



Shermer creates doubt

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lack of oxygen in the mind or brain function. It is easy to replicate an out-of-body experience simply through bombarding the temporal lobes with electromagnetic waves.

Shermer replicated an experiment using the audience. He showed the crowd a short video clip of people in black and white who were passing a basketball back and forth. The crowd was instructed to count the number of passes between those people wearing white.

Although most of the crowd came close the actual number, 17.5, the surprise was apparent when Shermer showed the clip again

and a gorilla walked through the middle. So intent was the audience on counting the number of passes, only about half had noticed the animal during the initial showing. Behavioral scientists, trained to study these things, were given the same experiment a while back during Shermer's lecture; they missed the gorilla, too.

Shermer mentioned that reality is a subjective process where we "sort out and collect the most important data," causing us to possibly believe miracles when really, we could have just chosen to focus on an incident that was coincidence.

Shermer explained that many of our beliefs arise through "pat-

ternicity," wherein people "find meaningful patterns in meaningless noise," according to Shermer. Others are created through "confirmation bias," where people look for information to reaffirm the beliefs they already hold.

At the end of the night, Shermer answered questions and signed books. He commented that the Psychology Club had done a great job and everything ran like a well-oiled machine.

Professor Sheldon Helms, adviser to the Psychology Club, commented, "Because of the overwhelming success of this event, we're more motivated than ever to continue our speaker series in the



Photo by Kathy Sung

Michael Shermer, center, delivered a talk on the psychology of beliefs Friday. Here he stands with professor Sheldon Helms, left, and Aaron Moss of the Psychology Club.

future. We have several educational campus community posted as to our speakers in mind and we'll keep the progress in scheduling them."

Talk: nature, math connection

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with Golden Ratio proportions).

Leonardo da Vinci's masterpiece "Mona Lisa" presents perhaps the clearest evidence of the Golden Ratio's place in art: not only is the frame itself a Golden Rectangle, but the composition of the entire portrait can be broken down into Golden Rectangles: the proportions of her face, the proportions of her nose and the measurement from her chin to her lips and the length of her nose all correspond to the Golden Ratio. "Clearly, [da Vinci] had a ruler and was measuring this stuff out," said O'Connell.

Da Vinci's immaculate attention to the Golden Ratio in "Mona Lisa" looks natural because it is, explained O'Connell—many proportions of the human body naturally conform to the Golden Ratio. The length of your shoulder to your wrist divided by the length from your shoulder to your elbow is close to the Golden Ratio; so is the length of your longest finger divided by the length of your pinkie. "The Golden Ratio is all throughout the human body," said O'Connell.

Modern-day da Vincis don't even have to do the calculations by hand, explained O'Connell; the ratio is so common in design that a template for it is built into Adobe Photoshop.

Besides occurring naturally in the human body, the



Jeff O'Connell delivered a talk on the Golden Ratio Friday.

Golden Ratio also appears throughout nature; "the part that I find the most impressive," said O'Connell. Coincidentally, the Ratio happens to dictate the most efficient growth patterns for seeds and leaves, resulting in its appearance on almost any plant.

It is in the best interests of a plant growing leaves directly from a central stalk, explained O'Connell, for each to grow a certain distance radially from the one before it, in order to ensure that it does not grow directly

under another leaf. Being an irrational number, the Golden Ratio turns out to be the ideal candidate—each leaf on a plant tends to grow about .618 of a rotation (around 228 degrees) around the stalk from the leaf before it.

Even as O'Connell concludes his Brown Bag semester schedule, however, he has already begun planning a presentation for the fall semester. The planned topic is online encryption technology, security that "is based on sixth grade math," according to O'Connell. He plans on explaining how that math works—and how that even as basic as is, it's powerful enough to keep your online information secure.

The next Brown Bag of the will be held Friday, April 10. Geology Professor Paul Belasky will be presenting "Geology: Key to Puzzles of the Ancient World."




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