The Collators Podcast - Shownotes

Episode 6 - Proof Positive - What is evidence?

Overview

From courtrooms to laboratories, from policing to public policy, “evidence” is a term loaded with assumptions. But what do we really mean when we say something is evidence — and who gets to decide?

Mark and Howard ask: What is evidence? From courtrooms to science labs to public policy, they explore how this powerful word shapes truth, trust, and decision-making.

External Links or References

A Very Brief History of Western Civilization - Roy Casagranda
https://www.youtube.com/watch?v=Dk02knYp0xA

Austerity: The History of a Dangerous Idea - Mark Blyth
https://en.wikipedia.org/wiki/Austerity:_The_History_of_a_Dangerous_Idea

Best Evidence: https://en.wikipedia.org/wiki/Best_evidence_rule

Bradford Hill Criteria - https://en.wikipedia.org/wiki/Bradford_Hill_criteria

Fruit of the poisonous tree - https://en.wikipedia.org/wiki/Fruit_of_the_poisonous_tree

Google Ngrams - https://books.google.com/ngrams/

Master of the Rolls -
https://www.judiciary.uk/about-the-judiciary/who-are-the-judiciary/judges/profile-mor/

Transcript

Howard

What I'd like to talk about today, Mark, if it's all right with you, is an introduction to the term evidence and what it means, and kind of how it's used in the various work environments that we have experienced and continue to experience. Now, the reason I say this is I see a lot of misuse of the term evidence or a misunderstanding of what they're referring to in a particular setting.

And just like we've discussed already, some of the issues around defining information and intelligence, I think we as a community of people who use these terms, be it law enforcement or in the wider public sector or private sector, I think we lose meaning in that confusion.

So just for me to start things off with my law enforcement hat on as a former UK police officer. In English law there are definitions for what the term evidence is and in this scenario the context of the word evidence being used is material that is information or whatever kind of information product, that's admissible and considerable shall we say in a court of law for legal proceedings both for civil and criminal.

Now that is a good generic basis to consider evidence globally because they all tend to follow the same models although the court systems can be very different. Ours is adversarial, some are what they call prosecutorial [aka inquisitorial] where basically one person presents both sides of the evidence if you will. You don't have this competition of one for the prosecution and one for the defence.

But in English law, there used to be, well still is, a very high legal office called the Master of the Rolls. And this would be a very eminent practitioner of law who would sit in the House of Lords and through his or her experience had vast control over the legal profession and the application of law in UK courts. And a very famous one was a gentleman by the name of Lord Denning. Now I'm not going to repeat the phraseology that he used, but one of the biggest contributions he made to English law was setting some kind of understanding of what evidence should be.

The term that he introduced and has become common throughout English law is that all evidence should be the best that the circumstances allow. Now that might sound like a very rounded and approximate term, which it is, but it recognises the fact that just as we've discussed as information and intelligence analysts and data scientists, you can't always choose the quality and quantity of the information, the data that you're given.

You have to go with what you've got. And the legal profession in the UK recognises that. So consider this. If a human being witnesses something firsthand, maybe they watch a crime occur or a road accident, so they with their sensors they capture that data from the environment.

For them to deliver that in evidential form in court, they would have to go to court and be present physically or virtually in court to explain what they'd seen. Or they may provide it in written form, either as a deposition or as a written statement, a witness statement. But what's also important about the process is, whilst they could present that information, they are open to be cross-examined or challenged on that content by either side of the legal advocates in the court or even the judge him or herself.

So the court has the ability to QA and check and even challenge what they're saying. That would be best evidence. However, if that witness gave information to another witness, so person A who saw the event first hand and witnessed it first hand described it to somebody else, maybe in a pub or a family member or an informant briefing a police officer and that second person came to court, say the first person died so wasn't available or was a hostile witness and couldn't be forced to give evidence in court.

The second person when they present it is no longer best evidence because it's not that first data gathering point, information creating point. In English law that's called hearsay. In other words I heard somebody say this but I didn't witness it myself so it's very limited in value. Now you can take this concept of steps away from the best any infinite number of times. Every time it moves another step away from best evidence it's flawed.

But the other problem with best evidence is it requires that you consider just the kind of things we've talked about. What was the position of the person collecting that evidence? Was it somebody who was stood very close to something so could see very well or were they far away? Was their view obstructed? Did they have sight issues or hearing issues or other physical issues that maybe the colourblind something that would limit their ability to collect what you might call the best data.

It's an honest description, it's not somebody that's accidentally or deliberately lying, they're [not] creating false data, but they are limited in their perspective on it and that can also be then quality assured and tested by the court. So that's where I would start with my law enforcement hat on.

Mark

I think that's fascinating. I just want to reflect on, people who aren't from a law enforcement background, and you've done a great job of summarising what that is. But I think it's important to reflect that in your description of evidence, there are, I think the key phrase is like on the record, off the record here, isn't there a little bit?

When I first joined the police, one of the things I struggled with was I had the intelligence officers on the intelligence side of the police station, if you like, who did deal in hearsay, who did deal in kind of whispers and rumours and you know, second hand, third hand, fourth hand bits of information which had a lot of value in an intelligence context when you're trying to imagine and build a picture about what's going on in the world. But they were polar opposite from the operational and police officers who were there as, and which is explained to people who perhaps might be as familiar with police structure, Primarily the role of the police is to first of all resolve an incident but the second duty is to collect evidence and prosecute in a crime.

When you're collecting the evidence in the way that we shall describing, you have to apply, it's about the material, right? It's almost like if you visualise a crime scene, you've got the detective not putting fingerprints on, know, rubber gloves, something up and putting it into a bag. It's trying to, it's this definition or this ritual of treating information as a very almost precarious product.

But also you're keeping records all along the way, right? Because when you're putting it in the sealed bag, you make sure nobody interferes with it. When you are signing the bag and you're saying who's collected it and at what time. So yeah, I'm happy for you to continue, but I just wanted to explain that so, so far we've talked about information, we've talked about Intel, but now you're taking us down the route of evidence and why it's distinct in a police context, because I

think some of the problems in English, is that we use the same words in very different ways, right? And if you look at the Latin for the word evidence, essentially it means something that's obvious, something that points to itself.

It's nothing to do with the judicial process. It's nothing to do with judgement. It's a term to describe something that is supposed to be like a star in the sky, obvious to both me and you. We can debate what the white dot is, but we can't deny that the white dot is there. That's where it came from.

But what you're describing is something that has evolved into a kind of a treated product with lots of ritual and lots of, and lots of procedure to make sure that the quality of the prosecution is of a high quality and because we're going to be potentially putting somebody in prison and that's important. So it's important to destreet [I invented word, I was trying to say treat discretely], to exclude the stuff that might be hearsay or guesswork or other sorts of low grade information.

It's incredibly important to collect the best evidence of what's there. So hopefully I've tried to create a distinction for listeners about, okay, the difference between information intel and now evidence. So I'll hand it back to you.

Howard

Yeah that's really useful Mark and you're right. One of the points that you raised there which is actually very important which I was sort of alluding to is the court judges two things. Not just the evidence that's placed before them, but also how it was gathered.

In English law, there's some English law enforcement, something called the chain of continuity and the forensic example you gave is a very good one. Basically, to support the best evidence principle, not only do you have to present the best evidence you can to the court but the second issue is you have to prove that it was collected and processed, right from the first point it was gathered to the date and day and circumstance that it appears in the court every step of the way and if you can't have that chain of continuity the evidence can be excluded it may be the best evidence in the world it might be the crucial point that may prove or disprove somebody's guilt or innocence but if it was gathered unlawfully or the procedure fell down in terms of this chain of continuity you would routinely expect it to be excluded. The defence would certainly appeal and say exclude it because a classic tactic in this adversarial court situation and there are other court systems like that around the world that use adversarial combat if you will, it is combat, they would immediately jump up and say to the judge we would like this evidence to be excluded because the way it was collected was unlawful.

If it was collected by law enforcement there are laws and policies that we and this applies around the world have to abide to in order for it to be lawful because we are servants of the public and servants of the court.

It always made me smile as a serving police officer that although I was a member of one force in the UK and got lent out and worked all over and my badge said Howard Atkin, an officer of that force, I'm actually not a member of just one force. I might be employed by one force but every police officer in the UK is an officer of the law.

I am a servant of the law and I, actually any police officer in the UK has the same power under law pretty much whether they be a constable or a chief constable, the very highest office in the

land. This this gets back to the old principle of because [you’re] serving the law, you can go rogue is the wrong term, but you don't have to, the concept is, rely on the support of other people in the the agreement, you have to answer to the law and that's a good principle because it drives you to serving what the public created because it's the public that create the law through parliament or through politics through their representatives in our system anyway.

But coming back to the point I'm trying to make, as a police officer one of the things I used to do I've worked a great deal with forensic science particularly when I was working not just in serious and organised crime even on the most basic crime but particularly, perhaps the most extreme was when I was senior investigating officer for what in the UK are called cold cases or unresolved cases. These are serious offences that probably happened many many years ago that have never been detected so we haven't brought anybody to justice for it or in some very rare cases the wrong person was convicted.

Not through police corruption particularly but more likely through a failure in understanding of the data and what it meant at the time. And one of the problems for me in the 20th, 21st century we are now aren't, God shows how old I am. In the 21st century I'm looking back at cases where the data and the evidence once the data are being processed through all the things we've talked about, was collected and collated 20, 25 years ago.

So if I went back to a witness, even if they were still alive, or a victim, their memory may have decayed. Their senses may have decayed. So I may have a written statement from 25 years ago, but if I produce that person in court to give evidence to the court, which I should do, you know, it's the best evidence, and this is about following the law and allowing the system to work and judge people fairly not trying to conceal or hide information you don't want to get to court and perhaps over egging other stuff, bias, which happens as it does in all walks of life.

That data could have decayed. The statement 25 years ago may be something that practically I would struggle to get across with the same QA and value in a court today. The second thing would be forensic evidence. And I dealt with many homicides and serious sexual offences in court. And the courts that they go to are Crown Courts in the UK. They are the highest court in the land for criminal cases.

And in those cases it may be that back in the day forensic scientists or police officers had seized a piece of material, maybe some clothing or a body wipe or the scrapings from underneath a fingernail that might contain DNA or blood or other other body matter that might give information about who the suspect may be or the circumstances. Something relevant to the offence at the time.

But over the years, that piece of evidence, it may not have been stored as well as it might have been if it was collected today, because forensic science has come on leaps and bounds as has evidential continuity. But the individuals may have made mistakes. Police officers are human. Forensic scientists are human. If that's not been captured the first argument I would always have in court with these pieces of evidence and often these days forensic evidence is a key part of successful prosecution of these unresolved cases, these cold cases.

Because witnesses might forget, but we don't forget DNA. DNA is DNA. I would expect to be challenged. For example, one of the things that forensic scientists used to do back in the day was take what they call tapings. They would take a piece of basically cellotape and lay it onto a piece of material with a sticky side down and pick that up and it would capture loose material that

would be on the top of a piece of clothing. Maybe fibres, maybe hairs, whatever. And then they'd stick that onto a piece of paper and that would become an exhibit. But how do you get to the back of the cellotape if you want to examine that 20 years later, for DNA maybe there's a human's hair root which carries lots of DNA.

So that exhibit would be interfered with. So I would have to track every step every person who touched that. The person who seized it, the scientist who looked at and assessed it in the lab. The store person who then put it in the box on the shelf to start gathering dust. Then that store person retires or somebody else takes it out all the way to today.

And if I couldn't do that, the argument from the defence would always be, how do we know it's the same data? It's kind of like a videotape where if you imagine somebody made a videotape and then they've converted it into an MPEG file for computers, they've digitised the data like we do these days.

Mark

And it's an important principle. What we're saying is somebody's going to go to prison on the back of this and it's very easy to falsify evidence potentially in less scrupulous police forces around the world.

Howard

Absolutely and it's right that we hold ourselves to a high standard because these are major issues for any democratic society or any society for it to have trust and faith in its institutions. Now the reason I'm going on about this in law enforcement is not because I want to teach everybody about evidence in law enforcement. We haven't got enough time and I'm not the best expert in that. There are many far better than me.

The reason I mention it is that kind of process is just as relevant in the fields that we're talking about in terms of data and information science and intelligence and analysis. And I'm not just talking about in law enforcement. You can't make a silk purse out of a sow's ear. So if you start with something that's poor quality or it's been affected throughout its root in whichever system or process that you're in. It's in with you, you can never improve that or it's very difficult to raise its quality.
Now you and I talked on one of the other episodes about this idea of sometimes people mislabeling things to suggest [it is] more valuable. So information or it's intelligence with a capital I because it makes it look better. It may have more worth, it may not, but the title shouldn't convey anything.

The same happens with evidence and if you take the fourth stage, the three stages we've talked about or I've set on this timeline of the life of data, from data to information to intelligence, the fourth stage in various settings is evidence because people use that material to prove something to somebody else or to themselves. So that's evidence with a small ‘e’. It's not just law enforcement.

Businesses look at evidence, for what's going on in their business processes or their markets or whatever their issue is. Other bureaucratic bodies do so. Tax people look for evidence of tax evasion or tax payment. The health service looks for medical evidence of illnesses and performance and everything else. It's a universal term.

What concerns me? There used to be a term floating about in intelligence analysis training in law enforcement that would say; yesterday's information is today's intelligence which is kind of true on that timeline, that real railroad if you will. But then I would say yes but with my law enforcement hat on as a prosecutor, as an investigator and somebody who's trying to bring people to justice which was one of my hats, I'm also looking at intelligence being tomorrow, you today's intelligence is tomorrow's evidence.

And that for me was trying to teach my information scientist, intelligence analyst colleagues that whilst their product might drive decision making, and that may be enough, because it may not be a decision that requires to end up in a court of law, they always need to keep in mind that possibly that product might eventually end up in that world of decision making, even though it wasn't designed for that.

Because if they don't plan for that, you can never make something evidence when it wasn't evidence. You know, maybe it was poor information or poor intelligence because it's based on poor information. Poor data gives poor information, gives poor intelligence, gives poor evidence. You can't change that.

I'll pause there because I want to move on to something else with those terms but are there any thoughts and observations on what I said there?

Mark

Yeah, I just want to do a second recap really. So just keep that in mind that you, the point you want to go on to. So a few things to bring to mind. First off is the word evidence, as we've already said, it's a little bit like we said in previous episodes, when you're dealing with information or Intel or evidence; It's all information, right? just kind of, what we have is we, I've used the analogy of like schools of dance, like we have a school of dance that treats information in this way, a different school that treats information this way.

Law enforcement's use of evidence is usually much more precise and specific and rigid in its approach to perhaps broader organisations. We go back to the more broader term or definition of evidence. Other organisations use it as essentially information that supports some sort of observation or claim.

I remember a trainer who was giving me some instruction on, I think it was some custom detective training. He was basically saying about the court process; He was telling, asking the class, okay, how many of you think that the courts are about getting to the truth? All hands kind of went up.

He said, you're all wrong. Essentially, the court process is about what can be proven. And what can be proven is much easier to deal with systemically and in a detailed fashion. And for that continuity that you described, we have to deal with facts. You can interpret those facts. A jury interprets those facts. The judge interprets those facts. The prosecution and the defence, array and interpret those facts. But essentially the game in a police context, in the prosecution context, is to gather the facts, put the case forward, and then it's for the jury to decide in most cases. It might be a judge in a smaller case, but you know what I'm getting at.

I think that's the important thing to recognise is that we are talking evidence for me has a much more factual grounding and has much, I treat it as a much more solid term, but there are cultural differences.

So for instance, in the US there is the legal term “fruit of the poisonous tree”. So the idea is if you have an illegal search and then you find drugs on a person, then the evidence that the drugs that were seized from that person, can't be used in their prosecution because the search itself was illegal.

In the UK, it's different. As I understand PACE, there is scope for the court to allow evidence as long as it doesn't deem the trial unsafe because it's all about the integrity of the trial. So I think PACE allows you to include what American professionals might consider fruit of the poison tree.

I think it's just, and it's also important to try and reiterate for people who are not from a law enforcement background here is that you will hear the word evidence in all sorts of non-legal contexts, scientific evidence. Your governments will have policy evidence.

The term evidence is usually some sort of information to support some sort of broader claim. But what we're talking about now, and I think what you're about to lead us on to is specifically that criminal justice interpretation of the word evidence and some of the benefits and pitfalls thereof.

Howard

Yeah, thanks for that. And you make some good points there. I'm actually old enough. I was a police officer before the Police and Criminal Advice Act came into force in the UK. PACE. Now PACE, and I speak as a police officer, was designed in part to address some of the concerns that historically some policing in the UK had failed to behave to the high standards in terms of how it gathered evidence.

When I joined the police in 1981, I think, we would take statements. I might go out and interview a witness or I might go into the cells or into an interview room and interview a suspect who had been arrested for a criminal offence.

And in those days you tended to write their statement for them. Now clearly that's not verbatim. It's not their statement, it's your interpretation. I'm not saying there was any intent to deliberately deceive, but human nature, if I tried to repeat the conversation that you and I had had, I may misconstrue what you said or not get all the words. That's just human error. But the statement at the top used to say...

and this is speaking on behalf of the person being interviewed, I wish to make a statement I want somebody to write down what I say and then it went through the various parts of the caution I've been told that it may be used in evidence blah blah blah but imagine this situation if police officers who may have a you could understand if they had a bias not to the truth but to try and prosecute somebody that they felt was guilty.

They were using their opinion or their feelings not the facts. The opportunity arose for them to misrepresent what a person said. I've known officers be challenged in court by defence barristers where the suspect has said I never signed that statement, that's not my signature, that's not what I said.

So PACE, and I'm not saying this happened or not, to get out and get out of that problem PACE introduced amongst many things tape recorded interviews. Interviews where the suspect would not be alone. So there'd be another third party, their representative, to make sure that, shall we say, the interview was conducted fairly. I have no problem with that.

But jump forward. Law enforcement has its use of evidence, you're right. And other fields use it in different ways. I cry sometimes or have a wry smile listening to politicians in certain countries with certain political bias saying, we've got evidence. And three days later, it's reported that they have zero evidence. They've got the dopamine hit with the public, to get them on their side. They aren't referring to evidence.

They are lying. They are misrepresenting what they have to the public to get the public to agree with whatever the hell they're trying to get them to agree with. That's just manipulation. And if people fall for that, well, that's just human nature and it's kind of sad. You know, go away and check the evidence. Don't just believe what somebody tells you, even when it's the police.

As a senior investigating officer, my first principle was what they call the ABC principle. Accept nothing. Believe no one. Check everything. ABC. And if I started, if I was the first investigator on a homicide, the suspect pool was everybody in the world except me. Because I usually knew I hadn't done it. And then you'd whittle down that pool.

Mark

I'm concerned at the use of the word usually there…

Howard

Anyway, the part I'm trying to make in law enforcement, other professions, but particularly law enforcement. Even in law enforcement where you think they were really careful about it, it gets misused. And you probably remember many years ago you introduced me to Google Ngrams. Basically, software that counts the number of times a piece of, a particular phrase or sequence of words was used over time in the data available to the good old internet.

Mark

literature in scanned books by Google because at the time Google had endeavoured to scan every book in print

Howard

Exactly. Yeah. So I know it's not verbal use but it's a measure of how certain terms of phrases may gain frequency of use or lose frequency of use over time. Now with my law enforcement police officer intelligence officer hat on, data scientist, over the years as law enforcement intelligence has evolved, I've seen policing globally adopt phrases for certain models. A common one used to be ‘intelligence led’ policing.

Nobody ever really explained what that meant but again the moment you use intelligence in the phrase you're starting to suggest…

Mark

I cry and shudder at that one. Every time I've ‘intelligence led’ makes me twitch now because of how vague it is.

Howard

Yes. Well, it wasn't. It was a coverall term for many forms of policing. And the police was never intelligence led. It might use intelligence, but my experience globally was it didn't solely rely on that for its lead. Life isn't like that. There are political and societal complications, legal, financial and all the rest of it. You know what mean? But it was a very... The fact that they used it...

Rather than calling it information led policing, is perhaps more accurate because information is the lifeblood of everything. By using intelligence it raised it up and gave it this heightened awareness. Or ‘problem solving policing’. Again, a very lovely phrase but meaning what and to whom? Now there are many definitions of these things but you don't go by the definition.

When somebody's talking about ‘problem solving policing’ or ‘intelligence-led policing’ they tend to mean something and there's a very popular one come up in the UK over the last just under a decade ‘evidence-based policing’. EBP, and there are acolytes to this cult passionate believers that evidence-based policing is the solution to all things.

I have nothing against some of the techniques that ‘evidence-based policing’ as a method suggests and promotes. That's fine and anybody in life should always look for new and better ways of doing things and test and check the way that they're doing things at the time. But the way that ‘evidence-based policing’ as a phrase came about was an academic or a group of academics said well look what the police need to do is be more scientific, and I'm using a very loose phrase here because again what the hell do mean by scientific, in the way that they collect information and use that to drive policing.

Okay, but that's, I would say, scientific based policing should be the phrase. Not evidence based, but they choose evidence because they were applying, I suspect, and all my reading on the subject, which is extensive and challenging of it, is that it's talking about what you might call scientific evidence.

Which again, comes back to data and peer review publications and all the rest of it. It's big. No problem with that. But for me, the last place you want to be using the term evidence in a scientific or a loose setting, is in law enforcement where evidence means something very different because of the need to present information to a court of law.

So it just shows that law enforcement is just as careless and lax about its phrases.
The reason I mentioned that, going back to the Google Ngrams, I remember you and I playing about with them with phrases like ‘problem solving policing’, ‘intelligence led policing’ and ‘evidence based policing’. And over time you can see that when a new one came along, the use of the other one died away. Particularly if you look at ‘evidence based policing’ compared to ‘intelligence led policing’, can see ‘intelligence led policing’ over time fell away, ‘evidence-based policing came up as a spike. It was suddenly the phrase.

Even when people I would say it hadn't had time to develop what it was it was just a reference. It was a hook to hang your coat on. Somewhere to put your hat. And what worries me is not that phrases like that are useful as a methodology. The methodology that they refer to is useful.

But it gives people power and control. you come up with the phrase ‘evidence-based policing’ you are by definition the father or the mother of ‘evidence-based policing’ that phrase and term and it gives power and control and credit and recognition. If that's deserved I have no problem with that. We all benefit from the insight of individuals. That's great. Good luck.

But it also creates a bias in that other people talking about ‘evidence-based policing’ can be challenged as well. You don't get what real evidence based policing is about. That's wrong for law enforcement and it's wrong for the principle of best evidence. And I would argue that the principle of best evidence in UK law enforcement is a pretty good first principle for anybody working with data science, information or intelligence or analysis, whatever their professional, their organisation that they represent and whatever their objective.

Because you would hope you could base your decisions on good data, good information, good intelligence analysis and good evidence.

Mark

I'm going to try and play devil's advocate because although I share some of your concerns and I have similar concerns about other things in society right now, and you know, the term ‘data science’ makes me twitch. There are other similar things where there seems to be the inclusion of certain terms to give a weight or a gravitas that perhaps it should get there on its own merit.

However, let's stick to ‘evidence-based policing’. As I understand evidence-based policing, essentially at its core, the heart of the matter is trying to use scientific principles to drive some, and I think in its own material, it says some police decision-making.

And I think that's a noble cause, right? I do think scientific material and published academia absolutely should inform police professional practice, 100%. However, I doubt the ability of academia to fully inform the police when it's forming that policy because the police has its own local experience. It has its own local feedback from communities.

You and I both know that sometimes in academia there is a time lag. It can take a while for something to happen in the real world, for it to be studied, for a paper to be written, for it to be peer reviewed and published and for it to get out there. And that cycle in especially in the more softer sciences can take five years, sometimes longer, which is not very useful if you live on a housing estate or any area and you've got a problem with crime and antisocial behavior now.

Now, absolutely. And I think this is where you and I probably are being maybe a little bit on the harsh side, but I think we mean it. We mean it in a kind way. We know that police officers have to resolve situations, but this is more of a social interpretation of the police. And what I mean by that is the police kind of have two roles, don't they? Yes, they have to respond to specific incidents. So we're all, we kind of use this notion of you dial the emergency services, stop this bad thing from happening. Somebody's kicking in my door, somebody's giving me abuse, somebody's hitting me or hitting somebody else. So police respond to individual incidents.

However, what's emerged over recent decades and quite rightly is that because the police are in receipt of lots of information about lots of singular incidents, they have a role to play in solving social problems over time. So in other words, why is there anti-social behaviour in that area? Why does that area, a note goes on? Why do people keep getting mugged in that area? And the police have been, and again, quite rightly, put under pressure to be proactive and to be conduct undercover operations or to do other things and to engage the community about, okay, yes, we'll keep on, we'll light the blue lights and we'll come running when you let us know of an emergency. But beyond the emergency call out, these are the proactive things that we will do. And I think absolutely academia should be involved in that process of what is the best thing to do in a situation.

But there's lots of other things to do in that situation. You've got to engage with the local community when they're engaging with you. You've got to engage with your own officers and personnel when they're engaging with you. And you've got to be able to give, I would say, fair hearing to all of the parties around the table. So in a hypothetical situation, if you have a crime problem in a particular housing area, and you're sitting around a table and saying, okay, what are we proactively going to do about the situation?

We can say, okay, well, the academic material says we should do X, but we would also need a seat at that table for the community who actually lives there, or perhaps many seats around the table for different constituencies within that community. But we also need a seat at the table for the operational arm of the policing that's there. We may need other stakeholders there. We may need local medical, we might need local council, there's other little bits and pieces there.

But in other words, I'm all for, and and I said, and this is, this is the, the thing I struggled with in one of episodes where I talked about how I have always loved science and tried to apply scientific rigour wherever I can. But I'm also recognising that there are sometimes limitations in my ability to observe. There are limitations in my ability to capture. And there's certainly limitations in my ability to replicate and proving something scientifically for all time is a different endeavor than keeping people safe and keeping them safe now because you and I have been at the other end of that emergency phone call of how we're going to resolve this situation now.

So I completely applaud what the aims are, the ultimate aim is to include more academia in that decision. But as long as it includes everyone around that table, I think the label, ‘evidence-based policing’...It's problematic. It's problematic for the reasons we've just laid out. It's problematic because it does make me curious about the opposite. Okay, what's the non-evidence-based placing stuff? Is there an implication there that the other stuff was not evidence-based? I would argue quite strongly that there's been good and bad examples, right?

But some of the best examples of community, of problem resolution have perhaps sometimes not always involved academia. Sometimes they have just involved engagement and common sense and working with people.

I'm also kind of concerned that I think, and I think this is the whole, that I think this is a tension that comes from, back from Intel land. So for listeners who have listened so far, you've heard me and Howard talk about information, you've heard me and Howard I talk about Intel, you've hopefully heard about how we've said that Intel is a little bit like, more fuzzy, harder to define, hard to get hold of, lots of gut instincts and feelings and lots of hard things to pin down and you've just heard Howard talk about evidence, stuff that you can put into a ziplock bag.

You can sign, you can seal it. It's kind of a fact and absolutely facts should be part of any response in policing 100%; but the question does arise; How long does it take to collect those facts? How do you interpret those facts?

Because for instance in medicine and I didn't, you know, we're doing this without much planning, so apologies. But if I remember rightly, there's something called the Bradford Hill criteria in medicine, which basically, I think goes back to the, the proving in speech marks of the link between smoking and cancer.

In other words, it turns out it's quite hard to actually prove that smoking causes cancer. But what you can conclusively prove is the association between the two. And the Bradford Hill criteria were kind of developed to kind of show this kind of, this is a way that we can say in an ideal world, we would use your evidential method and every single person who smoked any cigarette, we would have all this forensic science and evidence to show how cancers formed and how they later manifest and everything else.

But the best evidence we can do here is we can look at statistical data and we can look at essentially the how many times these things happen. So these are large, coincidences. And as these coincidences start to stack, you start to have to ask yourself, well, look, OK, corroboration doesn't necessarily prove causation, but at some point it's a pretty damn strong signal.

In other words, most reasonable people would interpret all these coincidences and arrive at the conclusion that smoking causes cancer. So you don't have your best evidence that you described earlier. You don't have the forensic record for all the people who have died when they started smoking and all the evidence along the chain. What you do have is a bunch of records that show that a bunch of people smoked, a bunch of people got cancer and a bunch of people died disproportionately so to the people who didn't smoke and that Bradford Hill criteria allowed you to come to a judgement of that and I think that use that that use of scientific method and data and process and the wish not to use guesswork or to use gut feeling about things. I think that's valid I think it's absolutely valid we absolutely should use facts to inform our judgements

But we also must, in my view, be mindful that at the end of the day, if you're going to have this hugely scientific process and then just make your own mind up anyway, and you put your own internal perception of that process at the end of it, then yes, you can say that the data was robust up to a certain point or the evidence robust was a certain point, but you do have to ask yourself how robust is your interpretation and your application of that in that ‘evidence based policing’ context.

Does that make sense?

Howard

It does, yeah, and you're right. I am deliberately being challenging and taking, shall we say, a biased position to invoke a response. ‘Evidence-based policing’, the methodologies behind it, I have no issue with. Nor do I with anything. One thing that life has taught me, I am, here I am, in the twilight of my life and certainly my career.

I am still a student, I'm a journeyman and I'm a thief for new methods and new information and new options because the more tools and expertise I have in my tool bag the better I think I might be in dealing with new situations, new information, new tasks, new organisational and cultural environments.

That's just me continuing professional and personal developments. A thing that floats my boat. And you don't need pieces of paper to do it or academic or other professional qualifications. It's almost a state of mind. So I use ‘evidence-based policing’ all the time. It's the use of the term and the trying to or the inference that you elevate a product because you call it evidence, when that's not always the case and the conflation of terms across different professions and different shall we say fields.

Think about I've always had this argument with my colleagues in academia. I had a degree I had a career in science, a very short one before I joined the police and I've always studied throughout the police I did my master's degree in the police, I started my research PhD into homicide in the police.

I finished it after I'd left but one of things that I've always tried to cover with my academic colleagues is look, yes you may apply academic rigour to the way that you process information and the checks and balances to QA before you come out with a product, an academic product, research paper, an article, a book, whatever, but although your processes, and I know we're going to go on in another episode and talk about qualitative, quantitative, and other types of that kind of analysis, rather than law enforcement analysis, no matter how good the method, if the question you were asking of the data is misconceived or the data that you gathered to process is flawed in some way, no matter how good your methodology you process, it's going to be flawed, and they really struggle to accept that.

Now I spent a lot of time working with criminologists and criminal psychologists, pure academics. Don't get me wrong, I've met people who were intellectually giants compared to me. Really insightful brains, they've done excellent research, they've had really good principles and process. But they're not all like that, just like none of us are ever perfect.

And there was always a…and still is in my view in academia, certainly in the UK, a pushback from academics to say that non-academics, and even though I hold a PhD and a master's degree and I have, I hold all the qualifications to qualify to be an academic at fairly senior rank, I actually out-qualified most of my academic colleagues, plus the other thing I owned is a 34-year career in law enforcement. So I've actually done the job that I'm teaching about as well as learnt the theory and scientific principles.

I would say to them, as a criminologist you came out of whatever university and decided criminology was the field you were going to study. True. Okay, where do you get your data? You are studying crime. Now, crime data, because it's human data and sensitive, is actually very

difficult to access. The police keep really careful control of it. They don't even share it across all the police.

So as academics you're always coming almost a begging bowl and I don't mean this unkindly. You're reliant on law enforcement organisations to give you access to the data. If you don't you're going out and gathering secondary or tertiary data by things like surveys or interviewing people. But that doesn't allow you to always cross-relate with the police data.

And just because the police give you access to certain data doesn't mean it's all the relevant data. Maybe even if the police were totally up to sharing anything with you because you don't know law enforcement systems, you don't know where to look for the data that might be of value to the issue that you're studying. So said you're always one step back.

And most in my career within law enforcement globally, you see applications for jobs and careers in policing for police officers, intelligence analysts, financial experts, forensic experts, many of whom come from academia or from other professions. And that's great. It's a great big melting pot of skills. Big organisations with big tasks need big resourcing in terms of range and quality. But in all that time, I've never ever seen a police force advertise for a criminologist.

Now I didn't mean that unkindly to them. They have skill sets that are valuable. But I used to say, look, I didn't join the police to be an academic. I joined the police to be a police officer. I just happened to be an academic as well. That's my background and training and philosophy. As a criminologist, you wanted to study and ultimately teach. There are very few opportunities for a career in that field, where you say, and I'm going to go on and be X in law enforcement.

Life isn't like that. So actually it's almost, it's at a distance and separate from law enforcement. That's not necessarily a bad thing. The great asset that that field and similar fields have from academia is they are one step removed so they have a different perspective and a different shall we say altruism to what police and law enforcement organisations have. That's an asset in my view.

Different perspective, it might teach you something new but it's also like you said they need to recognise and we all need to recognise that around that round table there are some areas where individuals fields and roles and functions in these stakeholders can have greater expertise and greater input but recognise that in other areas they are flawed just as myself as a police officer there were areas in which I was often critically flawed and had to rely on other professions and other fields. I'm not claiming we're any better than anybody else. We aren't.

It's a team game. the danger is when a field... You've talked about moving from law enforcement into the private sector with all your skill sets and finding that culture change a shock. I think there's a culture shock going on right now between law enforcement and academia.

And not that any one of them is right or wrong. They're both right and they're both wrong. But at the moment there's a little bit of butting heads because they don't know how to work together as a team effectively. And that's not for want of trying or, you know, deliberate intent or whatever else. It's a culture exchange. But stepping back to where we are as individuals, as information scientists, it's important that we highlight that or flag it up.

Because many of the people in the organisations involved maybe don't have that perspective on their role and their position. And a good intelligence analyst always needs to have that perspective on how they operate and how their organisations operate. Does that make sense?

Mark

It does. So we've wound up and irritated all the EBP crew and then not being satisfied with that, we've we've now pushed it to criminology. Let me see if I can expand it to see if I can enrage half of academia and anyone else who's lying around. I think at its heart there is a tension between kind of two sentiments here. So there's the old Heraclitus quote.

“You can't step in the same river twice.” But there's the old, think it's Mark Twain, which says, “history doesn't repeat itself, but sure as hell rhymes.” And so kind of both things are true, right?

And what I mean by that is, I think this kind of goes back to almost that hard science, soft science thing. If you're in the hard sciences, studying objective phenomena, you're trying to count electrons, or you're trying to like kind of, if you're in physics, chemistry, things like that.

I won't say it's easy, but it's a different game. It's a different game to make scientific claims about certain physical phenomena. When you get into the social sciences or the soft sciences, the game, again, instinctively I nearly said, is a lot harder, but maybe it's just different. But when I'm trying to prove something mathematically for the hard sciences, if I try and prove something like that in the soft sciences, let's say I want to prove...

Let's, yeah, I'm always talking about the information hazard, right? Let's say I want to prove that information is dangerous. Okay. That is, and here's the word proof, right? The word proof is doing a lot of heavy lifting here. It depends on what game you're playing. When you talked about evidence earlier in this pod, the game you were playing is we're going to convince a jury and satisfy a court that a particular set of circumstances occurred and somebody was responsible. And those circumstances are the whatever the criteria for the crime are and the attribution to the individual, that's that game.

A different game is about how humans say, well, what's the evidence for the claim that I'm making? And I think in the social sciences, let me try with a practical example. I'm gonna name drop a couple of people in a blatant attempt to try and get them onto the pod, but we'll see how it goes. When I came out of the police, one of the things I became aware of is I came out of the police because there was a financial crisis and a third of the service had to be cut.

And I was quite annoyed about that. And then I lived in a police bubble and I actually didn't really start looking at things like the financial world and the political world until I came out of the police. When I came out, I started doing research on things like austerity and things like that. I wanted to try and understand why all my friends and family who had a job and my career had vanished. I wondered why all these police stations were being sold off and all these teams were disappearing.

So I looked into austerity and I'm thinking to me, instinctively as somebody who knows nothing of austerity, austerity seems a bit brutal. So there's a guy called Mark Blyth and he is a political scientist and he literally wrote the book on austerity. Now I don't, and I'm going to speak on his behalf though I shouldn't do.

I don't think he can conclusively prove that austerity is bad all the time in all circumstances. But what he did do in his book, Austerity, the History of a Dangerous Idea, is he thematically went through every single political instance of austerity as a policy, its subsequent outcome, and basically demonstrated that the majority of the time, austerity failed to achieve its stated aims, and there were adverse complications at the end.

[NOTE from Mark. I was wrong, Mark Blyth didn't provide a 100% exhaustive list. I remembered incorrectly. He selected certain instances, but some were omitted]

So I couldn't get the gold standard best evidence, like you can prove the speed of light that austerity is bad. But the strongest argument I can get about how austerity is likely to be bad is this book written by this guy who's done a stack of research. It's published by Oxford. The guy knows his stuff. So that's the best evidence, alluding to what you said about cold cases, for instance. I would love to have a forensic level detailed proof of something as I would be able to have in the hard sciences, but for social matters, the game gets harder.

So that's enough of the Mark Blyth plug. There's the hard sciences and how you prove something forensically offer objective phenomena that can't be disputed. That's one game. There's a soft sciences and social sciences trying to prove certain policies or big societal shifts. That's a harder game. Mark [Blyth] showed me how austerity was damaging historically and was not a good idea in my opinion and in his opinion at the time.

Didn't stop it from being implemented. That's a topic for a different day. Another academic that comes to mind is Roy Casagranda, is, he's got a YouTube video, the history of Western civilization, at the start of it, he basically talks about how history is essentially nonfiction literature. and this notion of that you're going to try and make a series of claims, you're going to tell a story about a subject.

And you've got to be careful, right? Because when you're telling stories about these grand sets of circumstances, be they nation states, wars, policies, outcomes, you have the opportunity to say something very eloquent and persuasive and it to be completely wrong.

You also have the opportunity to say something kind of boring, dull, and nothing we want to hear, but it happens to be the truth, right?

So achieving best evidence in that social context, when you come to, what I'm leading up to is the concern about criminology. I have had similar experience with criminology as a discipline and criminologists, and maybe I've just not met the right one, is that I think they have, in the same way Mark [Blyth] had the hardest task of proving austerity was bad, so maybe the next step back from proving it was always bad at all times is to say, is to create a forensic record of, here's all the times we tried and here's what happened. You read the book, you come to your own conclusion.

I think for criminologists, Mark [Blyth] at least had the ability to go and get the data that was in the public domain. Your point about getting access to crime data, I think is a real tricky thing. It's tricky thing for all sorts of reasons. First of all, there are crimes as in breaches of law, but as you and I know, laws get abolished and repealed and implemented all the time so sometimes an event in history might be legal, illegal, legal again and it might oscillate between those.

Second of all you sometimes have things that people consider moral crimes although they were completely legal at the time and that's before you even get to which forces had the crime report and were the crimes actually captured properly. So I'm not saying the academic study of crime isn't worth it, it absolutely is.

I'm saying the game they play is it obscenely hard and I couldn't do it. I would hate to have to do it. I had the easy job as an Intel analyst and as a member of the police. I could work with all the Intel and the literal evidence. I had direct access to the sensitive material and I found my job hard and impossible at times. It's very hard to prove a case sometimes. It's very hard to work out what's going on based on Intel. The notion I can scientifically make a claim and prove about something is, perhaps beyond my skill set.

So, but I also think at your point about why do, why don't the police hire criminologists? Well, maybe this is the first start of that. Maybe ‘evidence-based policing’ is the first step towards that. Maybe that there's that integration of academia. I have no doubt that academia has a lot to offer policing. However, I will want to offer academia a decent seat at the table. I don't want to offer academia all the seats at the table because I think it's fundamentally important that the police officers and staff, the people who work in office have a seat at that table but it's also important the communities in which they serve have a seat at that table because academia, like police, is far from perfect and at the end of the day when the police get it wrong, people can die and people can't wait for us for the study to get published sometimes, for us to get out there and resolve a problem.

So I would say, absolutely, open the doors to scientists wherever you can in policing, but not just to scientists, fair hearing, but not only hear those parties. So that's kind of my take on it. If that made, I'm hoping that was coherent.

Howard

I agree with you. I perhaps could be best known in the context of these podcasts as wearing two hats. I've got the t-shirt as a law enforcement officer and both as an investigator and information intelligence analyst within that setting. But I've also got a career in academia.

So I love both passionately and I'm tremendously proud of both, but I'm also their biggest critic because having worked within them I want to I see flaws in the same way that I reflect on my performance on on everything that I do, I reflect on the performance of the systems and the stakeholders with a view to improving and sometimes organisations and fields have blindness to each other.

Law enforcement is the same. Anybody who would talk to you from a law enforcement policing background would say Howard is one of the biggest critics of policing, there is. But I'm coming to it as I am with science and academia from a position of some knowledge. There are people with far more knowledge than me but there people with far less. I've earned the hat, the t-shirt if you will.

In both those fields. I could not comment with the same authority on politics or finance or any of the other many fields that there are out there. But in the same way I would be open to somebody from those fields saying we might have something of value to add as stakeholders in the area that you're working on right now and I wouldn't seek a position of primacy in that relationship, I believe in the round table where things come out through merit not through well I'm from here so

I get I get the high seat or I get the the extra piece of pie if you will and that's what I don't like and what I'm saying is going all the way back to this is about evidence; One of the problems is when you start to define something and get ownership and control of something, it becomes misleading and it doesn't serve the social or the intellectual function that was actually designed to create.

So what I'm doing is putting a big, here are lots of reasons where you need to be careful about people who talk about evidence in different contexts and the processes by which evidence is created, adduced, shared and utilised by people because there's good and bad.

I mean the example you gave of the chap looking at smoking, people might call that indirect evidence. And again that's a massive field where direct evidence is something you witnessed directly. But you've hit the nail on the head. Society and dealing with human behaviour in large societies.

The organisation, the operational, the personal need, the societal need often outweighs the quality of information to make a judgement with absolute certainty or evidential certainty if you want to throw that term in. If we're saying that evidence is at the top of the pile and I don't necessarily agree that it is. So sometimes we have to be pragmatic.

Human beings don't rely on evidence. They don't rely on scientific process. They don't rely on intelligence and analysis to being practiced completely perfectly, to arrive at meaningful and useful decisions based on, that create survival and quality of life and avoid risks. So we need to cut ourselves some slack. But as practitioners, we need to have that open mind, that blue sky approach in the first instance to say, to be open to new fields and opportunities, but to the very dangers of labels and semantics and symbols being the thing that we use to communicate with each other and to drive our processes when sometimes they mean something different to somebody else.

Mark

I think that's more than fair. And I think you've touched on it. I think that's one of the problems of our times right now, isn't it? Even we have now a crisis of faith in evidence bases and structures overall, even for matters where there is ample evidence isn't enough and enough doubt has been cast. And now people find themselves in a situation where what is to be believed, and people are ‘doing their own research’ and people are coming to their own conclusions.

Sometimes that's desperately sad. Sometimes it's quite funny. I think there's two or three examples now on the internet where people who have been flat earthers have spent thousands of dollars or pounds on proving the earth was flat only to find out, oh dear, it's round. And I think that's the difficulty for anybody right now is what is that?

You and I spent most of our life in the 20th century where there were institutions and well-worn practices that said, this is the evidence, this is the authority's take on the evidence, therefore this is the truth. And in some cases that was false. In some cases, our blessed institutions and our authority figures got it wrong and we didn't review things quick enough and we did mislead.

However, I still passionately believe that science is a cornerstone of progress as a society. We have to have objective reasoning and objective judgement in what we do. We have to bake into all facets of our society.

Coming back to policing, I was once told this, not had chance to research it, so I apologise if what I'm about to is false, but I was once told that in Sweden the police have basically set up this system whereby a lot of the road traffic accidents, the data, not the personal data, but the circumstances, the vehicle and the kind of forensic evidence that they're seeing is passed directly to Volvo and Volvo kind of analyse that data and try and work it and use that to work out, okay, how can we design better cars? How can we improve safety features?

That pipeline of a society saying we have these things called road accidents and we have this other thing called a car company and this car company is perhaps best placed to work out how we can make things more safe.

Now you can at this point say, hang on a minute, why isn't it going to a Swedish university or why isn't it going somewhere else? I'm sure it is to be fair, but I wonder if maybe for criminology, if such things, and I'm out of date now, okay, I've been out of the crime game for a little while, but when I was involved with criminologists and criminology and trying to get access to police data from outside of the police that's also been a massive hurdle.

Sometimes you can wait decades for data sets to become available. And you do have to ask yourself, okay, is it the same river? Am I stepping into the same river now? How much rhyming is going on? And how long can people wait? Well, we resolve that issue because honestly, people are calling the police now and wanting a resolution now. So like I said before, I am 100% in favour of scientific principle. I am 100% in favour of scientific integration, but we also have to integrate the application of those sciences and that professional judgement, the professional judgement that's made by the officers and staff who have to apply these type of principles. But we also have to be sensitive to the communities in which the police serve, because if we don't, then I actually think we risk doing what a lot of bad police departments do, is to kind of, you know rule by a very gentle form of, or patriotism, or, no, patriotism, sorry, authoritarianism, where basically we know what's best, paternalism was the word I was after, sorry, where we know what's best and you don't, and we will police you as we think you should be policed. We will not engage you in how you should be policed because, and I think that's a terrible, terrible outcome.

Howard

It is, but in the same way, scientists, politicians, financial experts, every field in the world has the opportunity and the potential to become paternalistic and controlling saying we know better than you. And it may or may not be true, but they don't have the full picture for human behaviour. And that's the lesson I would take from this.

Cast your net wide for different perspectives and context to form a collaborative view that does its best to deal with all the data. And actually that's back to the scientific method. Come up with a solution that explains all the data, not just the data that you're comfy with or you think is more important than the rest.

So there's organisation and field bias, nevermind individuals. So keep it up in mind, blue skies and for analysts and intelligence operatives going forwards, like you say, were from the 20th century. These issues have changed.

Where before the information was limited and hard to access and share. These days we're in information overload. And the forms and types and the variables that are thrown at us as well as

the tasks are far more complex than even the work when you and I, well certainly when I started out. It was simpler to do, even though it may be not as effective.

I shall we say stand in awe of the task and the expectation that we've placed on the people who are the next generation of information scientists and intelligence operatives and analysts and investigators in any field public or private sector because this issue is getting more and more complex every day.

So maybe the thoughts we've covered today just give you a little bit of perspective that maybe you didn't have before when you're in the thick of it.

Mark

And just everyday people, right? That's the blessing and the curse of our time is that you now have access to everything. You can dig into it, and you should do your own research and you should kind of go into things and look at things. But in some respects, you and I had, we were blessed because there were structures and textbooks and experts and the world was a lot smaller then, right?

We could say what the UK policing principle of ‘X’ was at a certain given time and that was very small community of experts and a very small community of people with that received wisdom. Now we're dealing with a global network of people who and we have and there's going to be conflicts there sometimes there isn't going to be consensus or sometimes the consensus isn't going to be clear to guide you so I yeah I, and that's why this podcast is here is to try and help everybody fight steer their way through all that kind of information abundance and everything.

So I think we've covered a lot of ground there. I think we've tried to, I think it's probably a new record of how many people we've upset in a single episode. So let's try even harder next time. But thank you for today and I'll speak to you on the next podcast.

Howard

Take care.