**RedZone Podcast Episode #58: Why Stoic Philosophy Now?| Ethics, Programming and AI| Intuition and Neuroscience| Autonomous Cars – with Massimo Pigliucci**

Bill: I grew up in Boston, Massachusetts, Massimo, and then what's interesting is, I was, I went to high school at a Jesuit high school. All boys Catholic school.

Massimo: Oh, wow.

Bill: We had to take the foundation Greek and Latin and so it was a very kind of a rigorous academic approach. The Jesuits sort of come from that whole background, and then ...

Massimo: Oh, yeah. The Jesuits know how to do a rigorous education.

Bill: I saw you were originally born in Italy. Is that correct?

Massimo: I was. Well, actually, technically, I was born in Africa, in West Africa, because my father was working there for a British company building roads, but yes, I grew up in Rome. My family went back to Rome when I was only a few months old.

Bill: Well, I hope you don't mind if we jump into the interview, and we can just pick up kind of where you, pick up in Italy? Is that okay?

[00:01:00]  
Massimo:  
Absolutely?

Bill: Okay, great. Well, I want to welcome you to the show today. I'm really excited about our conversation.

Massimo: Thank you. Thanks for having me.

Bill: In Italy, and in your area, I'm curious about your, how you developed your interest in philosophy and Stoicism, and like, what was the genesis? Can you trace it back to when you were younger, or to some of your either your parents' teachings or some of your academic background?

Massimo:

[00:02:00] Yeah. It's somewhat secludist roots, and I'll make a long story as short as is possible and palatable for your audience. Yeah, I grew up in Rome. Actually, I grew up with my grandfather who was very much into Roman history, so I learned about Roman history, and later on, a little bit about Roman philosophy when I was a kid. It was one of the things that it's just part of your cultural background, and I really didn't think too much of it until later on.

Then, in high school, when you're in Italy, you have to take three years of philosophy in high school. My teacher was absolutely fantastic. She was one of those people that really make the subject matter come alive and challenges you, and it was amazing. That was actually my first opening into new, into philosophy, and I really liked it, but not as much as to change my planned career. Since I was a kid, I wanted to become a scientist, and sure enough, when I went to college I took biology, and then I pursued my academic career, and for 20-plus years I was a professional evolutionary biologist.

[00:03:00] Then, mid-life crisis ensued, and I was looking around to do something different, because I was feeling like my career was fine, but anyway, it was beginning to coast, and I certainly didn't want to coast forever, 30 years, or however fate will allow me to live, and so I was looking for something else. At that point I was at University of Tennessee, and the University of Tennessee just happened to hire a brilliant young philosopher of mind, I'm sorry, of science, Jonathan Kaplan.

Jonathan, turns out, had done his dissertation at Stanford on nature/nurture issues, and that's exactly what I was working on as a biologist at the time. He looked me up, we met, and we hit it off very well, we became friends. About a year later, I said, "Hey, Jonathan, I really like this philosophy of science that we've been doing together." We had been publishing a few papers together on conceptual issues in evolutionary biology.

[00:04:00] I said, "What about if I, part of my sort of redirection, redirecting my career, what about if I joined a doctoral program in the philosophy department and you be my advisor?" I still remember, he looked, and you know, we were having lunch, he looked at me and he said, "How many glasses of wine did you have today?" I said, "You know perfectly well I don't drink until sunset, so the answer is none." It was a little unusual a request, for someone who was a junior faculty, I was a full tenured professor, and here I was wanting to become his student, basically, and change entirely my academic career.

Eventually, I sort of persuaded him, he kind of warmed up to the idea. We went to our dean, we asked for the permission to do that, and a few years later I defended my dissertation in philosophy of science. It took a few more years after that before I was actually able to land an academic job in philosophy. In the meantime, I had continued my career as a biologist, and that was when I moved to New York, so City University of New York hired me as a philosopher of science. [inaudible 00:04:52] philosopher.

[00:05:00]  
Bill:  
For the audience purposes, I think, we'll set some foundation pieces real quick. What is, in your definition, the philosophy of science? If you had a thousand business leaders and normal technical business leaders, what would you say the philosophy of science is?

Massimo: Yeah, that's a good question. Perhaps the best way to explain it is by actually way of an analogy. There are two other fields that study science from the outside. One is history of science, right? A historian of science is somebody who looks at the development of scientific disciplines and scientific ideas over time, and sort of tries to figure out how and why things develop, ideas develop, in a certain way.

Then there's sociology of science. These are sociologists who study science from the outside as a human enterprise, as, in terms of power relations, in terms of hierarchy, in terms of structure, social structure and interactions.

[00:06:00] Then there's philosophy of science, which also studies science from the outside, but from the logical epistemological perspective. Epistemology is the branch of philosophy that studies knowledge and such, I mean, how do we acquire knowledge? A philosopher of science is somebody who studies science from outside, let's say evolutionary biology or fundamental physics, or whatever it is, and the philosopher is concerned with general questions about, how does science make progress?

[00:07:00] When science doesn't work, when it ends up into a dead end, let's say, for instance, with the famous case of eugenics in the beginning of the 20th century. Why did that happen? What sort of things went wrong in that case? What can we learn from those instances? A philosopher is also interested in the logical structure of scientific theories, so my dissertation, my PhD dissertation in philosophy was about the basic logic pillars of evolutionary theory. What is it that constitutes evolutionary theory? How does that work as a theoretical structure?

Then, we're also interested in how scientists make the empirical work with the theoretical, right? Science is normally conceived of as an interplay between theory and empirical evidence, either in the form of observations or in the form of experiments. One of the questions philosophers are interested in is, "Well, how does that work, exactly? What kind of relationship, what kind of feedback is there between theory and an experiment? Does that change from field to field? Does that change from time to time, over the course of the history of science? That's more or less what philosophy of science is about.

Bill:

[00:08:00] Okay. That's a great foundation. What's really interesting about your background is you come from the biology, or evolutionary biology discipline, and then have married this philosophy of science together. What I find interesting about kind of where we are right now is, we have the, I'm going to pick on one of the exponential technologies, but, there are certainly many, like artificial intelligence, for example, and so we have this, like, developing smartness, this artificial smartness, and then we have our human biology.

How do you talk about, like, do we have the internal software, from a biology perspective, to actually keep pace with what we're creating, in your opinion?

Massimo:

[00:09:00] Well, that's an excellent question. As a philosopher, one of the first things that I ask about this sort of question is, what do we mean, exactly, by intelligence? When people talk about artificial intelligence, I think there's a lot of confusion out there. Is intelligence measured, let's say, as processing speed? Because if that's the case, then computers are already ahead of us. Is it calculated as, you know, assessed as sort of memory and ability to retrieve memory? Because in that case, also, computers are pretty much there. In fact, super computers are probably ahead of us again already.

Most [inaudible 00:09:10] won't measure intelligence either one of those ways. Intelligence is often referred to as, thought of as the ability to solve problems that were unexpected, that you didn't encounter before. It has a component of creativity in it. In that sense, I don't think computers are there quite yet. Then there is yet another aspect of it, which is consciousness, right?

The fact that I'm having an experience while I'm talking to you, right? I am viewing certain things that come out of my iPad, I am looking at my surroundings, I elaborate my internal thoughts and sort of try to articulate them at the best as I can, so all that is what we'd refer normally as consciousness. That's yet another thing which is something that, at the moment, I think it's actually completely missing from computers.

[00:10:00] I mean, I do know people that claim that my iPhone is conscious, but I think they're crazy. There's different components, and so, one of the first questions that we will want to ask as a philosopher is, "Well, which one of these, or which combination thereof, do we mean when we talk about artificial intelligence as compared to human intelligence?" Right?

Bill: You're breaking that down. You're trying to break the ration down into smaller pieces.

Massimo:

[00:11:00] Right, because I think that the answer is different, depending on which particular piece you're talking about. Now, you could also argue, of course, that, wait a minute, but the human mind, however you conceive of it, does all of those things together, right? We have memories and the ability to access them. We certainly do computation in the broad sense of the term, not just in the specific mathematical one, but you know, sort of broadly speaking. We also do have creativity and problem solving ability now, and of course we have consciousness of what we do and how we feel about it while we're doing it.

It's true, the human mind has all those, but does that mean that we actually are looking for all of those components in computers as well? Why? I mean, one could imagine that artificial intelligence could be something quite different from human intelligence. At the very least, we need to sort of be clear about what it is that we're referring to. Also, this matters because, in terms of these endless debates of, when is it going to be that computers are going to be surpassing, if they're going to surpassing human beings? Well, again, depending on which particular sub-question you're asking, the answer may be, "Well, that's already happened," or, "Not quite yet, and we're not sure," to, "Well, maybe never."

[00:12:00]  
Bill:  
What I'm trying to bridge here, I'm pretending like I'm in your class. You're the professor and I'm the student. I'm trying to ask questions that I know I have, that, because I'm deeply interested in understanding. I learned by reading your book, which, by the way, the Answers for Aristotle, which it was fantastic, and the subtitle, How Science and Philosophy Can Lead Us to a More Meaningful Life.

One of the pieces, what's really interesting is you spent time talking about mathematics, and I want to bridge the sort of left and right brain approaches to philosophy, because my subsequent questions are going to be more on the right brain, but my left brain part question is, how is philosophy and mathematics combined? Why is philosophy in mathematics important? Or, should I say proof, that proving the theorems that you would need, but you can just give us some of the foundation there and why that's important.

[00:13:00]  
Massimo:  
When it comes to philosophy in mathematics, there are, again, different kinds of relationships. First of all, there's an entire field called philosophy of mathematics, which does do about mathematics what philosophy of science does with science, that is, philosophy of mathematics studies what mathematicians do, and how they reason and the sort of, the foundations of mathematical reasoning and why it works, and why it doesn't work, and that sort of stuff. That is one aspect in which mathematics and philosophy interact.

[00:14:00] The other aspect is that, historically, a lot of philosophers have been interested in mathematics because of both sort of the abstract, the access to this abstract realm that mathematicians feel that they have, this realm of ideas that they feel they have, and also because of the practical importance. This goes back all the way to the ancient Greeks. I mean, I was recently on the island of Samos in Greece, and I climbed up with a couple friends to Pythagoras' cave. This is a cave where ...

Bill: Oh, really?

Massimo: Yeah, where he actually lived and taught his students. It was interesting to think about this guy 24, 25 centuries ago, who was so enthralled with mathematics, he was both a philosopher and a mathematician. He actually established what, for all intent and purposes, was a religion based on mathematics, based on mathematical abstraction. The relationship between philosophy and mathematics goes way, way back. Then there is another, yet a third relationship between the two, and that goes through logic.

[00:15:00] Logic, historically, has been a branch of philosophy. It's one of them, and it's still taught today in philosophy, the permanence, although it is now pretty quickly becoming its own field, and in fact, it's a branch field between philosophy and mathematics, because a lot of logicians are interested in mathematics and the other way around. Logic, unlike mathematics, logic has always been thought of by philosophers as very directly involved with practical problems. Even though mathematics, obviously, has practical applications.

A lot of what mathematicians do, actually, is very abstract. It actually has nothing directly to do with practical applications. Again, despite the fact that mathematics has been very useful to the sciences, for instance. In terms of, you know, logic developed from Aristotle on, largely, until very recently, as an applied part of philosophy. In fact, even recently, we have applications of new logics to computer science, for instance. Right.

[00:16:00] Logic is a kind of a bridge between philosophy and mathematics, because it feels a lot like mathematics, and if you do abstract logic, it looks like you're doing, for all effective purposes, like you're doing mathematics, and you look at symbols and you write very strange symbols on your computer, and you say, "Oh, this means that," and it looks, for all effective purposes, as if you were doing mathematics. In fact, you can prove theorems in logic just like you can prove theorems in mathematics.

At the same time, again, logic is also the basis of what is sometimes referred to as critical thinking, which is what we teach to introductory students in philosophy. In other words, it is at the basis of distinguishing, being able to distinguish between sound reasoning and non-sound reasoning, you know, well, how do you know that you're committing a fallacy in your reasoning? How do you know that your reasoning is cogent? Well, you study the logic of it.

Bill: Oh. Now, is that, when a student is studying, let's say they're trying to program a Google autonomous car, and they're trying to program, I think you know where I'm going with this, and there's a person that the car's about to hit, and if they swerve right, the car automatically swerves right, it hits five people on the sidewalk.

[00:17:00]  
Massimo:  
Yeah.

Bill: I'm really interested in what, the three pieces you just mentioned, the logic, mathematics, and the philosophy, where does virtue and ethics and pieces like that come into your field?

Massimo: Oh, that's an excellent question. The issue that, the example you just referred to is, in fact, a particularly interesting current application of a general problem in philosophy, which is referred to as the trolley problem, right? This situation where something is going, an accident is going to happen, and you only have a limited number of options, and in none of these are the options particularly good. Somebody's going to die, regardless.

Bill: Sure.

Massimo:

[00:18:00] You're faced with the option of, well, do I let the child, the innocent child die, or the driver of the car, or do I let three or four people die as opposed to one? That sort of stuff. This kind of dilemma, this kind of problem, which is referred to normally as the trolley problem, because it's often presented as, you know, there is a trolley going down, a runaway trolley going down the street, that kind of stuff, but it might as well be referred to today as the Google car problem.

Bill: Sure.

Massimo: It's essentially the same thing. These problems, this class of problems in ethics was introduced a few decades ago by Philippa Foot. Philippa Foot was a very influential ethicist. She was concerned with the logic of ethical reasoning, and interestingly, she was also interested in what is called virtue ethics, which eventually, depending on how this conversation is going, is going to get us back to Stoicism, which is a type of virtue ethics.

Bill: Yes. We're going to get there.

Massimo: Right. Even if we don't get there, so let me, let me briefly ...

Bill: How do you spell her name, by the way? Philipp, how do you spell that?

Massimo: Pigliucci? P-I-G-L-I-U-C-C-I, but ...

Bill: No, no, no, the woman you just mentioned, the person who did the ...

[00:19:00]  
Massimo:  
Oh, the, Philippa Foot. It's F-O-O-T, and Philippa as in P-H-I et cetera.

Bill: Gotcha. Yep, yep.

Massimo: To step back for a second or more, and sort of understand the context, there are, broadly speaking, and this is a simplification, but broadly speaking, there are three major ways that philosophers have articulated over the centuries to think about ethics. Okay. Two are the prevalent modern ones, and the third one is the ancient one, which is being, having a comeback, in part because of Philippa Foot and other people, people's effort.

[00:20:00] The modern versions of ethical reasoning are the Kantian deontology, deontology is, means simply, it's following the rules, so most of your listeners will be, presumably, familiar with the classical deontological system, which is the Ten Commandments. Okay? If you follow commandments, or if you follow rules, regent rules of some sort or another, you are, essentially, behaving deontologically. What you're saying is, the rule is what matters, and the consequences be damned. Okay? If it is wrong to kill people, then it's wrong to kill people, end of story. There's no exceptions, and it doesn't matter what the consequences are.

Bill: Sure, sure.

Massimo: Now, Immanuel Kant was the first and most pre-eminent modern proponent of deontological systems. He basically reduced them all to one commandment, which he called the categorical imperative. The categorical imperative basically says that you always want to treat other people not just as means to an end, but also as end in themselves. In other words, you want to respect people's dignity and on their own right. From that, all sorts of interesting things derive, but let's stop there for a minute. The second major system of modern ethics is utilitarianism.

[00:21:00] This goes back to [inaudible 00:20:55], essentially, in the 19th century, and it is arguably the prevalent system today. Most philosophers are utilitarians, or think in terms of utilitarianism. What a utilitarian would say is, well, in order to decide whether an action is right or wrong, you have to think about the consequences, or the likely consequences, right?

Let's say we're talking about the Google car issue, just to make it, to ground it in an actual example, and let's say that I'm inside the car, and the car, the computer in the car, realizes that a child is about to be hit and likely killed. Then, the only courses of action are to just keep going and kill the child, or go off-road very sharply and kill me. Right?

Bill: Sure.

Massimo:

[00:22:00] Well, a deontologist might have to say, look, killing anybody on purpose, it's bad, because you're using that person as a means to an end. You're not respecting that person as an end in himself, and so, you should do nothing, because it is an accident that the child is coming through, and you don't know, by the way, if he's going to be killed for sure, so you don't exchange one life for another, because that's just using one life, in this particular case, mine, as a sort of a means to an end, to another end.

A deontologist would say, nope, you don't do that. You just let things go as they will, and then we'll see what happens. The utilitarian would say, no, no, no. You're looking at the consequences. What's the maximum degree of happiness or the least degree of pain that comes out of both scenarios? One could argue, well, the child has a longer life expectancy than I have. I'm 52, so I might expect to live another 20, 25 years. The child has a life expectancy of several more decades.

[00:23:00] I've actually already lived a good chunk of my life, I've done certain things that, on the other hand, the child has potential, so, fine. The utilitarian will make the choice of taking their chances and saving the child, and possibly killing me. Those would be two different, very different outcomes, from two very different ways of looking at the ethics of the situation. Well, then there is the third one, which is the one that Philippa Foot actually supported, the virtue ethics, and remember, she's the one that invented these kinds of questions, right?

The virtue ethicist actually looks at the problem from a completely different perspective. He doesn't ask, well, what rule am I about to break, or what rule should I uphold? He doesn't ask what are the consequences? The consequences are important, but they're not determinant. What he's going to ask is, what would a good person do? Virtue ethics is about character.

Bill: Oh, okay.

Massimo:  
[00:24:00] Right? It's about your own character. The focus is not on actions. It's not on other people. The question, the focus is on your own development of character as a good person.

Bill: Okay.

Massimo: Right? The virtue ethicist's answer is always going to be, well, it depends. There isn't going to be a universal answer to these kinds of questions. It will depend on the details of the situation, and it will depend especially on the character of the people involved. If I am a brave and altruistic person, I would certainly say to the computer, absolutely, take your chances, go off the road, because I'd rather save the child and take my chances that way, right? If I'm a selfish bastard, then I'm not going to do that.

[00:25:00] From the point of view of virtue ethics, I would be deficient if I actually behaved as a selfish bastard, basically. The interesting thing in all of this is that Philippa Foot set up these trolley problems, which, at the time, were completely sort of theoretical, they were completely hypothetical, to show that both utilitarianism and deontology doesn't really quite work. They're too rigid. They are, they don't take into account the nuances of the situation. They don't take into account a lot of factors that most of us, actually, would want to be taken into account.

Little do you know, now we're looking at a society where that kind of thing can actually happen. Those kind of decisions will have to eventually be made by an automated computer, which means that that computer would have to be equipped with a program, a software, that allows it to make ethical decisions. That's fascinating, that, to me, is absolutely fascinating.

Bill:

[00:26:00] Yeah, because the Stuart Mill utilitarianism and the Kantian deontological approach are probably going to have to be followed from a problematic point of view, but then Philippa's point of view on the virtue and ethics, that's going to be, it's almost going to be a clash in many respects.

Massimo: Yeah. Yeah, yeah. If your programmer is a Kantian deontologist, you're going to get one piece of software. If it is a utilitarian, you're going to get a very different kind of piece of software, and therefore, a very kind of different behavior from the car.

Bill: Yeah.

Massimo: The interesting thing is that, to me, as a philosopher, is that virtue ethics, unlike the other two, virtue ethics is much more difficult to implement in a computer, because deontology is about following rules, or not, and computers are very good at following rules. You specify the rule, and you say, okay, you don't do that, period. End of story. It's a little more difficult to build the utilitarian computer, but it's possible, because utilitarianism is also based on basically maximizing one quantity and minimizing another one, right?

[00:27:00] Utilitarians would try to maximize happiness and decrease pain. Now, we can have a long discussion about well, what do you mean by happiness, and all that sort of stuff, right? At the very least, these are quantitive. These are quantifiable, so the computer can be programmed in a way to sort of try to estimate, maybe using a Bayesian framework or something like that, to estimate those quantities and make the best decision.

To try to implement a virtue ethical perspective in a computer is going to be really difficult, because virtue ethics is based on the human ability to provide sounds judgments on situation, on complex situations, and that, I think, is going to be much, much more difficult. Human beings are very good, actually, at doing that sort of stuff. We learn to do it throughout our development and our upbringing, and my guess is that it's going to be very difficult to have a computer do it, unless you somehow can sort of originate the data equivalent, and I'm talking about the Star Trek character now.

Bill: Sure.

Massimo: It would be the equivalent of an ethical chip, right? You can insert and all of a sudden the computer has judgment. I don't know how that would be done, at the moment.

[00:28:00]  
Bill:  
Is this what the Chinese room experiment and the Turing test attempting to try to debunk, as far as consciousness is concerned, or what ...?

Massimo: Those are related issues. They're two different questions. One, the Turing test, is a, trying to address the question of how would you know if a computer behaved like, you know, were conscious, or behaved in a, or were intelligent. As I said earlier, all of these tests, all of these discussions actually tend to confuse consciousness from [inaudible 00:28:33] and intelligence. Let's use the term intelligence right now, which is what actually Turing was talking about.

[00:29:00] The Turing test basically, as I'm sure many of your listeners will know, essentially says, look, if you are talking to either a computer or a human being via a keyboard, so you don't know whether the person, whether the entity on the other side is a computer or a person. At what point will you decide that, even if it is a computer, it's essentially behaving, for all effective purposes, as a person? The test consists in asking questions and having a conversation via keyboard, and if you cannot tell within a certain allotted period of time whether you're talking to a human being or a computer, basically, the computer has passed the Turing test, and we will say that the computer has human intelligence.

[00:30:00] The problem with that, with the Turing test, is that it is essentially a behavioristic test, meaning that it's based entirely on observable behavior. That is, it doesn't have any access to the internal, mental workings of either the computer or the human being, right? You wouldn't be able to tell through a Turing test if in fact the computer is conscious or not. You'd just be able to tell, okay, it's behaving as if a human being were answering, but that's about it. It doesn't license any conclusion, any inference on the inside workings of that computer. That's one problem. The other problem is that it's actually, as it turns out, somewhat easy to fool a human being.

Bill: Sure.

Massimo: You can write a program that fools a human being, especially if it's a limited period of time. There is an international competition I think, every year or every other year, that carries out these Turing tests, and I think the limit is five minutes. Well, it's not that difficult, as it turns out, to write a code that is not intelligent at all, and yet fools a human being into thinking that it is intelligent. That is a problem there.

Bill:

[00:31:00] Part of our conversation has to start to move to Stoic philosophy, and so you're, I would say, one of the major leaders in that movement. I didn't think I was going to be interested, two or three years ago, in that, and I have become much more interested recently. I would like to get your ... Why Stoic philosophy now? Why is it gaining more traction, and what do you think the underpinnings of it are that are leading that charge?

Massimo: That's a great question. I think there's a number of reasons. On the one hand, more and more people do feel like they want some kind of philosophy of life. Now, traditionally, religions have offered a philosophy of life, right? Christianity, even though it's a religion, there's worshiping of a continental entity and so and so forth, it's also a philosophy, meaning that it does give you ethical guidance for instance. It does give you existential comfort and so on and so forth. It is also a philosophy.

[00:32:00] I would argue that all religions are also philosophy, even though most philosophies are actually not religions, because they don't include the worship of a transcendental entity. Historically, however, most of us got their philosophy from religions. We're living in interesting times where the number of secular people, or people who are not particularly associated with religions, is increasing, especially in the Western world, but we still need answers to the same kind of questions.

I mean, we still want to know who we are and what are we doing, and what is it all about, and what should I do with my life to pursue happiness, and what does happiness mean, and so on and so forth. There's still an interest in developing [inaudible 00:32:31] life, although most people don't think of it that way, but that's what it is. That explains, for instance, the high level of popularity of some Eastern philosophies, like Buddhism.

[00:33:00] Certain versions of Buddhism are religious, other versions are very much entirely secular. In fact, the original Buddhism was secular, and it did not include any gods in any worshiping. Stoicism is in that category. That is, it is essentially, I often present it as Westerns respond, the Western response or the Western equivalent to Buddhism. It originated at about the same time. Buddhism is a few centuries older than Stoicism, like three or four, two to three centuries older than Stoicism, depending on who's counting, but it has, it presents many of the similar ideas.

It is about prioritizing things in life, it is about teaching you how to meditate, it is about teaching you how to think about what's important in life and what is not important, and how to behave and so on and so forth, so there's a lot of similarities there.

Bill:

[00:34:00] You know, it's really interesting, I was reading Peter Kingsley, some material that he had published, and I was shocked to see that, because we're so romantic about the East. We're so romantic about zen and Buddhism and Eastern philosophies, which is, there's nothing wrong with them, they're fantastic. However, I didn't realize that some of, we've almost like forgotten about our own Western heritage that almost creep, it's equally, equally ancient.

Massimo: Exactly. It is equally ancient, and it has, of course, developed in some sense, in a sort of a parallel, along parallel lines. As you said, there is a lot of similarities between Stoicism and Buddhism, but in other sense, it's very different. By the way, once you're caught, I know that some of your listeners who know about Buddhism may take me to task on this, so I'm not going to talk about Buddhism a lot, but Buddhism really should be referred to as in the plural, Buddhisms, because there is a number of Buddhist traditions that have developed over two and a half millennia, and so it's kind of hard to pinpoint what, well, this is what I mean by Buddhism.

[00:35:00] There are some traditions within Buddhism that are very sort of rational, rationalistic and logic, and those are very similar to the great big Roman traditions, including Stoicism. Then there are others that are, on the other hand, much more mystical and much more religious in nature. Zen Buddhism tends to be on the mystical side of things, for instance.

Bill: Okay.

Massimo: It appeals to different people, depending on what your personality, I think, is, depending on what your goals in life are and so on. You were asking earlier, why Stoicism now? I think that one of the answers, so I gave part of the answer. That is, I think that more and more people are looking for philosophies of life or for a general framework in life that doesn't come from religion.

The other answer is, I think, the same answer for why Buddhism itself is very popular, and that is, all these traditions, Stoicism, Buddhism, and actually, a number of others, originated in a society that was very much under turmoil, where people felt that they didn't have much control over their lives, and certainly not much control over the broad, the larger events.

[00:36:00] I mean, Buddhism originated during and after the invasion of Darius, the Persian king, which completely overturned the reality in Central Asia, and the political reality and social reality in Central Asia and in India, and Buddhism sort of arose as a reaction, as a way to cope with that sort of a thing. Stoicism arose in Athens, and then in Rome, during the late republic, the late Roman Republic and early empire. That was another time of big turmoil where people think, things were happening, and large, large picture of things, major upheavals.

Bill: Sure.

Massimo:

[00:37:00] Alexander the Great, Julius Caesar, two of the Roman Emperors, and people felt they didn't have much control over their lives. I think that we are living, actually, remarkably similar situation now. On the one hand, we live in a highly technological society, at least, some of us on the planet, and we enjoy a relatively good level of healthcare, a certain longevity, longer lifespan and life expectancy, a lot more education. You can argue that a lot of people, especially in the Western world and some other areas of the planet are living now in conditions that are much better than any king in the past.

We have, for instance, hot water in the morning for the shower. Almost nobody had that kind of thing before. At the same time, we also see major political upheavals, major economic upheavals. A few years ago, the world almost ended in a financial collapse, the world as we know it. We have terrorism, we have wars going all over the place. We really feel like we don't have, you know, a lot of stuff is happening, and we don't have a lot of control over what's happening.

[00:38:00] That is the time where philosophies such as Buddhism and Stoicism actually can play a major role, because they're centered on the individual. They focus on what it is that I can and cannot do. How should I behave in this kind of general turmoil? How should I conduct myself? What is the meaning of what I'm doing within this broader context?

Bill: Yeah. I love that, the way you brought that together. In your book, I think what's really interesting for our listeners is, and I found it very useful is, so, the world of mindfulness and meditation, and in really helping to combat, essentially, help us feel like we're in control when we're in a very uncontrollable situation.

[00:39:00] Those are some of the philosophies that I know Stoicism brings about, but in your book, you talked about intuition and science, and I found it interesting that you had like these three steps, and then you, and sort of like kind of a practical application of this, of Stoic philosophy is, you had talked about the steps, and maybe you can go through them, of acquiring skills, and then how, and I think most of the listeners, as they're going to be highly educated professionals of different various disciplines, but the acquisition of skills, the automatic becoming proficient with those skills.

In that third step, I'd like you to talk to, maybe all three, but then, the application of mindfulness and discipline in Stoic philosophy to that third step will be really interesting for our listeners.

Massimo: Yep. That, the bit you're talking about, and the answer's very subtle, actually comes from interesting studies in cognitive science, where people have become interested in the study of what we refer to normally as our intuition, right? You hear all this, lots of people saying things like, oh, I'm a very intuitive person, or something like that.

Bill: Right, right.

Massimo:

[00:40:00] Well, as it turns out, cognitive science tells us that there's no such thing as an intuitive person, period, meaning somebody who is good at intuitions across the board, no matter what the topic or no matter what the area of application. What there is, is that, it seems that intuition, which is essentially, psychologists think of intuition as massive unconscious processing of information in the part of the brain. Okay? That's basically what intuition is. That then you call up, at some point, when you have a problem. You can study intuition in specific domains. As it turns out, intuition is domain specific.

[00:41:00] One of the best examples is studying intuition in chess players. Right? The reason it's one of the best examples is because it's particularly easy to study under those conditions, because the problem is very well defined, you have lots of people that volunteer for the experiments, and so on. The same findings actually can be extended to a number of other areas of application from playing sports to playing musical instruments to getting PhDs in the sciences, you name it, or being a computer programmer. Focusing for a moment on chess playing, so, what happens is this.

Initially, when you start playing chess, when you learn about playing chess, you have to be very conscious about remembering all the rules, remembering all the moves that are allowed and forbidden and so on and so forth. Then you begin to learn a little bit of strategy. People explain to you about opening gambits and about defense versus attack, and the idea that you should be trying to defend the central part, you know gain control, and then defend the central part of the board, and so on and so forth.

[00:42:00] All these things, initially, are overwhelming for a novice, and so, a novice doesn't play very well because he has not internalized all of this stuff he has to think about all of this very deliberately, very consciously, and go through the moves, and so on and so forth. That's very taxing and it's very slow. Right? The more you play, and we're talking about tens and then hundreds and then, eventually, thousands of hours of play, the more some of these things become internalized. You start doing, I've been playing chess for a long time, since I was a kid, and I'm certainly not very good at it, but I've made progress.

Bill: Sure.

Massimo: I realize now that I don't have to think about my openings. I look at the board, and I say, oh, yeah, I'm going to do this. I don't even say, I don't even think, I'm going to do this, I just, my hand moves and it makes a particular ...

Bill: Much more proficient than when you started.

Massimo: Yes, exactly. You become more proficient, and a lot of the decision making is shifted down to the unconscious level, so you don't even think about it. Later on, when you become something that I've certainly not become and never will become, but it's a grand master, let's say, right? These are people who literally spent tens of thousands of hours playing chess, and they've improved over many, many years, right? Here, something funny happens.

[00:43:00] If you give a problem, a chess problem, to a grand master, the master will look at the situation on the board, the particular configuration of pieces on the board, and he will immediately pick up whatever piece and make the right move. Now, if you don't say, why did you make that move? What was the logic behind that move? Why that one and not another one? Interestingly, researchers have found, the grand master actually has to stop and think about it and reconstruct his own thinking. In other terms, he doesn't know.

Bill: Oh, okay.

Massimo: He doesn't consciously know why he did that. Then, later on, he can come up with an explanation. Now, some people would call that a rationalization, but it's not a rationalization, it's making explicit at a conscious level, and articulating via language something that his brain actually did automatically. This is something that we all do when we become more proficient at doing certain things. I'm sure if you learn to drive a car, it's a similar situation.

[00:44:00] I grew up in Italy, so I obviously learned stick shift car driving, right, which is a little more interesting than sort of the automatic car stuff that they have here in the United States. I remember that I was terrified initially, because I learned how to drive in Rome with a lot of traffic and people zipping by all the time coming really close to where you are. You have to pay attention to hundreds of things, and then, there's this guy sitting next to you who is teaching you, and he's shouting, he's like, don't do that, do that, hit the brake.

Like, whoa, but very quickly, you internalize a lot of these things, up to the point that, just even a few months later, I was able to drive in the traffic, in the middle of traffic in Rome, listening to the radio, talking to somebody sitting to my right side, and not having an accident.

Bill: Sure.

Massimo:

[00:45:00] Not [inaudible 00:44:45] things regularly. Why did that happen? Because a lot of that stuff got internalized and shifted back to the subconscious. That's what intuition is. It's this massive processing, subconscious processing of information that comes in the, whenever you have a sudden problem. Now, here's the difficult part, however. Sometimes, your intuitions are going to be wrong. Okay? Intuition is not infallible, because it's fast, right?

Bill: Sure.

Massimo: If you ask an engineer, you can have speed and precision, but you rarely can have both. Usually there is a trade-off between the two.

Bill: Sure.

Massimo: You're either fast but imprecise, or you're very precise but then you slow down. That's what psychologists have discovered recently, is the Daniel Kahneman's famous book, Thinking Fast and Slow.

Bill: Oh, yeah, right, great book.

Massimo:

[00:46:00] It's about that one, it's about this phenomenon, it is what our brain does, is it shifts back and forth between the fast thinking, which is the subconscious very immediate but also somewhat inaccurate, and the slow thinking, which is conscious, it's much more deliberate, it's much more accurate, but it's also much slower. The basic idea, now I'm going to circle back to Stoicism. The basic idea of Stoic mindfulness is this. We always react, we always have a certain immediate reaction to whatever is happening to us. I might walk down the street at night and I hear a sound, and my first reaction is of fear.

Bill: Yep, yep.

Massimo:

[00:47:00] You know, it's like, oh my God, what's happening? Right? That's what Stoics call your impression. Okay? Then, the mindful person is supposed to step back and decide whether to give or withdraw what the Stoics called a scent from the impression, meaning that you say, okay, wait a minute. I jumped because it was a sound, but where did that sound come from? Oh, it turns out it was a cat jumping off the street.

Okay, there is no problem, there is no need to be afraid, and so you just resume your walking, as opposed to, oh, there is this guy with a knife that's hanging out of the shadows. Then, in that case, you do validate your initial impression, and your initial reaction is then practical.

Bill: The Stoic philosophy, where you don't react, actually take a step back and don't let your old brain that thinks everything is a threat, take back ...

Massimo: Correct.

Bill: Observe the situation, and then, okay.

Massimo:

[00:48:00] Now, you cannot always afford to do that, right? If somebody with a knife really does jump in front of you, all you have are your instinctual reactions, and you can hope that you're going to make it alive out of that. What the Stoics say is that in a lot of situations, you do have the opportunity to step back and think, to basically allow what Kahneman calls the system two thinking, the slow thinking, to come into play and analyze the situation. Being mindful, for a Stoic, means that.

It means to step back and say, wait a minute, what is happening here and what is supposed to be, what is the best reaction, not the instinctual reaction, but the best reaction I can have to that situation? According to the Stoics, very often, you will, in fact, discover that your first reaction was not the best one, that slowing down and taking stock of the situation is better. Let me give you an example. One of the things that Stoics are big about is anger management. Okay.

Bill: Anger management? Okay.

Massimo:

[00:49:00] Yeah. It's a problem that we all have, and in fact, the APA, the American Psychological Association, devotes large quantities of web space on their site to provide advice to people on how to manage anger. Well, anger management is one of the things that the Stoics have been doing for 2,300 years. What they say is like, okay, what exactly makes you angry about a certain situation? Let's say that somebody hurls an insult at you. Okay.

Somebody, let's say, to just give you an example that actually happened to one of my colleagues, he was walking down the halls in the department, this guy is a philosopher, and one of his colleagues stopped and said, oh, Bill, I was just thinking the other day of whether I want to cite one of your papers in my next book. Bill reacts, and he says, oh, well, that's very nice. Right? I mean, a colleague of yours tells you that he's appreciating your work, and that's nice. The colleague immediately went on and said, yeah, but before I do that, I need to decide whether your paper was profoundly misguided or downright evil.

[00:50:00] Now, at that point, you say, what the hell? Right? The guy just offended you. That's an insult. He's basically telling you that your work not only is not good, but that it's either profoundly misguided, so really bad, or even evil, so it's like, it's bad in the sense of morally bad. It's like, what the hell is going on? Now, Bill, who is a practicing stoic, stepped back and he quickly said, okay, what is going to be my reaction to this kind of thing? The guy is insulting me, presumably on purpose.

The Stoic's reaction to insult was essential, well, they had two reactions. One was that of a rock. There is Epictetus, who is a famous Stoic philosopher said, imagine that you are a rock. I'm sorry, imagine that you're going to go and insult a rock. How did that go? What kind of reaction did you get from the rock? Right? Now, did you get frustrated? Yes, because you didn't get any reaction.

[00:51:00] The first advice, Stoic advice, is simply to walk on. Just keep walking. Just completely ignore the person. What that does is, first of all, it calms you down immediately, because you just got out of a dangerous situation or a confrontation, but also, it makes your opponent, the other guy, look like an idiot.

Bill: Sure.

Massimo: He thought that, here we go, he had this clever turn of phrase, and you just kept walking, like if you were nothing, it was just as if you were not talking to anybody in particular. That is a great reaction. Now, that's the sort of introduction into Stoicism. If you are not very good at dealing with insults, that's what you want to do. Now, Bill, on the other hand, is very good. My friend Bill is very good, because he has practiced this a lot of time. He actually uses the second approach, which is also recommended by Epictetus.

[00:52:00] The second approach is to use self-deprecating humor. His reaction was, oh, evil or misguided. Well, that's because you read only that paper, my friend. If you'd read the other ones that I wrote, you'd really know that I'm both misguided and evil. At that point, you'd walk on, you'd walk off. The guy was just like, he stayed there like an idiot. It's like, what just happened? I was thinking I was insulting this guy, and this guy basically did a sort of a mental judo on me, and turned the whole thing around.

Bill: Yeah.

Massimo: It turns out I'm the one that is insulted now.

Bill: Well, it's a lot of patterns, we get bolted into our brain patterns that we don't even know from early, early on. I'm going to give you a practical and real fun example, and people that are listening are just going to have to translate this into their own challenges. I've taken up, we could do a business example, but I think this is more fun. I've taken up kite surfing, and so, I am at the sort of “like” level, so you have three stages. I'm at level one.

[00:53:00] There's not much proficiency yet, but I'm starting to gain, and I'm sort of trying to balance the fact that it is a challenging sport, and it is somewhat dangerous so I'm on the edge of comfort, and I would like to get to a level of proficiency. I don't, let's say excellence is being able to pull yourself 30 feet in the air and do a flip and come down. I don't have an interest in that level, but I would like to feel massively confident with this complex skill.

If I know, so I have access to all the resources to do that, however, what type of a Stoic philosophy would I need to approach this challenge so that I can achieve this and not let my fear or concerns or doubts overtake these ... ?

Massimo: Well, that's a very good question. Actually, as it turns out, Stoics have very similar examples. I think that the kind of activity you're talking about didn't exist in ancient Rome, but they did have some stuff that was sort of equivalent, and it served the purpose anyway. One of the examples is archery.

Bill: Oh.

[00:54:00]  
Massimo:  
You're trying to hit the target with bow and arrow. There's this famous passage in Cicero, who was not himself a Stoic, but he wrote about Stoicism quite a bit, and he was very sympathetic to Stoicism. He said, look, suppose you want to hit the target and you've got your bow and your arrow and you practice and you think you've improved your practice and all that, and then at some point, of course, the moment, the crucial moment comes, you have to let go of the arrow, and the arrow's going to fly off the bow, and it may or may not hit the target, right?

[00:55:00] Well, he said, there is a dichotomy here, there's a separation of two goals. One goal is the external one of actually hitting the target, right? The other one is the internal goal of having done your best in order to put yourself in a situation of hitting the target. Okay? Now, Cicero said the internal goal is entirely up to you. You have complete control over that. You have control over how many times you practice. You have control over how you react to your failures. You have control over your behavior, basically, up to the point in which you let the arrow fly.

As soon as the arrow left your bow, you have no control of what's going to happen after that, because it may very well be that you are a very good archer, and the target might be hit, or it may very well be that the target is moving let's say, because it may not be a standing target, it may be an enemy's soldier for instance, and so, the guy is moving. He's not waiting for your arrow to come in.

Bill: Sure.

Massimo: It may be that something else is going to get itself between you and the target at the last minute so you're not going to hit the target, but you're going to hit something else. It could be that a gust of wind ...

Bill: Sure.

Massimo:  
[00:56:00] Suddenly comes up, and I'm sure that comes up with your example a lot, or a wave, all of a sudden, and it throws everything out. You've done your best, you've done everything right, and then all of a sudden it ends up in disaster. He says, well, all of those things considered then, what you need to do is to internalize the goal. Your goal should not be to hit the target. Your goal should be to prepare as best as you can to let the arrow go.

Bill: Sure. Oh, yeah.

Massimo: That's it.

Bill: Okay.

Massimo: You see?

Bill: Okay. It's the application and then the release of the outcome.

Massimo: Yes, right. Exactly. The outcome, as he says, it's to be preferred but not desired. This is a wonderful turn of phrase. I mean Cicero had a way with words, I think. Preferred, but not to be desired, meaning that, of course, you'd prefer to hit the target. I mean, yeah, stupid, that's why you're doing it, right? In your case, of course you prefer to have mastery of your instrument and you'll be able to withstand the winds and the waves.

Bill: Sure.

[00:57:00]  
Massimo:  
That's your preferred outcome, but you don't desire, you train yourself not to desire that. What you desire instead is to do your utmost best in practicing that particular sport or that particular activity or whatever it is. This actually has, I mean, you mentioned business applications. This actually is, the Stoics applied that across the board.

Let's say that tomorrow morning you're up for a decision for a promotion or not, right? At your office. Well, the Stoic would say, you can go to sleep and not worry about it at all, because you have already achieved, if you worked hard, you already achieved the only goal that is within your control, which is to put forth your best resume, your best effort, your best job, and so on and so forth. You've done that already. Okay? That is what was under your control.

Bill: Sure.

Massimo:

[00:58:00] The outcome, whether you do get the promotion or not, it's not under your control, because it depends on if you have competitors that are maybe better than you, if your boss didn't like you for whatever reason, an arbitrary reason, or something else happens, there's a budget cut and all of a sudden they cannot actually increase anybody's salaries or give any promotions. All of that stuff is outside of your control, and so, you should remove it from your desires. It's still a preferred outcome, but you remove it from your desires. This is very, very similar to Buddhist ideas.

Bill: Yeah, practically, yeah, totally.

Massimo: Preferring things and the detachment from outcomes and that sort of stuff.

Bill: Yeah, yeah. Preferences versus desires. That's very, very similar. Oh, gosh. You've really made this come to life, and I really, really appreciate that. I think I just have one question for you, Massimo. I think we can wrap up. This is, again, kind of, I was all over your, actually, before we ask that last question, how can people learn most about you, and what message do you want to give to people?

[00:59:00] there a particu- I have your, on the show notes, I'll put your Twitter and your YouTube channel and your Facebook, and, not Facebook but your footnotes from your major websites and such, but is there someplace that you want the listeners to go to, to learn more about you, that you would prefer?

Massimo: Well, as you mentioned, I'm all over the damn internet, but my two favorite places are my two blogs. I have a blog called platofootnote.org which is about general philosophy. There I write about general philosophical issues, and then I have a second one which is called howtobeastoic.org, and that's where I do all my Stoic writings.

Bill: Are you going to be at that camp? I know you're having a Stoic camp in New York.

Massimo: Yes. We are doing the Stoic camp in New York in early September, in Labor Day weekend. We've done that last year. This is going to be fun. It's basically three days of very intense, like as in twelve hours a day, the theory and practice of Stoicism. Then, on October 15, actually, we are hosting the international Stoic conference, which is called Stoicon, in New York City, and it's a Saturday, October 15.

[01:00:00] Some of the major authors, including Ryan Holiday, is going to actually, he's our keynote speaker, and are going to be here, and there's going to be hundreds of people that are either curious or interested or even practicing Stoicism, so it's going to be a lot of fun.

Bill: Great. Well, I'm going to put show, on the links, on the show notes, I'll put to those two fall resources for you, and of course, links to your book, which I highly recommend your latest book.

Massimo: Thank you.

Bill: I've sat around the table with my kids and of course they're like, oh, Dad, you're such a geek, which is funny as heck. My kids are in their teenage years. I gave them the test of the trolley test, also, the trolley test that we've talked about before.

Massimo: Right.

Bill:

[01:01:00] Had a dinner conversation about it, and then, throw the guy off the bridge test, and then I ran out of options. I was like, God, there's got to be other good philosophical questions that I can pose to my kids that would stir debate around a dinner table, and I was wondering what you thought about that, if you have like a resource that I could send people to and myself to, to like, start fun interesting conversations around a table, because I had, my 10 year old was jumping into the conversation.

Massimo: Yeah, so, absolutely. Actually, there are a number of resources like that. There is, if you're interested in particular for your kids, there are a couple of good books of philosophy for kids, and I can send you via email the links, if you'd like, but another thing is, you can go to the website of the Philosophers magazine online, which is one of the major sort of philosophy magazines for the general public. It's not a technical publication. They actually have a section there of about problems and games. They actually have games that you can play.

[01:02:00] One of them, of course, has to do with the trolley dilemma, but they also have games in which you get to play God about certain, in certain situations, and there are games about the ethics of war, for instance, and things like that. You're absolutely right. This is a great way to introduce people in general, and kids in particular, to philosophy, without having it, without saying, oh, here we are. Well, let's sit down and have a philosophy lecture. Right? If you do that, people are going to immediately turn off. It's like, what?.

I can't tell you how many times I go to a party, and typically the first question somebody who doesn't know you asks is, so, what do you do? Now, at this point, I know what's happening, so on purpose I answer, well, I'm a philosopher. Typically, either the person just walks away, or somebody actually recently said, well, that's a conversation stopper, isn't it?

Bill: Oh my gosh.

Massimo:

[01:03:00] I said, actually, no. Why would you think that it's a conversation stopper? Let's talk about that. A better way to do it is exactly what you did. That is, you can think, there are entire courses in philosophy classes that are based on reading the news. You just pick the news or listen, watch TV news in the evening or something like that and say, oh, that's an interesting question. Why don't we talk about it? What do you think about that? They typically have to do with ethical problems, but not only.

I mean, there are, you can have conversations about artificial intelligence. You can have conversations about science and technology. You can have conversations about medical research. I mean, there's, philosophy is literally everywhere. There's not a single topic I can think of that does not have a philosophical underpinning of what kind or another.

Bill: Well, you've really made this topic come alive for myself and for our listeners, and I was really excited to have you on the show. As I mentioned, I'm going to link up all these resources on the website for the show notes, and I really appreciate you for your time today, Massimo.

Massimo: Thank you very much. It was a pleasure.

Bill: Okay. Thank you. Talk to you soon.

Massimo: Yes. Bye.