# **Dan Rather Reports**

**Episode Number:** 630

**Episode Title:** Bad Score

**Description:** Standardized testing in America's schools has become a billion-dollar industry. But whistleblowers come forward to tell how erratically and unfairly the tests are scored. Also, Japan six months after the quake. Will they make another comeback? Plus, an investigation into pesticides and possible new effects on honeybees.

**TEASE:** 

# DAN RATHER (VOICE OVER)

TONIGHT, BEE AWARE! NEW PESTICIDES MAY BE KILLING BEES AND PUTTING OUR FOOD SUPPLY AT RISK. WHO, IF ANYBODY, IS MAKING SURE THE CHEMICALS ARE SAFE?

STEVE ELLIS

The chemical companies do the testing.

**RATHER** 

The companies do the testing? Not the EPA?

**ELLIS** 

Not the EPA.

# RATHER (VOICE OVER)

PLUS, THE BILLION-DOLLAR BUSINESS OF TESTING AMERICA'S SCHOOL CHILDREN. SOME ON THE INSIDE SAY THE TESTS ARE CHEATING STUDENTS.

## **TODD FARLEY**

The testing companies are in it to make some money; they're making tons of money, but what is anyone else getting out of it?

# RATHER (VOICE OVER)

AND THE LAND OF THE RISING SUN. SIX MONTHS AFTER THE GREAT TSUNAMI, WILL JAPAN RISE AGAIN?

#### PROFESSOR JOHN DOWER

What I think Americans should see is how frequently in the past it's faced disaster and tragedy and how often it's responded very creatively and constructively.

# RATHER (VOICE OVER)

WE'LL BRING YOU THE NEWS TONIGHT, ON DAN RATHER REPORTS.

**ACT 1: BEE AWARE** 

# RATHER (ON CAMERA)

GOOD EVENING. A FEW YEARS BACK, WE REPORTED ABOUT THE MYSTERIOUS DEATHS OF HONEY BEES OCCURRING AROUND THE WORLD. IT BECAME KNOWN AS COLONY COLLAPSE DISORDER...OR CCD, AND IT'S WHERE LARGE NUMBERS OF HONEY BEES DISAPPEAR FROM THEIR HIVES WITHOUT A TRACE, LEADING TO THE DEATHS OF ENTIRE COLONIES.

SCIENTISTS STILL DON'T KNOW WHAT CAUSES THIS PHENOMENON, BUT MANY SEE THE THREAT TO HONEY BEES AS BIGGER AND MORE OMINOUS THAN JUST CCD. TONIGHT A NEW INVESTIGATION INTO GROWING QUESTIONS ABOUT THE ROLE OF A NEW CLASS OF PESTICIDES - WHAT WE KNOW AND WHAT WE DON'T KNOW ABOUT THEIR IMPACT ON HONEY BEES ...AND ULTIMATELY OUR ENTIRE FOOD SYSTEM.

# RATHER (VOICE OVER)

COMMERCIAL HONEY BEES ARE THE WORKHORSE OF MODERN AGRICULTURE.

#### BEE KEEPER

These guys here are pollinatin' these flowers.

# RATHER (VOICE OVER)

ALMOST 2 MILLION COLONIES ARE RENTED OUT TO U.S. FARMERS EACH YEAR TO POLLINATE MUCH OF WHAT WE'LL EVENTUALLY EAT.

IT'S HARD TO IMAGINE AMERICAN AGRICULTURE WITHOUT BEES...A FARMER'S MARKET WOULD BE A PRETTY BARREN PLACE.... NO PEACHES, CUCUMBERS, PEARS, APPLES, CHERRIES, PUMPKINS, AVOCADO, ALMONDS, ZUCCHINI, WATERMELON OR BLUEBERRIES...THESE ARE SOME OF THE MANY CROPS ALMOST ENTIRELY DEPENDENT ON HONEY BEES FOR POLLINATION.

AND NOW CONSIDER THIS: IN THE UNITED STATES, BEEKEEPERS ARE NOW LOSING 30-TO-50-PERCENT OF THEIR HIVES EACH YEAR.

WITH REPORTS OF BEE DEATHS COMING IN FROM ALL OVER THE U.S., EUROPE, THE MIDDLE EAST AND SOME PARTS OF ASIA, WE FACE UNKNOWN BUT POTENTIALLY DEVASTATING CONSEQUENCES ON THE WORLD'S FOOD SUPPLY...

WITH THE STAKES SO HIGH, BEEKEEPERS ACROSS THE COUNTRY ARE DESPERATELY LOOKING FOR ANSWERS.

TOM THEOBALD IS A SMALL BEEKEEPER IN CENTRAL COLORADO. AND AN UNLIKELY LEADER OF A NATIONAL MOVEMENT TO CHALLENGE AMERICA'S PESTICIDE POLICY.

HE LOST FIFTY TO SIXTY PERCENT OF HIS HIVES LAST WINTER.

#### TOM THEOBALD

The electric fence keeps the bears out of the bee yard.

Well, the question, obviously, is what's causing this? This is very unusual. This just doesn't happen in the bee world.

# RATHER (VOICE OVER)

THEOBALD'S BEE HIVES ARE SURROUNDED BY RICH FARMLAND, GROWING BARLEY, HAY, SUGAR BEETS, AND CORN. HIS BEES SEARCH FOR POLLEN ACROSS THOUSANDS OF THESE ACRES AND SINCE HE'D RULED OUT USUAL CAUSES OF BEE DEATHS, HE BEGAN TO LOOK TO THE FIELDS FOR

#### ANSWERS...AND SOON REALIZED SOMETHING DIFFERENT WAS GOING ON.

## THEOBALD

I began investigating and-- and I began looking at corn. Now corn is one of those crops that has been treated. The seed is treated with one of the inc-- systemic pesticides, clothianidin.

# RATHER (VOICE OVER)

SYSTEMIC PESTICIDES ARE A NEW TYPE OF PESTICIDE THAT HAVE CHANGED THE GAME OF INSECT CONTROL IN THE PAST 15 YEARS.

TRADITIONALLY, PESTICIDES ARE SPRAYED ON THE SURFACE OF LEAVES OR PUT IN THE SOIL TO DIRECTLY KILL UNWANTED INSECTS, AND THEN THEY WEAR OFF OR WASH AWAY A SHORT TIME AFTER APPLICATION AND HAVE TO BE SPRAYED AGAIN.

SYSTEMIC PESTICIDES, HOWEVER, ARE ABSORBED BY THE PLANT SO THEY BECOME PART OF THE BODY OF THE PLANT FOR THE LIFE OF THE PLANT, THEY ARE TAKEN UP BY THE ROOTS AND LEAVES AND CAN MOVE TO ALL PARTS, INCLUDING THE POLLEN AND NECTAR.

## **THEOBALD**

The systemic pesticides are always there. There's no escape from them. And they are there whether there's a pest problem or not. Anything that chews or sucks on that plant is affected by that pesticide.

# RATHER (VOICE OVER)

FARMERS LIKE THESE SYSTEMIC PESTICIDES BECAUSE THEY REQUIRE A LOT LESS SPRAYING. DERIVED FROM NICOTINE, THEY'RE CALLED NEONICOTINOIDS, AND HAVE QUICKLY BECOME THE FASTEST GROWING AND AMONG THE MOST WIDELY USED INSECTICIDES IN THE WORLD.

THEOBALD STARTED LOOKING INTO RECORDS OF THE ENVIRONMENTAL PROTECTION AGENCY'S OFFICE OF PESTICIDES, WHICH APPROVES OR "REGISTERS" PESTICIDES FOR MARKET. WHAT HE FOUND SHOCKED HIM...

## **THEOBALD**

And what I discovered was a series of Environmental Protection Agency memos which documented the consideration of that product for registration, the first of which was February of 2003, in which the EPA scientists said that they recognize that these systemic pesticides were highly toxic to the bees. And they took the prudent course which was to determine the safety of this product before it was released to the market.

# RATHER (VOICE OVER)

THEOBALD READ IN DOCUMENTS THAT EPA SCIENTISTS WANTED FIELD TESTS ON BEES AND THOUGHT THOSE WOULD HAVE TO BE COMPLETED BEFORE THE PESTICIDES WERE AVAILABLE TO THE PUBLIC, BUT HE SOON FOUND OUT THAT IS NOT WHAT ACTUALLY HAPPENED.

CONGRESS HAD CREATED A PROVISION IN PESTICIDE POLICY CALLED "CONDITIONAL REGISTRATION", WHERE PESTICIDES CAN HIT THE SHELVES AFTER A SET OF CORE SAFETY STUDIES, BUT BEFORE ALL OF THE ENVIRONMENTAL EFFECTS ARE KNOWN. IN THIS CASE, THE CHEMICAL WAS SHOWN TO BE HIGHLY TOXIC TO BEES IN THE LAB, BUT IT WAS ALLOWED ONTO THE MARKET ANYWAY WHILE THEY AWAITED FURTHER FIELD TESTS ON LONGTERM IMPACTS TO BEE COLONIES.

AND JUST WHO IS RESPONSIBLE FOR DOING THESE HONEY BEE FIELD STUDIES?

STEVE ELLIS

The chemical companies do the testing.

**RATHER** 

The companies do the testing?

**ELLIS** 

Yes. Most people are unaware of the fact that that, in fact, does occur.

RATHER (VOICE OVER)

STEVE ELLIS IS A LARGE COMMERCIAL BEEKEEPER FROM BARRETT, MN, AND THE SECRETARY OF THE NATIONAL HONEY BEE ADVISORY BOARD. HE LOST 43% OF HIS HIVES LAST WINTER.

#### ELLIS

The chemical companies hire their own people or their own labs, or a research scientist, to do product safety testing of their products. They design the tests. They conduct the tests. They pay for the tests

#### RATHER

Not the EPA?

## **ELLIS**

Not the EPA....They present their tests and some other tests that they can come across and then the packet is submitted. And EPA reviews these tests that are submitted to them.

# RATHER (VOICE OVER)

BEEKEEPERS AND CITIZEN GROUPS SAY THIS IS LIKE ASKING A FOX TO DESIGN THE BEST CHICKEN COOP TO PROTECT THE CHICKENS, AND QUESTIONS ARE GROWING AS TO WHETHER THE EPA IS HOLDING INDUSTRY ADEQUATELY ACCOUNTABLE.

THEY POINT TO BAYER CROPSCIENCE...A DIVISION OF THE PHARMACEUTICAL GIANT.

IN 2003, WHEN BAYER APPLIED FOR APPROVAL OF THEIR NEW SYSTEMIC PESTICIDE FOR USE ON CORN SEEDS, A COMPOUND CALLED CLOTHIANIDIN, MEMOS SHOW THAT EPA SCIENTISTS ASKED FOR FIELD STUDIES TO BE COMPLETED IN ONE AND A HALF YEARS TO DETERMINE LONG-TERM IMPACTS ON HONEY BEE COLONIES.

BUT THE PESTICIDE WAS ON THE MARKET FOR A FULL FOUR YEARS BEFORE THEY SUBMITTED THEIR RESULTS...BAYER'S OWN ANALYSIS REPORTED THE COMPOUND WAS SAFE FOR BEES. THE EPA ACCEPTED IT, BUT BEEKEEPER TOM THEOBALD IN COLORADO SAW SOMETHING VERY SUSPICIOUS. THE TEST AREA THE COMPANY USED TO VERIFY THEIR PRODUCT WAS SAFE? TURNS OUT IT WAS ONLY A TWO AND A HALF ACRE PLOT.

## **THEOBALD**

This bee yard behind me will forage over several thousand acres. And to have a study that proposes that putting them on two-and-a-half acres of canola, planted from treated seed, is going to give us any kind of valid science is ridiculous.

# RATHER (VOICE OVER)

THEOBALD WASN'T THE ONLY ONE CALLING THE INDUSTRY TESTS BAD SCIENCE.

# JIM FRAZIER, ENTOMOLOGIST AT PENN STATE

Anyone with a basic understanding of honey bee biology would look at that-- that test and say, "This is not a good test design."

# RATHER (VOICE OVER)

DOCTOR JIM FRAZIER IS AN ENTOMOLOGIST AT PENN STATE UNIVERSITY AND IS THE SCIENTIFIC ADVISOR TO THE NATIONAL HONEY BEE ADVISORY BOARD. HE IS ALSO CALLED UPON BY THE EPA OFFICE OF PESTICIDES TO CONSULT ON BEE HEALTH, AND EVEN WORKED FOR INDUSTRY AS A SENIOR SCIENTIST AT DUPONT BEFORE CONDUCTING HIS OWN INDEPENDENT RESEARCH.

## FRAZIER

In fact, the average foraging area for a honey bee colony is about 28,000 acres. And so, you have to be very cautious in your interpretation of what the treated pollen impact is likely to be or not be on a colony.

# RATHER (VOICE OVER)

BUT MORE IMPORTANTLY, FRAZIER SAYS, IS THAT INDUSTRY TESTS ARE NOT SUBJECT TO SCIENTIFIC REVIEW BY THE INDEPENDENT COMMUNITY.

## **FRAZIER**

And so, there's no opportunity for replication or verification that these results are, in fact, real. Without a lot of-- honey bee expertise within the EPA, that makes them have a limited capacity to really review and carefully critique these kinds of studies.

## RATHER (VOICE OVER)

WHILE INDUSTRY STUDIES MAY NOT BE FINDING A DIRECT CONNECTION BETWEEN PESTICIDES AND OVERALL DECLINES IN BEE POPULATIONS, DR. FRAZIER SAYS A STUDY HE AND HIS TEAM AT PENN STATE CONDUCTED SHOWS CAUSE FOR ALARM. THEIR SAMPLING OF HIVES ACROSS THE UNITED STATES FOUND AN AVERAGE OF SIX DIFFERENT PESTICIDES IN EACH SAMPLE, AND IN SOME CASES AS MANY AS THIRTY NINE PESTICIDES. SOME OF THESE ARE SYSTEMIC PESTICIDES.

## **FRAZIER**

I think no one had any idea that-- that it could be this-- this large-- a residue problem. And because the residue consists of insecticides, fungicides, herbicides, miticides that differ in different places across the country, combinations of five or six or seven of these materials, there is no toxicological literature that exists for, "What are the consequences of these combinations of things when ingested or contacted by honey bees or any other insect?"

# RATHER (VOICE OVER)

AND THAT'S ONE OF THE BIGGEST CONCERNS FOR SCIENTISTS AND BEEKEEPERS... THAT THE GOVERNMENT AGENCY CHARGED WITH MAKING SURE PESTICIDES ARE SAFE...IS NOT ASKING THE QUESTIONS THEY SHOULD BE ASKING...

#### **FRAZIER**

Well, I think the EPA registration system has been designed to look for short term-- toxic consequences of a compound. So something that will kill the insect outright. But then, the long term consequences of that are very complicated and very complex to figure out and very difficult to-- show experimentally. It's not-- not part of the thinking, really.

What's more concern-- is a dose of insecticide below what is necessary to kill can have what we call sublethal impacts. That might alter behavior; it might alter memory...it might alter development; it might alter all kinds of things. So the potential ways in which a lower dose of-- pesticide could be impacting the insects is tremendous.

# RATHER (VOICE OVER)

WHILE THE IMPACT ON BEES IS VERY MUCH IN QUESTION, WHAT THE EPA HAS

BEEN ABLE TO DETERMINE IS THAT THIS CLASS OF PESTICIDE IS MUCH SAFER FOR HUMANS THAN OLDER PESTICIDES ON THE MARKET, FOR ONE BECAUSE FARMERS USE LESS OF THEM.

## JAY VROOM, CEO CROPLIFE AMERICA

Lower-- toxicity to mammals, in general-- is a feature that we're always-- kinda tr-- trying to target that-- innovation and research around.

# RATHER (VOICE OVER)

JAY VROOM IS PRESIDENT AND CEO OF CROPLIFE AMERICA, THE NATION'S LARGEST TRADE ORGANIZATION REPRESENTING THE PESTICIDE INDUSTRY. HE SAYS THAT NOT ONLY DO WE NEED TO GET THE SAFEST OPTIONS FOR HUMANS ON THE MARKET AS QUICKLY AS POSSIBLE, BUT ALSO THAT THE BURDENS OF FEEDING THE WORLD'S POPULATION IS INCREASING AND PESTICIDES HAVE DONE WONDERS FOR GETTING MORE FOOD PER ACRE.

#### **VROOM**

Sometime-- yet this year, in 2011, the world population is going to cross over seven billion. To me, more important is the fact that one billion of us, or probably more, went to bed hungry last night. And thousands of us that were in that one billion—category, won't go to sleep tonight because we will die-- due to malnutrition. That just is unacceptable, given the fact that we have the means to improve agriculture output and productivity, and supply more food.

# RATHER (VOICE OVER)

ACCORDING TO VROOM , THE BOTTOM LINE IS NO ONE HAS PROVEN A DEFINITIVE LINK BETWEEN SYSTEMIC PESTICIDES AND LOSS OF HONEY BEE COLONIES.

## **VROOM**

There's no direct causation that's-- been identified with regard to these insecticides, and the overall bee health issues. But the research continues and-- and the research-- continues to be supported by everyone-- that is a member of our association, including the manufacturers of those products.

RATHER (ON CAMERA)

WE ASKED BAYER-CROP-SCIENCE FOR AN INTERVIEW, THEY DECLINED. THEY DID ISSUE A STATEMENT SAYING IN PART, "THE USE OF SEED TREATMENT PRODUCTS HAS BEEN WIDELY ADOPTED...BECAUSE OF THEIR EXCELLENT PERFORMANCE." AND THE COMPANY ALSO SAID, "THERE HAVE BEEN NO DOCUMENTED EFFECTS ON COLONY HEALTH DUE TO LONG TERM EXPOSURE,..."

BUT MANY ARGUE THERE ARE LINKS...AND STUDIES ON HONEY BEES AND PESTICIDES ARE NOW COMING IN FROM AROUND THE WORLD. WE'LL HAVE THAT PART OF OUR INVESTIGATION FOR YOU, NEXT.

## **ACT 2: BEE AWARE**

# RATHER (VOICE OVER)

TOM THEOBALD HAD A SURPRISE LAST SUMMER. HE'D JUST WRITTEN AN ARTICLE CALLED "DO WE HAVE A PESTICIDE BLOWOUT?" FOR A TRADE MAGAZINE. IN IT HE CRITICIZED BAYER FOR CONDUCTING THEIR STUDY ON HONEYBEES ON A RELATIVELY TINY PLOT OF LAND. THAT SAME STUDY CONCLUDED THAT ON THAT SMALL PLOT, SYSTEMIC PESTICIDES WERE SAFE FOR BEES. THEOBOLD WROTE THAT IT WAS "A MOCKERY OF SCIENCE." SHORTLY AFTER HIS ARTICLE WAS PUBLISHED HE GOT SOME INTERESTING NEWS.

## **THEOBALD**

I got a call from an EPA employee at headquarters, who said, "Tom, you should be the first to know." And went onto explain that the scientists had gone back and reviewed that original study, because of the-- request on the part of the chemical companies to expand its use. And had concluded that it was not a valid scientific study.

# RATHER (VOICE OVER)

IN A STUNNING REVERSAL, THE EPA DID AN ABOUTFACE.... THEY WERE NOW AGREEING WITH THE SMALL BEEKEEPER IN COLORADO, SAYING THE SAFETY STUDY FROM BAYER WAS DEFICIENT...THIS AFTER THE BAYER PESTICIDE HAD BEEN ON THE MARKET FOR EIGHT YEARS. A GOVERNMENT SOURCE TOLD US, ON BACKGROUND, THAT THE CHANGE WAS A ROUTINE RE-EVALUATION...BUT THE BEEKEEPING COMMUNITY WAS FURIOUS.

RATHER
Is this compound being used in cornfields today?
ELLIS
Yes.
RATHER
It is? ELLIS
Yes.
RATHER
Where is the EPA? Why haven't they said stop?
ELLIS
Well, a number of organizations signed a letter to directed to EPA Administrator Lisa Jackson requesting just exactly that. That that until the controversy over the science on this with pollinators can be resolved and and good, field studies that can be conducted that as a precautionary move, the product be taken off the market.
RATHER
That hasn't been done?
ELLIS
No.

# RATHER (ON CAMERA)

THAT SENSE OF EXASPERATION EXTENDS BEYOND THE BEE KEEPING COMMUNITY AND INTO THE EPA ITSELF. SOURCES WITHIN THE AGENCY WE TALKED TO SAID THE HANDLING OF PESTICIDE REGULATION HAS BEEN THE SOURCE OF TENSION FOR YEARS. MANY SCIENTISTS SAID THEIR CONCERNS

HAVE BEEN IGNORED BY THE ADMINISTRATORS HANDLING THE APPROVAL PROCESS.

WE ASKED THE EPA FOR AN INTERVIEW AND THEY DECLINED, SO WE WANTED TO FIND SOMEONE WHO COULD HELP EXPLAIN HOW THE EPA DECIDES WHICH PESTICIDES STAY ON THE MARKET

#### BILL CONIGLIO

I think we have a misconception.

# RATHER (VOICE OVER)

BILL CONIGLIO SPENT HIS CAREER AS A SCIENTIST FOR THE EPA AND WAS ONE OF THE FIRST TO SET UP THEIR OFFICE OF TOXIC SUBSTANCES WHERE HE STUDIED THE IMPACT OF SUCH MATERIALS AS LEAD AND PESTICIDES ON HUMANS. HE NOW OWNS A NURSERY IN NEW JERSEY AND IS AN AMATEUR BEEKEEPER HIMSELF.

#### **CONIGLIO**

The general public basically says, "It is registered therefore it must be safe." That is not true. There is a risk associated with exposure to the compound and that risk may be minimal based upon the knowledge available at the time or the judgments made at the time, but it is not absolute safety.

# RATHER (VOICE OVER)

THE EPA IS REQUIRED BY CONGRESS TO APPROVE A PESTICIDE BASED ON WHAT'S CALLED A RISK-BENEFIT ANALYSIS. ITS DECISION CONSIDERS THE ECONOMIC BENEFIT TO FARMERS, TECHNOLOGICAL, POLITICAL AND SOCIAL FACTORS. SCIENCE IS ONLY ONE OF THE FACTORS CONGRESS ALLOWS THEM TO CONSIDER

## **CONIGLIO**

Scientists in EPA have always been frustrated with risk assessment, risk management. The inability to take and to address the risk has always been there. Whether we're talking about air programs, whether we're talking about drinking water programs, whether we're talking about pesticides or-- rugs or into our air-- it has always been that way.

# RATHER (VOICE OVER)

CONIGLIO SAYS THAT AT THE EPA, DECISIONS ARE MADE BY ADMINISTRATORS, NOT THE SCIENTISTS WHO REVIEW THE SAFETY DATA. AND BOTH HE AND SOURCES INSIDE THE EPA TELL US THAT THEY THEMSELVES DON'T EVEN KNOW HOW MANAGEMENT DETERMINES WHAT PESTICIDES ARE APPROVED, AND THAT THE AGENCY DOES NOT REVEAL ENOUGH ABOUT THE PROCESS TO THE PUBLIC.

HOWEVER, THE EPA DOES MAKE AVAILABLE ON ITS WEBSITE THE ANALYSIS OF ITS SCIENTISTS....AND DOCUMENTS WE'VE UNCOVERED SUGGEST THE SCIENTISTS' WARNINGS HAVEN'T BEEN TAKEN SERIOUSLY.

INCLUDING THE FACT THAT SYSTEMIC PESTICIDES BUILD UP IN THE SOIL AND CAN REMAIN FOR MANY YEARS...

ALSO, BECAUSE THE PESTICIDES SHOW UP IN POLLEN AND NECTAR THEY HAVE POTENTIAL FOR QUOTE "...LONG-TERM TOXICITY,,,"...AND RISK, QUOTE - "...THE EVENTUAL STABILITY OF THE HIVE."....

AND THEN THERE'S THIS: YEARS BEFORE COLONY COLLAPSE DISORDER WAS IDENTIFIED, EPA SCIENTISTS SPECULATED ABOUT SYMPTOMS THAT SOUND SIMILAR TO CCD: "WILL THE EXPOSED FORAGERS BECOME DISORIENTED AND FAIL TO RETURN TO THE COLONY?"

NEVERTHELESS, THE EPA SAYS IT DOESN'T HAVE ENOUGH CAUSE TO LIMIT USE OF THESE PESTICIDES AT THIS TIME, IT'S A MUCH DIFFERENT STORY ELSEWHERE. IN EUROPE, FOR EXAMPLE...THE EUROPEAN UNION CAN...AND IS...KEEPING SOME SYSTEMIC PESTICIDES OFF THE MARKET FOR CERTAIN USES UNTIL IT FEELS THEY ARE SAFE.

## **EU PARLIAMENTARIAN #1**

It is argued that there is no proven scientific evidence of the causal link. And...yet... there are scientific studies that have been carried out which... suggest there was a causal link.

# RATHER (VOICE OVER)

A SPECIAL CONFERENCE WAS CONVENED IN MARCH OF THIS YEAR THAT BROUGHT TOGETHER EUROPEAN UNION PARLIAMENTARY MEMBERS,

SCIENTISTS AND BEEKEEPERS TO ADDRESS THE LONG-TERM EFFECTS OF SYSTEMIC PESTICIDES ON POLLINATORS.

#### **EU PARLIAMENTARIAN #2**

In 2008 major honey producers such as Argentina... Turkey... and some EU countries lost at least 1/3 of their colonies. There may be some debate about the cause of this...this loss of colonies...but...but you can't dispute the fact that it is happening. Therefore... the need for urgent studies...urgent steps to be taken is very pressing.

# RATHER (VOICE OVER)

THAT'S JUST WHAT SEVERAL INDIVIDUAL EUROPEAN GOVERNMENTS HAVE DECIDED TO DO. FRANCE, GERMANY AND ITALY HAVE ALREADY RESTRICTED SYSTEMIC PESTICIDES FOR SOME USES AFTER STUDIES CONDUCTED IN THOSE COUNTRIES SHOWED LINKS BETWEEN PESTICIDES AND IMPACTS ON BEE HEALTH.

FOR NOW, THE EPA HAS DECIDED THAT A WARNING LABEL ON THESE PESTICIDES IS GOOD ENOUGH. THAT LABEL SAYS SIMPLY..."DO NOT APPLY THIS PRODUCT TO BLOOMING....PARTS OF PLANTS....IF BEES ARE PRESENT." SCIENTISTS SAY THAT DOES NOT WORK WITH SYSTEMIC PESTICIDES.

## CONIGLIO

The systemic pesticides are different from past pesticides. That means an entire redesign of the methodology used by EPA in risk assessment and risk management. And that is their challenge.

# RATHER (VOICE OVER)

THERE ARE SOME SIGNS THAT THE EPA IS BEGINNING TO RECOGNIZE THE POTENTIAL SCOPE OF THE PROBLEM AND IS MAKING SOME POSITIVE STEPS FORWARD.

THIS PAST JANUARY, THE AGENCY INITIATED A GLOBAL CONFERENCE, TRYING TO DEVELOP NEW APPROACHES TO DETERMINING POTENTIAL RISK OF THESE PESTICIDES TO POLLINATORS.

THE EPA SAYS IT STANDS BY THE OVERALL SAFETY OF THIS CLASS OF

#### PESTICIDES AND SENT US THIS STATEMENT:

"EPA IS CONCERNED ABOUT THE DECLINE OF HONEY BEES AND OTHER POLLINATORS. THIS YEAR EPA SCIENTISTS WILL BEGIN AN EXTENSIVE REEVALUATION OF THE PESTICIDE CLOTHIANIDIN, AND WILL INCLUDE THE PUBLIC IN ITS REEVALUATION. IF REGULATORY ACTION TO PROTECT POLLINATORS IS NEEDED, WE WILL IMPLEMENT ANY NECESSARY RESTRICTIONS"

THIS ISN'T JUST ABOUT BEES AND FARMLAND, THESE SYSTEMIC PESTICIDES CAN LIKELY BE FOUND IN A BACKYARD NEAR YOU. LOOK CLOSELY AT THE LABELS AT YOUR LOCAL GARDEN STORE AND YOU WILL SEE THE TELL-TALE CHEMICALS USED IN A RANGE OF PRODUCTS.

SCIENTISTS WORRY THIS IS AN EVER-GROWING LIST....AND THEY STILL DON'T KNOW THE LONG-TERM IMPACT OF THESE PESTICIDES ON HONEY BEES....

#### CONIGLIO

Let's say that there is no risk. The data when it's available clears them all, okay? That'd be a great thing, be a wonderful thing! However how can you take and make that judgment without the data? Since you know that the compound is incorporated into nectar; since you have studies from universities showing the concentrations of exposure have adverse effects, how do you allow it to be used without the data that shows it's not a problem? You do that by taking and say, "We judge the risk to be not as important as the benefits." And in that balance, that risk/benefit balance, it's obvious that they are not considering the collapse of the entire food chain. They're dealing with-- benefits from a short-term perspective.

# RATHER (ON CAMERA)

OUR SOURCES WITHIN THE EPA HAVE TOLD US THAT THE AGENCY'S PUBLIC ASSURANCES ABOUT THE SAFETY OF THIS CLASS OF PESTICIDES MASK WHAT'S REALLY GOING ON WITHIN THE EPA. THEY SAID THERE HAS BEEN A FLURRY OF HIGH-LEVEL MEETINGS AND WE WERE SHOWN NOTES FOR ONE SUCH MEETING THAT SUGGEST THE AGENCY HAS BEEN URGENTLY RE-THINKING HOW IT REGULATES THESE PESTICIDES AND ADMITTING THEY DON'T HAVE ACCEPTABLE STUDIES FOR BEE SAFETY.

WHEN WE COME BACK, THE DIRTY SECRETS OF THE BIG BUSINESS OF STUDENT TESTING. THAT'S STRAIGHT AHEAD.

#### **ACT 3: BAD SCORE**

# RATHER (ON CAMERA)

WHEN PRESIDENT GEORGE W. BUSH SIGNED THE 'NO CHILD LEFT BEHIND' BILL IN 2002, STANDARDIZED TESTING ACROSS THE COUNTRY SUDDENLY BECAME A MUCH BIGGER DEAL. THE LAW REQUIRES TESTING OF PUBLIC SCHOOL STUDENTS IN 3<sup>RD</sup> THROUGH 8<sup>TH</sup> GRADE AND ONCE IN HIGH SCHOOL. AND THESE HIGH STAKES TESTS CAN DETERMINE THE FATES OF STUDENTS, TEACHERS, PRINCIPALS AND EVEN ENTIRE SCHOOLS. BUT CRITICS SAY TRADITIONAL FILL-IN-THE-BUBBLE, MULTIPLE CHOICE TESTS FAIL TO GIVE A FULL PICTURE OF STUDENTS' ACHIEVEMENT, SO NOW MORE STATES ARE INCORPORATING WHAT ARE KNOWN AS 'OPEN-ENDED' OR 'FREE RESPONSE' QUESTIONS. THESE KINDS OF QUESTIONS REQUIRE STUDENTS TO WRITE-OUT THEIR ANSWERS AND THIS STYLE OF TESTING IS NOW BEING USED IN AT LEAST HALF THE STATES. BUT THEY DON'T USE MACHINES TO GRADE THESE ANSWERS, THEY USE PEOPLE AND THAT'S WHERE THE PROBLEMS COME IN.

## DAN DIMAGGIO, FORMER TEST SCORER

Look, these kids have had to sit in a room for months to prepare for this test. I am gonna read this test in 30 seconds, one minute, two minutes and you know, put a score on it and move on.

# RATHER (VOICE OVER)

DAN DIMAGGIO, DANIELLE INDOVINO AND DAVID PUTHOFF GRADUATED FROM SOME OF THE MOST PRESTIGIOUS COLLEGES IN THE COUNTRY BUT IN A STUMBLING JOB MARKET THEY TOOK TEMPORARY JOBS WITH THREE DIFFERENT COMPANIES SCORING PARTS OF STANDARDIZED TESTS. DIMAGGIO AND THE OTHERS SAY THEY WERE SO SHOCKED AND DISMAYED BY THEIR EXPERIENCES THAT THEY ARE BREAKING CONFIDENTIALITY AGREEMENTS TO SPEAK WITH US.

## **DIMAGGIO**

I discovered that the tests are scored by tens, probably hundreds of thousands of fairly low paid, over worked temps in scoring centers around the country.

RATHER (VOICE OVER)

WE MET THE FORMER SCORERS IN THE MINNEAPOLIS - ST. PAUL AREA WHERE SEVERAL COMPANIES HAVE SCORING CENTERS. EVERY YEAR MILLIONS OF TESTS ARE SHIPPED IN FROM ALL OVER THE COUNTRY. THE TESTING COMPANIES HIRE THOUSANDS OF TEMPORARY SEASONAL EMPLOYEES TO GRADE THEM.

EVERY DAY...ALL DAY...FOR ABOUT \$12 AN HOUR... THE SCORERS WE SPOKE TO READ AND ASSIGNED SCORES TO SO-CALLED OPEN ENDED QUESTIONS. ON AVERAGE, ONE TEST EVERY SIXTY SECONDS.

#### DIMAGGIO

I would describe it as "soul sucking." Reading hundreds of very similar essays for eight hours a day-- is not the most entertaining way-- to spend a day.

# DAVID PUTHOFF, FORMER TEST SCORER

Everybody would say, "This is driving me insane," everybody.

# RATHER (VOICE OVER)

AND THEY SAY THE WORK CONDITIONS IN THE SCORING CENTERS MADE IT DIFFICULT TO FOCUS AND FAIRLY GRADE THE ANSWERS.

## DIMAGGIO

It looked like a textile-- factory-- except you're-- you know, working at all these computers.

# DANIELLE INDOVINO, FORMER TEST SCORER

Your work station would literally be the width of your keyboard. So I'd have a monitor and then somebody else's monitor would be touching the back of mine. So we would be almost face to face plus side to side in that long line. And imagine that, you know, maybe 15 tables back.

#### DIMAGGIO

It was just like-- it was just a test scoring-- assembly line.

TODD FARLEY, AUTHOR, MAKING THE GRADES

We looked at essays-- an essay every two minutes. A short answer, every five seconds, every ten seconds. We don't understand your kids. We don't understand anyone's kids.

# RATHER (VOICE OVER)

TODD FARLEY IS A FIFTEEN YEAR VETERAN OF THE TESTING INDUSTRY. HE'S DONE EVERYTHING FROM SCORE TESTS TO DESIGN THEM. FARLEY SAYS THE STUDENTS ARE BEING CHEATED - THE OPEN-ENDED QUESTIONS THAT ARE SUPPOSED TO GIVE A MORE ACCURATE PICTURE OF INDIVIDUAL STUDENTS FAIL TO DO THAT BECAUSE OF THE WAY THE BIG BUSINESS OF TESTING WORKS

#### **FARLEY**

The-- my-- my biggest complain about testing is the job we seem to do was fleeting and superficial. The-- the testing companies are in it to make some money, they're making tons of money. But what is anyone else getting out of it?

# RATHER (VOICE OVER)

JUST A HANDFUL OF COMPANIES WRITE, PUBLISH AND SCORE THE VAST MAJORITY OF TESTS. THEY INCLUDE FORTUNE 500 COMPANY MCGRAW HILL; A FEW SMALLER COMPANIES LIKE DATA RECOGNITION CORPORATION AND QUESTAR; AS WELL AS A NOT-FOR-PROFIT ORGANIZATION - AMERICAN INSTITUTES FOR RESEARCH.

THE LARGEST IS PEARSON EDUCATION, PART OF A GLOBAL PUBLISHING BEHEMOTH THAT MADE \$1.1 BILLION IN PROFITS IN 2010 AND HAS CONTRACTS TO SCORE TESTS FOR AT LEAST 10 STATES.

SINCE 2002 AND THE PASSAGE OF THE NO CHILD LEFT BEHIND ACT THAT MANDATED ASSESSMENTS, THOSE FEW TESTING COMPANIES HAVE SEEN THEIR WORK LOADS -- AND THEIR PROFITS -- GROW EXPONENTIALLY. FARLEY SAYS THEY ARE UNDER PRESSURE TO SCORE MILLIONS OF TESTS AT A TIME ON TIGHT DEADLINES.

#### **FARLEY**

The testing companies have to hire almost anyone because they need to get them done. And as a result, they hire some people that are very smart. And separately, there are people-- and I mean, it's literally-- who I wouldn't allow to cat sit for me.

# RATHER (VOICE OVER)

THE ONLY QUALIFICATION TO BE A SCORER IS A COLLEGE DEGREE. BUT TWO RECENT U.S. DEPARTMENT OF EDUCATION AUDITS REVEALED THAT COMPANIES WORKING WITH TENNESSEE AND FLORIDA WERE "UNABLE...TO PROVIDE ADEQUATE DOCUMENTATION SHOWING THAT ITS HANDSCORERS OBTAINED BACHELORS DEGREES." AND SOME SCORERS WERE HIRED EVEN THOUGH THEY DID NOT PASS THE QUALIFYING TEST.

THAT'S EXACTLY WHAT HAPPENED TO TODD FARLEY FIFTEEN YEARS AGO WHEN HE WAS JUST STARTING OUT IN THE BUSINESS. HE APPLIED FOR A JOB READING OPEN-ENDED ANSWERS IN IOWA CITY, BUT HE FAILED THE QUALIFING EXAM, TWICE.

#### **FARLEY**

Mind you, I'm not the only one. So, we're all embarrassed. We're all mad. We're all sent out the door. And at 7:00 the next morning, I got a call. And they said, "Hey, can you come back?" And I was like, "But I failed the tests." And they said, "Well, we've lowered the acceptable, you know, test score. You're in." So, I go back. All of us failures? We're right back there.

# RATHER (VOICE OVER)

WE REQUESTED INTERVIEWS WITH REPRESENTATIVES OF SEVERAL TEST SCORING COMPANIES ABOUT HOW OPEN ENDED QUESTIONS ARE SCORED -- THEY ALL DECLINED. BUT THE SCORERS DESCRIBE HOW THEY WERE GIVEN GUIDES - OR RUBRICS-- TO HELP THEM SCORE ACCURATELY...A 0 OR 1 WAS THE LOWEST SCORE AND 5 OR 6 THE HIGHEST. INDOVIDO COMPLAINS THAT RUBRICS WERE TOO VAGUE AND HER SUPERVISORS OFFERED LITTLE CLARIFICATION.

## **INDOVINO**

They might print out an essay and say, "This isn't a three, this is a two." And you'd be like, "Why?" and they'd be like, "Well, you should consult the Rubric." And the Rubric will say something like, you know, "adequate use of" instead of "competent use of." Like, "Okay."

# RATHER (VOICE OVER)

BUT THE SCORERS SAY THE RUBRICS DID NOT TAKE INTO ACCOUNT STUDENTS' INDIVIDUALITY...

#### **PUTHOFF**

I don't think the rubric fairly represented the creativity most of these kids had.

#### **INDOVINO**

I mean, I'm an awful speller. I have a degree in English and like went through a Master's program. You know, I would get dinged pretty hard in one of these tests, I think. And it just doesn't indicate my intelligence, doesn't indicate how well my teachers are doing. And it certainly shouldn't be used to defund the school that I came from.

# RATHER (VOICE OVER)

AND THESE FORMER SCORERS SAY THINGS GOT EVEN MORE ABSURD – WHEN THE SCORES THEY WERE HANDING OUT WERE NOT WHAT THEIR BOSSES WERE EXPECTING

#### **DIMAGGIO**

I was told, when I was beginning a project, that "last year there was a certain amount of twos, a certain amount of threes, a certain amount of fours. We expect that to be similar this year." If that's not similar they will tell you, "We're scoring too many threes, we're scoring too many fours." They'll say, "You have to learn to see more papers as a three. You have to learn to see more papers as a four."

# RATHER (VOICE OVER)

ACCORDING TO FARLEY, WHO WORKED AS A SUPERVISOR, SCORE MANIPULATIONS HAPPENED ALL THE TIME.

#### **FARLEY**

I would stand in front of my table-- people I'd supervise-- or later in front of the whole room. And I would say, you know we would couch this as delicately as possible, "You know-- we're-- we think that maybe we've been scoring a little hard. And maybe now if you're, you know, caught between two scores, maybe you should fall forward a little bit. Maybe you should give it a higher score than you used to." And then eventually near the end of the project you would just be like "Give more threes. We need more threes," you know?

# RATHER (VOICE OVER)

BAD TESTS RESULTS CAN LEAD TO MORE THAN FUNDING CUTS, WHOLE SCHOOLS CAN BE SHUTTERED....IT'S BEEN PREDICTED THAT MORE THAN 80% OF OUR SCHOOLS COULD BE LABELED FAILING BECAUSE OF POOR TESTS SCORES.....AND THAT'S NOT FAIR SAYS DIMAGGIO... WHEN THE RESULTS THAT STUDENTS GET COME ABOUT AS MUCH FROM VARIABLES IN THE HIGH-PROFIT, HIGH-PRESSURE TESTING INDUSTRY AS THEY DO FROM THE STUDENTS ABILITIES

#### DAN DIMAGGIO

It matters if you've had your first cup of coffee-- or your fourth cup of coffee-- you know, what your-- what your mood is. Where the paper falls in with other papers because a lotta the papers are-- they come in kind of as a class and so you can get used to just-- you know, clicking two, two, two or four, four and see those papers as all being similar.

# RATHER (VOICE OVER)

TODD FARLEY HAS WRITTEN A BOOK ABOUT HIS TIME IN THE TESTING INDUSTRY CALLED 'MAKING THE GRADES.' HE WORRIES THAT DESPITE THE PROBLEMS HE'S DOCUMENTED, TESTS IN THE FUTURE ARE LIKELY TO INCLUDE MORE OPEN ENDED QUESTIONS.

AND IN SEPTEMBER 2010 SECRETARY OF EDUCATION ARNE DUNCAN AWARDED \$360 MILLION TO TWO GROUPS OF STATES TO DO JUST THAT -- DEVELOP NEW ASSESSMENT THAT WILL LIKELY HAVE MORE OPEN-ENDED QUESTIONS.

## ARNE DUNCAN, US SECRETARY OF EDUCATION

For the first time, many teachers will have the state assessments that they have longed for – test of critical thinking skills and complex student learning that are not just fill-in-the-bubble test of basic skills but support great teaching, great instruction in the classroom.

# RATHER (VOICE OVER)

THE DEBATE ABOUT THE BEST WAY TO ASSESS STUDENTS WILL LIKELY CONTINUE. AND, IN THE MEANTIME, FARLEY SAYS WITH SO MUCH MONEY INVESTED AND SO MUCH RESTING ON THE OUTCOMES, IT'S DANGEROUS TO TRUST THE TEST RESULTS

#### **FARLEY**

There's a total blind faith in the industry. These tests get sent to schools. The kids take them. They disappear. And then a number comes back. And no one has ever questioned, "Where'd this number come from? Can I believe this number?" And other than the fact the industry's saying, "These numbers are good, trust us," why? Why would you?

# RATHER (ON CAMERA)

ONLY THREE STATES HIRED TEACHERS OR SCHOOL STAFF TO SCORE THEIR FREE-RESPONSE ITEMS: NEW YORK, NEVADA AND OREGON.

OUR NEXT STORY IS JAPAN, SIX MONTHS AFTER THE TSUNAMI. IT'S COMING RIGHT UP.

#### **ACT 4: RISING SUN**

## RATHER (ON CAMERA)

WELCOME BACK. IT'S HARD TO BELIEVE THAT IT'S ALREADY BEEN SIX MONTHS SINCE AN EARTHQUAKE AND TSUNAMI DEVASTATED JAPAN, KILLING THOUSANDS AND LAUNCHING A NUCLEAR CRISIS. IT WAS A MIGHTY BLOW TO ONE OF THE WORLD'S BIGGEST ECONOMIES AND MOST STABLE NATIONS.

WE WANTED TO GET A SENSE OF HOW THE COUNTRY MAY REBOUND FROM THE DISASTERS, AND WHETHER ITS HISTORY COULD PROVIDE SOME PERSPECTIVE ON WHAT LIES AHEAD.

I SAT DOWN RECENTLY WITH ESTEEMED SCHOLAR JOHN DOWER, A PROFESSOR EMERITUS OF JAPANESE HISTORY AT MASSACHUSETTS INSTITUTE OF TECHNOLOGY. HIS PULITZER-PRIZE WINNING BOOK "EMBRACING DEFEAT" TOLD THE STORY OF HOW JAPAN ROSE TO PROSPERITY FROM THE RUBBLE OF WORLD WAR II.

#### RATHER

Well, Professor, thank you very much for doing this. We're honored to have you. Thank you.

#### PROFESSOR JOHN DOWER

It's a pleasure.

#### RATHER

Let's start with an overview. As we sit here today, what do you think is the most single important thing for Americans to know about Japan in the wake of the great tsunami and the nuclear meltdown?

#### PROFESSOR DOWER

What I see as I, as I look over, and what I think Americans should see is what a resourceful country it is. How frequently in the past it's faced disaster and tragedy, and how often it's responded very creatively and constructively.

#### **RATHER**

Take us through those times over the last century or so that the Japanese have faced disaster, perhaps even catastrophe, and come back the stronger for it?

## PROFESSOR DOWER

If you look at the present moment and go back in time, it's like a palimpsest. There's layer and layer under it. But the one that people talk about most now, of course, is World War Two.

If you go through the 1945 and look before that, previous, the greatest natural disaster, natural disaster in Japan, was the 1923 Kanto Earthquake. Kanto is the area that includes Tokyo and Yokohama . And the Kanto earthquake destroyed basically Tokyo and Yokohama. It destroyed almost the entire metropolitan area.

The earthquake occurred almost exactly at noon-- in 1923. It was in September. Many cooking fires were going on at that time. People were preparing lunches. They were living in wooden houses-- fairly flimsy structures. We estimate that about 140,000 people were killed. So it was a devastating-- event. Devastating-- natural disaster. Terrible moment. But the other side that's worth looking at now is after the earthquake in 1923, that's when they rebuilt Tokyo as a great city. And what happens after 1923 is what they called the c-- reconstruction boom, and the

phrase, if you work as a historian for Japan in the 1920s into the 1930s, is new. The New Tokyo. Everything is going to be new. They put in the subway system. They changed the transportation system. That's when the cafe society comes up. The department stores come up. Much Western architecture. Build parks in the city. And so there's this terrific instance that we can take this disaster and start over and do so to create a great new city.

#### **RATHER**

Well, I'm fascinated by this, what you told me about the 1923 earthquake, because only a decade later, beginning no later than the early 1930s, Japan became-- it rebuilt itself, rebuilt Tokyo and Yokohama, and it became the ranking military power in all of Asia?

#### PROFESSOR DOWER

Yes, that's the negative side of the positive sides. Many things are-- are taking place, and so one direction is to build the new city. And of course, one of-- the other is that-- 1929, you have the global depression. The economy is crashing. So, you have a world crisis and the militarists start to come up, so you have these developments going side by side. And of course, by 1930s, they become a very aggressive nation, moving against China. And so militarism was on the rise, and at the same time, there's a kind of cosmopolitanism that is struggling to survive. And it's-- these-- enthusiasm for rebuilding is-- is fighting against the militarism and loses, but they do creates a new Tokyo which in 1945 is destroyed in World War Two.

## **RATHER**

Do the Japanese of today still have that resilience?

#### PROFESSOR DOWER

That's what we're gonna find out. I think that's a question everyone is asking. And that is when the Prime Minister says, "This is the worst disaster in 65 years," he's also saying, "Let's remember how we did recover to the previous disaster." And that's the image that is in the minds of many people, more than the 1923 earthquake. It's 1945, and when we look at that, when we look at 1945, I think most people, including young Japanese, don't remember the destruction, the ruin. It was a shattered country. When the war ended in Japan, you had 66 major cities all over the entire country that had been firebombed. We know that over 100,000 people were killed in Tokyo during the war. We know that in the atomic bombs in Hiroshima, about 140,000 were killed. We know that s-- 70, 75,000 people at least were killed in Nagasaki. So, we've already got over 300,000 people, and then you've got 60 plus other cities that were also firebombed with

much less destruction. But the number of Japanese killed is somewhere around a half million. About ten million people in the Tokyo area, are homeless.

#### **RATHER**

But in the wake of defeat, absolute defeat, surrender and occupation, by no later than the mid-to late-1960s, Japan was coming back economically tremendously, and by the 1980s, was the second economic power in the world, threatening, bidding to become the first economic—

## PROFESSOR DOWER

And that's-- that's the resilience we were talking about.

#### RATHER

How did they do that? How did they come back?

#### PROFESSOR DOWER

Before Japan went to war in the 1930s-- it was not that advanced in ma-- major industries, heavy industry and chemistry. By 1945, 15 years later, it has made a breakthrough in chemical industry. It has made a breakthrough in heavy industry. The number of engineers in the country is about ten times more than had-- had been in the early '30s. The number of skilled blue collar workers, 'cause they were mobilizing for war, skilled blue collar workers was enormous. They were making weapons of war, war-related materials. They were making fighter aircraft. They were making tanks. They were making this. When the war ended, they come back, and the talent is there. The talent is there. And they just turned it around, and a lot of it's coming bottom up. But, for example, the famous bullet train in Japan, you know, which is the marvel of anyone who goes there and a model for the rest of the s-- the people who had been building the zero air-aircraft. After the war, you couldn't make military things, and those engineers come in and-- and put their talents to building a-- railway system. People that were developing tanks and that go into heavy construction equipment. And then people who were in electronics, that's where your-- Sonys come from, from just individuals-- who were, who were electronics. They go out and-take their skills and push them in that direction. And so you've got this, all of this talent and discipline, and it did go into the war effort. There was no choice for those people. But when the war ends, you get this moment, this space and these people put their energies into-- they're rebuilding their lives, and there was something exhilarating about watching that take place, even though life was hard. One of the things that happens in post-war Japan is a lot of conflict and tension, which in way can be stimulating.

You have a lot of people coming up and asserting, "We want this. We want this," coming from the grassroots.

The question becomes is this disaster in-- to-- in Japan today, the earthquake, tsunami, and the nuclear disaster, will it create that kind of sense of space of people saying, "We've got to start over?"

#### RATHER

I run across the term "creative reconstruction," and you use that term. What do you mean by that?

#### PROFESSOR DOWER

The concept of creative reconstruction means you just don't go back and-- and-- and try to pick up where-- things were on March 10th, the day before the tsunami and the nuclear disaster. You don't go back. You can't go back and rebuild the villages the way they were. After World War Two, they said, "We've got to build a totally different society. And that kind of thinking hopefully will go on in Japan. Whether it will succeed, I don't know. But I think that energy is there, and that potential. And the question is can it come up again at-- at this moment in Japan?

#### RATHER

Professor, thank you very, very much.

## PROFESSOR DOWER

Thank you.

# RATHER (ON CAMERA)

THE WORLD'S ATTENTION HAS LARGELY MOVED ON TO OTHER CONCERNS, AS JAPAN CONTINUES TO STRUGGLE TO REBUILD, EVEN AS IT STILL MOURNS... AND DEALS WITH THE NUCLEAR CRISIS

BUT THAT COUNTRY'S RESILIENT HISTORY SHOULD BE A LESSON TO ALL OF US LIVING IN SUCH UNCERTAIN TIMES. OFTEN, FROM THE DEPTHS OF DESPAIR, ARISE OUR GREATEST TRIUMPHS.

AND THAT'S OUR PROGRAM FOR TONIGHT. FOR HD NET FROM NEW YORK, DAN RATHER REPORTING. GOOD NIGHT.