



Centre for Air Power Studies (CAPS)

Forum for National Security Studies (FNSS)

75/16

'POKÉMON GO' MANIA: AN INFLECTION POINT FOR AUGMENTED REALITY?

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In cyberspace, the virtual, augmented and mixed reality has penetrated so deeply into the reality that the pursuit of its pure aspect, free from any form of foreign and man-made influence is often resembles the *search for the proverbial* needle in the haystack. On regular basis, we are exposed to the mixed reality technology stimulating our cognitive apparatus and affecting our visual, aural, olfactory and coetaneous senses. While virtual reality (VR) creates an interactive virtual environment, augmented reality (AR) is a real-world environment whose elements are augmented by computer generated sensory input. The main objective of VR is to dominate the senses, taking its users to a place *totally disconnected* from the real world and plunge them into immersive artificial world.

Augmented Reality allows the user to see the reality of the environment, as well as the synthesis of *virtual objects* in the real environment superimposed or contrasted with virtual reality.¹

The *real-virtual blurring* of boundaries has created many opportunities, challenges and threats – some foreseen, some neither foreseen nor perceived while others entirely *serendipitous*. AR technology has the advantage of allowing the use of tangible and multimodal actions that facilitate interaction and motivate users.² The ubiquity of mobile phones and people's *unwavering obsession with them has elevated these devices to a level where mobile phones have become central to peoples' identities social lives and every day functioning*. The mobile application developers' community has kept pace with peoples' increasing dependence on mobile phones for - communication, social media interactions, information exploration, interactive entertainment and cognitive stimulations. Companies and individuals engaged in mobile application development continuously innovate and create new things or ideas using available technologies to keep up with insatiable yearning for novelty and excitement.



In their seemingly unbridled enthusiasm to create something new, the developers have come up with another mobile application (hereinafter referred to as app) which became a rage across the world, only a little over a week after its release. 'Pokémon Go' has become such a craze that all major public locations are teeming with hordes of people walking around hunting for Pokémon. A collaborative outcome of Nintendo, the creator and owner of the Pokemon license and Niantic, a subsidiary of Google that specializes in augmented reality games, this location-based augmented reality mobile game uses GPS and the camera of compatible devices for the training, battle and capture of virtual creatures, called Pokémon, who appear on device screens as though in the real world. The game was released in Australia, New Zealand, and the United States on July 6, 2016, which was followed by release in Germany on July 13, in the United Kingdom on July 14 and in Italy, Spain and Portugal on July 15.³

Pokémon Go has become the fastest game to top the App Store and Google Play and on July 12, the game became the most active mobile game in the US ever with 21 million active users, eclipsing Candy Crush Saga's peak of 20 million. The average daily usage of the app on Android devices exceeded Snapchat, Tinder, Twitter, Instagram, and Facebook⁴. The Nintendo company, despite only owning a 33% stake in the Pokémon franchise witnessed a post-release surge in its share price, more than doubling

the firm's market capitalisation to 4.5 trillion yen (US \$42.5 billion) in just seven sessions since the launch of Pokémon GO in the United States.⁵

The game has become a 'social media phenomenon', unprecedented in the history of mobile gaming and unparalleled in garnering massive following in such a short period of time. The surge in popularity of the game has reached manic proportion and the whole phenomenon is christened as "Pokémon Go Mania" or simply "Pokémania". The massive popularity of the game has some serendipitous advantages too. The gamers have reported the sites of crime in progress or committed and have helped law enforcement agencies in catching the criminals. Business ventures have been benefitted due to their close vicinity with the 'Pokéstops'. The public places such as National and Memorial Parks across the US have experienced a surge in numbers of visitors following Pokémon Go's release in the country. In one of her rallies, 2016 US *President aspirant* Hillary Clinton acknowledged the *frenzied phenomenon of the game*, saying "I don't know who created 'Pokemon Go,' but I've tried to figure out how we get them to have Pokémon go to the polls."⁶

On the flip side, if Niantic drops rare Pokemon in a restricted area, some careless player might wander into restricted areas jeopardising *his or her life*. On the other hand, if a rare Pokemon pops up without being tracked by any one, it will not be difficult to surmise that the

area is a high security area. In Bosnia, people playing Pokémon Go have been warned to avoid areas littered with unexploded mines left over from the 1990s conflict.⁷ In Baltimore, a driver while playing *the game* behind the wheel crashed into a patrol car.⁸ People keep playing the game at funerals, hospitals, churches and have been shot after being mistaken for burglars while searching for virtual *Pokémons*.

Augmented Reality tools have the potential in medical, education, industrial and scientific fields. Persons with *ocular or auditory impairment* can use *augmented reality* tools to enhance their real world experiences. *Augmented reality tools have the potential* to enable weather, *environmental and oceanic* changes to be visualised, communicated and interacted in ways that provide a near real measure of problem and viable solutions. *Augmented Reality has potential* to vastly transform teaching and learning. Coalesce of the AR and 'geocached'⁹ data of real-world objects and locations has resulted in *stupendous* success of Pokémon Go. This game uses Google Maps data and is extremely accurate for hyper-location and has a huge database of real-world objects submitted by players to make up the Pokéstops in Pokémon Go where players collect objects.

The Pokémon Go is yet to be launched in India as its global rollout is hampered due to server overcapacity. However, it is matter of days before it is launched in India and once

launched; the whole of India will be swept over by "Pokémania". In India, the mobile gaming community is expanding everyday due to proliferation of mobile phones and mobile internet service providers. If people's enthusiasm is to be believed, India is set to welcome Pokémon Go in characteristically paradoxical fashion – gaming enthusiasts lapping up the opportunity to enhance their augmented reality driven gaming experience while *social media puritans and stolid* netizens warning of ill effects and potential dangers of *unbridled* fixation with augmented reality. India is better placed to deal with the potential frenzy likely to be created after the launch of Pokémon Go as the US experience will provide us with some templates to chalk out a plan for minimising potential physical and emotional risks to the players. The gauging of overall influence of this game on cognital, physical and emotional dimension of *society* at this point in time *will be purely* conjectural as the game was launched just two weeks back. But a study of overall impact of the game after some time will provide some interesting insights and will raise a number of issues surrounding the role of augmented reality on society in general and on gamers' behaviours in particular.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

¹ Lucio Tommaso De Paolis and Antonio Mongelli, *Augmented and Virtual Reality: First International Conference, AVR 2014*, (New York: Springer, 2014), P.4.

² Randall Shumaker and Stephanie Lackey, *Virtual, Augmented and Mixed Reality, 7th International Conference, VAMR 2015*, (New York: Springer, 2015), P.39.

³ Matulef, Jeffrey, "Pokémon GO is out now in Australia and New Zealand", *Eurogamer*, July 8 (2016), <http://www.eurogamer.net/articles/2016-07-06-pokemon-go-is-out-now-in-japan-australia-and-new-zealand>, accessed on July 20, 2016.

⁴ Brett Molina, "'Pokémon Go' beating Facebook, Tinder and Snapchat", *USA Today*, July 13, (2016), <http://www.usatoday.com/story/tech/gaming/2016/07/12/chart-more-time-spent-pokmon-go-than-instagram-snapchat/86982096/>, accessed on July 20, 2016.

⁵ Reuters, "Nintendo's market cap doubles to \$42 billion since Pokémon GO launch", *The economic Times*, Jul 20 (2016), http://economictimes.indiatimes.com/articleshow/53279534.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst, accessed on July 20, 2016.

⁶ Natalie Andrews, "Hillary Clinton's Campaign Uses Pokémon Go to Register Voters", *The Wall Street Journal*, July 16 (2016), <http://blogs.wsj.com/washwire/2016/07/16/hillary-clintons-campaign-uses-pokemon-go-to-register-voters/>, accessed on July 20, 2016.

⁷ Agence France-Presse, "Pokémon Go players in Bosnia warned to steer clear of landmines", *The Guardian*, July 20 (2016), <https://www.theguardian.com/technology/2016/jul/20/pokemon-go-players-in-bosnia-warned-to-steer-clear-of-landmines>, accessed on July 20, 2016.

⁸ Samit Sarkar, "Pokémon Go player hits cop car while playing behind the wheel, all caught on camera", *Polygon* July 19 (2016), <http://www.polygon.com/2016/7/19/12231520/pokemon-go-accident-police-car-baltimore>, accessed on July 20, 2016.