

- Rodrigo Gordillo: [00:00:06](#) Welcome to Gestalt University, hosted by the team of ReSolve Asset Management where evidence inspires confidence. This podcast will dig deep to uncover investment truths in life hacks you won't find in the mainstream media covering topics that appeal to left brain robots, right brain poets and everyone in between, all with the goal of helping you reach excellence. Welcome to the journey.
- Speaker 2: [00:00:28](#) Mike Philbrick, Adam Butler, Rodrigo Gordillo and Jason Russell are principles of ReSolve Asset Management. Due to industry regulations they will not discuss any ReSolves funds on this podcast. All opinions expressed by the principals are solely their own opinion and do not express the opinion of ReSolve Asset Management. This podcast is for information purposes only and should not be relied upon as a basis for investment decisions. For more information visit investresolve.com.
- Adam Butler: [00:00:54](#) Hello and welcome to the Gestalt U podcast, brought to you by Invest ReSolve, ReSolve Asset Management. And today's special guest is none other than [Ben Hunt](#), primary author and editor and founder of the Epsilon Theory content portal. And in this podcast, which I think is quite a departure from our usual discussions on the Gestalt U podcast series, we're going to get into the nitty gritty of how Ben Hunt thinks about the world from his vantage point with a background in applied statistics and game theory and the narrative machine. And obviously Ben is a prolific writer and approaches his views on the world from an acute angle relative to how I think most of us digest media and internalize the ongoing narrative that we are fed. And I think it's really important to be able to go behind the headlines to grasp the underlying motives of the primarily public relations entities that are behind most of the messaging that we all digest from day to day.
- Adam: [00:02:12](#) And so, we wander in a variety of different directions, but with a constant theme of what the dominant motivation is for the people who are currently in charge and making decisions and have the most to lose from a political climate and a market climate that veers away from the current paradigm. How investors should think about the risks given the current equilibrium and the potential for disequilibrium, and just a better framework for how to think about markets and building a more resilient portfolio. This is a longer session than usual, but I think it's worth it. So without further ado, I bring you Ben Hunt please enjoy. So, actually where I wanted to start, I wanted you to answer the question, [who is Neb?](#)
- Ben Hunt: [00:03:08](#) Neb Tnuh.
- Adam: [00:03:09](#) Yes, who is that?
- Ben Hunt: [00:03:09](#) I was in one of my kind of funks because I write a lot about narrative and how narratives impact all of our lives and how we have to take back our distance and how we have to really look for this stuff and not get caught up in the machinations of what we call in game theory, the missionaries. The people who shake their finger at us and tell us how to think about the world. So, I write a lot about that. But the truth is we're all hardwired to respond to this stuff. And so, so frequently

I find myself getting sucked in. I'll start writing out some angry tweet. I'll react. It's usually a reaction of anger because so much of the And that's intentional in a lot of the, what we call missionary statements that are out there. They're not all intended to try to ... In fact, very few of them tried to or intended to convince you of something. The goal is to create this emotional engagement either of, I'll call it adulation, celebrity.

- Ben Hunt: [00:04:12](#) "Oh my God, someone famous thinks like me. I love that person." Or, what I like to call it a rage engagement where it's all very intentional. And I find myself getting sucked into that. I was trying to step back from this and think, "What is become of me and the way I interact with the world?" Because the other observation I had is that so much of what's happened to us both at a macro level, our society, our communities, but also on a micro level to us personally, it's like the old story about how do you boil a frog without the frog hopping out of the hot water. It's just degree by degree and then over a period of time you look at it and you go, "Oh my God, we frogs are in boiling water." And so, I was thinking about how my life has changed over the last seven or eight years. I remember I used to enjoy going to parties.
- Adam: [00:05:15](#) This is such a familiar-
- Rodrigo: [00:05:16](#) We talk about this all the time.
- Ben Hunt: [00:05:18](#) I really did.
- Ben Hunt: [00:05:19](#) I used to look forward to a conversation with neighbors.
- Adam: [00:05:23](#) Amen.
- Ben Hunt: [00:05:23](#) I'd go on a trip and I'd be on a flight. I'm flying economy. We've got two people sitting in the same room. I might even have, believe it or not, a conversation with someone on the plane. Imagine that. And what I realized is, man, I just dread that now. I dread the idea of talking to other people. Sartre once said that hell is other people. It's a great line, and all I would do to make an addendum to that is hell is other people who want to talk about politics or markets. Who want to talk about our social interactions.
- Adam: [00:06:02](#) Has it always been like that?
- Ben Hunt: [00:06:04](#) No.
- Adam: [00:06:05](#) What's changed?
- Ben Hunt: [00:06:06](#) It really hasn't. Well, there is a polarization. Again, it's a lot of this is organic. It's not a conspiratorial smoke filled room thing, but some of it is. The is part is that our devices, our smartphones and the like these are designed to be dopamine

transmitters. Our, I'll call it, the platforms, the media and the messages in which we consume they are delivered to us in much more effective ways. It's both the 24/7 shaking a finger at you through the CNN, MSNBCs, the CNBCs. These started with sports, which is usually a way a lot of these things start. New media systems usually start with porn and sports. The public one, the non porn one is ESPN, to the 24/7 programming. And so, what do you do if you have a 24/7 programming? You have to invent the programming to fill the time. And that's what we have everywhere today 24/7, I'll call it, dopamine transmission. Little zaps of sports now, but business and here I'm doing air quotes, news, world, air quote, news. Political news.

- Ben Hunt: [00:07:25](#) It is intentional. It is a business model.
- Adam: [00:07:27](#) And it's changed the conversation. It has changed the way we interact with each other, engage with each other.
- Ben Hunt: [00:07:31](#) Absolutely. And there is no utility, there's no utility like there used to be utility. When you had, was it Brokaw? Who was the voice-
- Adam: [00:07:38](#) Tom Brokaw.
- Ben Hunt: [00:07:39](#) The Voice of America that came on at night for 30, 40-
- Adam: [00:07:43](#) Walter Cronkite.
- Rodrigo: [00:07:43](#) Walter Cronkite. That's him. Proving now I don't know a lot of stuff. He used to run the narrative based on a 24 hour time period where they could gather data, assess it, figure out what's actually going on, and then communicate the American values and possibly there's more utility to that narrative. Then there can be in a 24 hour network where you have to fill in the time. And when you are trying to win eyeballs, is it winning eyeballs through dopamine, which another utility for the network rather than the utility for the society.
- Ben Hunt: [00:08:15](#) Here's the distinction I'd make. You ask, has it always been this way? What has always been this way is that ... Again, I'm not saying this as it's kind of a bad thing. I was going to say it's neither good nor bad. It just is. But what it is, is that institutions of power, political institutions, corporate institutions, they want to promote and instill a certain message. In a sense it was easier in the Cronkite age. This is the old line about Lyndon Johnson that he lost his chance at winning a re-election when he lost Cronkite over the Vietnam war. And then once he lost Cronkite, he lost America. So, there was a, I'll say, hierarchical and clear delineation of how messages would be transmitted to us, the people. But what is different today is it's more fragmented. There's not a single voice. It's not people just tuning in to the network news at 6:30 or whatever. It's more fragmented now.

- Ben Hunt: [00:09:16](#) There are many more voices, but those voices now because of the form and the function in which they give us the information, again, 24/7 designed to be snippet effective on our dopamine receptors. The messaging is much more effective and influential. And the messaging, again, is designed not to convince, not to have a conversation. It's not a two way messaging system. It's a one-way messaging system where the business model is satisfied through either the adulation engagement, the celebrity engagement, or the rage engagement. Because the business model is satisfied this way, my business model, both the political business model, the Democratic Party couldn't survive without Trump being in office. And the Republican party couldn't survive without Pelosi and the Democrats, because you have to have that enemy.
- Ben Hunt: [00:10:10](#) The system works so well to encourage this sort of polarization. And what is really troubling to me to get back to the Neb Tnuh, my name backwards, is that this business model and social model now I'll say trickles down. It impacts us on the micro scale. It impacts us in our own minds, in our conversations with ourselves. It impacts us in our conversations with the people who are most important to us in our lives, our families. And it's a polarization both at a national scale. The parties are farther apart than they've ever been. But more importantly to me, and that's what I was trying to communicate, it's a polarization and division of ourselves and our relationship with our families. And that's the really tragic thing.
- Adam: [00:10:59](#) It separates us as we become more insular as a survival mechanism. It also means that we become less connected emotionally to the broader community, whether that's at the neighborhood level or at the municipal level or at the state level, or at the country level or at the global level. It becomes an about me instead of about us. So, tell me a little bit about the mission of Epsilon Theory and how you're trying to communicate a more hopeful message about that.
- Ben Hunt: [00:11:35](#) Before I talk about what I think we can do to repair the damage that's been done, let me give you another historical example of when the same process happens and the path I think we're on, because this is something that has happened in the world before. It's different today. It's always a little different because particularly the role of technology that's an arrow that goes up into the right and makes things different, and why I think what we're experiencing today is much more accelerated in this timeframe and the way it's impacting us. There's this wonderful play ... I was mentioning Sartre earlier. I'll mention Ionesco today. He wrote this play called Rhinoceros. And it's about a central European townie. He grew up in, it was Romania, between World War I, World War II. Leading up to World War II. And the play is about something that another great writer and thinker Hannah Arendt called the Banality of Evil. That was her famous phrase.
- Ben Hunt: [00:12:36](#) She got that from watching the Nuremberg trials, the war trials after World War II, the banality of evil. That the evil people who perpetuated the final solution in the genocide, they were nebbishes, they were bureaucrats. They weren't these towering heroic figures. They were just these banal evil men. And the play

rhinoceros is about how all of a sudden people in the town start turning into rhinoceroses. It is the theatre of the absurd, they call it. And it's a rhinoceros of course, more and more people just turn into rhinoceroses and they start rampaging through the town. The first people to turn into rhinoceroses are the kind of goons of the town, or kind of the kind of right wing authoritarian types in the town, but pretty soon it's just people just start turning into rhinoceroses. And the reaction of everyone else it's not, "Oh my God, people are turning into rhinoceroses. This is awful."

Ben Hunt: [00:13:38](#) This is the brilliance of the play. And what happened then in Romania and what's happening with us today now the response is, "Oh look, another rhinoceros. Oh look, another rhinoceros." And the people, ultimately there's one person who doesn't turn into a rhinoceros. And again, he's not some heroic figure. It's a very sad difficult life because everyone else is now this rampaging rhinoceros. The right wing authoritarian goons were the first to turn into rhinoceroses. But the worst are the intellectuals, I'll call it left wing because they know better. That's why it's worse. They know better and yet they become rhinoceroses too willingly. They want to become rhinoceroses because they think it's effective. And that's what happens, I think, to so many of us today. You ask, will we lose contact and what can we do and we want to take action.

Ben Hunt: [00:14:32](#) I think we so frequently can lose our souls. And I have no better word for it than that. We lose our souls when we become rhinoceroses because we think that, "Oh well, I've got to adopt these mechanisms of power. I've got to become a rampaging authoritarian rhinoceros also because I want to get my guy elected." And it's that, I think almost more than anything else we have to resist. The first step is to recognize, "Oh my God, this is not healthy for us as a society, for us as individuals, for our families, for the way that the messages are really changing our behavior." For a lot of people, the first reaction is, "Okay, we got to fight." And that means, "Oh my God, it's that Donald Trump. So I'm going to become a rhinoceros on the left and that's going to be what I want to do." Vice versa, you have people say, "Oh my God, I can't believe the way those socialists are trying to take over the world. It's MAGA all the time for me, baby. I'm going to get on that train."

Ben Hunt: [00:15:38](#) These are two forms of rhinoceroses. And I get it. One of the things I was trying to write about when I was writing about my, this alter ego of my Neb Tnuh I feel it. I get angry. I get drawn in by this. But we've got to do is we've got to take back our distance, our distance of mind, our distance of heart from the people who they're not our family. One of the big things that really bugs me of modern society is companies trying to portray themselves as your family. They're not. Your family is your family. Your pack, I like to call it. The people who should mean something to you and you mean something to them are people who treat you in a non-instrumental fashion. Corporations, any company treats you in an instrumental fashion.

Adam: [00:16:30](#) As in you're an instrument to serve their function.

Ben Hunt: [00:16:32](#) You are means to an end. You are a means to an end. The core thing, and this again, this goes back in every religion, every secular philosophy that's worth an ounce, is that at its core we should treat people not as a means to an end, but an end in themselves. And we should expect that to be reciprocated. This is do unto others as others would do unto you. This is Aristotle. What is the good life? It is living life with, he called it a magnanimous life, a great heart. And what he meant by that was to have great hearted friends. People who saw you not as a means to an end, but as an end in itself, and you treat them the same way. It's a really simple message. It's a message that's thousands of years old. It's a message that it's never been more important to get out there again than today. So you ask, what am I trying to do with Epsilon Theory? It's that. It's really that.

Ben Hunt: [00:17:31](#) It's find your pack, meaning people who treat you as an autonomous human being, who respect your autonomy of mind and people who you extend that same degree of trust and faith. It starts in our families, but it can be a lot bigger than that. That's how we survive this. We find our pack. You're not going to find it in your company. You're certainly not going to find it in your political party. That's going to be your first reaction. It certainly is mine, but that ain't where you're going to find it. It takes hard work, but it's the only thing that can protect us here is to find your pack. It ain't your company. It ain't your political party.

Adam: [00:18:18](#) So, one of my favorite essays of yours is where you differentiate between the concept of pack and the concept of flock. Can you drill down a little bit on that?

Packs vs Flocks

Ben Hunt: [00:18:30](#) Absolutely. So, I live out in the woods, a Middleton farmer. My grandfather actually had a real working dairy farm in Northern Alabama back in the 20s, and I just know how much he would just laugh at me getting on my tractor and driving around and moving stumps and picking up rocks and stuff. It's a joke. It's a hobby. It's also been one of the most intrinsically rewarding and wonderful things in my life, because you know how it is guys. I mean, our world of investing in the, we live in a world of abstraction. We live in a world of what I like to call cartoons in the technical sense. Abstractions of abstractions. And there is a real power in disconnecting from your dopamine machine and either with your own muscle power or with John Deere horsepower connecting again with the real dirt.

Ben Hunt: [00:19:35](#) And life on this hobby farm ... And look, it's a series of both choices and being fortunate to be able to do this, but we can all disconnect from the dopamine devices and try to connect with the real. For me an important part of that has been relearning and then being able to tell people about lessons I see in nature from the connecting with the real and to bring it back to this world of abstraction that we live in constantly. And so, what I see, we keep sheep. Again, these are pets. This is not some commercial operation. We have goats, we have sheep. We have chickens, ducks and horses, and we have this menagerie out there. I think of them sometimes it's like works of art, like living works of art because I can just watch

them. And the sheep, I love watching the sheep. Because people think that sheep are stupid.

Ben Hunt: [00:20:33](#) That's an insult today to say, "Oh, you're the sheeple." Not the people, the sheeple. "You're just being led around and you're stupid." That ain't sheep. Sheep aren't stupid. They are just differently intelligent than other animals, than humans. But they are not stupid animals at all. They are incredibly willful animals, in fact. So we talk about the insult of, "Oh, you're just being a sheep." You're saying, "Oh, you're just easily led." Sheep are not easily led. They're not. And this is why in the old stories, the shepherd, you've got to be a good shepherd. It's a full time job to be a shepherd because sheep are not easy to lead, the reason they're not easy to lead. The reason that they are not a pack like coyotes or dogs or wolves, we think of that as being a pack.

Ben Hunt: [00:21:23](#) The reason they're not easy to lead is because a flock, which is what we call obviously a group of sheep, each individual sheep is utterly selfish, utterly thinks of other sheep in an instrumental sort of way. Very different from a pack. In a pack you have real sacrifice. Everyone who knows a dog, or has a dog because a dog, they are a member of your pack. They're so wonderful. And we all know that expression of a hangdog look. When your dog does something wrong, your dog knows he or she has done something wrong. They can express that hangdog look as a sense of shame. "Oh my God, I've been a bad boy." Sheep never feel that. If you see everyone instrumentally you have no sense of shame. That also means you have no sense of honor. You have no ability to take a hit for the team and to sacrifice anything for the group. That's not what a flock is.

Ben Hunt: [00:22:26](#) A flock, it's utterly other regarding which is the intelligence that sheep have. They are constantly watching the other sheep, constantly. But not because they're watching out for them like you would find in a pack. They're watching them to see what sort of advantage they can gain in terms of, "Oh, there's a good bit of grass." Or, "Oh, that sheep looks agitated. Is it a predator?" "No, it's not a predator." "Oh good. I'll scoot in there and get that sheep's grass while they're distracted."

Rodrigo: [00:22:58](#) So, in essence of the rhinoceroses are a flock.

Ben Hunt: [00:23:02](#) Absolutely.

Rodrigo: [00:23:03](#) And the Epsilon Theory pack is what you're trying to create is something that is more selfless and trying to make the pack stronger.

Ben Hunt: [00:23:12](#) Yeah. I forget who it was. It was, I think God help us. Those maybe not seen to live, but at first it's wrong. So, he was saying that he's a communist with his family. He's a socialist in his town. The guys from there, you're a Republican at the state level and you're a libertarian at a national level. What it means to be a pack is to have that, you can call it a socialist spirit. It's that, you are willing to make a sacrifice. You are treating everyone as an end in themselves, not as a means to an end, and

you expect the same in return. It's not that a pack is a group of, I'll call it lemmings. People are just looking for reasons to sacrifice. A pack is not an irrational thing. It's a very rational thing. But a flock can be, these are both I'll call them equilibrium points, to use these kinds of \$10 game theory words? These are balancing points where once a flock ... I'll call it equilibrium is set. There's nothing that's going to change it from that.

Ben Hunt: [00:24:17](#) If you're in a flock of sheep, you're an idiot if you start looking out for the other sheep.

Adam: [00:24:22](#) Because there will be no reciprocity.

Ben Hunt: [00:24:24](#) There will be zero reciprocity. You have to behave as if you're a sheep as well. And it's the same thing with a pack. Even if you don't feel it in your heart of hearts that, "Oh, I want to have reciprocity and the like." If you're with a group of ... In a well functioning pack, the rational decisions, "Okay. I need to at least act like I'm that."

Adam: [00:24:43](#) I think that captures things really, really nicely. I think, is it safe to say or would you directionally agree with the statement that as a society or as a culture we have evolved to expect flock to be less reciprocity, and therefore we are less inclined to make sacrifices in advance of, or in pursuit of the advancement of the society, the community that we once were. And that is a major motivating factor in the fact that we've all become more selfish and insular.

Ben Hunt: [00:25:22](#) It's everything, and it's intentional. Because the existence of, I'll call it packs, is very threatening to a national or a mass society control. It's very threatening to a political party, whether it's a single political party like in China or a dual political party system like we have here. These, I'll call it, local bastions of social power, which a pack really is, it's very threatening. So there's both a business model to polarize and divide us to fragment us. And there's a political model for this as well. And that's why this is so hard to resist. You can talk about this in kind of dry game theory terms. I can talk about it in kind of real life farm terms. And I told this story in one of my notes. I think the notion of flock behavior really hit home for me. We have four sheep today. We used to have six. This was a couple of summers ago. My daughter comes in in the morning so our daughters take care of all the animals, which is another great thing.

Adam: [00:26:29](#) Can't even give it to my children to walk the dog. So, that's a Herculean achievement in my view.

Ben Hunt: [00:26:34](#) It's really interesting because here's the thing, if our daughters don't take care of the animals, they will die. And that's a responsibility and a lesson. Because when you are around animals on a farm all the time animals die. There is that circle of life and then there's a lot to accept about that.

Adam: [00:26:53](#) Up close and personal in a farm.

- Ben Hunt: [00:26:54](#) Up close and personal. You have that responsibility to these animals. You belong to the animals more than they belong to you. And learning that it's just been, I can't describe how powerful and important that lesson is for instilling this understanding of what a pack is and the responsibilities we have. But she comes in one morning and she says, "Oh my God, dad, you've got to come out and help me." And she named two of the sheep, they're dead. And I go, "Wait, what? What's going on?" So, rush out to the pen area where they spend the night in their shed. And this was kind of early days of us keeping the sheep. We had made the mistake of we set up ... And this is how you feed a lot of times horses, you set up what's called a hay net. So, it's a net with very kind of loose rungs in it where you put hay, a couple of flakes of hay in it and then the animal can go up and pull at it.
- Ben Hunt: [00:27:49](#) You keep it elevated in this net so this not just on the ground and build up this huge massive hay anyway. So it's called a hay net. Well, two of the sheep had figured out, "Oh I can get more of the hay ..." Because we've got the six sheep competing at the hay net, "By wriggling my head inside one of these loose rungs of the net." So, one of them did it. Another one did it. Two sheep got their heads inside the rungs of the net. And then, and you sometimes see this and kind of feeding behavior of herds. They'll start to Jostle each other because they're trying to move another one out of the way to get more food. Again, that's all they care about. It's, "What's in it for me." It's as profound selfishness, profound selfishness. And it's very different from other animals. Goats will, "Oh yeah, it's your turn to eat." Or a dog, same way. But sheep, profound selfishness, but very smart.
- Ben Hunt: [00:28:43](#) So they started the whole... Group of sheep started moving clockwise around the net. And they started then to turn the net, and so it slowly tightened the rungs around the necks of the two sheep. And so, they kept on doing this even unto death. They strangled themselves through this profoundly selfish behavior. It was a rough day, but it's an image and an example that just is so searing to me to pursue these profoundly selfish, and I like to call it other regarding behaviors, because they're always looking for an advantage from another sheep. They are incredibly aware of all the other sheep. They're not single-minded or isolated. They're part of this flock. But their other - regardingness is to achieve some sort of advantage. **And they will pursue that even unto the death.** It's interesting. This is reminiscent of the whole progressive leftist oppression Olympics.
- Ben Hunt: [00:29:56](#) Like my wife is very much born and raised in New York City, private school kid. She over time has become a rhinoceros. She doesn't know how she became a rhinoceros. She just knows she's an ardent rhinoceros. And what that means is that if you are not a rhinoceros as well in talking about the right rhinoceros narrative, you're immediately an enemy, which is something I actually want to ask you. How do you ... Because she sees me as my own rhinoceros on the other side. But the other thing is within the rhinoceros crew, there are these levels of oppression. These groups that are all progressive lefties, but they're all trying to go after their own agenda and it becomes a jockeying of who's more oppressed. It's like they're starting to destroy all the values because they only care about their particular

oppression and whoever is more oppressed gets to move forward and everybody else gets to move downward within that rhinoceros flock.

- Rodrigo/Ben Hunt: [00:30:52](#) It's very selfish. It has nothing to do with the general theme of traditional liberal values. It is very much an egotistical, self-centered, selfish process. These phenomenon that we're talking about, the intentional and organic develop of, let's call it flock culture, intensely selfish intensely other-regarding there are two primary other-regarding emotions. Sheep only have two emotions and this is what is now pervasive in our culture as well. The most powerful other regarding emotion is jealousy. Whether it's you read a fellow, the best song about jealousy is The killers, Mr. Brightside. It's the best song ever written about jealousy. And when you experience jealousy you know how that ... It just, it consumes you. It's such a powerful, again, what I call an other-regarding emotion. The second most powerful emotion is schadenfreude. Jealousy is the pain that we feel at other's pleasure.
- Ben Hunt: [00:32:03](#) Schadenfreude is the pleasure we feel at others pain. Those are the two other - regarding emotions, jealousy and schadenfreude. And you see that play out in the dynamics of groups like you're describing or the internal dynamics of groups and this is absolutely true on the right. It's everywhere. This is not a left / right thing. This is a modern society. "What the hell is happening to us," kind of thing. We are now transformed by jealousy and schadenfreude because those are two emotions that generate enormous amounts ... Again, I get back to dopamine and both rage engagements. "Oh my God, I can't believe this person said that." Or these adulation engagements. It's all of a type and so we see, again, jealousy and schadenfreude as the defining emotions of our time. And these are the emotions of the flock. These are the emotions of the flock. And it's so different from the emotions of the pack.
- Rodrigo: [00:33:01](#) In practical terms, how would you get the point across that your flock, for example, is not jealous. Is not jockeying for position? How are they different? Because the biggest problem that I have is I am seen by my liberal friends as another rhinoceros on the right. Whereas, I see myself as applying heterodoxy and differing ideas, having nuance in the conversation, but they're incapable of seeing that. They see me as the same thing just with different values.
- Ben Hunt: [00:33:33](#) I'll tell you exactly what you have to do. What one must do both to bridge the gap and to strengthen, I'll call it, pack behavior in your own group, and you're not going to like this answer. The answer is, you have to forgive and you have to take the first hit and you have to keep taking a hit. You have to take the L.
- Adam: [00:33:53](#) So, how does that play out?
- Ben Hunt: [00:33:55](#) I'll tell you exactly how it plays out. There's this long ... And this kind of gets into, I hate to say that my dissertation, one of my books is about game theory. Because I hate to say, "Oh, it's game theory." This becomes such a trite phrase today.

Because idiots say, "It's game theory." I hide it, but I have to talk a little bit about game theory now. Because what game theory is, is strategic interaction. What game theory is, we're familiar with these kind of two person games like prisoner's dilemma. It's the source of every police procedural show on television or familiar with the game of chicken because it's in movies so much of the time. And it's Kevin Bacon driving his tractor, the other guy driving his tractor.

Adam: [00:34:43](#) But is that a Footloose reference?

Ben Hunt: [00:34:43](#) That is a footloose reference. I'm dating myself. Before me it would have been ... My dad's generation would've been rebel without a cause. The most important games though are the games of how groups interact and you can model what does it take to change group behavior. Because we were talking about this earlier. Even if I'll call it a full-hearted magnanimous person and you find yourself in a world of sheep with flock behavior it is irrational to behave like a full-hearted magnanimous person, because you're just going to get eaten up and tossed out. You're not going to survive. There has to be a critical mass of full-hearted magnanimous people. It's kind of like we're seeing with the spread of coronavirus. You have to set up a cluster of people who you interact with on a regular basis who will treat you as you're treating them in a non-instrumental way.

Ben Hunt: [00:35:41](#) If you can create a cluster there are advantages to being in that cluster. Actual advantages. Advantages over the sheep, the mass of sheep that are in the flock. Your cluster will begin to grow. Your cluster will absolutely begin to grow and you can demonstrate this and they do these real world tournaments where you have groups of people and you devise strategies for how you're with them. You can model this in different simulated environments and the like. But the way to change things and it's the only way to change things is to create these clusters of pack behaving people within the larger environment of the flock, flock environment that we all live in, and to find your pack, to find your pack. There's a very simple strategy to do that and it's called tit for tat. Which means you're not going to be an idiot if you're among a lot of sheep and they're sheep and they have no desire to ever change from being a sheep.

Ben Hunt: [00:36:50](#) You're going to open yourself up say, "Hey, wolf over here. I'm looking for pack members." And so, you're going to take a loss. You're going to leave yourself open to being smacked by the sheep. You're leaving yourself open to taking the sucker payoff in the interaction with this potential wolf or potential sheep. Once they prove themselves to be a sheep, and once they smack you or once you take the L in that one-on-one relationship with that person, it's harsh, maybe not. You write them off. They're not going to be part of your pack. But then you go to the next person. You leave yourself open, vulnerable to taking a loss. Whatever that means in the relationship we're talking about can be economic and more usually it's a loss in the heart. But this is what you do, because you will find other people who will not take advantage of your openness, your willingness to take a loss, but they will say, "No, I, I'm going to cooperate with you."

Ben Hunt: [00:37:52](#) I'm going to leave myself open for a loss to you." And once you do that, once you start finding those people to be in your pack, watch how that cluster starts to grow. It really is like the spread of a disease except in a good disease. This is how our world changes. It doesn't happen from the top down. It does not happen from the top down. It only happens from the bottom up. It only happens from people finding their pack and that requires leaving yourself open to taking a hit. But you will find other people who reciprocate and then you stick with that group and that group will grow. It will be slow, it will be really slow. There will be nothing, nothing, nothing. And then, boom.

Adam: [00:38:40](#) So, I'm going to take a little shift on the conversation. It actually is a nice segue because I think it's useful to think about markets in the context of herd behavior, and think about the motivation of agents in markets, investors along the exact same axes as you described, jealousy and schadenfreude, and think about how that plays into what we're observing in markets at the moment, and then recognizing that these are the dominant motivations for actions in markets. Reframing how to think about the investment process.

The Business Process

Ben Hunt: [00:39:28](#) And let's apply it specifically to the business-

Adam: [00:39:31](#) The business of investing.

Ben Hunt: [00:39:32](#) ... of investing. Because, and you guys know this really well, we've all lived this. Is that the hardest time for an asset manager or portfolio manager, somebody who's responsible for other people's money, OPM, the hardest time you have from a business perspective is not when, "Oh my God, the market is down and we're all down. The hardest time is when you're not up as much as the market is. That's the hardest time.

Adam: [00:40:07](#) 100% yes.

Ben Hunt: [00:40:08](#) That's the hardest time. Is that relative, that under-performance, this is jealousy and schadenfreude because your client is looking around and saying, "Oh, you may be 10%, but wasn't the S&P up 20% last year? What the hell guys? What are you doing? What are you doing? My neighbor over there, he's got his Robinhood App and you know he did a lot better than I did with you guys managing my money. How about that?" This is what pervades our business. And again, in so many ways, big ways, little ways. We were at dinner last night and we were talking about if you're an active manager, you can't take a big position in the big companies like Apple or Microsoft or Google. What story are you going to tell your investors? "Oh yeah, I really like Apple. I've got some edge on understanding Apple."

Ben Hunt: [00:40:58](#) No, you take these smaller companies and as it turns out, those companies are actually the ones that are really expensive on any metric you want to take. So it

makes it just even more difficult for you to outperform. But our whole business, particularly the business, not just the business of active management, systematic management is the same way. The business of managing other people's money is on this foundation of jealousy and schadenfreude and it makes it so freaking hard. And so, in the same way that in our personal lives, you have to find your pack. The most important thing in the business of managing other people's money is to find your pack in your clients.

Rodrigo: [00:41:40](#) Amen. I've lived and die by that. When I started in the business, quantitative asset management, I would put together a case of maximum diversification, asset allocation, dynamic, tactical. All of these reasons why you should have that eliminate the negative 50% draw-downs, and so on. And a short time into it I started getting that jealousy and schadenfreude. I said, I can do one of two things. I could toe the line or I'll just fire them. And for whatever reason I decided to go down the firing path. And in fact, when I started new conversations, I would say, "This is how I do things. If you complain about it once, I'm going to fire you." And what ended up happening is I didn't grow as quickly, but I have fantastic clients that never bothered me. And I think it's so unique. In the wealth management space it's always about doing what the client's asking you to do.

Rodrigo: [00:42:38](#) It tends to be about client servicing and it's the clients, that unique snowflake, whatever it needs. Rather than, "Here are my values, here is how I live my life, here's how I think I'm going to do best for you." And it's almost like a parent child relationship. Look, I have the expertise here. I'm going to walk you through this and you're going to come with me as a pack. You're going to understand what I'm doing or you're not. And that is too an awesome business, but it's not the norm. It's a really difficult thing to do, because you do grow slower. You do get into frustration as to why they didn't join the pack. How can you not join the pack? It's so obviously better.

Ben Hunt: [00:43:11](#) And it's particularly hard to grow that sort of business today because we live in a world where scale, it's stultifying. I mean, it's crazy. This world where if you don't have scale, it's so freaking hard to grow. Forget about growing, just to survive because you're just being squeezed in every possible direction. You're being squeezed by your clients, even if they're believers. You're being squeezed on the market side, you're being squeezed everywhere. And the only, the response to that, the rational begin business model response to that is to go from being a squeezee to a squeezer. And you achieve that through massive scale. It is so hard in, it's almost impossible to start and be your own man or own woman in this business today. The pressures, as you say, to toe the line, that could be the pressures that you're getting from your client.

Ben Hunt: [00:44:15](#) That can be the corporate pressures you have as being part of an enormous machine. It can be part of. I find often people think, "Oh, I'll go try to join a family office because they're I won't have the pressures of clients." Are you kidding me? Are you kidding me?

- Rodrigo: [00:44:29](#) Your risk just went up exponentially.
- Ben Hunt: [00:44:31](#) Oh my God. Or I'm going to work for a foundation or an endowment or a pension. It's the old Bob Dylan song. We all got to serve somebody. And the important thing is that the people you serve, frankly, be in your pack, that you don't have this instrumental relationship. And I find that a very difficult, if not impossible thing to achieve within the modern high-scale behemoth financial world that we have today. I can't recommend to my own kids that they go into this business. I just can't.
- Adam: [00:45:02](#) No. I mean you have to be obsessed with an insatiable curiosity about complex systems and you really do have to be a special kind of personality to want to go into this business now.
- Ben Hunt: [00:45:14](#) Yes. Special in air quotes. So right.
- Adam: [00:45:19](#) I wanted to continue to sort of nudging in the direction of kind of investment conversation. I'm interested in the fact that you sort of started writing what was extensively an investment blog. And you spent a great deal of your career working in investments. And I always found, because I started reading your material pretty well right off the bat when you started writing it, and I found very often that I would read through an article and you'd be making these terrific points. You'd be setting up this incredible framework of how to think about markets and think about the problem, but you would close a loop. And I think probably that was deliberate because I think you didn't want to be prescriptive. So, I'm going to do the uncomfortable thing. I'm going to ask you to try and close the loop.

Closing the Loop

- Adam: [00:46:09](#) And I want to anchor on ... And I'm trying to remember the exact term, but you used the words, I think, profound agnosticism, which really resonated with me. And I felt like there was ... You could have gone one step further there, and I'd love to know if you are pressed, what would that step be?
- Ben Hunt: [00:46:31](#) There are different ways. I'll describe kind of what I mean by this concept of profound agnosticism. And it's not as simple as it sounds. Just to say, "Oh yeah, you're really agnostic. You're really not predictive. You're really agnostic about stuff." Profound agnosticism means not just that I don't know the answer, but that I believe it is impossible to get the answer with a capital T and a capital A. It's not just difficult. It is impossible. And I've got different ways of approaching that. I wrote this note called The Three-Body Problem, which is this famous problem in geometry.
- Adam: [00:47:11](#) By the way, just to press pause on that. I assume because you wrote that missive around the time when The Three-Body Problem trilogy was emerging into sort of sci-fi culture. Assume you read that trilogy.

- Ben Hunt: [00:47:27](#) Favorite. The best. Certainly the best set of books I've read in the last 20 years.
- Adam: [00:47:32](#) So, parenthetically, there needs to be an entire other podcast about how we ... I share the exact same feeling about that trilogy and would love to sidebar on that for quite a while. So, just as a recommendation, you don't even need to be into sci-fi, but highly recommend that book series to virtually everyone
- Ben Hunt: [00:47:53](#) I'm going to mispronounce his name.
- Adam: [00:47:55](#) Cixin Liu.
- Ben Hunt: [00:47:56](#) Cixin Liu. I try to pronounce it, there's the Cixin part I don't know how to pronounce.
- Adam: [00:48:00](#) I'm probably wrong too.
- Ben Hunt: [00:48:01](#) But what's amazing about, first of all, it's the translation from the original Chinese to English is wonderful. For me it was so helpful in understanding and getting a glimpse and a window frankly into China today. There is a perspective that you find from reading the works of someone from another country and other culture. Our shared touch point is the plot, the science fiction plot here, which is brilliant and deep and regulatory and so many ways that we can do in a whole another podcast. And because it's written from this distinct Chinese perspective, that's another aspect of value to this trilogy, I think often goes unappreciated. So yes, there's that trilogy. It's this old mathematics problem. But at the core of the science fiction problem posed in the trilogy, at the core of this, it was called The Three-Body Problem that Henri Poincaré first set out in the 1800s is that there are certain, I'll call it, problems, certain questions.
- Ben Hunt: [00:49:14](#) Let's put that as certain questions you might have about the physical universe that you would think, "Oh, there's an app for that." "Oh, there's an algorithm for that." "There's a formula. Obviously, there must be a formula that gives me the answer to these very simple questions I might have against frankly about frankly very simple physical systems like three objects orbiting in space where I know everything about them. I know their mass, I know their position, I know their speed. I know their velocity, I know their vectors. I know everything about those three bodies." **And yet there is no formula. There is no algorithm.**
- Adam: [00:50:00](#) No analytical solution.
- Ben Hunt: [00:50:01](#) There is no closed form solution-
- Adam: [00:50:03](#) Exactly.
- Ben Hunt: [00:50:04](#) That I can say, "Okay, at some time T in the future, tell me the position of those three bodies." It does not exist. Now, and this is the profound agnosticism part in

what's really is a kind of a head wrapping exercise. We can't predict. There is no closed form solution. We can observe, we can calculate. It's hard for me the way that humans are, the reason I got into investing and the game of markets as I like to describe it was, "Oh, I'm going to come up with the answer. I want to come up with that closed form solution so I can make a shit load of money." And I think that's what motivates so many of what I'd call as coyotes, to use another animal reference where we're kind of too clever by half. But that's what drives the world man. It's the drive and the innovation and the-

- Adam: [00:50:57](#) To solve the problem.
- Ben Hunt: [00:50:58](#) To solve the problem. And what Poincaré is saying is, "Well actually, no, there is no answer." What we can do, and I get people who send me ... Because you get the Three Body problems sometimes comes up in articles in papers and journals and stuff, and people are saying, "Aha this article, the headline says Three Body problem solved." You look at it, what it is, it's a better computer system for calculating the future states of these three bodies.
- Rodrigo: [00:51:27](#) Probabilistically.
- Ben Hunt: [00:51:28](#) Probabilistically. And frankly you can get it within a margin of error that's incredibly small and the like. This is what massive computing processing power can do. It can observe and we can simulate the world. And there's so many implications of this of again, what I'm talking about profound agnosticism where it's not even that it's difficult to get the answer. The answer does not exist and I think the most important way, at least for me in which has changed my view of the markets and how to think about investing is that we have again embedded as with as human beings this model of the market as what I like to call a clockwork, and what Ray Dalio calls a machine. That is our mental model of what the market is. And I will tell you that is false. That mental model that we think of it as a clockwork, the gears, the parts. If X then Y.
- Ben Hunt: [00:52:29](#) That is a mental model of the closed form solution. I'll give you another model. A model we don't think of that way, but I think it's absolutely the model that's correct for markets. The market is a bonfire. The market is a bonfire. The hardest thing in computer games was always like, how do you generate waves? Or how do you generate firewater? Because they're both fluids.
- Adam: [00:52:54](#) And they're emergent.
- Ben Hunt: [00:52:55](#) They're emergent. There is no formula for a fire, but you can calculate a fire. And again it's that switch, is thinking about, okay, it's not a formula, but it is a calculation. That's what-
- Adam: [00:53:11](#) This is simulation, really. It's absolutely a simulation. You're walking it forward step-by-step because you don't know what the future is until you walk it forward.

- Ben Hunt: [00:53:20](#) What is the purpose for the supercomputers, the most biggest and fastest super computers in the world? The purpose they're built by the department of energy. Why? They are built to simulate nuclear bomb explosions. That has been the driving purpose, not just in the United States, but for the development of the biggest and best supercomputers, to simulate nuclear explosions. To simulate fire. This should be our mental model of markets, not as a clockwork, not as a set of closed form solutions, but instead these dynamic emergent systems, we should know more. Think that we can predict the shape of this, the sparks of a bonfire would be. We'd never even think to try that. What we would think to do is, "Okay, if that spark is in position X, Y, Z on this coordinate and I know everything about the system, is there a computer that can tell me at in one millisecond from now where that spark would be?" Absolutely.
- Ben Hunt: [00:54:25](#) That's what I mean about calculating. And that's what we do with simulations. That's what we do with the supercomputers to test nuclear explosions. It's a very different model, mental model, and we can go down so many different paths on this, but I think that the future of our understanding of markets and being effective investors is to change our mental model of what's possible in our analysis of markets, and it starts with this concept of profound agnosticism, that not only is it hard or difficult to come up with the answer, the answer does not exist.
- Adam: [00:55:05](#) So, you're still being slippery. I'm going to go one level deeper here, because I think it's even more complex and I know you agree, but it's even more complex than the bonfire because the bonfire's behavior doesn't change by virtue of a person being able to model its behavior. So what's so interesting about markets is it is both emergent and complex, but it's also affected by how people choose to try to solve the problem and understand it.
- Ben Hunt: [00:55:34](#) To understand it. That's true. This is the reflexivity that George Soros talks about.
- Adam: [00:55:37](#) 100%.
- Ben Hunt: [00:55:37](#) And Soros is the one I usually quote when I'm talking about profound agnosticism, because Soros has got a great quote. And I wish I could do the accent, but I really can't. So I'll just do it straight in my kind of weird Southern boy's, been in Connecticut for 20 years accent, so he was asked, I don't think this was around the British pound escapades for sure as I think it was another currency. Maybe it was the Thai Bhat or something like that. But somebody was asking him, because Soros was giving his analysis of currency situation why he had the positions that he did, and somebody asked him, "Well, how do you say that? How can you predict something like that?" He said in his gravity always, "Young man, I'm not predicting, I'm observing." I'm not predicting, I'm observing. And that has just hit home for me so many times. That is what we should be doing. I'm really not trying to be slippery here.
- Adam: [00:56:30](#) No, I know.

- Ben Hunt: [00:56:31](#) With the analysis.
- Adam: [00:56:32](#) I think really what you did is sort of define profound agnosticism, why we should embrace that perspective. And so, I'm just going to drill one level down and sort of say, well, what practical steps can investors take? How can they create a framework for allocating capital that is consistent with the view of profound agnosticism?

Agnostic Allocating

- Ben Hunt: [00:56:53](#) So, this is one reason why I'm a big fan of, let's put it in that kind of bucket of let's call it risk parity strategies, where there is a profound agnosticism to ... And again, we can, if you guys want to, because you guys are-
- Adam: [00:57:10](#) 100% want to.
- Ben Hunt: [00:57:12](#) So well versed in this whole world of what risk parity means. But at its core, what risk parity means is, I'm going to observe, I'm going to react. I'm going to react systematically. But I am not predicting, I am not saying, "Oh, I think the world is going to look like X six months from now, and so I want to position myself for that." There is a profound agnosticism. This gets back to our notion of why it's so hard, I think, to build a business around risk parity. I've experienced that firsthand. You guys have experienced that firsthand. Risk parity in whatever flavor or form you're talking about doing it is at its core, a reactive approach to markets. And so, when you're trying to describe that to your clients, your clients want you to have a view. I'm paying you because like you're saying Rodrigo, this is what you do full time, and I'm trusting you with this.
- Ben Hunt: [00:58:13](#) So, I'm trusting your view of the world. I want you to predict that's your edge. You've got this prediction, this view about the world and I think it's likely to be correct, and so I'm giving you money. And you're saying what you are saying with a risk parity strategy as, I don't have a view. I don't know. I freaking don't know what the future is going to be. What I want to try to do though with the strategies I'm going to try to, I'll say, harvest what I can from the world's markets in as efficient away as I can.
- Adam: [00:58:47](#) But I'm in the business of observing, not predicting.
- Ben Hunt: [00:58:51](#) And the idea of maximum diversification and like Bernstein said, the diversification is an explicit recognition of our ignorance. That's it.
- Adam: [00:58:59](#) What's so amazing to us is that we don't really do this much anymore because we don't really prioritize the conversation around a pure risk parity strategy anymore. But we don't because that was never something that was bought. It's the most incredible experience to walk through a presentation that gives all the reasons why we should maintain this view of profound agnosticism. So, go through all the

examples of market forecasters and how they've been worse than random. All of Tetlock's work about how it's not unique to markets, but it's true in all these other complex fields, extra political judgment. Talk about the Fed's forecast of interest rates. They set interest rates. They can't even predict the direction of rates six months hence. So you go through all of these different examples why markets can't be predicted. You build this framework for this profoundly agnostic portfolio, this global risk parity portfolio.

- Adam: [01:00:02](#) You demonstrate its empirical efficacy over, whatever, 100 years. And all the while a person is nodding along, they're getting it, they're making the right noises. This is clearly something that they're connecting with. And at the end, "So, what do you think is the best course of action?" "Well, yeah, this seems smart. But that's not for me."
- Adam: [01:00:26](#) This is when you fire them and walk away.
- Ben Hunt: [01:00:28](#) Pull on that thread for me, what's going on there?
- Adam: [01:00:30](#) So, let's do the counter example. Let's think of the, an example of an incredibly successful from a business perspective, risk parity strategy. Let's talk about Bridgewater for a second, and the All Weather Fund. Enormous fund. The point of bringing this up is not to dig into the particulars of Bridgewater. Bridgewater, all that you describe, the modeling and here is the examples, and doesn't that make sense? And here's examples from other fields and all that aha, aha. That's not why institutions put money with Bridgewater, is it?
- Adam: [01:01:06](#) No, it's no one ever got fired for buying IBM.
- Ben Hunt: [01:01:08](#) Well, I think it's actually even more than that, because there is, I'm going to call it, again, a mythology. And I don't mean to say that this is false. I mean mythology in the technical sense. There's a narrative, there's a story, there's a mythology around Bridgewater. There's an origin story for Bridgewater with Ray sitting, in his apartment and writing his daily observations. There's the mythology of, "Oh my God, it's these market monks who are the smartest people in the world." The mythology around Bridgewater is that it's the biggest and they're the smartest, which is a little different from IBM. IBM was the biggest and they were the behemoth, but the mythology around IBM was never, "Oh my God, these are the ninja monk warriors of brilliance."
- Adam: [01:01:56](#) I have to take your word for it. I know they certainly aren't now. I wonder if they were in their 60s. But anyways.
- Ben Hunt: [01:02:00](#) No, they were just the behemoth. There is this mythology around Bridgewater and that's why it works for them. There's a mythology around AQR, frankly, let's call it for that. Our business again is what story are you telling to your clients, and what gives them that warm and fuzzy feeling that you are the person to give their money

to, because you've told them, I don't have a view. You've told them. "I'm not a wizard." And yet Bridgewater and AQR are based on the notion that there is a wizard.

- Rodrigo: [01:02:38](#) But there's also the reality that they are not selling extreme agnosticism. They're slipping in, they're active in charging a ton of money and saying, "Hey, you can do the risk parity thing, but risk parity plus my genius is where it's at." And that's what AQR has done. It's what everybody needs to do to thrive. And even AQR has it ... We've spoken to the guys at AQR. The worst selling product is risk parity.
- Adam: [01:03:05](#) Oh, absolutely. And yet all the principals, that's their core holding.
- Rodrigo: [01:03:08](#) Yeah, well certainly the origin story of Ray Dalio whether it was, "When I die, I trust nobody to manage my money actively and therefore what is the most agnostic way to manage where nobody can screw it up?" And it comes down to risk parity. But ultimately to run a business it needs to be tied into this idea that there's a machine that can be solved.
- Ben Hunt: [01:03:31](#) I think I may have mentioned this to you guys before. I used to be this kind of weak form negativist where I thought that, "Oh, well, narratives are important." But it's really whether it's the fundamentals of the security of a company and the market, or whether it's the fundamentals of my business plan that matters. Then I became a semi strong negativist meaning that, well, these narratives are kind of a lot. These stories and origin stories are a lot more important than I thought they were, and they go on for a really long time. But I still think that ultimately it's the merits of my strategy, the empirical evidence I can show, honest to God, I've now become a strong foreign narrativist to say that if it doesn't exist in story, it doesn't exist, not in our real world. And I go back and forth on, "Well, what does one do about that?"
- Ben Hunt: [01:04:19](#) Fortunately, I think, and I think you guys are living proof of this, is that to have a life that is self-sustaining, and I mean that in both the economic sense and, I'll call it philosophical sense, but I really mean that in an emotional sense. Self-sustaining. It is possible to construct that and to find your pack of people who believe in your story because there's a meta-level to this. So presenting the empiricism, the research and being so transparent about, "Here is what we do." That is in itself a story. It's not appealing. It doesn't have the mass appeal of the wizard story that Dalio used that people crave. But it is a story and you will find your pack and you again can make a business that is both self-sustaining economically and emotionally. It will not, however, it will never, ever, never scale to a really big thing. And if that's what you need for fulfillment, then you got to find a different path.
- Rodrigo: [01:05:29](#) In this business throughout the last 10 years, one of the biggest frustrations I see from asset managers is this idea that the markets are rigged. You just can't make money looking at fundamentals, which is the way it should be, and yet they continue to bang their heads against the wall trying to find that quality company that has all the right numbers that is going to get them ... Someday it's going to

end. But I think what you've accomplished, I want to actually talk about the clustering.

Clustering

- Ben Hunt: [01:05:58](#) Sure.
- Rodrigo: [01:05:58](#) I think you've been able to cross that chasm to the other side, becoming a strong foreign negativist where it's not about whether it's right or wrong that the market is rigged. It's what you can do even though the market is rigged by following those narratives and trying to find solutions to that Three Body problem that you can observe and react to. And so, instead of looking at company fundamentals you're now having to follow the fiat news, and see what's-
- Ben Hunt: [01:06:28](#) So, here's the way I like to think about it. So, I understand why ... I'm not picking on Ray Dalio. But I understand both the appeal of this model of the economic machine and thinking of markets as a clockwork. I understand why that's such an attractive mental model for us to have. I also understand why it's been successful because in most periods of time, no circumstances. It works. It works. The connection or the analog I'd like to draw is between Newtonian physics and Einsteinian physics. Newtonian physics is essentially a model of the universe, or physics that is a clockwork. That is Newtonian physics. And under almost all real world circumstances it works. I can give you another example. My avatar on Twitter is Ptolemy, the most famously wrong, misguided scientist of all time.
- Ben Hunt: [01:07:28](#) It says he's going to go by and wink at this stuff. But the fact is, is that if your need, is to sail your ship from Ostia to Piraeus on the Mediterranean in 300 AD-
- Adam: [01:07:44](#) Newtonian mechanics we'll do a really good job with that.
- Ben Hunt: [01:07:47](#) Newtonian mechanics will do just fine and Ptolemaic astronomy will do just fine, just fine.
- Rodrigo: [01:07:53](#) His understanding and theory of why it worked was totally wrong, but it got you from point A to point B.
- Ben Hunt: [01:07:59](#) That's your point A to point B. And to bring it forward to, well, what did Einstein do? Well, he said, well actually, I'll call it kind of edge cases, like when you get close to the speed of light, Newtonian physics. Right out the window. If you're on a starship and you're trying to understand the world and you're mired in your clockwork analogy and your Newtonian physics it ain't going to work for you. It just ain't going to work for you. And so, that's what I like to think of my view of, again, I'm going to call it narrative world. The stories we tell. And what I mean by being a strong form narrative, where it's all story all the time. Is that most times the story world, which is kind of encompassing of clockwork world, most of the time Einsteinian physics doesn't come into play. But everything that is in Newtonian

physics is incorporated in Einsteinian physics and it also explains what's going on when you get into these really bizarre times, on extreme cases.

Ben Hunt: [01:09:05](#) We're in one of those extreme cases. We've been in one of these extreme cases since the great financial crisis and the policy reactions to that. It's not that Newtonian physics is wrong ever. It's never wrong. It's whether it's more or less useful and this model of markets as a clockwork, this mental model we have at the market and not just the mental model, the actual investment models that we have are not very useful in these conditions that we're in. So, what I'm trying to do in my research is to say, "Look, there is a layer above and beyond the clockwork model." And we now have tools to both visualize and measure that story world, narrative world, whatever you want to call it. The translation between us as investment professionals and the real world is always this layer of story and how it's being presented to us.

Ben Hunt: [01:10:06](#) So, that's my focus. It starts at the kind of this big level of, all right, you've been living in the Newtonian world. We're in this Einsteinian, this relativistic world now. And so we've got to expand our purview to get that, our tool set to survive and to manage other people's money effectively. That's what I'm trying to do.

Adam: [01:10:28](#) And so, you've got this tool, what do you call it?

Ben Hunt: [01:10:31](#) Well, it's not my tool.

Adam: [01:10:32](#) It's a tool that you use and you use I think to great effect. And it's very interesting.

Ben Hunt: [01:10:37](#) It's like so much of science. It's a very old idea and it's called natural language processing, NLP. And this is stuff I was doing 30 years ago. This has been my professional career and all of its different incarnations. Academia, software companies. Now investing world. And the idea is, well how do we understand what we'll call unstructured data. It means if it doesn't live in a database, it's not something that you're getting off of a spreadsheet. It's the messages, the words, the text, the signals that we receive as a social animal tens of thousands of times a day. And what it means naturally means we take it as it is. We're not imposing some form of structure on these texts. We actually talk about it in terms of a bag of text, an article or a transcript. Think of it as a bag of text, a jumble of words and grammatical structures. And what we want to do is we want to compare the words and grammatical structures of one bag of text with the words and grammatical structures of lots of other bags of text.

Ben Hunt: [01:11:51](#) Again, 30 years ago I was hiring undergrads to go look at microfiche and read newspaper articles and then write down a summary and transcribe. And I'd go to this, it was literally a Fortran where it was on a digital equipment mini frame for if there's anyone listening to this who remembers that company Digital Equipment. Two things have changed to revolutionize this approach to understanding unstructured data. The first is, I'll call it big data, so now it's not sending in

undergrads to read microfiche. You can literally tap into the Dow Jones, you tap into the LexisNexis feed. It's all there. All of it is just there. Tens of thousands of bags of text every day. The second, but actually the more important thing that's changed is not big data but what I'll call big compute.

- Ben Hunt: [01:12:46](#) So, the ability to plug into the wall and get as much processing power as I want from AWS, from Azure to apply tens of thousands of microprocessors to a problem and in exactly the same way that I plug into the wall and get electricity. That's been the biggest change because what you have to understand is that natural language processing is not AI. It's not machine learning. It is brute force mathematical comparisons of words and grammatical structures.
- Adam: [01:13:19](#) That's the case to make that it's a form of unsupervised learning, especially the way they use it for the clusters that you build and, and that sort of thing.
- Ben Hunt: [01:13:26](#) But you can apply kind of layers of that on top of it. I'll say particularly in the interpretation and to design a, I'll call it kind of an executive-
- Adam: [01:13:37](#) Topology almost of the narrative.
- Ben Hunt: [01:13:40](#) What you might want doing, because you're not predicting, you're calculating, observing and this is the way that I think that most effective AI programs worked. So, the AI program that wins Go Tournaments is not one single massive superhuman brain. That's not how it works. You have an executive function module, you have the short term calculation module or engine. You have medium term to intermediate term. So, there is particularly in that executive function module of an AI, there is supervised learning and the like that you can do to try to improve your play of the game. What I'm talking about though is just the engine here is a brute force. I'm comparing this word to that word. It's a factorial when you're comparing everything to everything else. So, the numbers get crazy large, crazy fast. So, quick example. I've got 1000 articles. Each article has 1000 words. That actually a small set to look at.
- Ben Hunt: [01:14:43](#) That's 1000 factorial. That's half a trillion calculations. And what's possible today and this is what's truly revolutionary is I can plug into the wall effectively, and I can calculate that I'm snapping my fingers right now. It takes me about two seconds to compare all of those words and grammatical structures. And the output from that is a freaking enormous matrix of all the linguistic relationships between every article and every other article. And on top of that, then you apply ... There's nothing new under the sun. These are old matrix algebra techniques then of ... Essentially you're finding the shortest distance between ... That's one of the major calculations you're making is the shortest distance between those relationship connections between what we'll call the nodes of this gigantic matrix, and again because you're able to tap into AWS or Azure. You're able to do it like that.

- Ben Hunt: [01:15:42](#) It's a different kind of math than I think most quants are used to in markets, which is why I think we, and here I'm talking about my company. I think we're doing some interesting stuff because it's stuff that's been on forever, a matrix algebra. But it is a new thing in our world of investing.
- Adam: [01:16:00](#) And what are you deriving? How are you using the information?
- Ben Hunt: [01:16:02](#) Well, so the first thing to understand is that, again, it's not predictive. In and of itself there's nothing predictive here. It is not ... And this is so important. It's not an input into your regression. Which is why this whole approach, I think some of the smartest, most brilliant quants I know are at places like Two Sigma or DE Shaw. And they use natural language processing, but in a very different way. So, if it can't generate an output that can be put into this, whatever relative value model they're doing that they've regressed out to say, "Okay, here's what we want to do." It could be interesting, but it doesn't fit for them. It doesn't fit their business model. So, the way we're approaching this and the sort of calculations we're making these relationships of, we tried to do both visualizations and then measurements of the structure again of what I'll call narrative world, all these messages that immerse us.
- Ben Hunt: [01:16:58](#) It is not something that you crank through a regression model. And that I find is the biggest barrier I have when I'm talking about this with like somebody at a Two Sigma or DE Shaw. Really very excellent quants and really understand this, but it's very different from how we've approached, I'll say the quantitative exercise in the past. Where I think it is really useful though is in seeing the bonfire. It's in seeing the dynamics of this because you can see these, again I'll call them clusters. The typical mathematical transformation you make on this is that you think about the shared linguistics as essentially the equivalent of a gravitational pull. So, when I talked about shortest distance, that's another way to think about basically gravity. And so, in these visualizations you get these like star charts, because they look like a galaxy with like clusters of stars here and cluster of stars there.
- Ben Hunt: [01:17:59](#) And I liked that analogy because really the intuition here is that to think about the shared linguistic characteristics as being like a gravitational pull and like the Three Body problem in astronomy and geometry, you're not evaluating this because you're going to say, "Aha, I'm going to use that as an input to create my model, my clockwork model of what's happening next." I don't know what's going to happen next. I don't know what narratives are going to come up and the like, but I can tell you that I can now react. I can observe these narratives. I can tell you how these narratives impact our human behavior as investors or as voters and then I can invest or analyze on that basis. It's a very different way of looking at it. It really is a way of thinking about the world as a bonfire where I have no chance of predicting what this fire is going ... What this narrative world is going to look like a week from now. I don't know.

Ben Hunt: [01:19:13](#) But that doesn't mean that I can't interact with the world so much better for seeing the world as it is through this new lens and understanding how these narratives are like their own life form. We talked about memes. That's the notion of a meme that it's like a living thing that it propagates. It's like a virus. What we're seeing here, you think of these narrative clusters and this narrative visualization is like a microscope. We're actually able to see memes. And we know how they impact us and it changes your whole take on what's happening in the world. It's like suddenly beginning that, "Oh, I can now see ultraviolet."

Rodrigo: [01:19:56](#) So, I want to pull on that thread a little bit. So it's like the random walk, the best prediction of tomorrow's price is today's price. You're not predicting, you're observing and then you're reacting. I want to-

Reacting vs Predicting

Ben Hunt: [01:20:05](#) And I can recalculate.

Rodrigo: [01:20:06](#) And recalculate. I want to get into that a little bit. So is the utility of it useful intellectually so that you can have a conversation and have a narrative for your clients and know what to talk about? Or is there an investment utility of knowing what that cluster represents right now and acting on that?

Ben Hunt: [01:20:26](#) So, what we want and what I want is to be able to say, and I think I can say this in some respects, all right, what I'm seeing here is a signal, the bridge here, when this kind of narrative is coming up and it's got this sort of life cycle that's got a life history to it that's going to impact investors in a certain way. And let's get in front of that. Let's get in front of that. And that's absolutely possible. Absolutely possible. Because the business model of Wall Street is why we call it the sell side, the business model is to sell. And to sell they have to construct and promote and distribute memes, ideas, stories, narratives. What's your best idea? Every active manager in the world. I was going, "What's your best idea?" And this is what Wall Street, the business of Wall Street is built on this. And so, you can literally see these quote/unquote best ideas, buy, buy, buy on financial sector.

Ben Hunt: [01:21:30](#) You can see that narrative born, grow, live sometimes multiply into different variations of that theme and then die.

Rodrigo: [01:21:41](#) What's interesting about that is that it is almost like a self-fulfilling prophecy. It's not the best idea. The best idea is one that's just the best idea. What they're creating is an idea that requires buying, and buying requires clustering of narrative so that when they talk to their three sales side guys they're all kind of saying the same thing and then they agree I'm in, but they've created this flow, I imagine.

Ben Hunt: [01:22:05](#) The weirdness of this to me is when you force me to watch something like CNBC, which we started off this conversation-

- Rodrigo: [01:22:12](#) God, who would force you to do that?
- Ben Hunt: [01:22:13](#) I feel like it's my job. We started off talking about how CNBC, 24/7 you have to find the programming. That's the business model. And so, how do you fill that programming by bringing in people to give their stories. And the goal of everyone who goes on CNBC is that their story becomes a narrative. Everyone that goes on CNBC has got a little snowball at the top of the hill and they're hoping that their snowball gets picked up by others and that that ultimately becomes a really big snowball. Then it becomes a narrative. That's the business model. What's so weird to me is that they bring in a lot of people to CNBC, including some of their regulars who their big shtick is all right, and is a shtick I agree with that, well, no, you don't want to be picking stocks. You just want to be in the market. You want to harvest these risk premia. We never used that word because that would be crazy, right?
- Ben Hunt: [01:23:05](#) You want to own the market and yet they're on a show where then they say, "Oh yeah, and my best idea is X, Y, Z company." It's like, come on guy.
- Adam: [01:23:14](#) We have to embrace that cognitive dissonance a few times too. When we go on BNN and it's not really our shtick to give individual sector or ETF advice, but that's what the people demand.
- Ben Hunt: [01:23:28](#) **That's what they demand because that is the business model.** That's the business model. So you can't get away from that because that is the business model. So long as that effort is being made, no one's going to care about what I'm talking about here. This is the way our business works. The creation of stories, because again, this is why we call it the sell side. You got to have something to sell. If everybody says, "Okay, I'm going on the market, I'm going to go home now." There's no reason for CNBC to exist. There's no reason for a Wall Street firm to exist. You have to create narrative demand to do something. And that's what I think we're picking up here.
- Rodrigo: [01:24:12](#) Very interesting. We were looking at the clusters last night. You would show us periods where these clusters of stars would be very disperse. And one of the things you said was, in these disperse areas where there's a very narrow set of knowledge about Russian-
- Ben Hunt: [01:24:31](#) German Nat Gas trading, those examples.
- Rodrigo: [01:24:34](#) Where there is a value of being that fundamental manner, they're just seeking truth outside of narrative that where actually fundamentals matter. And then this transitions into a global story that dominates all the narrative and it's a risk on risk off when those satellite systems become one glob of one narrative moving everything, at which point that manager that had the fundamentals-
- Ben Hunt: [01:25:01](#) It doesn't matter.

- Rodrigo: [01:25:01](#) ... it doesn't matter. He needs to move towards, "Okay, well we're in a narrative system now. Forget about the fundamentals that's called risk on or risk off," whatever that is.
- Ben Hunt: [01:25:09](#) And listen, that is active management writ large for the last 10 years. That is the failure of active discretionary management. It's not that, and I'm including myself in this. I was an active discretionary manager, long-short manager. And we didn't get dumb. It's that our models are based on Newtonian physics. Where if we're left alone, meaning if there is not an overarching dominant narrative or story that's being-
- Rodrigo: [01:25:37](#) An agenda that's being pushed.
- Ben Hunt: [01:25:39](#) ... pushed onto us, we'll do fine. We'll do fine, because we'll do all this work and we'll think really hard and really smart guys and girls. And that worked for a lot of years. That's how Newtonian physics works. We knew our little piece of the clockwork. And when that changed in the aftermath of the great financial crisis, all of our smarts, all of our time, all of our effort, it's been for bupkis.
- Adam: [01:26:07](#) So, I think we all agree that the market's changed, that people in this room believe that the market as we used to think about the market is broken. But I think we also agree that as you've moved on from being sort of a professional investor, but I think you would still agree that if you do continue to hold yourself out as a professional investor that it is not sufficient to use the fact that the market is, let's call it broken, as an excuse for why you're not delivering value.
- Ben Hunt: [01:26:44](#) Right on brother. And frankly it's the tension that so many smart people have with the market as it is, which is that I know everything there is to know about ... We were talking about Russian ... I'm a Nat Gas trader and I know everything there is to know about this particular market that I trade. It's not fair. It's not right that that knowledge and that investment in that, the smarts that I'm defending, that it's not fair that it doesn't matter anymore for price, but it is. So, what you have to do, what one must do is adapt or go do something else. We'll go on to do something else. I've gone to do something else. It is impossible for me to reconcile what I know is necessary to be a good steward of other people's money, which is to play along with the game. That's what's required since I'm fortunate enough to have, to have something else to do so that I don't have to do this, so I ain't going to do it.
- Adam: [01:27:51](#) I fundamentally identify with that journey. I remember coming out of 2008 and having been completely immersed and obsessed with what was happening and with the fundamentals of the problem, the fundamentals of the cracks in the balance sheets of the banks, the cracks in the mortgage market, etcetera, getting a lot of those bets right and then having the authority step in and completely change the game. And that was a shattering experience for me. And I was really, really angry for a really long time and just sort of going back to being no fun at

dinner parties. And I remember being that guy who was saying, "This is a broken system." And they are now taking steps to kick the can on the broken system. And I was just incensed and there was an existential question for me, am I going to go do something else?

Adam: [01:28:59](#) And I very seriously contemplated it. And somebody recommended to me, "Listen, you've got a lot to say on this. You're clearly very well versed in what's happening. You should write about it." That was the motivation for me to start the blog and it was absolutely cathartic. And what it allowed me to do is by virtue of expression and sharing and finding a pack that way is now I can be open to other ways of thinking, open to new ideas. Then it was, "Wow." I discover Philip Tetlock, I discover systematic thinking." And it opens up an entire new set of possibilities that 10 years later has led to what we've currently built, which is really fun and I think really legitimate and is able to successfully navigate the current environment. But I had to reinvent myself to be able to do that. It was not possible for me to do it with the old framework that I was operating.

Rodrigo: [01:30:08](#) You were a Newtonian and that process allowed you to move towards Einstein's theories. And I think what you're accomplishing right now with your narrative, with the work that you're doing is you're grabbing a bunch of Newtonians that are at that point of giving up. Because what happens is we never stop talking about how unfair it is that the market is rigged. We just know that but play the game for the success of our clients, which is satisfying. And there's nothing satisfying about being fundamentally right that it's rigged and it sucks and not completing your duties for your clients. It's just, it's soul crushing. And so, what you're doing this transition from, "Hey, Newtonians, we need to move to this other place. You have to accept it. It may be unfair, but it is. It's not right. It's not wrong." It may be wrong, like you said, but it makes me sad. It's sad.

Adam: [01:31:03](#) Absolutely. Yes, and it still does and I avoid having these conversations.

Rodrigo: [01:31:07](#) Oh my God.

Adam: [01:31:07](#) Because it continues to make me angry.

Rodrigo: [01:31:09](#) I cannot share global macro narratives with Adam most of the time. It's like if I get into this, they will just ... I can't.

Ben Hunt: [01:31:15](#) And it makes me even sadder when we get beyond market world. We start talking about our political lives for sure. I'll tell you, you see it's a conversation I've had on a couple of podcasts and other people around of all things Bitcoin, because there's another group that knows this notion of shaking your hand at the clouds. Shouting at the clouds as the Simpsons memes shows. And that's gold bugs, let's call them that. And I'm so sympathetic to the, I'll call it the true believers in gold. I'm very sympathetic to that. But what I keep coming back to, particularly the devote's, let's call it a physical gold. It's a miserable way to live. It's a miserable way to live. And

I see that happening in the Bitcoin community when the positive energy around Bitcoin was being transferred to, "Oh, it's digital gold. It's a store of value."

- Ben Hunt: [01:32:20](#) And you see them being really Balkanize. You see them being ghettoized in the same way the gold believers have been ghettoized by mainstream media, by economics professionals, by the investment business. And you may be right, but it's a miserable way to live to be in a very real sense, hoping to be proved right through a terrible economic collapse. It's just a miserable way to live, and it can turn you into a miserable person. It's hard because so many of us have spent so much effort and time and really our lives trying to figure out the puzzle to master our little piece of the Newtonian physics clockwork. And then to have it not matter, it's hard. It can make you bitter. And that's where Neb Tnuh came from, was the bitterness I was feeling at the way my world had changed over seven or eight years in slow incremental fashion until one day you wake up and you think, "I'm not the same person that I was, and I need to get Ben Hunt back and leave Neb Tnuh behind."
- Rodrigo: [01:33:31](#) Last night we were at a dinner that was hosted by Walter Asset Management. This is a Toronto hedge fund firm. Awesome firm. Very successful and clearly you have a strong relationship with them. This dinner came about, it was 30 of us, roughly. And it came about from a letter that you wrote a few months back saying, "I want to continue to expand this pack idea." And I'd love you to tell us a little bit about what you're trying to do there. Let everybody know what the concept is and how you're trying to help because this is all about from the Newtonian physics to what we spoke about in the beginning. What's your mission right now?
- Ben Hunt: [01:34:06](#) This is true for your guys' podcast and the stuff I do with Epsilon Theory. There is a hunger for people to know that they're not alone. I've told the story a lot, but it bears repeating. I started writing Epsilon Theory six and a half, seven years ago. And I sent out the first note to about 100 people. We'd never done any marketing. We've never done any pushing on this, never bought any ... Nothing of that. And so, purely through word of mouth we've got 100,000 people now that are signed up for the email. I think I'm a pretty good writer. I think I was a really good portfolio manager. I think I'm a better writer, frankly. But that's not why it's striking a chord. It's striking a chord because there are so many of us out there. We just don't know if the person sitting next to us is part of our pack.
- Ben Hunt: [01:35:00](#) And so, what I'm trying to do is I'm trying to make it easier for people to self identify frankly as one of these people who's trying to make their way in the world but is not part of the flock. It's not a part of the flock.
- Rodrigo: [01:35:15](#) And just on that note, what I found really refreshing last night is at the end we ended up with a table of six, seven. And it wasn't just Ben speaking saying things, everybody nodding and saying, "Alleluia, amen." There was pushback. There was differing opinions. There was like you said, a safe space-

- Ben Hunt: [01:35:36](#) That's what a pack is.
- Rodrigo: [01:35:36](#) ... to argue to get closer to the truth, whatever your truth is.
- Ben Hunt: [01:35:42](#) Well, it's possible to disagree vehemently on things. But because you see that person not as a means to an end, but as a full hearted human being just like you are, that you can engage with that person with full hearts. Meanings, "I think you're a great person. I just disagree with you on this." And we can talk about it. And I don't have to convince you and you don't have to convince me, and that's okay. It's freaking okay.
- Rodrigo: [01:36:11](#) You don't have an agenda.
- Ben Hunt: [01:36:13](#) Yeah, right. I'm not using you. I don't need you to buy into this because I need you to buy something for me or I need you to vote for me or I need you to ... Or if you're not willing to do that you're on the other side. So, I do a lot of traveling. Whenever I go to a city or a town or whatever, I try to get a group together. It's almost always around a meal or drinks because that's an important part of this sort of personal connection, is to break bread. There's a reason that phrase exists. It's really true. And to let people make a physical connection with other people in their geographic area so you know, "Oh, you're part of the pack, you're part of the pack." I don't have to go through the difficult process of leaving yourself open to get hit and taking in a loss to find out if you are one of us. By coming here I can extend trust to you that I can disagree with you.
- Ben Hunt: [01:37:11](#) We can have an open conversation about anything, and we're not going to think you're a bad person. You're not ever going to get canceled. So, to mention this note, look, anybody puts together 20 people, town cities and where I'll be there, I'll be there. Because at least at this stage I think it's helpful for me to be there in person and kind of to get the ball rolling. But what we've seen now in LA, in Chicago and Milwaukee and Boston and I hope now Toronto is that these packs they have a life of their own. They grow.
- Rodrigo: [01:37:42](#) They don't need you anymore.
- Ben Hunt: [01:37:44](#) They don't need me anymore. That's what it's really great. They don't need me anymore. And I'm telling you guys, this is how the world changes. It's slow. It's frustratingly slow a lot of times, but it really is how things change. So we're like fight club except in this case-
- Adam: [01:38:03](#) You're encouraged to talk
- Ben Hunt: [01:38:04](#) You're encouraged to talk about it.
- Rodrigo: [01:38:06](#) Let's talk about it.

Ben Hunt: [01:38:07](#) Let's talk about it.

Adam: [01:38:08](#) Well, I think that was absolutely tremendous. I'm hoping that we can go to lunch and be able to chat about The Three Body Problem book. But I don't know. You might have to go before we get a chance, but we'll have to do it another time.

Ben Hunt: [01:38:20](#) Well, I'll do this anytime. This was fantastic. Thank you.

Rodrigo: [01:38:23](#) Thank you Ben.

Adam: [01:38:23](#) We really appreciate it. Thank you.

Rodrigo: [01:38:24](#) That was an awesome conversation. Thank you. Bye.

Speaker 1: [01:38:29](#) Thank you for listening to the Gestalt University podcast. You will find all the information we highlighted in this episode in the show notes at investresolve.com/blog. You can also learn more about ReSolve's approach to investing by going to our website and research blog at investresolve.com, where you will find over 200 articles that cover a wide array of important topics in the area of investing. We also encourage you to engage with the whole team on Twitter by searching the handle [@InvestReSolve](https://twitter.com/InvestReSolve), and hitting the follow button. If you're enjoying the series, please take the time to share us with your friends through email, social media. And if you really learned something new and believe that our podcast would be helpful to others, we would be incredibly grateful if you could leave us a review on iTunes. Thanks again, and see you next time.