

TRIAL BY TV: POP CULTURE MEETS LAW

Law professor Dr. David Papke estimates that about one-half of prime-time television depicts lawyers, police and private detectives. He first noticed pop culture's love affair with the law when he was working toward a doctorate in American studies. Intrigued, he took a closer look at the legal themes, characterizations and lessons depicted in movies, television and literature. With these findings, he co-authored the textbook *Law and Popular Culture*, published August 2007, and teaches a corresponding class to law students.

"I saw an interesting shift in the portrayal of lawyers," Papke says, "from hero, the Atticus Finch and Perry Mason type, to everyman types in need of

redemption, like Ally McBeal; men and women who have gone astray and have to regain a moral path in their lives."

He also noticed a striking change in the character's role, which flipped from counsel for the defense popularized in the '50s and '60s to prosecutor in the '90s. "I think it's a harder, less-yielding era when people are more inclined to identify with those who crack down on wrong-doing than those representing the unjustly accused," he says.

Papke recognizes the impact such representations have on the public's perception of lawyers and legal practices. He appreciates the dilemma faced by real-life prosecutors, who say they can't measure up when pop culture presents

the wheels of justice turning at lightning speed, with a suspect caught, evidence collected, jury impaneled and brilliant prosecution concluded in a 60-minute episode. Add in how easily extraordinary forensic evidence is obtained, as depicted in the television series *CSI*, and the challenges are apparent.

"In real life prosecutors don't have such evidence at their disposal. Yet juries expect it and when they don't see it, they are more likely to think there's a hole in the prosecution's case," Papke says, describing what lawyers call "the *CSI* effect."

Literature hasn't been exempt. John Grisham, the lawyer turned novelist and America's best-selling author in the 1990s, captivated readers with dramatic legal dilemmas.

Papke warns students against underestimating the importance of popular culture in contemporary American life. "For some Americans, what they see on television becomes their entire cultural experience," he says. "It is especially important to law students to reflect on how laymen and women — their future clients — think about lawyers and legal institutions. There's no better measure to alert students to law-related assumptions and expectations than how the law is represented for dramatic purposes."



Real-life legal dilemmas don't always play out like a *Perry Mason* episode. Yet over the decades, famous fictional lawyers (such as Mason, played by Raymond Burr, left) have shaped the public's impressions of the legal process. Scholars from around the nation gathered to discuss the issue at the Marquette Law School's Law and Popular Culture Symposium last fall.

MPTV.net



CRAVING ANSWERS ABOUT APPETITE

The words “eating disorder” usually bring to mind dangerously thin teenagers — not fruit flies.

But understanding the eating habits of those tiny creatures could have huge implications, says Dr. Edward Blumenthal. An assistant professor of biological sciences, he discovered a line of mutant fruit flies that eat and eat and yet still starve to death. By researching these mutant flies, he hopes to identify the genes that are involved in sensing hunger and regulating feeding.

“The exciting possibility is that the problem with these flies lies in the pathways connecting nutritional state and hunger, which would have obvious implications for things like obesity and eating disorders,” says Blumenthal, who has a grant from the National Institutes of

Health. “Believe it or not, the control of feeding in flies has a lot in common with humans, so it’s not that big of a stretch that what we learn could be applicable to human health.”

Blumenthal stumbled on the topic by accident. He was studying a fly organ called the Malpighian tube, which is involved in salt balance, and looking for flies that died on a salty diet. He dubbed the mutants who died “Lot’s Wife.” Then it got more interesting.

“When I started looking at them more closely I realized that the flies died no matter what I put them on — it wasn’t just salty food,” he says.

The fruit flies are fed a mixture of cornmeal and molasses that is dyed blue. That allows Blumenthal to track the food, which eventually gets stuck in a food-

storage organ called the crop. The hungry flies try to eat more, but unable to digest the food, they deplete their fat stores and die within a few days.

He has already identified the gene that makes Lot’s Wife different. Next, he wants to figure out where the gene is turned on, which will help him determine why the flies starve. By doing further genetic screens to create more mutations, he hopes to learn more about appetite control.

Hunger, in humans and in flies, is a very complicated phenomenon, Blumenthal says. “We now have this fly that’s really unique because we have uncoupled eating and digestion,” he says, “and now we can maybe use this fly to understand how hunger is controlled.”

OH FAVORITE SODA, HOW DO I LOVE THEE?

The power of the Coke and Nike brands crosses borders and transcends cultures. People love them, buy them and believe in them. Why have people built emotional attachments to these brands over others? Dr. Felicia Miller, assistant professor of marketing, hopes to help product owners discover the secret.

After working at Procter & Gamble for a decade, Miller came to academia eager to test the prevailing theory that consumers form enduring relationships with preferred brands. Her research shows that consumers are less attached to most brands than product marketers would like to believe. Instead most consumers form unique relationships with a small number of the branded products they buy.

“I found the brand/consumer relationship is very idiosyncratic,” she says. “It appears that there are some common relationship types that consumers experience, but the brand partner in that relationship varies greatly.”

Miller’s research defines nine unique relationships consumers form with brands, ranging from adversarial to abusive to fling to communal partner. For an example of the relationship phenomenon, Miller points to the airline industry. Some consumers feel they are in an abusive relationship with brands such as Delta and United that they perceive have failed to treat them as valued customers despite higher prices and fewer services. In contrast, other

consumers have formed a communal partnership with brands like Midwest Airlines and Jet Blue that are consistently recognized for customer service and unique on-board experience.

In another stream of work, Miller examined the effect celebrity endorsements can have on a brand. She found that choosing the wrong celebrity could torpedo the consumer relationship altogether. She tested pairing Clinique, a well-respected brand of cosmetics, with celebrity endorsers Paris Hilton, Britney Spears or Jessica Simpson and found the firm could expect negative results. “The celebrity’s meaning was in conflict with what the brand Clinique means in the minds of consumers,” she explains.

GETTING TO THE ROOT OF THE PROBLEM

Teens moan about the two to three years spent wearing dental braces, but they appreciate the reward — dazzling smiles. Dr. Dawei Liu wants those smiles to last a lifetime.

Orthodontics applies degrees of mechanical force to correct dental irregularities, which include everything from crooked teeth to jaw skeletal discrepancies. But there is an unfortunate byproduct to most orthodontic treatments; the continuous force used to move a tooth can cause dental roots to shorten over time.

“We can observe radiographically that after two years of orthodontic treatment part of a root is gone, and you can’t regrow it. A tooth with less root will become mobile,” says Liu, assistant professor of orthodontics. “It can’t bear the functional load of chewing. Eventually, because the tooth is not deeply rooted in the bone, you will lose the normal function or the tooth.”

With one-half of the population undergoing orthodontic treatments during their lives, Liu says it is important to anticipate a patient’s susceptibility to root resorption. “If we can predict it, we may be able to prevent it,” he says.

In clinical trials Liu is evaluating the magnitude, frequency and duration of the orthodontic forces that adversely affect dental roots. “My study deals with the mechanisms of orthodontic tooth movement and its associated root resorption,” he explains. “To see how we can move teeth efficiently, we are applying different forces to solve orthodontic problems.”

He says solutions may lie in applying a lighter and vibrating force on the tooth and releasing the force immediately when root resorption is observed.



KANNSCHT DU DEITSCH SCHWETZE?

“Can you speak Pennsylvania German?” Those who can provide fertile field study for Dr. Steven Hartman Keiser, one of the few linguists studying the unique language of the Amish and Old Order Mennonite.

An assistant professor of English, he first heard the language from his Mennonite grandmother. Now he’s working on a dialectology of Pennsylvania German, studying the vocabulary, pronunciation and structural differences across regions. He is particularly interested in studying how language changes spread over large, discontinuous space, such as the isolated Amish communities of the Midwest.

A product of colonial Pennsylvania, the language is a “New World” blend that most closely resembles the dialect of the Palatinate region near Frankfurt, Germany, with a bit of Swiss influence mixed in. In the beginning, the Amish and Mennonites were a minority among Pennsylvania German speakers.

“There were once hundreds of thousands of Pennsylvania German speakers in Pennsylvania — Lutherans and Reformed and all sorts of faith traditions — but now the language is all but dead in those groups. The only place where it’s still alive, where children are still learning it, is among Old Order Mennonites and the Amish,” Hartman Keiser says.

Pennsylvania German speakers are fluid bilinguals, he notes. Although Amish and Old Order Mennonite children speak the native language at home, all of their schooling (which ends in eighth grade) is in English.

Hartman Keiser estimates that there might be 300,000 Pennsylvania German speakers today, down from a peak of nearly a million in the late-1800s. And despite its Pennsylvania roots, the language is now most concentrated in the American Midwest.

Pennsylvania German speakers have defied the pattern of other immigrant populations, who usually drift farther from the native language with every generation. In contrast, the relatively isolated, rural society of the Amish has helped Pennsylvania German survive, he says.

Even more surprising is that the language is on the rise. The Amish population in North America doubles every 20 years, and by 2020, it’s likely to reach 400,000. “In all of the Amish communities, you have children learning Pennsylvania German,” he says. “So as long as the kids are learning it, it’s alive, and it’s growing.”

The relatively isolated, rural society of the Amish has helped Pennsylvania German survive.



INNOVATIONS IN FAMILY PLANNING

For decades “the rhythm method,” basal body temperature and cervical mucus monitoring were the primary tools available to couples interested in natural family planning. Thanks to research undertaken at Marquette’s Institute for Natural Family Planning, a modern NFP method called the Marquette Model now guides couples in employing scientific methods and easy-to-use tools such as an electronic hormonal fertility monitor to accurately track fertility.

Using the rhythm method, a woman counts the days of her menstrual cycle, monitors her waking temperature or observes her cervical mucus to determine when she is fertile. With the Marquette Model, a woman measures the levels of two female reproductive hormones — estrogen and luteinizing hormones — in the urine with a hand-held fertility monitor. The two hormonal indicators provide a good estimate of the beginning and end of the fertile phase of the menstrual cycle.

There are six days of fertility in the menstrual cycle, the day of ovulation and the five days before. Dr. Richard Fehring, R.N., professor of nursing, says the Marquette Model provides good indicators to estimate the fertile phase of the menstrual cycle. Couples can use this information to achieve or avoid pregnancy.

When used correctly and consistently, Fehring says the Marquette Model has a 97 to 99 percent effectiveness rating in avoiding pregnancy, which approaches the effectiveness of the birth control pill.

“We want to help couples work with nature, with their natural cycles, as a healthy way of family planning,” he says. “This method takes mutual motivation. Couples have to work together, but they tell us the experience improves their communication and fits their moral, ethical and spiritual view of family life.”

Since 1998 Marquette has offered the only for-credit courses available to health professionals who want to coach couples on natural family planning and integrate fertility monitoring into enhancing women’s health. A new Web site, which will go live later in 2008, will help couples learn how to use natural family planning methods, participate in discussion rooms, and consult with nurses, doctors and moral theologians about natural family planning.

Fehring and his colleagues are also studying the variability of the menstrual cycle and application of fertility monitoring during breastfeeding.

HEALING PAIN

Pain is a complicated phenomenon. It’s the No. 1 reason that people seek medical relief, and yet there’s only so much clinicians can do to ease patients’ suffering.

That dilemma was what drove Dr. Marie Hoeger Bement to study chronic pain. An assistant professor of physical therapy, she researches the role of exercise in alleviating pain. Her research is supported by the Arthritis Foundation and the American Pain Society.

Acute pain, which is associated with tissue injury, is easy to understand and straight forward to treat. But with chronic pain, the cause isn’t so obvious.

“It’s hard for the patient as well as the clinician to understand,” Bement says. Patients with chronic pain even perceive pain differently, possibly because their central nervous system has become more sensitized, she says.

Although there’s no cure for many chronic pain conditions, exercise could help. Exercise-induced analgesia was first identified in long-distance runners, who can become oblivious to their bodies’ complaints when experiencing “the runner’s high.” But high-intensity aerobic exercise isn’t feasible for everyone. Bement wants to learn if the same effect can be achieved through low-intensity, isometric exercise, similar to the movements of yoga and Tai Chi.

“A lot of people with pain have a fear of movement, and with isometric exercise people aren’t moving; they’re just contracting their muscle,” Bement says. “It’s easy to do, and everyone can do it.”

She compares exercise-induced analgesia between healthy individuals and fibromyalgia patients, and also between genders. Although women have lower pain thresholds and higher pain ratings when exposed to a painful stimulus, they may also experience greater pain relief after high-intensity isometric contractions. Now Bement is trying to understand why.

REVVING UP REHAB THROUGH ROBOTICS

Dr. Michelle Johnson lost her grandmother to a stroke. Now she devotes her career to designing robotic systems to help other stroke survivors do what her grandmother couldn't.

“It’s not just about the science or the engineering; it’s about people.”

“I saw someone go from very vibrant and functioning to bedridden and not being able to use her limbs. It affected me,” Johnson says. “Then when I started getting into stroke rehab, there was a passion there. I understood this was a real need. It’s not just about the science or the engineering; it’s about people.”

Johnson is an assistant professor and director of the Rehabilitation Robotics Research and Design Lab, a joint effort of Marquette and the Medical College of Wisconsin. With funding support from the American Heart Association and others, Johnson’s team is busy creating and testing innovative devices to help stroke survivors. She is also testing whether there are gender differences in robotic-assisted therapy.

One project is a simple video game system that uses joy sticks and steering

wheels to help patients exercise an impaired arm. “The goal is to develop low-cost, affordable systems for home therapy,” Johnson says.

The researchers can adjust the wheel’s height, position and other perimeters to make the exercise more or less difficult. The machine employs both “rote” therapy — for example, using the wheel to chase a moving square across the computer screen — and more fun, commercial video games with a lot of action and flashy graphics.

“The rote therapy is more controlled. The fun therapy is more free form, but people are more willing to stay longer,” she says. “So there’s a trade-off there. The question is do both result in recovery, or does the engagement factor make a difference?”

The team also built the Activities of Daily Living Exercise Robot, called ADLER for short. By strapping the patient’s impaired arm into the device, ADLER helps patients move through three-

dimensional space to practice movements such as reaching and drinking from a cup. As the patient recovers, the robot provides less help. One patient needed two-thirds less help after 24 sessions of therapy.

“The caveat is that not everybody sees the same amount of recovery,” she says. “It’s part of the research to understand who this benefits. Do you have to have a little bit of function and the robot helps you get more? We’re still trying to figure that out.”



Dr. Michelle Johnson demonstrates her rehab robot.

THE OTHER SIDE OF THE THERAPY COUCH

What happens when a therapist receives a gift from a client? How does a therapist manage sexual attraction toward a patient? How does a therapist-in-training cope when a patient commits suicide?

In a field focused on emotions, the therapist-patient relationship can be fraught with even further emotional complications. Dr. Sarah Knox, associate professor of counseling and educational psychology, studies psychotherapists and the sometimes sticky issues that can

arise in therapy. She recently received the Outstanding Early Career Achievement Award from the Society for Psychotherapy Research.

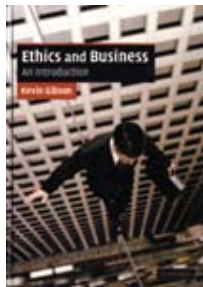
Knox always felt there was an unexplored depth to the therapist-patient relationship. How do therapists create and build relationships, and how does that relationship affect the therapy? “What’s going on between these two people? We may never fully understand, but the more we can understand, the better it can be,” she says.

Knox is also studying how therapists or therapists-in-training are affected when the roles are reversed — when they’re the ones in therapy. Her research shows that it’s often a transformational experience that changes the therapist personally and professionally.

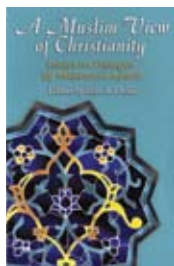
“My hope is that my research informs the work of therapy and helps therapists think about it in new ways,” she says.

MARQUETTE BOOKSHELF

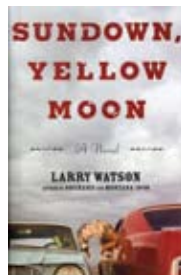
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by Kevin Gibson, associate professor of philosophy (Cambridge University Press, 2007)



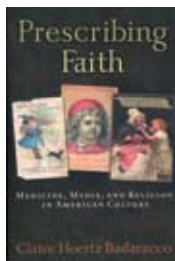
A Muslim View of Christianity: Essays on Dialogue
edited by Irfan A. Omar, associate professor of theology (Orbis, 2007)



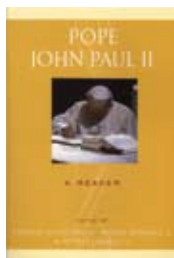
Sundown, Yellow Moon: A Novel
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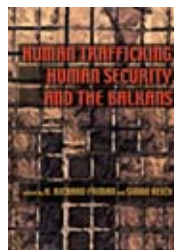
Foot and Ankle Motion Analysis: Clinical Treatment and Technology
edited by Gerald F. Harris, professor of biomedical engineering, Peter A. Smith and Richard M. Marks (CRC Press, 2007)



Prescribing Faith: Medicine, Media, and Religion in American Culture
by Claire Badaracco, professor of advertising and public relations (Baylor University Press, 2007)



Pope John Paul II: A Reader
edited by Jeffrey LaBelle, assistant professor of education, Gerald O'Collins and Daniel Kendall (Paulist Press, 2007)



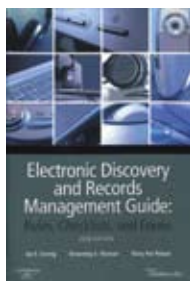
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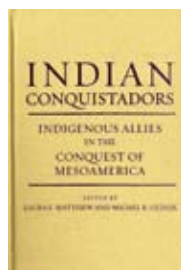
Calculated Futures: Theology, Ethics and Economics
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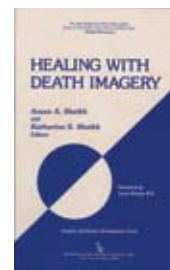
Seventeenth-Century English Romance: Allegory, Ethics, and Politics
by Amelia Zurcher, associate professor of English (Palgrave Macmillan, 2007)



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Indian Conquistadors: Indigenous Allies in the Conquest of Mesoamerica
edited by Laura Matthew, assistant professor of history, and Michel R. Oudijk (University of Oklahoma Press, 2007)



Healing with Death Imagery
edited by Anees A. Sheikh, professor of psychology, and Katharina S. Sheikh (Baywood Pub., 2007)



RESEARCH AT MARQUETTE

- Marquette faculty significantly increased the number of federal research applications submitted, and externally funded research requests exceeded \$26 million for the first time.
- Corporate research dollars increased, with the largest award supporting work on renewable energy.
- More than half of the research awards won by Marquette faculty in fiscal year 2007 included funds for student participation, reflecting Marquette's commitment to the teacher-scholar model.
- The university provides internal support for research through several programs: three-year Way Klingler fellowships, fourth-year sabbaticals for junior faculty, and the Lawrence G. Haggerty Faculty Award for Research Excellence.
- Marquette faculty edit a number of scholarly journals, from the *Journal of Orthopaedic and Sports Physical Therapy* to the *International Journal of Systematic Theology*.
- Marquette's Department of Theology ranked among the nation's top 10 for faculty scholarly productivity, according to Academic Analytics of Chester, Penn.
- The Department of Special Collections and University Archives houses more than 17,000 cubic feet of archival material and 11,000 volumes, including approximately 7,000 titles within the rare book collection. The J.R.R. Tolkien Collection includes many of the author's original manuscripts, including *The Hobbit* and *The Lord of the Rings*.
- Marquette has more than 20 academic centers and institutes that foster research in the areas of end-of-life care, ethics, neuroscience, rehabilitation engineering, transnational justice, water quality, sports law and other areas.

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