Courage "understood this well," wrote Beal, whose credits include the theme for the Netflix series *House of Cards*. "How could we ever separate the strains of his *Star Trek* theme from the



What's that Sound?

During the opening of *Star Trek*, the *Enterprise* races across the screen. What's the sound that accompanies it? It's Alexander Courage breathing into a microphone.

Producers tried a variety of electronics to try to get just the right sound, but with no success. "I said, 'Look, it won't cost you anything,'" Courage told music journalist John Burlingame in 2000. Watching the screen as the *Enterprise* flew by, Courage delivered a breathy roar into the mic. "And that's what they used," he said.

triumphant French horns and the theremin-like female vocal?"

When he was hired to compose for *Star Trek*, he saw it as just another job for "just another show," Courage recalled in that same 2000 interview, conducted by film and music journalist John Burlingame for *Emmytvlegends.org*.

"Little did I know when I wrote that first A flat for the flute that it was going to go down in history somehow," he said. "It was a very strange feeling."

Hope in a Fractious Age

Jeffrey Tucker Associate Professor of English

"There was a kind of utopian vision that the show offered," says Jeffrey Tucker, a science fiction expert who teaches a course on utopian literature.

"A key aspect of utopian philosophy is the notion of hope. Hope is a forward-looking psychological process, and just the notion that the status quo can be revised and improved—and even, I think my father said, that the species will survive and exist into the 22nd

or 23rd century—in the mid-to-late 1960s that idea probably had a lot of weight. It was during the Cold War. It was the Vietnam era." And the species does more than survive in *Star Trek*, Tucker adds. It "expands its scope and explores the final frontier, and engages with other civilizations in a mostly constructive way, as opposed to destructive.

Certainly there are conflicts, and wars and battles represented, but the

whole idea is about exploration and sharing, cultural and economic exchange as opposed to domination."

Tucker notes there are opposing interpretations, namely one that sees the starship's exploration as a form of colonialism. "To what extent are the *Enterprise* and the Federation of Planets instruments of economic and military dominance, and to what extent are they vehicles for cultural and economic exchange? I think the creators intended the latter," he says, "but if we're to be responsible audiences, we have to be open to that other way of responding to the story, or at least be aware of how the history of colonialism and expansionism at least shadow, if not shape, the stories in the classic series." As for the later series, "I think *Next Generation* and the subsequent series worked harder to get out of that mind-set," he adds.

My father watched *Star Trek*. He was a big fan. When I was a kid, the show was in reruns, and I watched those with him. I don't know that I really got the concepts. I think I watched it because it was colorful, and it was a bonding experience with Dad, who read a lot of science fiction. And that's sort of where my interest in the genre came from.



What Gender Is that Alien?

Tucker notes that *The Next Generation* explored gender identity long before the idea of fluid gender identity or the word transgender moved beyond relatively small communities and into the American popular discourse.

In the episode "The Host," the starship doctor discovers that members of an alien race are actually human hosts with a symbiotic creature (Tucker describes it as a worm) living within them. They share a consciousness, but the worm's lifespan exceeds that of humans. When the human host dies, the worm enters another host.

"The worm and the human host share a consciousness," he says. "But the worm can live for centuries. When its host dies, the worm leaves and goes to another human host. What happens if it goes from a female host to a male host? All of that female host's memories and identities go along with the worm into its new host. So is that human male, female, both, or something else?"

LIVE LONG AND PROSPER: Mr. Spock figurine from the 2009 film *Star Trek*.

Introducing Holodiction

Sarah Higley Professor of English

Sarah Higley was in her third year of teaching medieval English literature at Rochester when she drafted a script for *Star Trek: Next Generation*. Having grown up on *The Original Series*, she started watching *The Next Generation* and quickly found herself both intrigued and skeptical.

Higley was fascinated by the holodeck, which had become a major feature of the *Enterprise* starting early in the first season. The holodeck was an enclosed room programmed to simulate any environment and create any holographic characters its users chose. "It was a rich source of role play for those who entered it," Higley says. But she found its portrayal "too wholesome. Crew members engaged in all sorts of adventures in the holodeck without psychological repercussions. Here we were, addicted to television. Where was the addiction to something like the holodeck?"

"I started writing this story about Reginald Endicott Barclay III," she says, "who was not well-adjusted, but who was a genius, and was admitted into the academy, and got on the *Enterprise*, but gradually started slipping, because of his unhappiness and his cynicism, into the holodeck." Her intention was to introduce a more three-dimensional character, and one more flawed and less heroic than characters such as Picard, La Forge, or Riker. And Barclay modified them in the holodeck, creating caricatures of them. She submitted her script, which she titled "Hollow Pursuits," and it was accepted—provided she rewrite it. The show's coproducer Michael Piller "wanted all of the episodes to have a certain quality to them. He wanted them to be

I started watching the show as a teenager, and was drawn to Mr. Spock. I thought he was one of those uncrack-able, admirable, intellectual individuals that I hadn't seen before. I was also in competition with my best friend, Phyllis, who loved the swagger of Captain Kirk, and I didn't go for it. I wanted a nut to crack.

upbeat," she says. The producers loved the concept that Higley coined as holodiction, but were lukewarm about Barclay.

"They told me, 'we like the premise, we like the whole idea of holodiction, but you have to have something that this character, Reginald Barclay, will solve, so that he stops being a Walter Mitty character and becomes the hero of the day.'"

She responded to the producers' wishes, and when she viewed the finished episode, discovered something startling.

"When I saw the episode, I realized how much of it was an analogy of me writing an episode for *Star Trek*," she says. Barclay was "an alien element" who repurposes the holodeck, refashioning his crew members to serve his psychological needs. But he's forced, in the end, to abandon the holodeck. He saves the starship from a technical malfunction that threatened to destroy it. At the end of the episode, he bids goodbye to his simulated versions of the crew members to take his place among the real ones. "And I thought, 'My god, that is me!'" Higley says. "I was told umpteen times how I could and couldn't portray the characters. I was projecting that onto Reginald Barclay."

Higley has mixed feelings about her experience working with *The Next Generation's* showrunners. As a scholar, she retains control over her published work to an extent not possible in the world of television and film. But even with the compromises she had to make, the episode crystallized a basic truth about virtual reality. It's a wondrous technology, with the capacity to enhance our lives in this world—or, very often, and at least for some of us, to lead us away from it.

STAR TREK: "Hollow Pursuits" - 2/9/90 - TEASER

1 CONTINUED:

The Holo-Guard groans, Barclay smirks, takes a gulp of synthehol and gestures with the glass at Holo-Riker.

BARCLAY

"Insubordination."

Holo-Riker seizes his arm and slops the drink; Barclay turns quickly, gets a half-nelson on Holo-Riker and strains him painfully against the counter.

BARCLAY

Riker, you're nothing but a pretty mannequin dressed up in a fancy uniform. You're full of hot air and nothing else, and if Picard has a problem with me, he can come and tell me himself...

Barclay gives him one last hard push before releasing him. Defeated, Holo-Riker slips wearily down and leans against the bar. Barclay moves threateningly at Holo-Geordi, who retreats, runs out of the room, scared to death. Barclay saunters over to the table where Holo-Troi is seated. He picks up her willing hand.

HOLO-TROI

I feel your confidence, your arrogant resolve. It excites me.

COM VOICE OF THE REAL GEORDI --

GEORDI'S COM VOICE

...ent Barclay, report to Main

MARKUP: Showrunners were keen on the basic elements of Higley's script, but wanted substantial changes to highlighted sections.



Jonathan Frakes as William T. Riker in *Star Trek: The Next Generation*.

William T. Riker and William H. Riker

Fans may have noticed that *The Next Generation*'s Commander William T. Riker bears the same first and last name as the late William H. Riker, the influential founding chair of Rochester's political science department. Is there any connection? In fact, no. Putting the rumor to rest are professors Gerald Gamm and Richard Niemi, both of whom declare there is "absolutely no connection" between the two Rikers.

Detail and Heart

Thomas Perry '74 (PhD) Novelist and screenwriter

Thomas Perry and his wife, Jo Perry, are both trained as scholars of literature, and both turned to novel and screenwriting as their profession. They'd been writing steadily for the CBS prime-time television series *Simon & Simon* in 1990 when they cowrote "Reunion," episode 80 of *Star Trek: The Next Generation*.

"Jo and I liked *Star Trek*, and Mike Piller, who had been a producer and head writer for a couple of seasons when we were coproducers of *Simon & Simon*, was working as a writer and coproducer on *Star Trek*," Thomas Perry says. "Mike called us and asked if we wanted to write an episode. Because we liked and respected Mike, we were happy to do it."

"Reunion" tells the story of an ambassador who makes a visit to the *Enterprise* to alert Captain Picard that the leader of the Klingon Empire has been poisoned. Picard is to choose the successor, a competition between two rivals.

"One reason for the show's success," Perry says, "is that the stories were all about human emotions, and not about futuristic hardware. We were already used to Mike Piller asking for stories with heart, and on that show, his bosses seemed to support that policy. This gave the show a timelessness, which contributed to its longevity. Human nature doesn't go out of date."

That's not to say that the show's creators didn't put great effort into the depiction of "futuristic hardware." Says Perry:

"The first thing a freelance writer doing an episode noticed was how meticulously the show was run. Every television show had what was called a bible. It contained a description of every previous episode, so the staff didn't have to listen to pitches for episodes they'd already done, or turn out an episode that contradicted an earlier one. At *Star Trek*, the bible was seven booklets, if I recall correctly. There was one about the physics of the fictional universe, another about the starship *Enterprise* and its gadgets, another about the anthropology of *Star Trek*. Everything on that show seemed to be run with similar precision and attention to detail."

ADAM FENSTER (SCRIPT, FIGURINE); AF ARCHIVE/ALAMY (FRAKES, SHATNER, BROOKS); PHOTOS 12/ALAMY (STEWART); UNITED ARCHIVES GMBH/ALAMY (MULGREW)

Star Trek: A Brief Overview

Star Trek began as a television series created by Gene Roddenberry. It's since grown into a multibillion-dollar media franchise consisting of several additional series, all distinct iterations derived from the original, as well as 13 films. Here's a timeline of the major *Star Trek* television series, as well as a brief synopsis of each:

Star Trek: The Original Series 1966-69

Set in the 23rd century, introduces the spaceship known as the starship *Enterprise* and its crew. Leading the mission—to seek new civilizations within the galaxy, "to boldly go where no man has gone before"—is **Captain James Kirk** (William Shatner), an Earthling with a wild streak, and first officer **Spock** (Leonard Nimoy). Spock is half-Vulcan, an alien being dominated by reason over emotion. Although cancelled after three seasons, *Star Trek* gained a small, cult-like following that greatly expanded during the 1970s, when the show was in reruns.



The Next Generation 1987-94

Set in the 24th century, introduces a new starship with a new crew, led by **Captain Jean-Luc Picard** (Patrick Stewart). The mission remains the same, albeit updated with the gender-neutral call "to boldly go where no one has gone before."



Deep Space Nine 1993-99

Set in the 24th century, introduces the space station Deep Space 9, led by **Captain Benjamin Sisko** (Avery Brooks), and situated in the most distant regions of explored space. The discovery of a wormhole sends the crew into vast uncharted territory.

Voyager 1995-2001

Set in the 24th century, introduces **Captain Kathryn Janeway** (Kate Mulgrew) of the U.S.S. *Voyager*. Janeway and her crew are trapped by alien technology 70,000 light-years from Earth. The mission is to return home.



Enterprise 2001-05

Prequel to *The Original Series*, *Enterprise* takes place in the 22nd century, before the founding of the United Federation of Planets.

Discovery To be released in 2017

Also a prequel, *Discovery* will cover the period between the end of *Enterprise* and the beginning of *The Original Series*.

From top: William Shatner, Patrick Stewart, Avery Brooks, and Kate Mulgrew.





Lt. Nyota Uhura
(Nichelle Nichols)

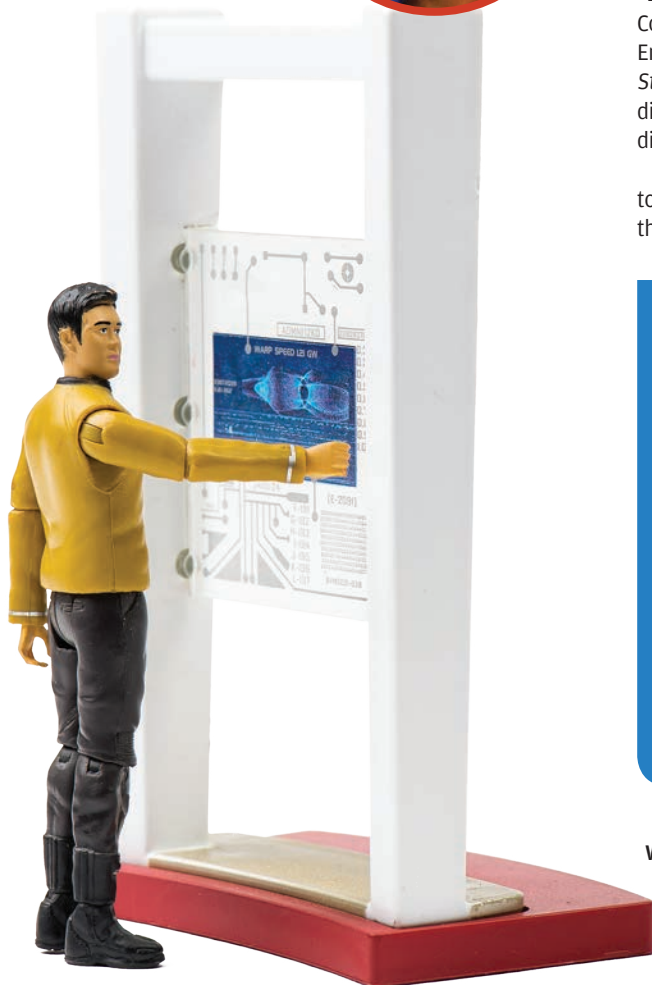
What's Your Server?

In the earliest days of email, as we collectively marveled at our newly expanded capacity for instantaneous communication, the staff of Academic Technology Services was inspired to name the University's servers after *Star Trek* characters. Which email server were you on?

- **uhura** (Lieutenant Nyota Uhura)
- **troi** (Deanna Troi)
- **riker** (William Riker)
- **laforge** (Geordi LaForge)
- **picard** (Jean-Luc Picard)
- **guinan** (Guinan)
- **ro** (Ensign Ro)



Lt. Commander Geordi La Forge (LeVar Burton)



The Next Generation ... Voyage to Heterotopia

Aviva Dove-Viebahn '10 (PhD) Honors Faculty Fellow, Barrett, The Honors College at Arizona State University

Science fiction has often been perceived as the province, primarily, of men—fantasy worlds chock full of gadgets and ultrapowerful humanoids. The irony, says Aviva Dove-Viebahn, is that science fiction “allows you to really play with social norms and to buck social norms”—including gender roles and stereotypes.



B'Elanna Torres (Roxann Dawson)

As a teenager, Dove-Viebahn was captivated by *Voyager* in large part because of the show's female lead, Captain Janeway.

Janeway “was a scientist and an explorer,” she says, “and fully invested in this role without being super girly, and without being masculine either.”

She was also drawn to the character B'Elanna Torres. “I'm biracial,” Dove-Viebahn says. “And B'Elanna Torres is half Klingon and half human. She struggles with this idea of being a hybrid. And

as a biracial teenager, coming to terms with the two sides of my identity, I was really drawn to her storyline, too.”

As a graduate student in visual and cultural studies at Rochester, Dove-Viebahn published an article in *Women's Studies*, a major interdisciplinary journal, entitled “Embodying Hybridity, (En)gendering Community: Captain Janeway and the Enactment of a Feminist Heterotopia on *Star Trek: Voyager*.” A heterotopia “emphasizes diversity rather than consensus,” she says. “Heterotopias offer a place for people to be different, but to still be able to collaborate.

“A collaborative space in which everyone's voice is given equal merit—that functions to me as a kind of ideal feminist space. And of course Captain Janeway as leader of that space adds an extra feminist layer to that.”

When I was a kid, maybe seven or eight, I started watching The Next Generation with my mom. I got really into it. And when Voyager came on, that was the first series I watched from beginning to end, again, with my mom. My dad watched too, but he wasn't as into Star Trek as my mom and me.

Inspired by Star Trek

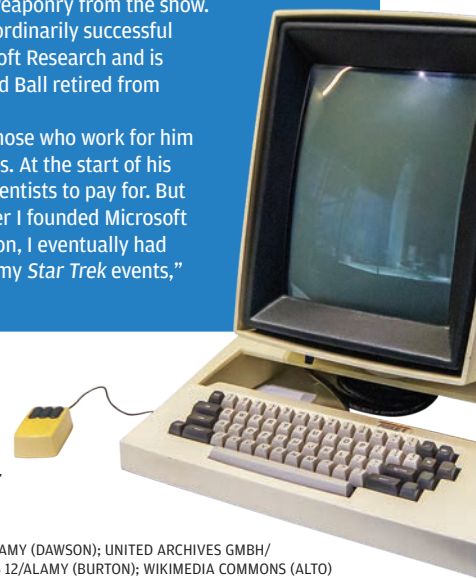
As graduate students in computer science at Rochester, Rick Rashid '80 (PhD) and Gene Ball '82 (PhD) codeveloped the *Star Trek*-inspired *Alto Trek*, one of the earliest networked computer games. Designed for play on the Xerox Alto computer, the game involved play in a universe of 16 star systems and included spaceships (named *Klingon*, *Romulan*, and *Terran*) and weaponry from the show.

Rashid and Ball went on to long and extraordinarily successful careers at Microsoft—Rashid founded Microsoft Research and is a chief technology officer at the company, and Ball retired from Microsoft as a senior scientist.

Since 1980, Rashid has regularly treated those who work for him to viewings of the *Star Trek* franchise's movies. At the start of his career, he only had a few fellow computer scientists to pay for. But as his success grew, so did the tradition. “After I founded Microsoft Research in 1991 and built out the organization, I eventually had hundreds of employees and their families at my *Star Trek* events,” he says.

WARP SPEED: Figurine and control panel from the 2009 film *Star Trek*.

Xerox's Alto Computer



A Physicist's Take

Dan Watson Professor of Physics and Astronomy

Among people in science and technology, *Star Trek* fans abound. Dan Watson, chair of the physics and astronomy department, is among them.

But that's not because the series or films illuminate much about science. Watson shows *Star Trek* films to his introductory astronomy students to show what's *wrong* with their depiction of physical science. "Astronomy 102 students learn enough about strong gravity, black holes, and time machines to detect the mistakes, and doing so is a good exercise for them," he says.

Watson regrets that the franchise's film creators in particular didn't place greater importance on scientific accuracy. They "had many more

resources to use to get it right," he says, compared to the creators of *The Original Series*, for example.

As for *Star Trek*'s technological gadgetry, he says, "We joke about holodecks, food replicators, and warp drives, but I suspect most of us are attracted to the same sorts of things that draw the humanities folks in." To the extent that there are films or television shows that inspire the imaginations of budding scientists, Watson says *2001: A Space Odyssey* is probably the best example.

"At least in part, this is due to Kubrick's and Clarke's attention to scientific accuracy in matters that are currently within our grasp," he says, referring to Stanley Kubrick and Arthur Clarke, who wrote the screenplay.

Star Trek's Moral Universe

William FitzPatrick Gideon Webster Burbank Professor of Intellectual and Moral Philosophy

"From its very beginning," says William FitzPatrick, *Star Trek* "explored themes of good and evil, power and moral corruption, peace and inescapable violence, and racism and equality; and in particular, took up issues concerning the moral standing of wildly diverse kinds of beings, from humanoids to intelligent energy clouds to sentient androids."

Many episodes inspired deep reflection. But one of FitzPatrick's favorites is "City on the Edge of Forever," which originally aired in spring 1967, during the first season.

Here's his take:

"Kirk, Spock, and McCoy are transported back in time, to 1930s Earth, and Kirk and Spock realize that Edith Keeler, with whom Kirk has fallen madly in love (what else is new?), must be allowed to die in a street accident. If she doesn't, the course of history will be radically changed, with the Germans winning World War II and everything the *Enterprise* crew know of their world vanishing in an instant, having never come to be.

"The situation raises basic moral questions about how to weigh one person's welfare against the larger good, how to balance special duties to those we love against impartial duties of beneficence, and the potential moral distinctions between letting someone die, preventing someone from being saved, and killing directly (for example, by shooting someone), for the sake of a greater good.

"One philosophical view, utilitarianism, tends to downplay such distinctions concerning means, holding that all that really matters is acting in whatever way will maximize the overall, impartially conceived good—the good as conceived 'from the point of view of the universe,' as Sidgwick famously put it. Often people hear a utilitarian message in Spock's famous quote from *The Wrath of Khan*: 'the needs of the many outweigh the needs of the few, or the one,' and they might read

Star Trek was the first television show I remember watching. I was about seven when it was first in reruns, and it was my first exposure not only to science fiction but also to serious moral reflection. It posed intriguing and dramatic moral dilemmas that fueled my later interest in moral philosophy. It was much more intellectually challenging than what I was getting in Sunday school.



William Shatner and Barbara Bouchet in "By Any Other Name" (1968).

Captain Kirk: He's No Kantian

"Spock relies always on logic, by which he means, roughly, strict rationality; McCoy is the voice of emotionally laden human experience and response; and Kirk is often the one putting both elements together," says FitzPatrick.

"Kirk also embodies an intuitive sense of when to follow rules and when to break them. The Prime Directive—the rule not to interfere with the natural development of alien civilizations—seems to exist primarily to be violated by Kirk whenever he judges that more important values are at stake, much to the displeasure of the Starfleet higher-ups. There's a certain practical wisdom, in Aristotle's sense, in knowing when to depart from fixed rules or algorithms. Kirk is much more of an Aristotelian than a Kantian in this sense, relying on virtues and practical wisdom for situational appraisals rather than simply applying rules.

"His wisdom is limited, of course, by his excessive fondness for aliens wearing miniskirts and sporting '60s hairdos."

it into the Keeler case as well. But that is a mistake, I think, and an oversimplification . . . The heavy focus throughout the series on the importance of individual dignity, freedom, and rights precludes any simple utilitarian interpretation of its moral sensibility. There are also plenty of opposing pulls from impartial rationality, personal emotion, and intuition that cannot be codified by any appeal simply to logic."