

Math 34001

31 January 2015

Essay 3

UNCLASSIFIED

United States Department of State
and the Federal Bureau of Investigation

Unassigned Case X-File 97554, January 2015

Decontrolled

Memorandum

TO: FBI- Special Agent Fox Mulder

FROM: DOS- FSO [REDACTED] *redacted*

SUBJECT: Investigating the appearance of an extraterrestrial species

Due to my recent encounter with an extraterrestrial species, there may be an increased risk to information assurance based on the species' specific questions regarding mathematics, and ensuring national and global security requirements are met is of the utmost importance. The purpose of this memorandum is to provide my account of the encounter on 30 January 2015 to inform appropriate parties within the Federal Bureau of Investigation's unexplainable phenomenon-specific unit, the X-Files.

Encounter with the species

On 30 January 2015 at roughly 23:00 EST, my doorbell rang and I was greeted by the most unexpected guest, a slimy green figure with a large head. The alien waved its hand and said "nanu nanu." Not detecting an immediate threat, I invited it in for tea and it promptly noticed the book *Mathematical Experience* on my counter. This is where our questionable conversation about mathematics began. The creature asked what mathematics was. I was not sure how to answer outright, so I referred it to the first chapter in the *Mathematical Experience*, which explains the development of a variety of disciplines within mathematics. Not satisfied with such a broad answer, the alien inquired deeper.

I simply stated that mathematics is a way to quantify our everyday surroundings. It is a means to understand the space, shape, arrangement, structure and changes of everything from the ground beneath our feet to the vast expanses of the universe. Surely the alien understood after I explained how mathematics applied to the means it used to travel here from across the galaxy, though it did not fall for my ploy to probe it for answers on interstellar travel. Fascinated by our concept of mathematics, the alien further inquired as to who specifically studies mathematics and what they do with it. I assured it that there are a variety of mathematicians, some that study it purely and some that study its applications to various fields of science. I went on to say that as a whole, mathematicians analyze solutions to everyday problems, showing that what may seem like arbitrary calculation and therefore taken for granted is actually necessary to understand.

Our last topic of discussion was that of Stanislaw Ulam's dilemma which it saw mentioned in the *Mathematical Experience*. The alien could not understand why humans need to pick and choose which topics are more important than others. I told it that humans do not possess the capacity to retain all of the information we have acquired about mathematics, and while it is impossible to objectively decide what the most important topic of study is, it is subjectively decided by the professionals that study a specific discipline of mathematics without an impedance on professionals in another field. These professionals meet in conferences and seminars to share their research area with others regularly, thus the need for any person to burden themselves with studying all areas is as unnecessary as it is unfeasible.

The alien made mention of the Internet and how that helps us store information we can regularly access. I replied that the Internet expands the global database and makes most information attainable for those with access, but it still cannot expand the human mind to be able to process everything it reads. The Internet is a great source for research as it gives people the ability to seek an answer within minutes, but for most people browsing, the valuable information is often in the shadows of a vast amount of misinformation, unreliable sources, and cat videos.