

By **Dr. Barry Wellar**

Professor Emeritus, University of Ottawa President, Information Research Board http://wellar.ca/informationresearch/

Special Report

Ottawa, Canada May 8, 2020 **Abstract.** This report uses multiple keyword-based searches of the learned literature and the professional literature, as well as reports on U.S. TV news shows involving 28 hosts and panelists, to answer the following question about the thinking behind public statements made by the current President of the United States, Donald J. Trump:

What are the ways of knowing employed by Donald Trump in arriving at statements involving public policies, programs, plans, or operations, and do the chosen ways of knowing represent substantive grounds for believing his statements about matters of public interest?

For the purposes of this investigation, the ways of knowing used as the diagnostic tool to ascertain the 'know-how' behind Trump's claims, pronouncements, declarations, challenges, confrontations, questions, observations, etc., are science, intuition, revelation, anatomical sourcing, everyday experience or common sense, and authority.

The results of the investigation into Trump's know-how capability regarding U.S. federal government policies, programs, plans, and operations are that 99.9%, that is, 999 of 1,000 statements by Trump are based on intuition, revelation, anatomical sourcing, and authority; 0.1% or 1 in 1,000 is based on everyday experience or common sense; and, 0.0% or 0 in 1,000 are based on his demonstrated knowledge of science.

The study concludes that because 'substantive' is not associated in any logical, rational, verifiable way with know-how that is based on intuition, revelation, anatomical sourcing, or authority, for 999 of 1,000 statements by Trump there are no substantive grounds to believe what he says about non-trivial matters involving policies, programs, plans, or operations.

Or, to re-phrase using the converse, the chances are at best I in 1,000 that a statement made by Donald Trump about non-trivial matters involving policies, programs, plans or operations could be believable on substantive grounds.

A. Introduction

Although I retired from teaching research methods courses at the University of Ottawa some 15 years ago, I continue to receive inquiries about research issues of the day in such fields as transportation systems and services, urban planning and development, interdependent infrastructures, model building and evaluation, geographic information science, and public access to public records.

Most of these inquiries are associated with the Information Research Board (IRB) research agenda, and reports dealing with some of the inquiries are posted on the IRB website.

However, there are also inquiries that involve sharing my views on topics which can be the basis for broadcast media columns, social media threads, theses and dissertation topics, professional association policies and programs, community association initiatives, political campaign materials, etc.

One of the topics about which I have been asked to share my views involves Donald Trump. Specifically, people ask for my views on the merits of his thinking processes, that is, to comment on whether there are substantive grounds for believing what he says about public policies, plans, programs, operations, and related matters of governance.

As indicated by the word 'save' in the title of the report, the U.S. is widely regarded to be in dire straits on many fronts during Trump's term of office, not just the COVID-19 situation, so questions arise about his thinking abilities to cope with matters of non-trivial social, economic, racial, cultural, financial, environmental, technological, and geopolitical difficulty and complexity.

One reason for seeking my opinion on this matter is that my career includes teaching undergraduate and graduate research methods and techniques courses for about thirty years, first at the University of Kansas, and then at the University of Ottawa, interrupted by a stint as a senior researcher in the Government of Canada, plus a number of engagements as an expert witness in civil trials.

Further, because I went to graduate school in the U.S. (Northwestern University), and have long been engaged with many government agencies and professional organizations in the U.S., I have frequently been invited to serve as an external referee for evaluations, promotions, awards, etc., in the U.S.

A complement to having reputable research credentials, I am told, is that as a Canadian I am deemed less likely to be conflicted, compromised, biased, prejudiced, etc., than someone from the U.S. who is assessing Trump's thinking abilities or 'know-how' as per the report title.

Which brings me to the combined challenge and opportunity associated with this project.

Since I knew next to nothing about Donald Trump's demonstrated experience and achievements in the ways of knowing, and their use, it was appropriate to ensure that this enterprise would not be a waste of time. Having done thousands of literature searches in my career, it took only several minutes to locate a directly on-target YouTube video: https://www.youtube.com/watch?v=5GqJna9hpTE.

The video is titled,

Everything Donald Trump Is an Expert In, According to Him.

In just 2:10 of viewing time, the 41 video clips show Trump stating 53 times that he knows more, understands more, and comprehends more than anybody on a wide variety of topics, including a number of which I have been professionally engaged.

My excitement was palpable, as they say, to launch this review of the record of a selfadmitted genius who must surely have created a substantial body of literature documenting his many ventures into the world of knowing.

B. Background to Formulating the Research Question

In my experience as a referee, arbiter, third party observer, judge, and so on, it is prudent as a general rule to avoid exposure to positions taken by others, as that could diminish one's claim, or perceptions of one's claim, of independence and objectivity.

For the purpose of report, however, a departure is taken for a sound research reason.

That is, if someone else has already undertaken such an assessment with a research tool similar to the one that I have in mind, then the exploratory investigation has been done and I would shift into the confirmatory mode using different tests. Or, it could be decided that all which needs to be said has been said, so give credit to whom credit is due for original or prior derivative work and post the links in a brief comment.

The investigative tool which I am using to form my opinion about the merits of Trump's thinking abilities is 'ways of knowing', a concept which has appeared in thousands of texts over many centuries, and is an integral part of the thought processes of every sentient person on a daily basis.

In Trump's case, no doubt he would have encountered the ways of knowing concept during his university days, and would have encountered it again during his business career.

Consequently, ways of knowing is a pertinent and incisive tool for this investigation into the merits of Trump's thinking abilities, and their manifestation as assertions, declarations, questions, claims, pronouncements, claims, etc.

For short, let us refer to all these productions as statements.

The following research question was selected to address the report question, **Does Donald Trump Have the 'Know-How' to Save the U.S.A.?**

What are the ways of knowing employed by Donald Trump in arriving at statements involving public policy, program, plan, or operations decisions, and do the chosen ways of knowing represent substantive grounds for believing his statements about matters of public interest?

C. Ways of Knowing 101

A research methods course could use several dozen references and five to seven lectures to introduce the concept of knowing. With that foundation in place for context, the stage is set for more lectures and references for materials to be read in the process of elaborating the concept of ways of knowing. And then there are more lectures and many more references involved in methodologically elaborating each of the ways of knowing, and their respective uses, strengths, and weaknesses for whatever purpose they are to serve.

In this report I briefly define each way of knowing, and outline which of the ways of knowing provide substantive grounds for believing Donald Trump's statements in his current capacity as President of the United States.

It is generally accepted by those who think deeply on such matters that there are basically six core ways of knowing:

Intuition;

Revelation;

Anatomical sourcing;

Everyday experience or common sense;

Science:

Authority.

As to whether there are other pertinent ways of knowing that could be used, perhaps there are. However, these ways of knowing are sufficient for the purposes of this report, including the primary purpose of providing an informed, logical, and verifiable answer to the question, **Does Donald Trump Have the 'Know-How' to Save the U.S.A.?**

Again, there are thousands of documents dealing with each way of knowing. The 101-level overviews are an introduction to massive bodies of literature, and this brief overview can only be indicative in nature.

1. Intuition

This way of knowing does not involve evidence-based reasoning, and is based on feelings rather than empirical evidence such as facts.

The origins of decisions based on intuition can be ascribed to feelings (e.g., ease, unease, comfort, discomfort), as well as to such travelling companions as sixth sense, instinct, divination, guessing, clairvoyance, premonition, superstition, tea leaves, and the psychic powers of oneself as well as messages transmitted by some unforeseen force from pets, crystal balls, clouds, and creaking windmills.



Uses of intuition include placing bets on horses or sports teams based on colours; opting for coin flips versus rolling dice or drawing straws; making choices in rock, paper, scissors showdowns; when at the roulette wheel going with single-digit odd numbers in red pockets on WTF days of the week, and double-digit even numbers in black pockets SSMT; and, a very popular intuitive act, accepting an email invitation to click on an unknown Internet link because one's name is in the recipient address.

And, special mention needs to be made of one of the higher forms of intuition, that is, relying on "layman's hunches" rather than expert advice in the face of unfamiliar or complex situations such as: manipulating stock portfolios in volatile markets to raise urgently needed cash; deciding where and when to allocate scarce medical and health resources in the face of an impending pandemic involving a highly contagious and unpredictable virus with a deadly streak; and, deciding on a strategy for a meeting with foreign leaders who have axes to grind and do not like you.

Intuition is a completely internal way of knowing, which cannot be penetrated even by so-called mind readers, and the process of someone arriving at a decision based on intuition is unknown and cannot be externally validated, even by the self-styled 'super psychics' and 'evangelically blessed' who float among us.

Consequently, since statements about matters of public interest are by definition open to the public in a free and democratic society, intuition is an irresponsible and potentially reckless way of knowing to use when making statements about non-trivial public policies, plans, programs, and operations.

2. Revelation

Experiences involving revelation are variously described by such terms as a "eureka" moment, an "aha" moment, a "flash out of the blue", a "bolt of lightning", a "vision", a "spiritual awakening", a "dream", a "voice", a "message", a "call", a "calling", and "a light bulb just came on", each of which involves acquiring some kind of instant and ephemeral wisdom that is shared by no one else.

The phrases "figment of imagination", "delusional", "delirious", "stoned", "you've been in the sun too long", "you've got to be kidding", "you should lie down", "nutty as a fruitcake", and "insanity" are frequently associated with claims about revelations.

Like intuition, revelation is a completely internal way of knowing and the process of someone arriving at decisions based on revelation is unknown and cannot be externally validated, even by so-called mind readers.

Consequently, since matters of public interest are by definition open to the public in a free and democratic society, revelation is an irresponsible and potentially reckless way

of knowing to employ when making statements about non-trivial public policies, plans, programs, and operations.

3. Anatomical Sourcing

This way of knowing is practiced on a grand scale, but a word about the origins of the term 'anatomical sourcing' and a citation reference may be informative.

I taught research methods courses (GEG 3104 and GEG 5904) at the University of Ottawa 1979-2005. I coined the term in the 1980s, after I had removed myself from the federal government where I found statements by politicians at all levels of government in Canada and abroad, including the U.S., to be far outside the traditional body of epistemological literature on ways of knowing.

I used the concept in conference presentations in the 1990s, in several papers in subsequent years, and most notably in a project undertaken in 2008-2009 for Transport Canada. The research methods report for Transport Canada on sustainable transportation comes up in a Google search using the phrase, "wellar anatomical sourcing". As shown below, Trump and this way of knowing have a connection.

Anatomical sourcing includes the brain, but gives explicit recognition to other parts of the anatomy which take over or become the default decision mode when the brain cramps, malfunctions, comes up short, or people are implicitly and sometimes explicitly admitting or claiming that a statement is not the result of using a brain-based way of knowing.

Moreover, when it is perceived by observers that a statement is not a product of someone else's brain-based logic, the statement may be attributed to a body part other than the brain of that person.

And, to complete the body parts triple, there is another often under-appreciated aspect of anatomical sourcing. As we learn from major trials, for example, people who are readers of body language are retained to watch for bodily "tells" that reveal biases, positions, claims, etc., about potential jurors without a word being spoken.

There are many ways to engage in anatomical sourcing, and there are also many ways for observers to attribute anatomical sourcing to, for example, a politician such as Donald Trump.

The following quotes are among those made with great frequency in politics, business, sports, and neighbourly chit-chat, and should suffice to illustrate the diversity of anatomical sourcing as way of knowing that is widely shared by deep and shallow thinkers alike:

- "I do not know the guy, so I am going with my gut."
- "I have a good gut feeling about his instincts."
- "I have a bad gut feeling about his babbling."
- "This is right off the top of my head, but let's do it."
- "To heck with using metrics, I prefer rule of thumb."
- "I am on board with this from the bottom of my heart."
- "I stuck my neck out before, so I am doing it again."
- "If I stick my neck out for principle, I know am toast."
- "Sure I made an off-the-cuff remark; I'm too tired to think."
- "I know that is the face of a liar if I ever saw one."
- "Forget the weather forecast; my knees know it's going to rain."
- "He has a good handshake, I trust him."
- "He did not look me in the eyes; he's hiding something."
- "He has sweaty palms, not my kind of guy."
- "Another knee-jerk reaction; does this guy ever think"
- "Can you imagine that, the face of our next president?!"
- "He twiddles his thumbs; that's not a good sign."
- "When his eyebrows go north I know he has tuned out."
- "He is a pain in the ass, that's why I don't like him."
- "He makes my teeth hurt."
- "The more he waves his arms the bigger the lie."
- "His arms are folded, which means his brain is frozen."
- "When he wrings his hands like that he's bluffing."
- "His eyes are darting so we know he's been cornered."
- "Ah, yes, his head is going down, the poor me pity move."

Among the more pejorative references to anatomical sourcing that are often associated with politicians, these two are top of list:

"His lips are moving so we know he's lying."

"We all know where he pulled that idea from."

And then there is the 'Whoa' moment that occurs when a politician does not know what a word means, cannot admit he does not know what it means, and instead points a finger at his forehead and says something like,

"The metrics right here, that's my metrics."

There are dozens more aphorisms which describe the contribution that the non-brain parts of anatomies make or are deemed to make to ways of knowing.

Like intuition and revelation, anatomical sourcing is a completely internal way of knowing. Therefore, the process of someone arriving at a decision based on sourcing one or more parts of her, his, or someone else's anatomy is unknown and cannot be externally validated, even by so-called body language readers.

Consequently, since matters of public interest are by definition open to the public in a free and democratic society, anatomical sourcing is an irresponsible and potentially reckless way of knowing to employ when making statements about non-trivial public policy, plan, program, and operations actions.

Or, to re-phrase in order to emphatically discount its popularity among so many politicians, anatomical sourcing is a massively flawed way of knowing to use when deriving and articulating statements that involve non-trivial public policies, plans, programs, and operations.

4. Everyday Experience or Common Sense

It is frequently the case in society, including governments, that things are done or not done in the name of "common sense". Unknown to many users, however, and individual misconceptions notwithstanding, this way of knowing does not magically appear out of the ether. Or thin air. Or a pumpkin patch. Rather, it has a very specific beginning.

What is claimed to be known due its common sense begins with actual, everyday experiences, that is, the things that an individual experiences on a day-to-day basis – sees, hears, tastes, smells, touches, reads, eats, rides, finds, loses, drives, shovels, chops, digs, bakes, sleeps, walks, talks, smiles, types, self-isolates, drinks, thinks, etc., – as he/she proceeds through life.

Where common sense as a way of knowing kicks in is based on what our brains with their very different capacities make of those everyday experiences, and what our brains put into our memories – short-term, long-term, fuzzy, fleeting, etc., – about those everyday experiences.

As for the word common, it is inclusive, that is, every sentient human being with the mental capacity to form a thought around an everyday experience has <u>some degree</u> of so-called common sense.

Hence, since the presence of some degree of common sense based on everyday experiences is widespread, this way of knowing has the potential to be useful when making statements about public policies, programs, plans, or operations.

However, three issues serve to illustrate the need to be prudent about using common sense as a way of knowing for decision-making that involves non-trivial matters.

First, few people are likely to share exactly the same everyday experiences in the same places, at the same times, under the same circumstances for a day, much less a week, a month, a year, or a decade. As a result, it is flawed thinking to assume that everyday experiences are widely shared, or shared in the same way.

To illustrate, the everyday transport experience of a car driver is not the same as that of a pedestrian, which is not the same as that of a transit rider, which is not the same as that of a cyclist or scooter user. Further, the everyday transportation experiences of individual pedestrians, cyclists, scooter users, transit riders, and car drivers are a function of such variables as routes taken, times of travel, weather conditions, and the behaviour of other mode users, so generalizing about common sense notions by mode of travel can be dicey.

The overriding message, therefore, is that people's everyday experiences involving even seemingly similar matters can be very different, which in turn makes them difficult to measure in a robustly verifiable manner, which in turn casts shades of doubt to the point of utter darkness upon what is actually known to be true about even the most common of everyday experiences.

Or, to re-phrase, ascertaining the underlying multidimensional reality (UMR) or truth about many things is seldom a walk in the park, and relying on common sense to make decisions about non-trivial public policy, plan, program, or operations issues is an extremely risky way to deal with matters of public consequence.

Second, due to differences in intelligence, education, training, disposition, attitude, family life, community life, age, travel, life skills, etc., people are highly likely to perceive shared everyday experiences differently.

By way of illustration, some drivers may regard it as common sense to slow down when weather conditions turn nasty, whereas others may disagree and drive at or above the posted speed because they 'know how to drive'; some transit riders may think it common sense to give up a seat to an older or infirm person, and others may think it is common sense for the person who got there first to keep the seat; some pedestrians may think it is common sense to cross as soon as a walk signal appears, and others may think it common sense to wait until there are no encroaching vehicles; and, some citizens may think it is common sense to self- isolate during the COVID-19 pandemic, and others may think it is common sense to regard the virus as a minor irritant, some kind of hoax even as the ambulances go by, or 'bullshit' as others proclaim and, in the spirit of "Que sera, sera", or, "Que será, será", go wherever one chooses to go.

Third, in cases where opinions collide, there is need of a mechanism which informs as to whose common sense to believe, and why. After many hundreds of years of common sense disputes, we are still waiting for insight into that kind of conflict resolution.

Fourth, everyday experience is by definition an historical phenomenon, that is, a record of things that have already occurred, which can be illustrated as follows.

Individuals who have fallen on an icy sidewalk or have seen others fall may have a memory of the experience(s), and can share a "common sense" solution based on what they experienced on previous, similar occasions. That is, they may believe that the municipality should have responded to weather reports and cleared the snow in a timely fashion, scraped the sidewalks bare of ice, and applied grit and salt as needed to prevent slipping.

However, the common sense situation is different for someone who has no previous experience with icy sidewalks. This person has no basis (experience) for appreciating the slip-and-fall risks, and no basis (experience) for expecting or suggesting the same kind of solution that occurs to others who have actually shared the experience, and have a perception of how it can be dealt with (avoided) in future.

The key point is that what is generally referred to as knowing by virtue of common sense is a direct reflection of the history of each individual's everyday experiences.

As a result, the more that the same experiences are shared, the more those individuals have a common basis for decisions. And, the more those individuals perceive (sense) things in the same way, the more those individuals have a shared knowledge basis for decision making.

But, conversely, the fewer everyday experiences they share of the same things or different things, and the more the differences in what their brains recall, the smaller the common knowledge set they have for arriving at informed decisions.

And now, a *caveat* about the misuse of the concept of 'common sense' by those who think they are bolstering their argument by relying on that term.

Examination of 100 newspaper articles – editorials, columns, letters – published in 2020 in the U.S. and Canada, revealed the concept was misused in more than 50 of them. Ironically, on many occasions the decision to proclaim common sense is not based on using common sense.

To close with a reminder that cannot be over-emphasized, common sense only applies to matters that are already part of everyday experience.

Consequently, when decisions about pandemics, for example, involve knowing about new strains, new spread processes, new measurement techniques, new technologies, new preventative measures, etc., which cannot be related or matched to prior, everyday experience, then there is no directly applicable common sense way of knowing that can be brought to bear on these decisions.

Moreover, to further drive home the point of misuse of common sense, a number of U.S. media commentators made a common sense judgement that the 19 in COVID-19 stands for the 19th iteration of the disease, when the number actually stands for the year of origin, which is 2019. You might well ask, "Where did they get wrong impression?"

Finally, those with a true grasp of what common sense means as a way of knowing are fully aware that unless everyday experience data are used in methodologically designed empirical research, it is prudent to defer to a robust way of knowing as the primary basis for statements that involve non-trivial matters.

5. Science

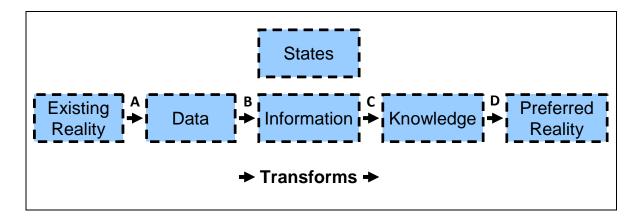
Two primary objectives of science, which have histories measuring in the hundreds of years, are to add to knowledge, and to add to ways and means of continuing to add to knowledge. Across the U.S., those two objectives are the driving forces behind designing and implementing research methods, research techniques, and research operations courses and activities in dozens of academic disciplines, thousands of government departments and agencies, many thousands of private sector enterprises, many, many thousands of academic institutions from elementary schools to universities, and now, due to COVID-19, in millions of home-schooling enterprises.

Our concern here is not the adding to knowledge aspect, but it is noted for the curious that in terms of subject matter it is likely that any topic considered in every other way of knowing could be the subject of scientific inquiry. However the converse does not hold, as additions to science-based knowledge break new ground by creating new data and/or new information and/or new knowledge which did not previously exist.



Our primary interest is in the second aspect of science; that is, adding to ways and means of continuing to add to knowledge. As illustrated in Figure 1, this aspect of science may be described as a transform process whereby reality is transformed to data (A), data are transformed to information (B), information is transformed to knowledge (C), and the knowledge acquired after transform C can be used (D) to change existing reality to preferred reality.

Figure 1. The Data-Information-Knowledge **Transform Process: Simple Model**



The key in the schematic for this report is the transform arrows, A, B, and C. These transform arrows represent the ways of knowing which enable achieving the transforms, that is, knowing **how** to transform reality to data, data to information, and information to knowledge. After that, we are into the political realm of what is done with knowledge (D), that is, whether and how it is used for policy, plan, program or operations purposes.

For each of A, B, C, and D there are thousands of productions, including those in the names of intuition, revelation, anatomical sourcing, and common sense, but this is where we separate wheat from chaff, corn from cob, fact from fiction, truth from fantasy, and the real deal from phony baloney, by explicitly noting how science as a way of knowing differs structurally and functionally from all the other ways of knowing.

First and foremost, science is the only way of knowing that employs empirical research organized around laws, theories and hypotheses which are tested and re-tested, accepted and rejected, and revised and refined, to achieve the transform process (existing reality → data → information → knowledge → preferred reality).

That distinction by itself should suffice to distinguish science as a way of knowing from the other ways, which are pretty much exercises in make-believe practiced by bullshitters, charlatans, con artists, con men, crooked logic peddlers, demagogues,



exaggerators, fakes, flacks, flakes, flim-flammers, fraudsters, guessers, hoaxers, hucksters, hunchers, liars, phonies, poseurs, pseudoscientists, quacks, scammers, shysters, spiritualists, swindlers, truth-twisters, and whackos, to name a few types of people who engage in knowing or creating the pretext of knowing by make-believe.

However, because of the importance of this distinction, I am adding a baker's dozen more of the differences between science as a way of knowing and all the other ways:

- Scientific ways of knowing must be transparent: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must be evaluable by external examiners: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must be repeatable: that condition does not apply to other ways of knowing;
- · Scientific ways of knowing must allow testing for reproducibility of results: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must rigorously investigate alternative explanations: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must allow for counter-analysis: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must be verifiable: that condition does not apply to other ways of knowing;
- Outcomes of scientific inquiries must be subject to validation: outcomes of other ways of knowing cannot be empirically validated;
- Scientific ways of knowing must take into account unseens and unknowns: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must be based on specifying and investigating relationships among variables: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must enable generalizing from a sample to a population within known limits of confidence: that condition does not apply to other ways of knowing;
- Scientific ways of knowing must be based on methodological design: that condition does not apply to other ways of knowing;
- Documentation of evidence produced by scientific ways of knowing must include all meta-data or meta-information or meta-knowledge needed for counter-evidence investigation purposes: that condition does not apply to other ways of knowing.

Consequently, since matters of public interest are by definition open to the public in a free and democratic society, and an intrinsic condition of science as a way of knowing is



to be a completely open enterprise, science is a responsible and potentially productive, constructive, and informed way of knowing to use when making statements about nontrivial public policies, plans, programs, and operations.

6. Authority

There are two kinds of authority, and elaborating this distinction is critically important in a discussion about ways of knowing used by or claimed to be used by any politician at the federal or national and sub-federal or sub-national levels anywhere.

That is, on the one hand authority is vested in how the authority is attained.

And, on the other hand, authority is vested in the authority *per se*, such as an institution, organization, corporation, agency, office, political party, or other entity.

The entity way of knowing is frequently misrepresented by politicians who claim to have attained authority, when in fact authority is vested in the entity, not the individual.

Due to the role of authority in governance, this distinction requires a detailed explanation, primarily because politicians as a group are inclined to merge the two types for their self-interest.

In part i, examples a, b, c, and d use expert witnesses, auto mechanics, high-tech professionals, and COVID-19 professionals to illustrate the attained authority that attaches to individuals. And, in part ii, examples e and f use religious organizations and political parties to illustrate authority which is conveyed upon an individual through affiliation with an entity.

i. Authority Attained by Individuals

a. Expert witnesses are recognized as authorities at civil and criminal trials because they are recognized to be among the most knowledgeable and credible people in a field for reasons of education, training, accreditation, experience, and any other substantive measure of demonstrated, external, critically evaluable competence.

Further, to be qualified as an expert witness in civil or criminal proceedings, there is an attached obligation to render service to the trier or triers of fact, and not to vested interests such as the providers of retainer fees.

b. Mechanics are authorities on problems with vehicles, and what needs to be done to fix those problems. What the lay person knows, or thinks he or she knows, is what he or she understands from the mechanic's statement. Sometimes we seek out a second or third opinion from other mechanics because, due to their training and experience, they too know more about fixing 'that funny noise' than lay people do, and provide informed advice on how to converge to a decision.



- **c.** <u>High tech professionals</u> are regarded as authorities because, due to their education, training, and experience, they inform lay people on such matters as using applications and how fix problems with computers, tablets, phones, etc., and also provide instructions about how to install new applications and how avoid similar or other problems in future. Sometimes we seek out a second or third opinion from other high tech professionals because, due to their education, training, and experience, they know more about fixing that 'non-responsive app' than lay people do, and provide informed advice on how to proceed
- **d.** In the midst of the coronavirus pandemic situation, it is a privilege to explicitly recognize the COVID-19 professionals in epidemiology, medicine, bio-statistics, nursing science, engineering, systems science, and many other fields who, as a result of their education, training, accreditation, and experience are informing lay people about what is known and needs to be known about the origins, current status, and societal implications of the pandemic.

In all these and dozens of other examples of attained authority as a way of knowing, those who attain authority by way of education, training, accreditation, experience, etc., undertake to inform lay people about the "why's" and the "how's" behind their authority.

Attained authority as a way of knowing manifests itself externally, and owes its very existence to that condition. Or, to re-phrase, the expert witnesses, mechanics, high tech people, and COVID-19 stalwarts in **a**, **b**, **c**, and **d** above earn their attained authority positions because of what their acquired knowledge (via the existing reality → data → information → knowledge → preferred reality transform process) enables them to say and do on behalf of others, and for which they can be directly held to account.

Consequently, since matters of public interest are by definition open to the public in a free and democratic society, attained authority which is acquired by individuals through education, training, accreditation, and experience is a responsible and prudent way of knowing to use when making statements about non-trivial public policy, plan, program, and operations actions.

This means that attained authority can be achieved via the scientific way of knowing, and on the basis of demonstrated, practical or applied competence in some aspect(s) of the everyday experience/common sense way of knowing.

However, for reasons detailed above in part C. Ways of Knowing 101, knowing by intuition, revelation, and anatomical sourcing is in the realm of fiction, fantasy, delusion, make-believe, pretence, fabrication, conniving, contriving, fakery, etc., rather than substantive, verifiable thought, and does not equate with attained authority.

ii. Authority Vested in an Entity

In contrast to the individual authorities noted in parts **a**, **b**, **c**, and **d**, there are entity authorities. For illustrative purposes, this report considers the authority vested in religious entities and political parties.

e. <u>Religious entities</u> introduce a different dimension into a discussion about authority as a way of knowing. As summarized by Google: "The major religions of the world (Hinduism, Buddhism, Islam, Confucianism, Christianity, Taoism, and Judaism) differ in many respects, including how each religion is organized and the belief system each upholds."

Clearly, this is a heads up that we are wading into murky water when associating 'ways of knowing' with religion – What is the likelihood that the major religions all have the same ways of knowing? – or that off-shoots, spin-offs, and departures from the major religions have anything at all in common when it comes to ways of knowing? Clearly, there are number of questions that arise.

What we do know about their commonality, however, is that members of religious entities are appointed to act on behalf of the "religious enterprise", and even those who are self-appointed tend to stress that they serve on behalf of a religious enterprise, and are not engaging in self-service for self-service purposes.

Therefore, authority resides in the religious enterprise which, through its spokespersons, agents, etc., conveys to parishioners, followers, believers, etc., what the authority decides is appropriate for parishioners, followers, believers, and others to know about a particular religion or, perhaps, other religions as well.

The cornerstone of this way of knowing is the concept of faith, whereby knowledge is imparted from a deemed authority to lay persons in the form of received knowledge. That is, lay persons know what they know because the authority tells them what they know in the form of received knowledge, or what they think they know, in the form of received knowledge.

Further, this kind of authority as a way of knowing is inclined to rely on dogma and indoctrination to impart messages, and to eschew open-ended, free-thinking discourse that deals candidly with questions about "why's" and "how's."

While entity authority associated with religion obviously does not apply to all entities, there are several messages of import that are widely applicable.

For example, democratic cornerstones of public transparency and accountability are not widely embraced by private sector entities. Further, many if not most private sector entities tend to put owner and shareholder benefits and gains before public welfare and the common good, and do so at private meetings with non-disclosure conditions.

Consequently, since matters of public interest are by definition open to the public in a free and democratic society, entity authority of the "backroom wheeling and dealing" nature is an irresponsible and potentially reckless way of knowing to employ when making statements about non-trivial public policy, plan, program, and operations actions.

f. By way of brief context for this section on <u>political parties and authority</u>, multiple news reports from multiple sources made it abundantly clear in the week or so before the time of drafting this section (April 15, 2020) that Donald Trump seriously misunderstands the U.S. Constitution which he took an oath to uphold. Moreover, he obviously has at best a limited grasp of the structural and functional principles and properties of the U.S. political system.

I hasten to affirm, however, that this news is not a 'game changer' in terms of pursuing the question underlying this report:

What are the ways of knowing employed by Donald Trump in arriving at statements involving public policy, program, plan, or operations decisions, and do the chosen ways of knowing represent substantive grounds for believing his statements about matters of public interest?

Rather, it is a design shifter, not a design buster, because Trump's failure, inability, whatever, to comprehend the U.S. Constitution can be dealt with by a modification that was anticipated in the report's research design.

In brief, Trump's claims about how much he knows signalled the need for prudent flexibility in the research design, because what he claims he knows could come a cropper for a very predictable reason. In brief, he moved from the private sector where he may have called many of the shots, to the public sector, where transparency and accountability are not readily dismissed or evaded. This means that what he claims to know from his business days could have very limited pertinence or applicability in his new decision position.

Consequently, because there are basic features of governance about which he has demonstrated a very limited grasp, we need to 'aim our sights a little lower'. This is done by putting a more explicit emphasis on establishing a very elementary point of departure for this part of the entity authority section.

In short, and as affirmed by those who qualify as experts in this field, federal politicians in the U.S. political system attain authority only to the extent that it is granted to them by political parties, and is required or permitted by the Articles set out in the Constitution.



Or, to re-phrase, with relatively few exceptions politicians in the U.S. (and probably many other countries) fancy themselves to be power brokers, persons of great influence, etc. And, as a result, of their self-fancies, they could perceive themselves as having attained authority when making statements.

However, in reality when it comes to using ways of knowing based on authority in the U.S. political system, political parties are the 'big dogs'. Individual politicians such as John McCain and Mitt Romney, for example, who did not always toe the party line, are extremely rare. Sometimes they pay a substantial price for their independence.

The bottom line then, and setting aside exuberant posturing by any individual politician, including Donald Trump, is that non-trivial statements involving public policies, programs, plans, or operations are the prerogative of political parties, and the reality in this regard is crystal clear:

> If a party in power is rejected then it loses its authority as an entity, and any residual authority attached to individual politicians comprising the party membership is diminished.

Or, to re-phrase, while a rising tide may lift all boats, a sinking political party takes down all its member politicians to some degree, and to a critical degree for those who lose their seats.

Consequently, authority as a way of knowing in party politics is established by the parties, and individual politicians are similar in standing to spokespersons, agents, and other appointed persons serving on behalf of religious entities and many other entities.

That is, although their titles and posturing might suggest or portend otherwise, they are pretty much messengers delivering messages on matters and in ways that the parties believe will keep them in power or put them in power.

As for the individual politician, what he or she brings to the table, that is, what he or she presents to the parties for consideration is based on what he or she knows and shows. And what he or she knows and shows is based, as discussed above, on such ways of knowing as intuition, revelation, anatomical sourcing, everyday experience/common sense, and science.

In the next section of the report we continue our due diligence by inquiring as to whether anyone has already asked and answered the research question,

What are the ways of knowing employed by Donald Trump in arriving at statements involving public policy, program, plan, or operations decisions, and do the chosen ways of knowing represent substantive grounds for believing his statements about matters of public interest?

D. Ascertaining Whether the Research Question Has Already Been Asked and Answered

In my experience there are at least nine different bodies of literature which could contain information regarding the ways of knowing manifested by Donald Trump in arriving at a policy, plan, program, or operations statement involving the public interest:

- Learned:
- Popular;
- Corporate/Institutional-Public;
- Corporate/Institutional-Private;
- Legal;
- Regulatory;
- Professional;
- Interest Group-Public; and,
- Interest Group-Vested.

While each of the bodies of literature could bear examination, the body of greatest, direct pertinence is the one labelled Corporate/Institutional-Public for the U.S federal government. The items of interest would be for "Donald Trump" and "President" as the primary keyword terms, in combination with terms based on ways of knowing.

However, since even members of the U.S. Senate and U.S. House of Representatives do not have free, easy, timely, and direct online access to those productions, they are deemed not available for this report.

Instead, we need to rely on proxy bodies of literature, because the preferred, original materials are not available. Fortunately, there are three general bodies of open or extant literature which are sources of evidence for ascertaining whether the ways of knowing employed by Donald Trump represent substantive grounds for believing his statements about matters of public interest:

- Learned literature (viz., journals, proceedings, dissertations, ...)
- Professional literature (P. Eng., MCIP, APA, AICP, GISP, CPA, ...)
- ➤ Popular literature (newspapers, magazines, television, Internet, ...)

The next several pages document what we were able to ascertain from examining these bodies of literature to learn if the research question has already been asked and answered.

1. Has the Research Question Already Been Asked and Answered in the Learned Literature or the Professional Literature?

Despite multiple searches using many combinations of search keywords and a number of search engines, I did not identify even one production by Donald Trump that has been published in the learned or professional or other bodies of expert-level literature which demonstrates his skills in one or more ways of knowing.

Consequently, based on findings from the searches, Trump himself did not ask and answer the research question in a manner that can be validated.

It is possible, of course, that his productions in these bodies of literature might not be accessible via online searches.

Therefore, taking into account Trump's claims in the YouTube video about how much he knows in a variety of fields, the searches were extensive, covering a mix of disciplines and fields pertinent to federal governance in a free and democratic society, including economics, engineering, geography, epidemiology, operations research, systems science, philosophy, religious studies, demography, hydrography, geology, biology, atmospheric science, mathematics, military science, probability and statistics, physics, chemistry, political science, planning, management science, public finance, public administration, decision science, geographic information science, library science, research methods and techniques, geo-politics, and communications.

If he did anything, it should be in there somewhere.

However, the searches identified no published evidence, none whatsoever, that the research question was asked and answered by Trump, who was logically the first person to query given his many assertions about knowing in the cited YouTube video (https://www.youtube.com/watch?v=5GqJna9hpTE), and other readily available videos as well.

Further, I did not locate any productions in the learned or professional literature by anyone which reports on the ways of knowing employed by Trump in arriving at policy, program, plan, or operations statements.

I hasten to add that my searches were keyword-based, so I could have missed published productions. If so, perhaps someone will correct my error.

In the meantime, as a result of not finding any evidence that "Trump" or "trump" and "ways of knowing" have been associated in the learned literature or the professional literature, it is concluded that the research question has not been asked and answered in those literatures.

Again, however, in the interests of correcting a failed search algorithm, I welcome receiving links to any peer-reviewed production about Trump in the learned or professional literatures which discuss the ways of knowing that he has employed at any time, but particularly since becoming President of the United States.

Finally, I considered searching for any production in which Trump credited any person or any body of knowledge for any of the things he claims to know in the YouTube video, Everything Donald Trump Is an Expert In, According to Him. (https://www.youtube.com/watch?v=5GqJna9hpTE)

The point is, Trump did not invent any of the fields for which he claims to know more than anybody else, so any knowledge he actually has is derivative, not original.

Therefore, if we knew who the people were from whom he obtained his claimed expertise, it might be possible to ascertain which ways of knowing he has copied, borrowed, emulated, built on, expanded, modified, extended, whatever.

However, since I did not locate any mention of any kind of him and his knowledge or ways of knowing in the learned or popular literature, it was decided that there is no productive point in pursuing this kind of search.

Or, to re-phrase, we are dealing with the President of the United States, and it would be inappropriate, in my opinion, to lower the bar on the literatures searched.

That said, I await being enlightened should someone have information to the contrary in this regard.

2. Has the Research Question Already Been Asked and Answered in the TV Component of the Popular Literature?

Trump goes public with great frequency which makes him a 'darling', you might say, of both broadcast and social media.

And, conversely, all elements of the media that contribute to the popular literature frequently produce stories mentioning Trump, which is to be expected given his position as President of the United States.

The magnitude of his high-profile public presence may be illustrated by Table 1 which compares his Google hits or results on April 11, 2020, with those of a selection of other political leaders.

First, the vast majority of results arise in association with his position as President. Keyword-based searches did not produce any mention, not one, that I was able to locate about his use of ways of knowing, or any positive presence or distinction that he brings to the Office through his ways of knowing.

Table 1. Google Results in Order of Magnitude for a Selection of Political Leaders, April 11, 2020

Xi Jinping (China)	3,040,000,000
Donald Trump (U.S)	889,000,000
Shinzo Abe (Japan)	644,000,000
Moon Jae-in (South Korea)	573,000,000
Boris Johnson (U.K.)	330,000,000
Andrés Manuel López Obrador (Mexico)	290,000,000
Narendra Modi (India)	165,000,000
Emmanuel Macron (France)	104,000,000
Vladimir Putin (Russia)	89,000,000
Angela Merkel (Germany)	88,400,000
Kim Jung Un (North Korea)	82,900,000
Justin Trudeau (Canada)	74,200,000

NOTE: For those who think deeply about such things, and before anyone 'goes ballistic', I emphasize immediately that Trump's Google numbers <u>do not/do not/do not</u> necessarily equate with substance in all cases.

The following comments should suffice to make it clear that I am not equating quantity of Google results with quality of Google results when it comes to ways of knowing, for two reasons in particular.

Less than 20 minutes of searching produced more than three hundred million (300,000,000) results using 'trump' and non-presidential keywords such as 'bullshit', 'cartoons', 'cartoon images', 'claims of genius', 'covfefe', 'dangerous', 'dotard', 'fake news', 'fool', 'funny', 'hair', 'idiot', 'insane', 'liar', 'moron', 'political comics', 'sixth sense', 'stupid trump', and 'thinker claims'.

However, it is reasonable to expect and prudent to check whether, somewhere in those 889,000,000 results, there are entries which inform about Trump's use of ways of knowing during the process of arriving at statements about policies, programs, plans, or operations.

And that expectation led logically to potential high-profile sources of insight into the ways of knowing used by Trump, namely, hosts and panelists of U.S. television, radio and other productions who are involved in covering and often interacting with Trump or his agents on a weekly, daily, hourly, or even a minute-by-minute basis.

Clearly, if Trump manifested one or more ways of knowing, then these are candidates to know about them in considerable detail.



Further, by seeking out views among those who might strongly embrace and those who might strongly criticize the ways of knowing that underlie the derivation of Trump's claims and pronouncements, the chances of not missing pertinent materials is increased considerably.

For the purposes of this report, attention is limited to television personalities who engage in dialogue which one might expect to have a ways of knowing aspect to it.

Moreover, because their productions are widely circulated, it is quite possible that readers who are regular viewers of those productions can validate my findings, or correct them as the case may be, as I make no claim that my review is comprehensive, much less exhaustive.

The decision about which media personalities to consider as sources is based on the journalistic rule of balance, that is, attempt to include TV personalities who can present both sides of the case in an investigation into Trump's use of ways of knowing.

This way, and regardless of the "brain power" of the TV personalities, the chances of selecting hosts and panelists who know something about ways of knowing, and the significance of the ways of knowing employed by the President of the United States, are likely to be increased

At the risk of lumping together people who may not much care for each other, Table 2 contains the names of the TV personalities whose interviews with or comments from or about Trump were examined for remarks about ways of knowing that were manifested in comments by or about Trump.

Table 2. U.S. TV Personalities Selected as Potential Sources of Information about Ways of Knowing Used by Donald Trump in Statements Involving Public Policies, Programs, Plans, or Operations

Jim Acosta	Tucker Carlson	Neil Cavuto	Stephen Colbert
Anderson Coo	per James Corde	en Ann Coulter	Chris Cuomo
Lou Dobbs	Jesse Dollemore	Jimmy Fallon	Sean Hannity
Chris Hayes	Jimmy Kimmel	Laura Ingraham	Bill Maher
Rachel Maddo	w Seth Meyers	Trevor Noah	Conan O'Brien
Lawrence O'D	onnell John Oliver	r Trish Regan	Joe Scarborough
Sean Spicer	Jake Tapper	Liz Wheeler	Rick Wilson

Three primary outcomes arise from watching more TV shows in the past several weeks than I have watched over the past several years, largely because of the COVID-19 shutdown (which also meant the end of my hockey season as a member of the Old Buzzards Hockey Club here in Ottawa, hence the 'free time').



The first outcome of note is that I did not identify even one claim by anyone that Trump as President had manifested any knowledge of the concept of ways of knowing, and especially of science as a way of knowing, much less that he had knowingly used any principles or practices of science in any statements involving public policies, programs, plans, or operations. (Term dropping, like name dropping, does not count as knowing)

On the other hand, however, thousands of comments were made to the effect that Trump demonstrates little if any knowledge about the scientific way of knowing, and seems to know very little about the processes of knowing in general.

Second, I did not identify even one claim by anyone that Trump as President had ever used the everyday experience/common sense way of knowing as the basis for any statements involving public policies, programs, plans, or operations.

On occasion comments were encountered to the effect that statements by Trump made sense, but what kind of sense they were purported to make was generally not specified.

Rather, the observations were just "thrown out there" in a truth without proof manner of the intuition, revelation and anatomical sourcing varieties.

Similarly, many statements by Trump were referred to in pejorative terms, such as lies, fabrications, false, falsehoods, and nonsense, but were not associated with any of the ways of knowing.

It occurs that the comments tended to be of such a dismissive or contemptuous nature that the sources did not associate 'Trump' with 'knowing' much of anything.

Third, numerous implicit references were made about Trump using the intuition, revelation, and anatomical sourcing ways of knowing in statement after statement, ad infinitum.

Again, perhaps due to dismissive or contemptuous regard for Trump's perceived limited thinking skills, the sources did not associate Trump with knowing.

Where critics were very explicit, however, however, was in criticizing Trump for his abjectly weak grasp of the duties of Office, and for erroneously claiming that he could exercise entity authority according to his (flawed) reasoning about distribution of powers.

Using keyword searches for guidance, I also looked at the productions of a number of other U.S. TV personalities.

I did not identify anyone who challenged any of the findings presented above, so the findings are deemed to serve as reasonable approximations until informed differently by the empirical results of other exploratory or confirmatory investigations.

E. Results of an Inquiry into Ways of Knowing Used by Donald Trump

For this approximation of the ways of knowing used by Donald Trump, and for which no directly pertinent research precedent was found, we have definitive results.

- **1.** The results are clearest for the **scientific approach**, that is, no evidence of any kind in any language, none, nada, нуль, cero, zilch, rien, zero, líng, nic, noll, nolla, nul, nulla, young, etc., was found that he uses science in arriving at statements involving public policies, programs, plans, or operations. **Score: 0.0%**
- **2.** No evidence was found in any literature that Trump uses **everyday experience/common sense** knowledge in arriving at statements involving public policies, programs, plans, or operations. However, some of his "media confidentes" made muffled noises in that direction. Repeated checks did not turn up any clear evidence, but the mercy rule suggests token recognition. **Score: 0.1%**

We have 99.9% remaining, and this is where things require thoughtful interpretation of a selection of Trump statements, because the three remaining ways of knowing are internal, that is, intuition, revelation, and anatomical sourcing. Further, whatever is done in the name of authority by Trump is actually based on one of those ways of knowing.

- **3. Intuition.** Trump makes mention in each of the vast majority of his public appearance statements to one, two, three or more of such intuition-related terms as feeling, funny feeling, hunch, instinct, gift, flair, notion, guess, anybody's guess, best guess, second guess, impression, who knows, you might know, does anybody know, and sixth sense. **Score: 95.0%**
- **4. Revelation**. Trump frequently claims that things such as ideas, insights, notions, facts, words, musings, judgements, and thoughts "come to him", seemingly emerging from the ether, about matters that in his opinion never before occurred to anyone. His revelations have traction with some members of the TV media. However, on the evidence his revelations have minimal substance when related to statements about policies, plans, programs, and operations. **Score: 0.5%**
- **5. Anatomical Sourcing**. Due to the abject lack of substance in the vast majority of explanations associated with his policy, plan, program, and operations repertoire to date, it is clear that some of Trump's statements must owe their origins to some body part other than the brain: **Score: 3.5%**
- **6. Authority.** Trump has no attained authority in any field, not even property development because of his many failures in the private sector over many years and projects, and oodles of money down the drain. However, he has been able to usurp the entity authority of the Republican Party on occasion. **Score: 0.9%**

In the interests of promoting clarity, the scores are presented in Table 3.

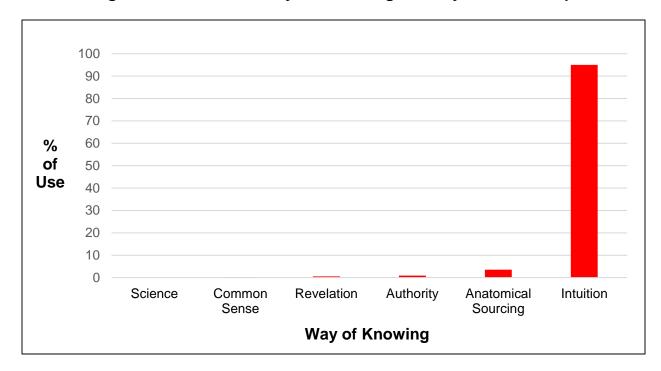
Table 3. Ways of Knowing Used by Donald Trump

Way of Knowing	<u>%</u>
Science	0.0
Common Sense	0.1
Revelation	0.5
Authority	0.9
Anatomical Sourcing	3.5
Intuition	95. <u>0</u>
Total	100.0

With regard to graphic representations, the bar chart, pie chart, and dot chart design approaches are potentially applicable, but the scale challenge is off the chart, so to speak, with this data base. In short, accurately scaling the overwhelming percentage of knowing by intuition, the zero knowing by science, the minimal knowing by common sense, the token knowing by authority and revelation, and a bit of knowing by anatomical sourcing, is no easy scaling matter.

However, concern in that regard is likely misplaced, because Trump himself would seemingly have zero interest in the science behind the design of a graphic representation. So, it is noted that Figure 2 is not precisely to scale, problem solved.

Figure 2. Bar Chart of Ways of Knowing Used by Donald Trump



Having answered the first part of the research question,

What are the ways of knowing employed by Donald Trump in arriving at statements involving public policy, program, plan, or operations?,

in Section F we consider the second part, namely,

Do the chosen ways of knowing represent substantive grounds for believing his statements about matters of public interest?

F. Do Trump's Chosen Ways of Knowing Represent Substantive Grounds for Believing His Statements about Matters of Public Interest?

Intuition, revelation, anatomical sourcing, and authority are not substantive ways of knowing, because they are not documented in formal, publicly accessible, accredited bodies of literature.

Therefore, since they lack any kind of verifiable, credible substance, they provide no substantive grounds whatsoever for believing Trump's statements about public policies, plans, programs, or operations.

This study found that Trump uses these ways of knowing in 99.9% of his statements, which means that for only 0.1% of his statements does the possibility exist that there could be substantive grounds for believing what he states.

To put the percentages in context, if he makes 1,000 statements, 999 of them are not based on substantive grounds, and only one of them could be, if, and I repeat, if, it meets the tests of methodological design discussed earlier in the report.

Which brings us to the crunch, as they say, regarding Trump's disdain of science and everyday experience or common sense.

Due to Trump's zero use of science and next-to-zero use of everyday experience or common sense as ways of knowing – 0.1% combined, or 1 in 1,000 statements –, it is fair to say that failure to use these authentic ways of knowing means that there are no substantive grounds for believing Trump's statements about public policies, plans, programs, or operations.

The bottom line, therefore, is that based on using ways of knowing as the diagnostic instrument, to an overwhelming degree – 99.9% – the chosen ways of knowing used by Donald Trump DO NOT represent substantive grounds for believing his statements about matters of public interest.

G. Double-Checking the Findings

This research project found that there is a huge difference between Trump's claims about how much he knows, and the near-total absence of evidence in reputable sources of documentation that he understands anything about the ways of knowing which are required to create the bodies of data and/or information and/or knowledge which underlie the all the things that he claims to know.

The word "bizarre" comes to my mind, because this massive dis-connect is far, far beyond anything I previously encountered in sixty years of research about knowing and ways of knowing.

And therein rests a caution which is respected by prudent researchers, and it is respected here.

That is, if a study's results seem to point out a massive contradiction between claims and findings, or expected and observed values, then if circumstances permit it is wise to bring in available second opinions which look at the research question from different perspectives using different test instruments.

Or, to re-phrase, by way of a question, "Although findings were regularly checked by cross-referencing and other means during the course of the investigation, is it possible that an error was made?"

After all, in becoming President of the United States, Trump received more than 60,000,000 votes, and some and perhaps even many of those voters must have thought there was evidence to support all or at least some of the claims that Trump makes about how much he knows, and how he knows those things.

Where to begin? His university record could contain clues.

Based on everyday experience, I know from the perspectives of a student and professor that early measures of people's brain power include examining what they did during university days.

However, it is my understanding that Trump's transcript is not publicly available by order of Trump, so it is not possible to directly confirm his public remarks about having achieved a top-notch academic record while a student at the University of Pennsylvania.

Fortunately there are sources with information in this regard. Classmates whose evaluations are available via Google tend to rate him as mediocre, and note that he is not listed on graduation materials as receiving high-level academic recognition. https://dcbluedot.com/trumps-says-he-was-first-imy-class-and-has-a-high-iq-so-we-checked-with-his-u/

The first message of import, therefore, is that the study results do not seem to be inconsistent with his academic career.

And, for a second source of comment on his performance while a student, according to (the late) Professor Michael T. Kelley who taught Trump at the University of Pennsylvania,

"Donald Trump was the dumbest goddamn student I ever had."

https://www.chicagotribune.com/columns/steve-chapman/ct-perspec-chapman-donald-trump-dumb-20171103-story.html

Again, we have a comment about his academic career which is not inconsistent with the study results. We are now two for two in substantiating the finding about Trump and his failed ways of knowing for public policy, plan, program and operations purposes, namely, he is not a deep-thinker, much less a genius or scholar.

And, for a more recent take on Trump's self-alleged brain power, there is a well-known quote by Tony Schwartz, who is listed as the co-author with Trump, of the book, "The Art of the Deal", published in 1987. According to Tony Schwartz, Trump had

"a stunning level of superficial knowledge and plain ignorance."

https://www.newyorker.com/magazine/2016/07/25/donald-trumps-ghostwriter-tells-all

https://www.chicagotribune.com/columns/steve-chapman/ct-perspec-chapman-donald-trump-dumb-20171103-story.html

I found no evidence that countered Schwartz's comment, and no doubt for good reason. Schwartz has published 23 books by this writing, and Trump has his name on one. Confirmation of study findings now stands at three for three.

Finally, for our last test there is the process of checking purported statements of fact by Trump, who seems to be the single greatest driver behind the fact checking industry becoming a virtual hive of activity in overdrive since 2016. Google is especially useful in this regard, although a number of keywords pertinent to the current inquiry did not activate that search engine.

Nevertheless, using 'trump' in combination with such keywords as 'claims about discovering things', 'lies', 'trust', false, 'originality', consistency, reliability, validity, and 'fact checker', more than 200,000,000 results arise.

In item after item on page after page, it is confirmed and re-confirmed that none of Trump's purported facts come from him using scientific ways of knowing, and none can



be methodologically tied to everyday experience or common sense. Indeed, on many occasions he repudiates those ways of knowing.

What remains when the ways based on methodological design are not used, are the default ways of knowing, which means that between 99.9% and 100% of facts claimed by Trump are derived from one or more of intuition, revelation, anatomical sourcing, or entity authority. And that makes it four for four in terms of externally confirming the study results. That is, no substantive grounds are found to justify believing any of Donald Trump's statements about public policies, plans, programs, or operations.

H. Conclusion

It is appropriate to open the Conclusion by repeating the research question,

What are the ways of knowing employed by Donald Trump in arriving at statements involving public policy, program, plan, or operations decisions, and do the chosen ways of knowing represent substantive grounds for believing his statements about matters of public interest?

and succeeding it by the final paragraph in Part F which summarizes the investigation:

The bottom line, therefore, is that based on using ways of knowing as the diagnostic instrument, it can be confidently asserted that to an overwhelming degree, 99.9%, the chosen ways of knowing used by Donald Trump – – intuition, anatomical sourcing, revelation, and authority – DO NOT represent substantive grounds for believing his statements about non-trivial matters of public interest.

Or, to re-phrase, the ways of knowing used to an overwhelming degree by Donald Trump do not and cannot represent substantive grounds for believing his statements on non-trivial policy, plan, program, or operations matters, and there is no rational, evidence-based reason to think or hope otherwise.

