



# FORCE OF NATURE

THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE from  
National Organization Responding Against HOJE that seek to harm the Green Space Industry (NORAHG)





# Hero Bruce Branham

## The Dark Age Where Science Is Trumped by Internet Rumor, Innuendo, and Fabrication

October 2011

**Bruce Branham**

Presentation to Town Council

Highland Park ( Chicago ), Illinois

Selected and adapted excerpts



Bruce Branham is Professor at Department of Crop Sciences, University of Illinois













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An official presentation by a REAL expert, John Branham,  
proves that pest control products are SCIENTIFICALLY SAFE

## Theories Are Supported by Evidence Gathered Through Research

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I always like to start off my comments with a joke.

So here it is.

The bartender said « *Hey, we don't serve faster than light neutrinos in this bar* ».

A neutrino walked into the bar.

I didn't get this joke when I first read it, but scientists at the CERN physics lab in Europe recently reported that they detected a neutrino moving faster than the speed of light, which violates the fundamental laws of physics described by Einstein 100 years ago.

So, in the joke the image of neutrino comes into the bar before the neutrino arrives.

Thus the normal order is reversed.

But this joke highlights an IMPORTANT PRINCIPLE OF SCIENCE —

... THEORIES ARE SUPPORTED BY EVIDENCE GATHERED THROUGH RESEARCH, and as long as the evidence supports the theory, all is well.

However, once data shows the theory fails, then a new theory must be developed.

# Hero

Speaking Out Against

## Conspiracies Presenting Fraudulent Data

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Today, you're dealing with the issue of using herbicides to control weeds in turf.

The question you want answered is ...

*Are these pesticides safe to  
our children, pets, and to adults ?*

Let me ask you a question.

Do you believe human activity is causing our climate to change ?

I'm not a climate scientist, but the Intergovernmental Panel on Climate Change ( IPCC ) represents climate scientists from around the world who are in near total agreement that human activities are causing global climate change.

However, many in the conservative media have waged an active campaign to discredit the world's climate scientists.

And in the United States, they have largely succeeded.

Climate skeptics abound, and they believe the climate scientists are corrupt, and that government funding only goes to those who are willing to support the theory that greenhouse gases cause global climate change.

On its face, this is preposterous.



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Science doesn't work this way, and you can't have a CONSPIRACY AROUND THE GLOBE TO PRESENT FRAUDULENT DATA.

Yet, I'm confident everyone in this room knows a climate skeptic or two.

So, what is the point you might ask ?

### Unreasonable People

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Herbicides are RIGOROUSLY TESTED FOR ENVIRONMENTAL SAFETY, evaluated by EPA scientists, and decisions rendered with the public's health as the FIRST PRIORITY.

Yet, many people in this room believe that the EPA scientists are corrupt, that data is falsified, and that these companies put their profits above human safety.

I've found that I can't reason with climate skeptics, they dismiss all the arguments I know.

For example, 97 per cent of the world's climate scientists are in agreement that human-generated greenhouse gases are causing the climate to change.

Likewise, I CAN'T REASON WITH PEOPLE WHO BELIEVE PEST CONTROL PRODUCTS ARE CARCINOGENIC, HIGHLY TOXIC, AND RESPONSIBLE FOR MOST OF THE CANCER AND BIRTH DEFECTS IN OUR COUNTRY.

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Speaking Out Against

The data clearly doesn't support people who think this way, yet many do.

A considerable number of parents have stopped vaccinating their children because of a DISCREDITED research paper.

## Scientific Consensus

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Why do we find it so difficult to believe in scientific consensus ?

Just as there are climate skeptics, there are a number of pesticide-skeptics ... those who believe that, despite the scientific consensus, pest control products pose an unreasonable risk to human health.

Some of these skeptics are PhD-trained scientists, and I respect their scientific opinions and research.

Science works by consensus.

If you think the consensus is wrong, you do experiments to show that, and you publish the results.

If you're right, others will repeat and expand your work and results.

Slowly, the consensus changes.



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### Extremely Misleading

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[ Porter is a Professor of Zoology, and has NO recognized background experience or training in matters concerning pest control products. He is NOT competent to give advice. Furthermore, Porter is a Director for Beyond Pesticides, an Anti-Pesticide Organization. ]

Dr. Warren Porter submitted a letter to the board expressing his opinions on pesticide concerns.

I'm not a toxicologist, and Dr. Porter's publication record indicates that he is principally an entomologist studying the effects of climate change on insects.

But I wish to draw your attention to two statements made by Dr. Porter that I believe are telling.

In his first paragraph, Porter states ...

*Other ingredients are designed to promote rapid penetration across the skin and respiratory surfaces.*

His statement is EXTREMELY MISLEADING.

Why would a company that develops a product to control weeds design that product to penetrate skin and respiratory surfaces ?

Wouldn't the better course be to develop a product that readily passes through the cuticle of a leaf ?

# Hero

Speaking Out Against

## Extremely Misleading and Defies Credulity

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In his last paragraph, Porter has a statement that DEFIES CREDULITY.

Porter states that because Whitefish Bay, Wisconsin, has the second highest incidence of breast cancer in the United States, and you can « *smell pesticides from April through September* », therefore breast cancer is caused by lawn care chemicals.

Does this kind of science pass the smell test ( pun intended ) ?

Despite his olfactory analysis, these products are widely used around the country, and I HIGHLY DOUBT YOU CAN CORRELATE LAWN CARE PEST CONTROL PRODUCT USE WITH BREAST CANCER RATES.

By the way the 1997 registration for the herbicide triclopyr is available through the EPA web site and is a wealth of toxicological and environmental data.

The carcinogenicity rating for triclopyr is a Group D chemical ( not classifiable as to human carcinogenicity ).



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### Pest Control Product Use

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I'm not a toxicologist ... I study turf management and pest control products are a part of turf management.

Do they have to be ?

No, but TURF QUALITY IS GENERALLY IMPROVED WHEN PEST CONTROL PRODUCTS ARE USED JUDICIOUSLY TO CONTROL PESTS THAT CAN'T BE CONTROLLED IN OTHER WAYS.

### Organic Methods

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I'm a big believer in organic production techniques, particularly the use of composts and natural products in agronomic, i.e. row crops like corn and soybeans, fertility.

However, I DO NOT BELIEVE that ORGANIC MANAGEMENT SYSTEMS are clearly superior to using pest control products and inorganic fertilizers in a turf management system, except where soil quality is poor, i.e. disturbed soils, sub-soils, and soils high in clay content.

In poor-quality soils, using compost or composted manures or meals ( i.e. bone, feather, etc ... ) is a better practice than using conventional fertilizers, and will result in higher turf quality.

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Speaking Out Against

## Phosphorus Use

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The concern with using natural product fertilizers is the increased potential for phosphorus run-off.

Natural products will contain phosphorus, and most of our soils in Illinois have sufficient phosphorus, so using a natural fertilizer is a double-edged sword.

Yes, it is good for the soil, but the potential for phosphorus run-off increases.

Using conventional fertilizers without any phosphorus is probably a better environmental practice when soil quality is good.

## Broad-Leaved Weed Control

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Why do we need herbicides in turf ?

Broad-leaved weeds are common in turf and include plants such as dandelion, white clover, plantains, knotweeds, spurge, oxalis, etc ...

Many of these weeds are perennials, and, once established, they have to be killed or removed ... they don't go away on their own.

Annuals, by contrast, die each year, so a healthy turf is often the best defense against annual weeds since competition will help keep them out.



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However, once weeds like dandelion, plantain, and white clover become established, they need to be killed, removed, or lived with.

BROAD-LEAVED WEEDS DISRUPT THE UNIFORMITY OF THE TURF AND MAY AFFECT PLAYABILITY OF THE FIELD IF THEY AFFECT FOOTING, BALL BOUNCE, ETC ...

### Organic Products

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There are NO current organic products that selectively control broad-leaved weeds.

We recently conducted a small trial to examine organic methods to control weeds.

We compared vinegar, clove oil, and Ortho EcoSense.

All products are non-selective ... that is, you have to selectively treat just the weeds as treating the turf can cause damage.

Vinegar kills weeds, but is VERY INJURIOUS TO ANY TURF IT CONTACTS.

Clove oil is MARGINAL at best.

Ortho Ecosense looks a little more promising, particularly on dandelion.

My guess is that the dandelion leaves are controlled, not the whole plant ( tap-root ), and it will come back from the tap-root.

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This trial is on-going, and may lead to an acceptable alternative if the EcoSense does indeed control dandelion.

Other universities have NOT seen good control from these products.

## Fate of Pest Control Products

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What happens to pest control products applied to turf ?

One of the major problems I have with citizens who think pest control products applied to turf are serious health risks is the level of exposure.

How do youth get exposure to these products ?

Contrary to Dr. Porter's conjecture, pest control products are designed to be absorbed into the foliage of the plant ( if they are post-emergence herbicides like the ones we use to control broad-leaved weeds ).

This occurs relatively rapidly for most pest control products, and AFTER THE PRODUCT DRIES ON THE LEAF, IT IS DIFFICULT, BUT NOT IMPOSSIBLE, TO DISLODGE THESE RESIDUES OFF THE LEAF SURFACE.

ONCE DRY, I WOULD HAVE NO PROBLEM WITH MY CHILDREN PLAYING ON SUCH SURFACES ONE DAY AFTER AN HERBICIDE APPLICATION.

Second, TURF IS A GREAT SYSTEM FOR DEGRADING PEST CONTROL PRODUCTS AND OTHER APPLIED ORGANIC MATERIALS.

Unlike row crops, a good turf is a layer of organic matter on top of the soil.



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Organic matter is highly absorptive of organics and is teeming with micro-organisms that can readily break down pest control products.

The half-lives of pest control product are determined in an aerobic soil environment, and these are the values reported to the EPA.

However, half-lives determined in turf are usually smaller, faster degradation, than in soil.

A former graduate student of mine determined the half-lives of five pest control products in turf or in bare soil.

( Gardner et al. 2000 and Gardner and Branham, 2001a and b (see CV) )

We found that half-life for halofenozide, an insecticide, was not significantly different in turf versus bare soil.

However, for the fungicide propiconazole ( Banner™ ) the half-life decreased from 29 days in bare soil to 12-15 days in turf.

The herbicide ethofumesate ( Prograss ) had a soil half-life of 51 days, and a half-life in turf of 3 days.

So, TURF IS A VERY GOOD SYSTEM FOR DEGRADING APPLIED HERBICIDES.

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Speaking Out Against

## Exposure to Pest Control Products

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How do we get exposure to these pest control products ?

Dr. Porter made a comment in his letter about smelling these pest control products, and blanket statements are to be avoided, but most broad-leaved herbicides for use on turf are applied as amine salts, this is how they are formulated.

Salts are usually NON-VOLATILE; table salt has no smell or odor.

Often the odor we do smell is not the herbicide, but either impurities or other materials in the herbicide formulation.

Some manufacturers have developed low-odor formulations for this very reason.

So, INHALATION IS NOT A COMMON ROUTE OF EXPOSURE SINCE THE AMINE SALTS ARE NON-VOLATILE.

Oral uptake would occur from chewing on the grass, which should be discouraged.

The other route of entry is dermal exposure.

Once dry, these compounds would be difficult to dislodge from the turf.

However, some exposure may occur if the turf is used the morning following an application, and there is significant dew that could cause the herbicide to go back into solution.



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THE MAJOR SOURCE OF PEST CONTROL PRODUCT EXPOSURE FOR MOST AMERICANS IS FROM OUR FOOD SUPPLY.

Specifically from fresh fruits and vegetables.

Our modern agricultural system is highly mechanized and efficient, and pest control products are sprayed frequently on fruits and vegetables.

Yet despite this, every study shows that you are much healthier by eating a diet rich in fruits and vegetables.

### Recommended Strategy

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The decision to use herbicides rests with the Park District management.

However, the citizens should have a say in whether herbicides are used or are not used.

This meeting is an excellent venue to voice your concerns.

The most commonly used herbicide in lawn weed control is still 2,4-D, which was discovered over 70 years ago and has been widely used in lawn weed control since the 1970's.

# Hero

## Speaking Out Against

Surely, IF 2,4-D WAS A PROBLEM AFTER 70 YEARS, SCIENTISTS WOULD HAVE DISCOVERED THE CAUSE AND EFFECT BY NOW.

So, I caution the community not to over-react to a very rational herbicide use policy employed by the Park District.

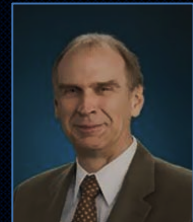
I fear we are entering a new « *dark age* » where science is trumped by INTERNET RUMOR, INNUENDO, and FABRICATION.

I believe a single application of a broad-leaved herbicide, such as Confront, can be safely applied after the soccer season is completed, provide outstanding control of the broad-leaved weeds \*, and by virtue of the application timing, be completely safe to the children of Highland Park.

By applying the herbicide after the season is complete, you can keep children and pets off the field for several days ( or as long as you wish ) to reduce the potential for pest control product exposure.

If you have further questions, I would be happy to answer them.

Sincerely,  
Bruce Branham  
Professor  
Department of Crop Sciences  
University of Illinois



\* I can provide data showing the performance of late season, 10/15–11/15, broad-leaved herbicide applications that indicate that this timing provides better control than traditional spring applications or applications made in early September, the traditional timing for a late year treatment.



**STOP** lying around  
doing **NOTHING** against  
**Lunatic Terrorist**  
**PROHIBITION**



# What YOU can do in the war against Lunatic Anti-Pesticide Terrorism ?!?!?!

What can YOU do against Anti-Pesticide Lunatics ?

WRITE AGAINST THE LUNATICS !

FIGHT AGAINST the  
CONSPIRACY to PROHIBIT  
pest control products  
in the Urban Landscape

RAT-OUT the Anti-Pesticide Lunatics  
with COMPLAINTS through  
LETTERS TO THE EDITOR

Anti-Pesticide Lunatics are GOVERNMENT-  
FINANCED with TAX-FREE MONEY

Demand a REVOCATION of their organizations'  
REGISTERED CHARITY TAX-EXEMPT STATUS !



**FORCE**  
OF  
**NATURE**



# NORAHG

In the 9/11 Era of Environmental Terrorism, at least ONE SUBVERSIVE ACT OF TERROR is Perpetrated EVERY SINGLE DAY by enviro lunatics.

NORAHG is National Organization Responding Against HUJE that seek to harm the Green Space Industry.

NORAHG is a NATIONAL NON PROFIT NON PARTISAN organization dedicated to representing the work of RESPECTED and HIGHLY RATED EXPERTS who promote PESTICIDE REALISM and PESTICIDE TRUTHS — scientific research PROVES that pest control products CAUSE NO HARM and can be USED SAFELY.

HUJE are enviro lunatics, anti pesticide activists, and lawn haters, who particularly DESPISE the golf industry. They are Hateful Underhanded Jokes as Environmentalists who have been WRONG FOR OVER 50 YEARS. There is NO RECOURSE but LITIGATION against these HUJE, as well as the CANCELLATION of GOVERNMENT GRANTS and REVOCATION of the TAX-EXEMPT STATUS of their organizations. HUJE should Get OFF Our grASS, and they should Roast In Hell.

NORAHG manages the Library Computer Access and Retrieval System for all anti pesticide terrorist acts of subversion. In the event that criminal charges for FRAUD and CONSPIRACY are laid, ALL anti pesticide activists and their environmental terrorist organizations have been identified on the basis of statements, activities, affiliations, and whereabouts.

NORAHG also produces FORCE OF NATURE, reports that present THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE about environmental issues, including anti pesticide terrorism.

FORCE OF NATURE is a series of reports destined for the green space industry, the environmental terrorist movement, governments, and the media, nationwide across Canada, the United States, and overseas.

The Force Of Nature Series of Reports — Agriculture • ALBERTA Conspiracy • Bee Colony Collapse Disorder • Bee Colony Collapse Disorder • Benefits of the Turfgrass Industry • Beyond Pesticides • Books That Screwed Up the World • BRITISH COLUMBIA Conspiracy • Canadian Cancer Society • Canadian Association of Physicians for the Environment • CARNAGE and Consequences of Lunatic Terrorist Prohibition • Controversial Prohibitions • Culprits of the Prohibition Conspiracy • Daffodils, Toxic Pesticide Treated Flowers Soaked Formaldehyde • Dating Services for Enviro Maniacs • David Suzuki Foundation • DDT and Our World of Politicized Science • Death and Illness (Alleged) • Departure Letters • Ecojustice Canada • Energy Sector • Environmental Terrorists UNMASKED • Environmental Terrorist Organizations • Enviro PROFIT • Environmental Defence • FAILURE of IPM, Pesticide Manufacturers, Prohibition, Trade Associations • Famous Quotations About Enviro Lunatics • Fertilizer TERROR • Food and Farming • Get Off Our grASS • Global Warming, The Scam of Our Lifetime • Golf Industry • Green Alternatives • Green Party • Halloween Terror • Happy Holidays • Health Canada • Health Concerns with Pest Control Products • Heroes Speaking Out Against Environmental Terror • History of Environmental Terror in Canada • History of the Turfgrass Industry • Letters to the Editor • LIARS and Lying Sacks of (Enviro Maniac) Cwap • Mock Advertisements • Mock Speeches • Myth BUSTING • NATIONAL Prohibition • NEW BRUNSWICK Conspiracy • NO Prohibition Exception for AGRICULTURE Industry • NO Prohibition Exception for GOLF Industry • NOVA SCOTIA Conspiracy • North America Free Trade Agreement (NAFTA) • ONTARIO Conspiracy, Haven For Environmental Terrorists • Ontario College of Family Physicians • Organic Golf Courses • Organic Maintenance • Organizations of the Prohibition Conspiracy • Pesticide Q & A (Questions and Answers) • Positive Waves (Interesting and Innovative Thinking) • PRINCE EDWARD ISLAND (PEI) Conspiracy • QUEBEC Prohibition • Quotations About Enviro Lunatics & Maniacs • Rachel Carson, The Queen of Junk Science • SASKATCHEWAN Conspiracy • Satire, Laughs & Insanity • Terror That NEVER Ends • TERROR Talk and Weasel Words • THE AVENGERS • The Environmental Factor • The FAILURES of Green Alternatives, Organic Golf Courses, BROWN Golf Courses, Integrated Pest Management, Pesticide Free Parks, and Pesticide Manufacturers • The Ontario Trillium Foundation • The Industry STRIKES Back • The Wilhelm Scream • The Wisdom of REAL Experts • Tukey TERRORISM • TWISTED Precautionary Principle • United States Enviro TERRORISM • UPDATES • VICTORIES Against Terrorists • Video, Audio, and Slide Shows • VIOLATING Federal Law • VIOLATING Prohibition • WARNINGS • Weapons of Ultimate Environmental Terror • Wind Power (Bogus) • 2,4-D

The information presented in FORCE OF NATURE has been developed for the education and entertainment of the reader by providing a sequence of events WITH COMMENTARY, striving for accuracy in history, politics, and science.

FORCE OF NATURE is committed to sound science, and ground-breaking original journalism that informs, entertains, and creates real change.

FORCE OF NATURE is TOTALLY INDEPENDENT and provides NO guarantee regarding accuracy or completeness. In no event shall FORCE OF NATURE be liable for any incidental or consequential damages, lost profits, or any indirect damages.

NORAHG also produces A LOOK AT, is a series of reports providing TECHNICAL INFORMATION on issues such as Career Management, Golf Course Maintenance, Green Alternatives, Summer Stress, Turfgrass Pests, and Turfgrass Species.

Finally, NORAHG frequently responds to anti pesticide activists in LETTERS TO THE EDITOR in newspapers across Canada and around the world.

All information, excerpts, and pictures contained in FORCE OF NATURE, A LOOK AT, and LETTERS TO THE EDITOR were retrieved from the Internet, and may be considered in the public domain.

FORCE OF NATURE, A LOOK AT, and their various incarnations, was the brainchild of William H. Gathercole ( now retired ) and his colleagues.

Here is a brief summary of Mr. Gathercole's career —

Fields of study — Horticulture/Agriculture, Mathematics, Physics

Alma mater — McGill University • University of Guelph • the first person ever to obtain university degrees and contribute to both the professional lawn care and golf maintenance industries

Expertise in — environmental issues and anti pesticide terrorism • turf and ornamental maintenance and troubleshooting • history of the industry • sales and distribution of seeds, chemicals, fertilizers, and equipment • fertilizer manufacturing and distribution

Notable activities — worked in virtually all aspects of the green space industry, including golf, professional lawn care, distribution, environmental compliance, government negotiations, public affairs, and workplace safety • supervisor, consultant, and, programmer for the successful execution of hundreds of thousands of management operations in the golf and urban landscape, as well as millions of pest control applications • advisor, instructor, and trainer for thousands of turf and ornamental managers and technicians • pesticide certification instructor for thousands of industry workers • founder of the modern professional lawn care industry • prolific writer for industry publications and e-newsletters • first to confirm the invasion of European Chafer insect in both the Montreal region and the Vancouver/Fraser Valley region • with Dr. Peter Dernoeden, confirmed the presence of Take All Patch as a disease of turf in Eastern Canada • with Dr. David Shetlar, confirmed the presence of Kentucky Bluegrass Scale as an insect pest in South Western Ontario, and later, in the Montreal and Vancouver regions

Special contributions — creator of the exception status that has allowed the golf industry to avoid being subjected to anti pesticide prohibition • creator of the signs that are now used for posting after application • co-founder of annual winter convention for Quebec golf course superintendents • the major influence in the decision by Canadian Cancer Society to stop selling for profit pesticide treated daffodils • the only true reliable witness of the events of anti pesticide prohibition in the town of Hudson, Quebec • retired founder of FORCE OF NATURE and A LOOK AT e-newsletters

Notable award — the very first man of the year for contributions leading to the successful founding of Quebec professional lawn care industry, which served as a beach-head against anti pesticide activists in the 1980s and 1990s

Legacy — Mr. Gathercole and his colleagues ... designed and implemented strategies that reined anti pesticide activists to provide peace and prosperity for the entire modern green space industry across Canada • orchestrated legal action against anti pesticide activists in the town of Hudson, Quebec • launched the largest founding professional lawn care business in Canada • quadrupled the business revenues of one of the largest suppliers in Canada

Mr. Gathercole is now retired, although his name continues to appear as founder of FORCE OF NATURE and A LOOK AT e-newsletters.

## The Whole Truth from an Independent Perspective