

THE PSYCHOLOGY OF THE U.S. OPEN



◀◀◀ BY DR. ERIC A. ZILLMER ▶▶▶

I have watched the Delaware Investments U.S. Open since 2011 when Drexel University started hosting the event. As a recreational player, I had never experienced squash at this level, but seeing the men and women on the glass court was brilliant. I became instantly addicted, watching as many matches as I could. It fascinated me on two other levels. As the Athletics Director at Drexel, I assist with the many logistical facets of the tournament

so that US Squash can stage a world-class international sporting event. As a neuropsychology professor, however, I look at the Open through a different lens. The Open is cognitively as well as emotionally absorbing, visually captivating and, most of all, exceedingly entertaining. Professional squash, at the world-class level, is a magical mix of sports, science and art. The ball and the athletes who propel it can do astonishing things that defy intuitive nature.

BALL PLAY



◆ Gregory Gaultier captured his third U.S. Open title in 2015

Squash at its core is physics and neuroscience. If there is one sport that is defined by the laws of Einstein and Newton, it has to be squash, where every shot celebrates the study of geometry.

Ball games are as old as human history and all have one thing in common: the play of the game follows the path of the ball. It is pleasing to our psyche to see the laws of the universe reaffirmed through the flight of a ball, with the essential components being that of time, velocity and space.

As a novice Open observer, I initially would just follow the trajectory of the ball in play. How can one not? It is mesmerizing to watch the dance of this semi-soft object. With the squash ball traveling up to 170 mph, and with all walls and angles in play, it is a luscious meal for the eyes.

As a neuropsychology professor, I also know that it takes a majority of the brain to pay attention to a moving squash ball. Following the squash ball requires masses of neuronal circuitry that are dedicated to the ocular movement of the eyes and the interpretation of the moving visual stimulus. It would be nearly impossible to build a robot that could follow the strokes of a Gaultier/Elshorbagy rally. The human brain's visual tracking system of the squash ball is so intricate that it reaches basically every neuron of our brain's complex network. Thus, there is a biological reason that watching the squash ball is cognitively mesmerizing. It is splendid mind therapy, and personally I can sit there for hours being absolutely content simply following the squash ball.

Our brain also mirrors the action on the court. It is not merely spectating squash. Approximately twenty percent of our premotor cortex—the area responsible for controlling and planning motor

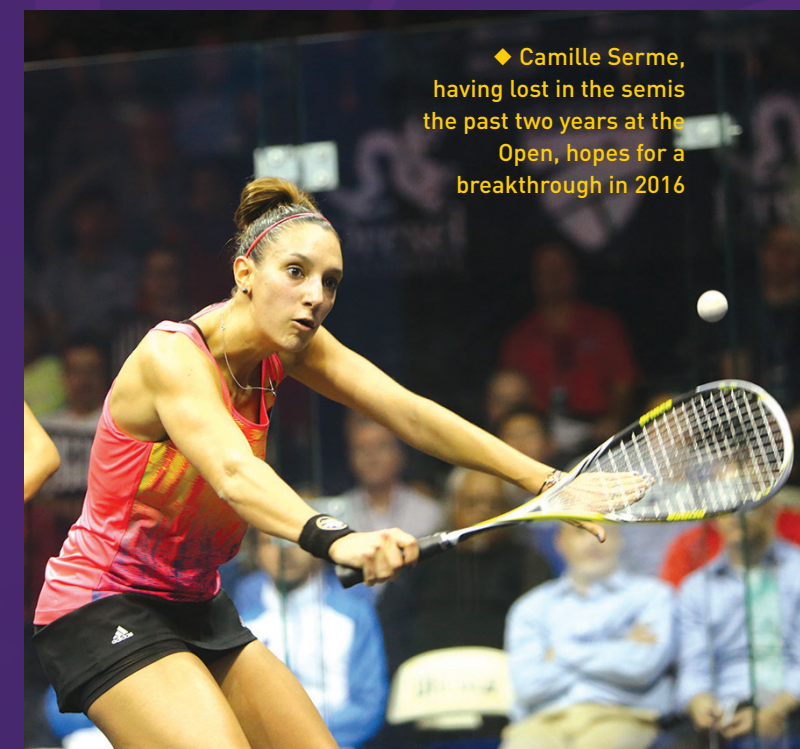


◆ Raheem El Welily is renowned for her mesmerizing shot-making ability



◆ Nick Matthew has endured a long patch of bad luck since winning the 2007 Open, with two losses in the finals and three losses in the semis

behavior—simulates what it sees on the squash court. The more experienced our brains are in terms of playing squash, the more we feel the action on the court neuropsychologically. That is why spectators like me wince when a player nicks the tin. My brain played along and committed the same error: been there, done that. Watching professional squash, your brain is all-in.



◆ Camille Serme, having lost in the semis the past two years at the Open, hopes for a breakthrough in 2016

THE PLAYERS

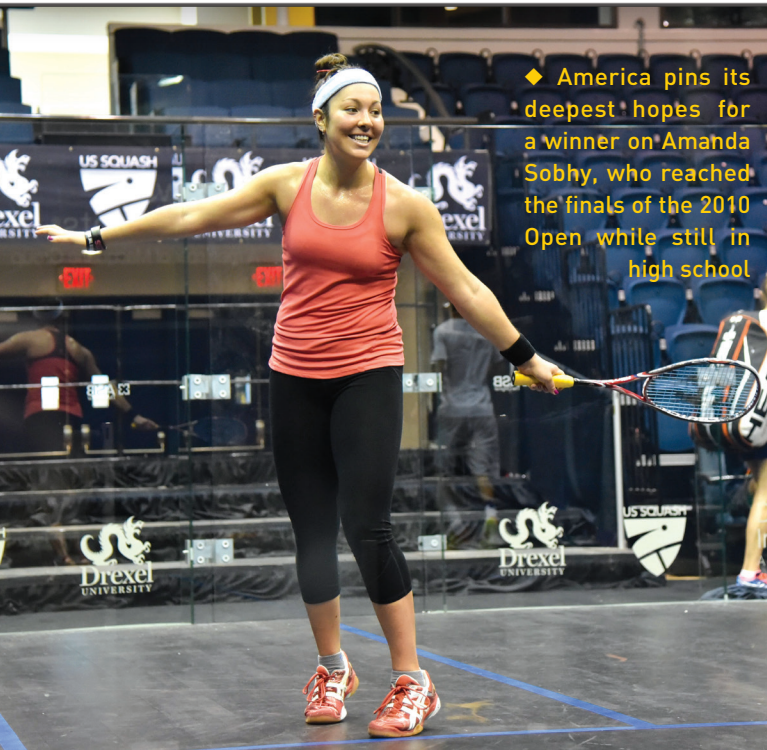
Besides watching the ball in play, I have started observing the players more closely. They are interesting athletes, a cross-cultural mix of men and women representing more than twenty-five countries.

These athletes perform with a beautiful combination of agility and power. Their footwork is as graceful as ballet, and their stamina rivals that of a triathlete. With the triumphant struggle for points often lasting twenty to thirty strokes, extreme fitness is the price of admission to world-class level squash.

The winner, however, is most often the player who outfoxes their rival, and thus the mental aspect of elite squash is equally as important as is the physical. A master of this was the 2011 U.S. Open champion Amr Shabana, who manages squash like chess, outmaneuvering his opponents until they are in checkmate.

◆ The Maestro, Amr Shabana, conducted points with unsurpassed creativity and aplomb





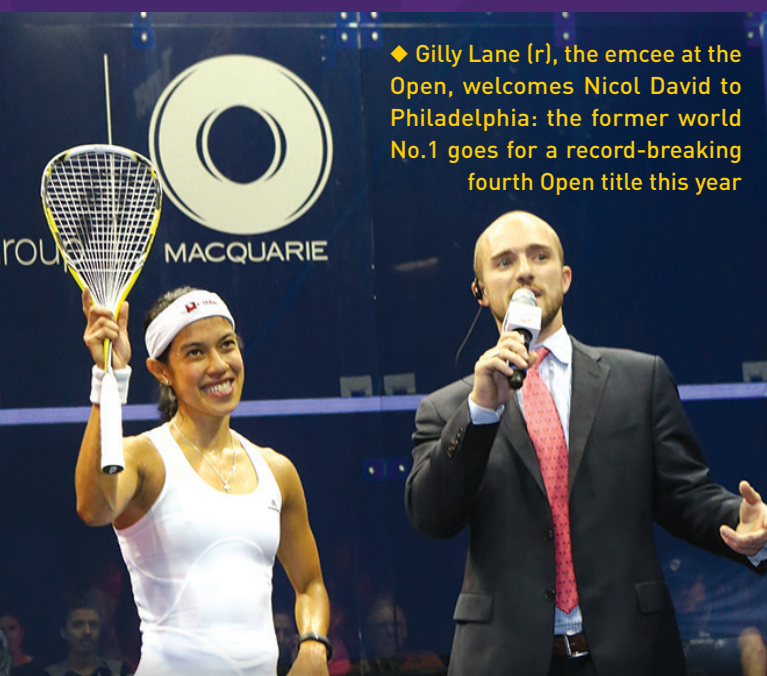
◆ America pins its deepest hopes for a winner on Amanda Sobhy, who reached the finals of the 2010 Open while still in high school

Amanda Sobhy is the best hope for the U.S.'s aspirations for international squash. Sobhy is America's only top-ten player, a former world junior champion and a Harvard alumna. Over the years at the Open, I have seen her game grow—the best is yet to come.

The players are troubadours whose personalities have been shaped by the sport's intense competition. Over the past few years, I have befriended several of the players. Nicolas Mueller, the Swiss champion, and Simon Rösner, the German champion, stay in my Old City condo during the Open. Having grown up in Europe as an Army brat and speaking fluent German, I become their chauffeur, tour-guide and personal assistant. Their world is filled with practicing, playing, and watching squash, eating, resting and connecting on social media.



◆ Two German-speaking stars at the Open each year are Nicolas Muller and (below) Simon Rösner



◆ Gilly Lane (r), the emcee at the Open, welcomes Nicol David to Philadelphia: the former world No.1 goes for a record-breaking fourth Open title this year



◆ World-class players get to show off their incredible athleticism in the glass court

THE GAME

I have learned about the game by playing squash recreationally at the club level and at Drexel, and by watching our Drexel varsity squash teams compete. But I have become a student of the game by observing world-class competition at the Open.

The different aspects of squash shot-making are psychologically fascinating to me. For example, I marvel at Nick Mathew's tight drives. They present no offensive options to his opponents, often reducing them to returning the ball with the frame of their own racquet. The drop shot is an entrée to squash chaos on the court, a symbolic invitation to tango. I marvel at the 2012 champion Ramy Ashour's drop shot—brutal.

I am a big fan of John White, our popular Drexel varsity team head coach and former world No. 1. Each year John attempts to make the main draw of the Open via the qualifying rounds, which are staged at different clubs around Philadelphia as well as at Drexel. Qualifying matches provide intimacy and an up-and-close personal feel. Every year I look for my favorite John White squash shot: his straight kill. It is so hard and fast, your baffled brain just asks, "What just happened here?"

My favorite squash shot, however, is the cross-court, which changes the direction of play, from symmetry to asymmetry. It opens up the court for speedier play, and it often forces the opponent to dig deep to retrieve the ball in one of the corners of the



◆ The pros annually rate the Open as one of their favorite stops on the world tour

court, aka the demilitarized zone. I particularly appreciate the wide cross-court with pace that can't be volleyed. It is fun to watch but hard to retrieve. This shot hardly produces any winners but judging by the player's facial expressions it is no picnic to return them and opens the door for what onslaught may possibly come next. I think Simon Rösner has one of the best cross-courts: low, hard, accurate and punishing.

And then there are the retrievers in squash, a patient lot who prefer to see what lies ahead, who live in the future, and who



◆ Nour El Tayeb was perhaps the story of the 2015 Open, as she upset Raneem El Welily and Camille Serme to reach the final before succumbing to Laura Massaro in five, hard-fought games

have cardiovascular stamina to spare. I believe the best retrievers to be Miguel Angel Rodriguez and Nour El Tayeb. Watching them is like settling in for a ten-course chef's tasting.

The equivalent of tennis' serve and volley are the attackers of the squash game. Like Keith Richard's guitar solos, they are ready to rock-and-roll at any time and they have raised the game of squash to a breathtaking

spectacle. For me personally, the best attackers are Nour ElSherbini and Ramy Ashour and I fasten my seat belt to watch them play.

SPORTSMANSHIP

Squash is a tough game with simple rules. Similar to cage fighting, two competitors are confined to a rectangular enclosure. These are men and women competing for major prize money, but they have to earn it.

The matches are closely monitored under the careful eyes of one chief and two assistant referees. The referees bring their own culture to the Open, and it sometimes seems that it is a

prerequisite to have a British accent to wear the red official's shirts. Players have one challenge per game and a high-tech video replay system allows spectators an interactive quality in judging the calls.

"Obviously a stroke," I hear myself saying to no one in particular during one of the challenges made. It holds up and I feel satisfied that my squash IQ has just been reaffirmed. With money

and glory on the line, the players have remarkable respect for each other. They battle each other on the court, but after the last point is played out, they often spontaneously congratulate each other in an embrace and the loser is graciously allowed to leave the court first.

Having two pros on a court often creates the inadvertent let situations. No question, the players are skilled in the art of deception using head, body and racquet fakes, but there is also subtle and not so subtle blocking of the opponent. The most difficult player to play against or officiate for must be James Willstrop, a former world No. 1 who is 6'5 and because of his size frustrates many of his opponents by simply being there. In the end, the referees do an excellent job and reinforce the principle that you have to make an effort to play the ball, which is good advice on the court and in the game of life.

At times I watch a disgruntled pro open up the glass door—a no-no in squash—to give the officials the evil eye about their final ruling. "Enough ... play on!" the referee instructs the player, unaware that he and his assistants are in fact very much part of this entertainment spectacle. The player takes a deep breath, makes a U-turn, closes the door and gets on with the match.

While there is psychological drama, there is also great sportsmanship. Among all of the players, Nicol David must be the most gracious competitor of them all. The popular Malaysian is a crowd favorite. Whether in victory or in defeat, Nicol is a class act.



◆ Maria Toorpakai is receiving the US Squash's highest award, the President's Cup, at this year's Open

PRACTICE

A delicious secret I have at the Open is sneaking upstairs from my office to the glass court and watching the pros practice in the early morning. At times they hit with world-class pace. At other times they spend time on the court with a coach or alone patiently practicing shot making. This intimate choreographed dance in an empty arena is intriguing to watch. All you hear is the ball bouncing off the walls and the squeaking of the sneakers.

I have noticed that all the pros practice with a purpose. They may not practice long, but when they are on the court they have a laser-like focus. They don't rally like us mortals do. They practice winners, nonretrievable shots, over and over. No question this is the bread-and-butter of their elite existence and it is a satisfying display to watch. They are working hard, depositing money into the mythical Bank of Squash. Then later, at match-point, they make a tactical withdrawal of their sweat equity.

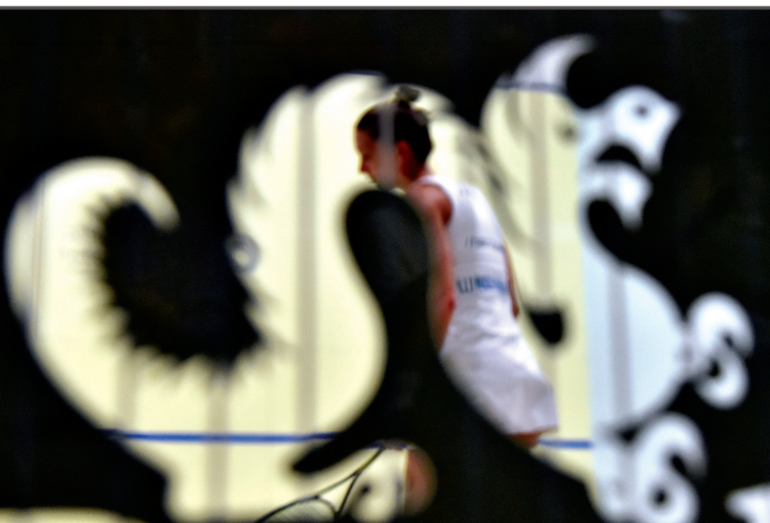
As a neuropsychologist I also know I am watching the players practice brain chemistry. Billions of neurons and their interconnections are the building blocks of our brain. Over half of our adult brain's neurons are inhibitory in nature, while the rest are excitatory. Our brain is at constant war with itself, between excitation and inhibition. Thus, a well-executed backhand is actually related to this integration of stop and go. It takes tens of thousands of hours to master the fluidity of footwork of an Amr Shabana or a Nicol David. Sitting alone in the bleachers I



◆ Skilled referees, like Roy Gingell (r) and Waseem Haq help enforce good sportsmanship and fair play



◆ The ASB GlassCourt is the stunning centerpiece of the U.S. Open at Drexel

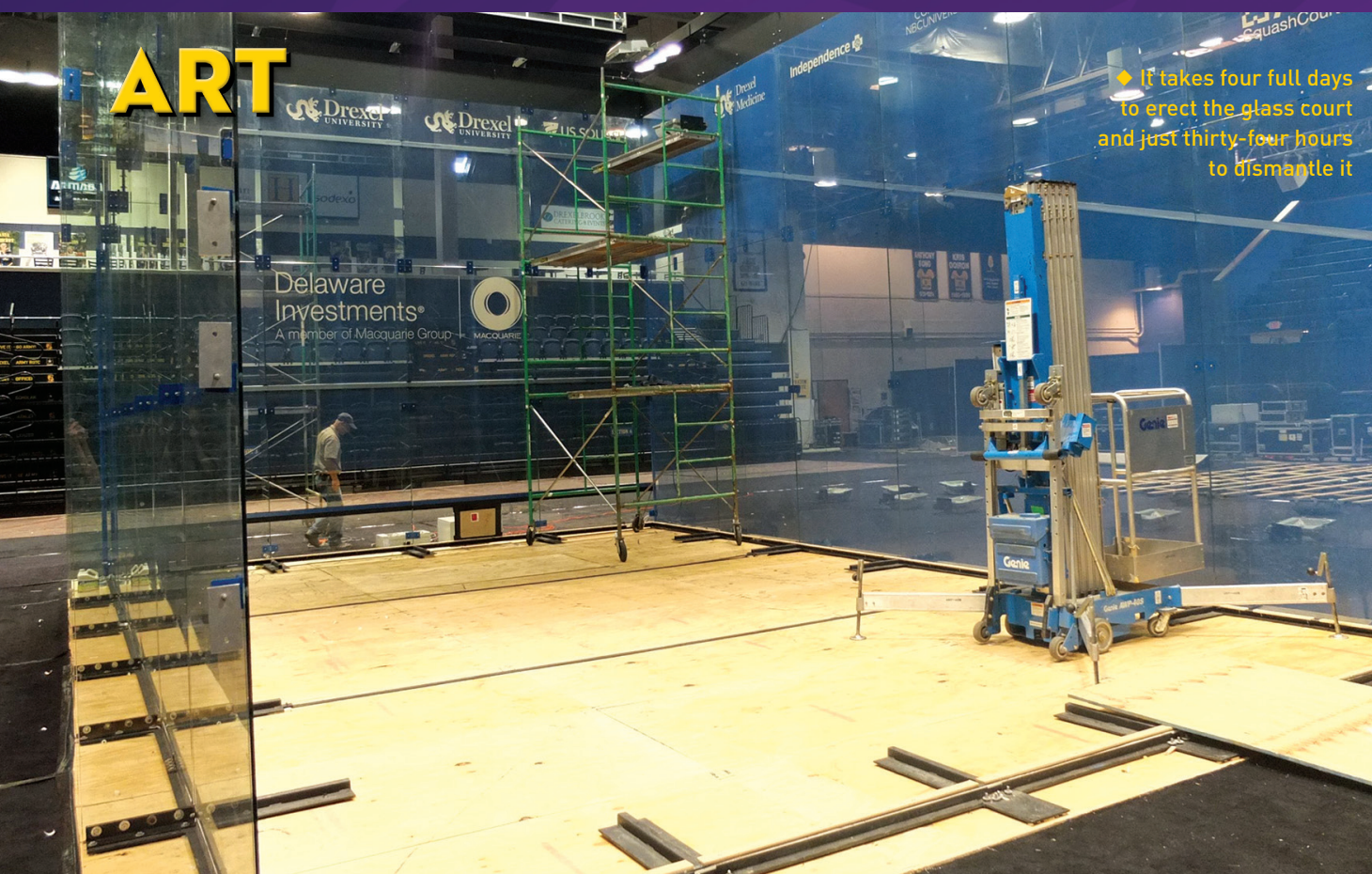


marvel at their dance on the court, fully well knowing that I am watching brain chemistry at its finest.

I would think it would be essential for squash competitors of all levels to watch how these pros practice. It is an art form



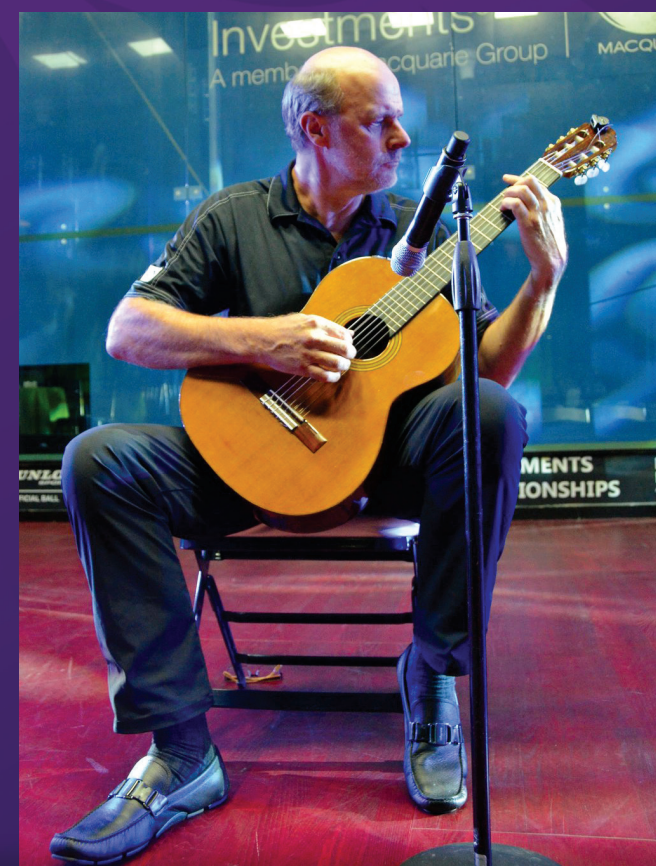
in its own right. This reminds me that my sister Bibi, who was an Olympic figure skater, often had open practices in front of paying customers. This part of the U.S. Open should also be made, well, "open."



Like many sports, the Open strikes a larger symbolic chord of our psyche; an archetypal search for what is possible with squash as the catalyst. Once you step into the Daskalakis Athletic Center, you can't help but be

drawn to the illuminated glass structure in the center, the ASB GlassCourt.

At the center of this eye-candy is German glass and light engineering. Your eyes see it, but your heart feels it. (The



Chinese-American architect I.M. Pei's glass pyramid at the Louvre comes to mind.) I asked Christof Babinsky, ASB's managing director, how his team was able to create such a structure, which seems to quite literally float in the middle of the arena, Babinsky smiled for a few seconds and then informed me that it is in the design of the glass, the structure and the lights: the glass is specially produced and treated, the structure is self-supporting and open without the use of metal pillars and the lights create a shadow-less environment inside the court.

The next day I looked at the match differently, realizing that there were, in fact, no shadows. The total effect is that one cannot get away from looking at it. The optics are that inviting. The whole set up reminds me of an art installation in a contemporary art museum. Form follows function. The folks at ASB are part innovative engineers, part artists.

At the world-class level, the game of squash reminds me of a combination between a Cirque du Soleil performance in Montreal and a Boris Spassky versus Bobby Fisher chess match in Reykjavik. This is the essence of squash. Come see and judge for yourself. See you in Philadelphia.

Drexel Director of Athletics Dr. Eric Zillmer is a licensed clinical psychologist and the Carl R. Pacifico Professor of Neuropsychology at Drexel University. He is the author of the textbook *Principles of Neuropsychology*.