THE SCIENTIFIC METHOD AND THE LATKE–HAMENTASH ISSUE or I CAN TELL YOU— BUT IT'S GONNA COST

Edward W. Kolb Astronomy and Astrophysics

Presented at the Jewish Federation Center, 130 E. 59th St., New York, as part of the 50th Anniversary of the Latke-Hamentash Debate March 20, 1997

It is a pleasure to be here with you this evening in New York. I would like to thank Ted Cohen for that wonderful introduction...every single word of which is true.

After working closely with Ted in the chaos of what passed as preparation for this important debate, I now understand why he is held in such true affection by the student body. Just last month I witnessed an example of this affection. Ted was hurrying across the Quadrangle, late for class as usual, when he slipped and fell on a patch of ice. It was truly a stupendous fall, arms and legs flailing about in all directions. I'm sure that in the Olympic street diving competition he would have received at least a 9.5. It might have been a 10.0, but he was marked down by the East German philosopher. Luckily for Ted, a student in his class happened to be right behind him when he fell. The student ran to Ted's side, only to find him stunned and unable to get up. The student felt sorry for his beloved professor, and seeing him lying on the cold pavement, the student removed his coat, exposing his own body to the bitter cold Chicago wind, fluffed his coat into a makeshift pillow, and put it under Ted's bruised head. The student, with great concern, looked down at Ted and inquired, "Professor Cohen, are you comfortable?" Ted slowly opened his eyes, shrugged his shoulders and said, "Weeellll, I wouldn't exactly say comfortable, but I make a living."

Speaking with my distinguished colleague from the philosophy department reminded me of my first exposure to philosophy. On April 25, 1965, at the tender age of 13, I participated in the true rite of progression from childhood to manhood. Not a Bar Mitzvah, but a first date. I remember the girl well. Her name still echoes in my memory—Wanda-Sue Wolfenstein. Now I was a desperately shy young man, with all the awkwardness of a 13 year-old boy, an awkwardness I hope to outgrow some day soon. Too embarrassed to ask advice from friends, in desperation I asked my father how to act on a date. In particular, I was worried that I wouldn't have anything to say to Wanda-Sue. What do you say to girls? My father, who was very a wise man, told me that the three fail-safe areas of conversation with members or the fairer sex are food, family, and philosophy (usually referred to as the three "Fs"). Well, as it turned out, Wanda-Sue was even more desperately shy than I. After the first half-hour together without a word spoken between us, I decided to open with the food topic. "Wanda-Sue" I said, "do you like hamentashen?" She didn't say a word, only shook her head no. Well, another half-hour passed, and I couldn't stand it any longer, so I tried the family question. "Wanda-Sue, do you have any brothers?" Again, not a word, just another shake of her head no. Now I was really in trouble. Two strikes already, and I knew that with girls three strikes meant you're out. So after another hour and a half of embarrassed silence, I went for it, the big question of philosophy. The deepest and most profound philosophical question I could come up with: "Well, Wanda-Sue," I said, "if you did have a brother, do you think he would like hamentashen?"

Now I didn't let this first bad experience lead to prejudice against philosophers. I want to make it clear that I have nothing against philosophers personally, in fact, some of my best friends....talk to philosophers.

Well, enough about philosophy. Rabbi Griffel was kind enough to allow free access to the archives of Hillel. You see, I was curious why, after 50 years of consideration among faculty members of the most distinguished and renowned university in the Hyde-Park/Kenwood neighborhood, such a crucial issue had not been settled. What I discovered, to my utter amazement, is that this debate has been largely dominated by faculty from the social sciences and humanities. Now anyone who has been through a faculty meeting with these people knows quite well that they never settle a damn thing, because deep down inside they just love to argue. It is my opinion that the only real difference between a faculty meeting and a pre-school class is that the pre-school class has a responsible adult in charge.

So enough of the mushy arguments of philosophers, linguists, sociologists, and anthropologists. Now it is time to settle, once and for all, the latke-hamentash question by putting it to the rigorous, objective test of the scientific method.

What I will present to you now is not the empty polemic of the past, but rather the sharp, clear logic of science. I am afraid that many in the audience might be intimidated by science, so to make it easier for you, I will start with a brief guide to the precise language of the hard sciences. My guide will be given in terms of a "when it says" – "it really means" translation dictionary. For instance, when it says

"The hamentashen were integrated into the ambient background environment,"

it really means

"Somebody dropped the damn hamentashen dropped on the floor."

When it says

"The latkes were isolated from adverse contaminants," it really means "The latkes were not dropped on the floor."

When it says

"Three sample hamentashen were chosen for further analysis,"

it really means

"Results of the others didn't make sense, so I omitted them."

When it says

"It is widely known..."

it really means

"I haven't bothered to look up the reference..."

When it says

"The final resolution of the issue requires further data,"

it really means

"The experiment didn't work, but I need the publication for a grant."

You see, science is not so difficult. Now that you are all comfortable with the precise language of science, let us proceed. The first step is historical research on the subject. It seems that it has been the subject of scientific inquiry since the very birth of modern science. In fact, the first modern physics experiment was inspired by considerations of the relative merits of latkes and hamentashen. On July 14, 1590, the father of modern science, Galileo Galilei, then an assistant professor at the State University of Tuscany at Pisa, was dining al fresco with a few of his graduate students atop the Leaning Tower Pizzeria and Deli. While having a tall, half-decaf, low-fat cap, Galileo noticed two young Talmudic students, Primo Contini and Secondo Levi, discussing the relative merits of the latke and the hamentash. The discussion became a debate, which became a confrontation, which led to conflict. Primo became so upset that he grabbed Secondo's plate and threw it, latkes and all, off of the tower. In retaliation, Secondo threw Primo's plate of hamentashen off the tower.

Watching the latkes and hamentashen fall to the ground, Galileo started thinking about what would happen if a latke and a hamentash were dropped from the leaning tower at the same time. Of course he could not bring himself to waste such tasty delicacies, so instead, he tossed two of his graduate students off the tower to see if they would hit the ground at the same time.

The result of this experiment led Galileo to postulate his first law of culinary physics, which states "A pound of latkes weighs the same as a pound of hamentashen." This overturned Aristotle's idea that a pound of latkes weighs more than than a pound of hamentashen. Obviously the owner of Aristotle's local deli had a heavy thumb on the scale.

Further experimentation with latkes led Galileo to his famous law of iner-

tia, which in it's original form stated, "A body at rest tends to remain at rest after eating lots of latkes." Later Galileo inserted an addendum which read "Eating too many hamentashen sets a body in motion, and once in motion, the body will remain in motion in the direction of the nearest bathroom."

Of course since Italy was under the control of the Catholic Church, Galileo was dragged before the Inquisition and forced to remove all references to Jewish food.

The classical physics of latkes and hamentashen discovered in the experiments of Galileo was overturned in the revolution of 20th century physics, led by that great latke/hamentash gourmet, Albert Einstein.

Historians of science agree that Einstein was led to the special and general theories of relativity by considerations of the special and general relative merits of the latke and the hamentash. When he was a child he asked his mother which is better, latkes or hamentashen. His mother's reply, "Albert, everything's relative," seems to have made a deep and lasting impression on him.

According to theories of modern physics, the entire latke/hamentash question can be decided only by studying their basic constituents. Now by "basic constituents" I am not talking about the ingredients given in cookbooks. That is just chemistry, which is stupid and boring. Nor am I speaking of anything as hopelessly complicated as biology, which is equally pointless. Cloning sheep, big deal! Although I've never seen cloning sheep around campus, I have seen Cohen schlepping around campus! That must be about the same.

By basic constituent I refer to the most fundamental nature of the food, its quark structure. Any attempt to judge the relative merits of the two without a complete and detailed understanding of their quark structure is doomed to failure, and will degenerate into the mere philosophical speculations we wish to end.

Sadly, the quark structure of the latke and hamentash has received precious little attention from scientists. This is due, no doubt, to unfortunate cutbacks in science budgets. But I believe that will change because of the exciting new scientific research program I will describe. This program is courageous in scope, ingenious in detail, bold in vision, and, I am most proud to say, in the finest tradition of modern science, it is damned expensive.

The traditional method of exploring the quark nature of matter is through colliding things together at enormous energies. This is usually done by means of something known as an accelerator, or atom smasher. An example of an accelerator is the 4.26 mile circumference Tevatron ring at Fermi National Accelerator Laboratory, 30 miles north-west of the University of Chicago in Batavia, Illinois.

Unfortunately, the Fermilab Tevatron accelerator, as powerful as it is, is simply not large enough to produce the extreme energies required to smash latkes and hamentashen to smithereens. Clearly, what is needed is a larger accelerator, designed for, and dedicated to, latke/hamentash research. I am happy to report to you this evening that physicists at the University of Chicago and scientists at Fermilab have come up with a design for a machine powerful enough to knock the stuffings out of a hamentash.

The price tag for this new machine, the Superconducting Delitron, is \$18.264 billion, a price which includes tax, tip, and dealer prep, and we are now negotiating for free rustproofing, pinstripes, a cell phone, and an anti-theft device. Now \$18.264 billion is a lot of money, but we believe that influential members of the New York and Chicago Jewish communities can get it for us wholesale.

At the heart of the Delitron are the injectors. A hamentash injector is planned for the Chicago area, in or near Skokie, where there is a ready supply of hamentashen. Latkes will be injected somewhere in Manhattan, presumably deep beneath the 2nd Ave. Deli on an abandoned platform of the never-completed 2nd Ave. subway. The latkes and hamentashen will be accelerated to high velocities driven by a force far more powerful than the electromagnetic force or the strong nuclear force. I speak of course of the single strongest force known, the force of guilt. Stationed every few miles around the circumference of the Delitron will be Jewish mothers, who will coax the latkes and hamentashen to go faster. "What's the matter, look at yourself. You call yourself a latke?" Why the other latkes are going much faster." "If you don't keep up I'll die of shame."

Then, driven to incredible velocities by the force of guilt, the latkes and hamentashen will collide in Wolfie's Deli in Miami Beach. Hidden in the debris of the collision will be clues to the quark structure of the latke and hamentash.

It was once though that a Delitron could never work because latkes and hamentashen would become stuck in the ring, clogging the machine as surely as they clog arteries. What was needed was some substance to coat the inside of the ring to allow food to slide through without clogging. This substance would have to be the greasiest, slipperiest, slimiest, oiliest substance, ever discovered.

The great breakthrough came last year when we noticed that the circular ring connecting New York, Chicago, and Miami Beach passed right through Little Rock, Arkansas, location of the famous Whitewater Deli. In the Whitewater Deli we discovered the miracle substance we had been looking for, on the hands of a frequent Whitewater patron, New York's very own Senator Alfonse D'Amato. In exchange for a modest contribution to the D'Amato campaign and use of his brother-in-law's construction company on the project, he agreed to allow some grease to be extracted from his palms to coat the inside of the Delitron.

Unfortunately, this technical breakthrough does not guarantee that the Delitron will be built. Everyone knows that knowledge ain't cheap. The tremendous cost of this machine must be shared between the University of Chicago and a new federal cabinet-level department which would replace the Department of Energy, to be called the Department of Ethnicity.

To raise its share of the cost of the Delitron, the University will have to tighten its belt a bit. We have proposed that this be accomplished in part by closing a few departments that will not be necessary for a university in the 21st century. Useless departments such as Classics, Political Science, Philosophy, Biology, and several language departments such as Far Eastern Languages, South Eastern Languages, and Midwestern Languages, will have to go.

Although I've enjoyed working with Martha Roth and have great respect for her scholarly research, her department of Near Eastern Languages will also have to go also. I really don't think it will be missed. Where the hell is the "Near East" anyway? And just what is the "Near East," near? The "Near East" must be near, "The East." So as near as I can tell, "Near East," is just a polite way of saying "New Jersey."

And while we're on the subject, does "The **Far** East" make sense to you? Think about it for a minute. What in the world is East of the Far East? The Farther East? The Near West? I think it's time to rethink this whole thing and close all those departments.

But the University of Chicago, strapped as it is now with budget problems, must do more than just close a few useless departments. Under the inspired leadership of Hugo Sonnenschein, respected economist and visionary President of the University of Chicago, we have developed a plan. I am pleased to report to you this evening that a joint faculty committee of Nobel Laureates from the Economics and Physics Departments has come up with an absolutely ingenious solution for solving the financial problems of the University, revitalizing the Hyde Park neighborhood, and funding the Delitron at the same time. This solution is sure to garner its share of fresh Nobel prizes in economics, as well as a few in physics.

The plan calls for a type of University–Business alliance many feel will be common in higher education in the 21st century. Under the plan, the University, in partnership with a well known businessman, will develop a gambling casino complex on campus. At this point in the sensitive negotiations we can not reveal the individual involved, but I can assure you that he is a great humanist, a generous philanthropist, and a true intellectual in the tradition of our original benefactor, John D. Rockefeller.

Although I can't reveal his name, I can tell you that we plan to change our name from "The University of Chicago," or "U.C.," to "Trump University Casino," or Trump U.C. In addition to raising money for the Delitron, Trump University Casino will result in remarkable, and long overdue, changes on campus. Let me outline just a few.

<u>Physical Plant</u>: Many of you are familiar with the dormitories at the University, many of which were constructed in the 1960s, in an architectural style

known as "brutalism." At Trump U.C., the antiquated dorms will be converted into luxury hotel suites for Casino guests, and renamed, "The Hyde Park Trump." Of course students would not be able to use their rooms at night, but our students traditionally spend all night in the library anyway. Besides, they will still get plenty of sleep during class time. Students will certainly appreciate the fact that giant neon signs will light up Hyde Park at night, resulting in a much safer neighborhood.

<u>Management</u>: The most modern management techniques will be employed at Trump U.C. While some fear that gambling will lead to the involvement of organized crime, others at the university welcome the presence of anything remotely "organized." It is also felt by the faculty that the Mafia might be more reasonable than the current administration.

<u>Retirement Incentives</u>: Now that Federal regulations prevent forced retirement, what do we do about faculty who have reached the traditional age where they would be referred to as "Professor Emeritus." As you know, the origin of the word *Emeritus* comes from the Latin phrase *E Peeus Mustus Lotus* which loosly translated means "with bladder control problems." The Trump University Casino early-retirement incentive—retire now and your grandchildren will be released unharmed—should solve this vexing problem.

<u>Core Curriculum</u>: We have to face the fact that the Common Core is just not adequate for preparing students for real-world employment opportunities in the fast food industry. Nothing in the Common Core provides students with modern jobs skills they truly need. Many years ago it was important for students to ask questions such as "Is Aristotle's Doctorine of Abstraction Just A Metaphor for Aesthetics?" or "Is the Conceptual and Contextual Structure of Nietzsche's *Beyond Good and Evil*, Premodern, Modern, or Postmodern?" But the only deep philosophical question "Generation X" graduates are likely to ask in their jobs is "Do you want fries with that?"

But in partnership with the Casino Complex, students at Trump U.C. will be able to gain valuable "real world" experience. Rather than studying the outdated music of Bach, Trump students will be exposed to the modern arrangements of Wayne Newton. And what better way to teach probability and statistics than hands-on experience working as dealers at the gaming tables? Students will no longer have to suffer through the stale works of Shakespeare, but can experience lively performances of the Trump Casino Showgirls. Finally, think of the invaluable business experience the students will obtain while hustling big tips in valet parking class.

Now that plans for Trump University Casino are underway, we believe that the University will be in a financial position to pay its share of the Delitron. But how can we convince the federal government to pay for its share? In this era of decreasing budgets for government supported basic science, the public demands that scientific research have an economic imperative.

Ladies and Gentlemen, I don't want to alarm you, but unless we build

the Delitron our country is doomed. The very economic survival of our nation depends upon the Delitron, for our chief economic rivals in the global marketplace, Japan and Germany, are planning their own ethnic food accelerators.

As reported last week in the *The Post*, the US has uncovered secret Japanese plans for the construction of an underwater machine known as the *Sony Super Sushitron*. This monstrous machine will collide sushi at enormous energies offshore in the Sea of Japan. This region is an an environmentally sensitive area that has given birth to many biologically unique species, like Godzilla, Rodan and Mothra.

Luckily, CIA agents accidently stumbled upon the Japanese strategic sushi stockpiles, which were stored in a warehouse directly across the street from the US Embassy in Tokyo. Imagine the audacity of the Japanese, storing raw fish under our very noses! The threat is clear. Do you want your children growing up in a world dominated by Japanese food? Delis replaced by Sushi Bars? History teaches that this is the way great civilizations of the past have decayed—first they lose their auto industry, then consumer electronics, finally, ethnic food.

But the most insidious threat to our ethnic food culture comes from our so-called partners in the new world order, the Germans. Since German unification, their scientists have been secretly involved in a secret project, code name 3-D, for Digestible Deutsche Desserts. At the heart of the program to develop edible German food is a super-secret accelerator called the "Strudel-Schnitzel Collider," or SSC. If the idea of edible German food doesn't frighten you, notice that in order to construct the SSC they require land in Belgium, the Rhineland, Poland, and the Sudetenland.

But if we complete the Delitron first, we will have a complete map of the quark structure of the latke and the hamentash, and we will have in hand the final piece of the puzzle for a complete understanding of the Universe. We will have a picture starting from the formation of the universe in a hot, primordial, chicken soup, through the era of production of nuclei, the era of production of atoms, the era of production of molecules, the era of the emergence of life on our planet, through the era of the development of Jewish cooking, known to scientists as the era of cholesterol.

Although I cannot yet provide a definitive answer to the question of what is better, the latke or the hamentash, I know the experiment that will. After just one or two years of Delitron operation we should have the final answer to this fundamental question, and we hope to see that glorious day when the latke/hamentash issue is forever removed from the realm of philosophers and others trained in the humanities, and is placed firmly in the sphere of rational scientific inquiry.

In conclusion, the choice is clear; either continued inconclusive arguments on the relative merits of latkes and hamentashen by philosophers and the like, or we give scientists the tools necessary to settle the question. I am sure I can count on the support of all present this evening for my bold program. If you want to know the answer to the question of which is better, the latke or the hamentash, I can tell you—but it's gonna cost. Thank you.