"BEWARE OF THIS VIRUS...CONTACT US FOR VACCINATION"

"Somewhere in Time"

Fascinated by destruction/ malfunctioning systems harmful in term of social, historical and cultural aspect I traced Bulgarian "viruses approaches" in the world virus database in order to understand why and what could motivate someone to write a destructive code. The research will take out of the dust some alluring narration from the near past and draw timeline of events, conditions and precursors echoing in the present realm.

From 1967 to 1972 under communism Bulgaria established first of several Five Year Plans for informatics. Considering inevitably massive production of illegal clones of IBM PCs and Apple II, hacked, reversed, engineered and transformed into Bulgarian equivalent (Pravetz) [1]. Bulgaria experienced great technological, economical and "human brain" supply. Boyanov, Bulgarian researcher emphasized that period: "In the USA, they needed tools to construct products. Here, we needed tools to deconstruct these products. We had fundamental skills in this, and we created a new breed of researcher - a person who could duplicate a machine using different materials." admitting the fact that quality was not so good, but computers still worked.

The manufacture of a complete copy of the hardware flourished. The Pravetz computers were defined as inseparable part from the Bulgarian virus epidemic scene happened at that time.

In the late '80s, students in Bulgaria had access to more computers than their peers in any other Eastern European country. They did what young people do when they first meet machines - they played, they explored, they programmed. In 1988 the time, when there were no viruses not even an established computer network the Bulgarian computer magazine, "Komnotypyt 3a Bac" (Computer For You) [1] translated a German article about viruses. It was more than an introduction to computer viruses it explained some methods for writing them. The idea was already spread. Several months later, the first destructive homespun code appeared. Eventually everyone was writing viruses. In 1988, 1990, 1990 Bulgaria was proclaimed as top virus writing country.

"Bulgarians Linked to Computer Virus," headlined New York Times.

Dark _Avenger

"I was not aware that there could be any consequences. This virus was so badly written, I never imagined it would leave the town. It all depends on human stupidity, you know. It's not the computer's fault that viruses spread." DA

There was one distinguished computer virus writer – formally named as Dark Avenger, who left a mark in the international virus scene. Characterized by secure researcher Sarah Gordon as "unique individual " who had slightly in common with any other virus writers he still remains a cloak or his real identity has never been ascertained.

Dark Avenger's first virus appeared in early 1989 and contained the string "This program was written in the city of Sofia (C) 1988-89". According to IMB research_ virus timeline from 1995 the following description for the virus was published:

"This virus introduced two worries: First, it was designed to do slow, insidious damage to the system rather than sudden obvious damage. It would randomly write garbage to sectors of the drive. So damage would tend to go unnoticed. In turn damaged files would be backed up. Corrupted files contained the string "Eddie lives... somewhere in time" [2]

Second, it was a fast-infector. Resident viruses before this would infect programs as they were run. Dark Avenger also infects programs if they are opened. Therefore, if the virus as in memory and you ran an antivirus scanner (that wasn't aware of the virus) on the system, the virus would piggyback on the scanner and infect every program the scanner looked at." Due to its highly-infectious nature, the virus spread around the world, reaching Western Europe, the USSR, the United States, and even East Asia. It even received a mention in the New York Times and Washington Post.

What could actually lead someone to write down destructive code then (nearly two decades ago and even now?! It is rather social, political and psychological question concerning the time and place of the origin. (the author)

In the past the most common reasons were linked to experiment. The programmers Basit Farooq Alvi and Amjad Farooq Alv - the creators of "Brain"- the first estimated virus were just curious. They wanted to explore the operation system or to find out if their written software would spread world wide or it could remain a certain group of people. Before the World Wide Web the only way to spread a malicious peace of code was trough a floppy disk.

But then there were always the opposite motives for one to write destructive code or seeking fame, approval or a certain profit or even revenge. Sarah Gordon an established IMB researcher whose main focus was profiling virus writers managed to do what no one had done before - or engaging DA. After five years of continuous correspondence, eventually in 1993 she published an interview with him.

Some extracts of questions & answers published in January 1993 issue of Virus News International by Sara Gordon [3]

SG- People have wondered why you wrote your first virus. Why did you write it and do you have any regrets about it?

DA- I wrote it because I had heard about viruses and wanted to know about them, but nobody around me could tell me anything. So I decided to write my own. I put some code inside it that intentionally destroys data, and I am sorry for it. I started working on it in September 1988.

DA....I think the idea of making a program that would travel on its own, and go to places its creator could never go, was the most interesting for me. The American government can stop me from going to the US, but they can't stop my virus."

SG- How do you feel about the destruction of data?

DA- I think it's not right to destroy someone else's data.

SG- If you think that, then why did you put destructive code in your viruses?

DA- As for the first virus, the truth is that I didn't know what else to put in it. Also, to make people try to get rid of the virus, not just let it live. At that time, I didn't think that data in PCs could have any great value.

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SG- Don't you feel responsible if someone else uses one of your viruses to cause actual harm to a person's machine?

DA- No. If they wanted to cause harm, they wouldn't need my viruses. They could simply type "format c:" or something else that is much more effective.

SG- What about the fact that you're giving people the idea, by creating such clever viruses?

DA- Ideas are not responsible for people who believe in them. Or use them. Or abuse them. Also, I didn't write them to "provide" anybody with anything.

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The real identity behind the mysterious man "X" or Dark Avenger was never revealed and the story was neglected, archived in some of the old records and publications on the case. But this rather narration remains open for cultural, social and historical investigation on that period. The "revolutionary time" when the change from one system to another occurred or the collapse of a regime uprise social anticipation and hope for a democratic change. The story is still present looping back and forwards hidden in our collective unconsciousness.

Used sources:

[1] note <u>http://www.pravetz.info/en/</u>

online archive of Pravetz computers and "The Computer for you" magazine

[2] note "Heart of Darkness" by David S. Bennahum Wired magazine issue 5.11 November 1997

An investigative journey of David S. Bennabum for Wired magazine (Nov. 1997) revealing history, identities and hidden secrets.

[3] note "Inside the mind of Dark Avenger"

The compendium correspondence between Sarah Gordon and DA, VFR Systems International, Sarah Gordon, 1993

[4] Wikipedia entry Dark Avenger