Interview with Scorpion: Walter O'Brien goes to Hollywood

by John Kennedy

Walter O'Brien, also known as Scorpion

As a 13-year-old in Kilkenny Walter O'Brien – aka Scorpion – received a visit from the NSA for hacking NASA. Today he is the inspiration behind a US TV show of the same name that has millions of viewers and leads a private network of 2,500 geniuses who solve critical technology problems.

In the opening scene for the US hit series *Scorpion*, which is about to broadcast its second season in the US and worldwide, a helicopter descends on a farmhouse in rural Kilkenny in Ireland and out hop armed soldiers who surround the farm and attempt to arrest a dangerous hacker. The hacker instead turns out to be a 13-year-old holding an extradition waiver.

The truth is less dramatic. There were no guns or helicopters, just guys in suits.

Welcome to the strange and mysterious world of Walter O'Brien, played by actor Elyes Gabel in the CBS TV show *Scorpion*.

O'Brien, who was born in Wexford and schooled in Kilkenny, is understood to have an IQ of 197 and holds an Extraordinary Ability EB-1-1 Visa, which is awarded to very few people for special endeavors and abilities valued by the US. Previous holders of the visa include Albert Einstein and Winston Churchill.

Walter O'Brien with the cast for the TV show Scorpion by CBS. The second season airs in the US on 20 September and comes to RTE in January

O'Brien got his first computer – an Amstrad – at the age of 12 and one year later he hacked into NASA under the pseudonym Scorpion. In the years that followed O'Brien built up a local computer business in Kilkenny and as a teenager is understood to have worked with Irish banks to help them fix technical issues. He also participated in the 1993 International Olympiad in Informatics where his team is claimed to have finished 90th out of 250 teams.

He graduated with a degree in computer science and artificial intelligence from the University of Sussex and moved to the US where Scorpion Computer Services evolved to become a key problem solver for organisations ranging from the US military to various corporations, from US Navy SEALs to nuclear power plants.

O'Brien is understood to have helped build ScenGen, a scenario simulator used by Lockheed Martin and Northrop Gruman as well as the US Navy's Command and Control system. It is understood that following the Boston Marathon bombing, video analysis software developed by Scorpion was used to analyse hours of video to help catch the bombers.

SCORPION - OFFICIAL TRAILER - First Look [HD]
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Who is the Scorpion?

Two things happened when I wrote about O'Brien, now 40 and living in LA and the head of Scorpion Computer Services, when he was nominated Irishman of the Year by the Mayor of LA for his contribution and dedication to the Irish community in LA.

First I received a series of tweets from individuals who were skeptical about O'Brien's achievements. They included Techdirt's Mike Masnick and *Fast Company* writer Susan Karlin. His claims have also been contested in a Reddit AMA.

Around the same time I received a message from O'Brien himself about my piece and he agreed to do an interview with me.

Before we began our interview and for reasons of transparency, I pointed out over Skype to O'Brien these communications from Masnick and Karlin, among others. We agree to proceed with the interview as I explain I am interested in how an Irishman became the subject of a popular CBS TV show and I ask O'Brien about his origins.

O'Brien shrugs his shoulders and says: "I have 26m fans, I'm going to have a couple of haters." He pauses and adds: "I'm a public figure now and it comes with the territory. There are some things that I can clarify and some things I can't. This attention was something new for me as I wasn't a public figure before all of this happened. I work with a lot of *Fortune 1000* companies and I am under NDAs (non-disclosure agreements), which is standard. If I do work around the US national grid, for example, I can't talk about it because it is under national security. It's not me being shady, it is standard practice."

> **'I didn't fit in great at school or have a bunch of friends. It was tough at school but when it came to computers I was on one-on-one terms with the machines in terms of I think they way they think'**
> **– WALTER O'BRIEN**

He points to a Myer-Briggs test used by the US military which shows that he is left-brain dominant, which indicates he is highly logical, reasoning, critical and tough but lacks empathy, compassion and tenderness.

"It seems my left brain has killed my right brain entirely. I am completely logical and everything is math to me. If I read a menu I will turn it into a scoring system for what I should eat."

He says that in order to relate to people and survive in the world of business he had to learn how to use his IQ to simulate EQ.

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His first computer was an Amstrad, one of those early machines that had a tape player on the side to store data on magnetic tape and we both laugh as we recall games like *Harrier Attack*. He gestures towards a glass case that contains the very computer.

The Kilkenny hacker

He recalls the hacking incident that led to his infamous brush with the NSA.

"I got my hands on a phone coupler. Compuserve had just started in the UK and it was possible to make a phonecall to Compuserve using long-distance calls using the phone coupler at 400 baud. Mostly the internet at the time was bulletin boards and I nosed around and came across a DWG file, a drawing file for Autocad, and it was a 2Mb file, which was massive for the time.

"I didn't know what it was until I opened it and I found it was a drawing of the space shuttle and then I realised 'I probably shouldn't have this'. At the time I knew a few hackers and we were all writing shareware code for each other and they said that because I was in Ireland I was outside of US jurisdiction but that I should have an extradition waiver ready for them to sign if I'd agree to do a deal."

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O'Brien, who was studying at the local CBS secondary school in Kilkenny, arrived home one day to find cars outside his house.

"It was the NSA via Interpol, not Homeland Security as the TV show presents it. At the time NASA didn't do its own IT, that was handled by the NSA. It wasn't SWAT teams with machine guns, but it was scary grown-ups in suits who were very stern and official. My dad was p****d off but didn't understand why and my mom was worried about me going to jail and was very emotional.

"I agreed to explain what I did and how they could stop people like me getting into their systems."

In the years that followed O'Brien began providing computer services in the Kilkenny area, fixing computers for pocket money with friends who also had the same fascination with technology.

"I wasn't out to be the next Bill Gates or anything, to me fixing computers was just like mowing lawns."

Surviving the smarts

He said it was while competing in the 1993 International Olympiad in Informatics that he realised a quirk in similar people with high IQs. "The higher their IQs the lower their EQs. I have found that the problem in the world is that the really smart people aren't very confident, they aren't the guy that gets the girl or named the hero, and the really confident people are not that smart.

"I had read about a study from Cornell or Harvard that 85pc of successful people had high EQs, so I should have been screwed. But I felt that if I could help raise EQ levels up to at least half way people with high IQs could function well as a team, listen and be mentored and their own lives would be better."

O'Brien says he always had a desire to live in the US, and had grown up on a diet of popular 1980s TV shows like *Airwolf, The Fall Guy* and *MacGyver* and always felt at a loss when it came to being on the edge of Europe and getting technology long after it debuted in the US.

"I wanted to get to Silicon Valley and get to the heart of it all."

> **'It was all very gradual and practical and I am not running around with guns and Ferraris like in the TV show. There's plenty of excitement but it is very practical, hands-on maths problem solving'**
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O'Brien's post-college career began in localisation, where he worked with ISOCOR and Oracle's Worldwide Translation Group in Dublin. He developed complex tools for translating products that rapidly brought down the cycle time for new versions of software in a variety of languages. While working at Uniscape he became chief architect of the Utopia project that became the preferred localisation software for Oracle, HP, Sun Microsystems and many others.

"The system I developed made it possible for technology companies to sell twice as many copies of their software in a certain timeframe rather than waiting months for a new localised version to emerge."

Following his time with Uniscape, O'Brien concentrated on building up Scorpion Computer Services by competing for US government tender requests, where his skills in artificial intelligence enabled him to win projects in areas like voice recognition and image recognition.

While the TV show *Scorpion* presents the kind of problem solving that O'Brien's company has done as pivotal to all kinds of scenarios, including preventing airplanes crashing over a city, he admits the truth is actually probably more humdrum.
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excitement but it is very practical, hands-on maths problem solving."

The home for the mentally enabled

O'Brien's Scorpion Computer Services is believed to employ more than 2,500 people, high-IQ near geniuses whose efforts are combined to solve technical problems for governments and corporations. He has since created a Concierge Up business that opens up this network to solve all kinds of problems for individuals and businesses.

"We have been doing everything from a software perspective and I understand the real impact of that, whether its technologies used in military or security scenarios that have helped save lives.

"The trouble I have is when a writer or someone in Hollywood says 'Walter singlehandedly helped capture the Boston Bomber', if you Google it you will see that I am not the one who said it. We developed image recognition software that we have licensed and sold to the government. I am allowed to say that. But I am not allowed to say what the government used it for. I can say legally we wrote these tools and sold them and that the government is one of my clients."

> **'A 150 IQ is one in 15,000 people – these people are rare as hen's teeth and if I can fix one of them they could be the person that comes up with a cure for cancer, who knows?'**
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O'Brien says that as well as being a commercial business that builds solutions for organisations, one of the core missions is to raise the EQ of high IQ people.

"We have a department that goes out and looks for these people like a HR department would, just with different ways of finding these geniuses. When we find them we sit them down and say who we are. We say 'here is the home for the mentally enabled, we can work together and do you want to become self-aware enough and are you smart enough to change yourself?'

"We complement this by hiring people with high EQ, these are everyone from single moms to school teachers, project managers and psychiatrists who become what we call 'super nannies' and they babysit the geniuses and the customers. I combine the best communicators with the best thinkers.

"The supernannies have to be tolerant and try and corral the geniuses and it's okay if it takes a few years for the geniuses to come around to have a good working relationship because they are hen's teeth and if I can fix one of them they could be the person that comes up with a cure for cancer, who knows? Their brain has made them really good in one area and really bad in another and we are really trying to balance that out."

O'Brien says he has built the business as any engineer today would, in the cloud. "Everyone is a contractor and I use them as needed, whether I need two people to solve a problem or 60. I run the business using Lean Start-up Methodologies. I am very risk averse. I am not a crazy gambler, I run the business very consistently and carefully."

He says Scorpion Computer Services has a network of 2,500 geniuses and 500 supernannies as well as a range of salespeople and ambassadors. “They are all contractors because we don’t believe in the employee model.”

He said that most of Scorpion’s business is won on referral and often the company acts as a kind of fire brigade for solving problems customers may have.

“We are trained in taking ambiguities and turning them into absolutes, which is a great way to deal with life. We could plan your wedding, or your divorce, by using the same methodologies.”

The notion of opening the Scorpion think-tank up to the public, O’Brien said, led to the creation of a new business called ConciergeUp.com that takes Scorpion’s methodologies to solve business problems.

In a recent case study, GiBaCon, a creator of artificial intelligence avatars for tablet computers, used ConciergeUp.com to build the right team to complete a project that landed the company its first contract with Vodafone worth up to US$139m.

The sun always shines on TV

scorpion
NEW MONDAYS
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CAR WASH

O’Brien admits it was one of the think-tank’s outputs that led to the TV show *Scorpion* happening in the first place.
“Basically we were running out of geniuses and finding them was pretty hard. We got together to find a way of getting the geniuses to come to us. I could have written a book but no one reads anymore — at least not in the age group we are targeting. I could have shot a movie but it would be forgotten after six months. But if I put a TV show on the air for a few years it would remain top of mind and the geniuses would find us.

“The geniuses would find us because they see themselves or recognise themselves as a dysfunctional family of superheroes with low EQ, which is what the show is all about. If we name the show after the company and the main character after me, a quick Google will find the real company.

“But not only that, many 12-year-olds watching the show now will hopefully in eight years’ time be graduates with computer science degrees because we influenced them to go study, believing that every problem has a solution.”

The show, produced by CBS in the US, has attracted up to 26m viewers in 13 countries and its production team includes producers from movies like *Transformers*, *Spiderman* and *Star Trek* and writers from *The Sopranos, Prison Break* and *Hostages*.

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In terms of how it works, at the beginning of each season O'Brien would clear a number of stories from the *Scorpion* vaults that would have passed their NDA period.

"We take cool stories of stuff that happened, take them to the writers and they would add in all the humour and romance. Then they come back with questions like how would I use technology to cheat in Vegas or break out of jail. What geeky, clever way can I get out of it. When the final script is approved the actor gets in touch and asks me questions about the technology, how I would describe it or pronounce it so they can act it out convincingly. That's it. I call to the set when much of it has been filmed and the producers would get in touch with questions about what gadgets I would use to hack an electronic door or what servers in a liquid-cooled data centre would look like."

The experience has prompted O'Brien to launch a new business, Scorpion Studios, which is consulting on props, explosions, pyro, and cyberhacking for Columbia Pictures on the upcoming *Spiderman: Venom* film.
The idea is that Scorpion Studios will be able to draw on O'Brien's expertise in working in industries as diverse as nuclear energy and finance as well as his work with organisations like the Navy SEALs and counter-terrorism operations to enhance stories and add realism to productions.

"The whole pitch is that we cut down on a movie projects' research time. We have access to all these real experts who can give the real terminology and they will tell you the truth is stranger than fiction."

O'Brien has built his life in LA where the weather's perfect and he has a network of friends who keep each other grounded. He doesn't visit Ireland that often, preferring to fly his family over to see him because there's more to do in LA.

He engages with the local Irish community in LA and was recently a guest celebrity judge at BritWeek: Code for Kids Hack-A-Thon in Los Angeles. "I also go to charity events and speak at school careers days where I teach kids how robots move, for example.

"Other than four or five trolls online, everyone else has been really positive. I have released a show that teaches kids that every problem has a solution and being smart is cool," he concludes.

"How's that bad?"

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