

Cat Burglar Steals Bird; Dogs Police

BY MATT A. MADDOX, Editor

An early morning burglary has residents and business owners on edge in the small community of Euclid Square, just south of Boston. Carol Elle O’Graham, a shapely brunette, is the owner of Bird, Bath & Beyond, a pet store specializing in exotic birds and organic grooming supplies. When she arrived at her store this morning, Ms. O’Graham was dismayed to find her prized Amazon parrot, Polly, gone.

According to Ms. O’Graham, the parrot is extremely valuable because of its unique ability to solve mathematical equations using the Pythagorean Theorem. Carol’s identical twin sister, Raye, put an arm around her shoulder. “We’re beside ourselves with worry,” she said. “Plus, we took out a huge loan to buy Polly. Carol had to sign, I had to co-sign...but I guess I’m going off on a tangent.”

Police quickly established a perimeter around the area, but the thief escaped in the high volume of traffic. Authorities suspect the notorious cat burglar known as “The Boston Angler,” famous for using geometric principles to plan and carry out his crimes. When asked if the police have any proof, Chief Ron Buss responded that there were several parallels to other burglaries known to have been committed by the same perp. “Once we realized the cases were similar, it was really just solid police work,” the chief boasted. “That, and he sent us a note saying: ‘It was me, The Boston Angler. I did it. You can’t catch me.’ But it was mostly the good police work.” The GSI (Geometry Scene Investigation) Unit is now running point.

Daniel A. Fiore
Propel Charter Schools
Braddock Hills High School, Pittsburgh, PA
danfiore@propelschools.org
NCTM 2014 Annual Meeting
Presentation No. 432

GSI:

Geometry Scene Investigation

“The Case of Where has Polly Gone?”

Sampling of Curricular Topics and Narrative Episodes

1. Calculating absolute value and segment lengths to identify a suspect's address
2. Using definitions of acute, obtuse, and right angles to deactivate a laser alarm grid in the proper sequence
3. Using properties of parallel lines, transversals, and angle pairs to stabilize and ascend scaffolding at an abandoned building
4. Using the slopes of parallel, perpendicular, and other lines to identify multiple connecting flights and a suspect's final destination
5. Using points of concurrency to triangulate a suspect's location
6. Using similar triangles to isolate a shard of broken glass with a fingerprint
7. Using properties of quadrilaterals to navigate a trap-laden room
8. Using trigonometric ratios to program an anti-drone defense system to thwart an enemy attack
9. Using volume formulas to identify the three-dimensional figure housing the kidnapping victim
10. Compiling photographs of real-world applications of geometric principles to lure the geometry-obsessed suspect to a gallery opening/sting operation