

# **The Tim Ferriss Show Transcripts**

## **Episode 55: Pavel Tsatsouline**

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Tim Ferriss: Why don't you – Pavel, if you don't mind, just tell me about what you had for breakfast this morning as a sound check.

Pavel Tsatsouline: Sound check. Breakfast. Coffee.

Tim Ferriss: Okay.

Hello ladies and gentlemen, this is Tim Ferriss, and welcome to another episode of the Tim Ferriss Show, where of course, I try to deconstruct world class performers, whether they be billionaire investors, chess prodigies, athletes, and everything in between, to pull apart, tease out the tactics, tools, and resources that you can use. And this episode was a real treat. I had so much fun with this. It was easily one of the most enlightening and lucid conversations about physical training I've ever had. And we covered everything, meaning strength, flexibility, endurance, and beyond. And my guest is none other than Pavel Tsatsouline, and yes, that is how you say it. He is chairman of StrongFirst Inc., and was born in Minks. Not Minks, Minsk. I always have so much trouble saying that. Not that I say it that much. USSR, former USSR, which is now part of Belarus. In the 1980s, he was a physical training instructor for Spetnas. That's also another one I want to mispronounce always. It's not Spetsnas, it's Spetnas, the elite Soviet Special Forces unit.

Pavel is now subject matter expert to the US Marine Core, US Secret Service, and the US Navy Seals, and he is also – perhaps you know this, or not – he is widely credited with introducing the kettle bell to the United States. The ubiquitous kettle bell, which is called kettle ball by almost everyone – maybe that should be changed. Make things easier. In any case, over the last several years, Pavel has become a friend of mine. I'm honored to call him a friend. And his input was critical to the success, and many of the experiments of, The Four Hour Body. Whether you have heard of him or not, stick with this interview. Prepare to have your mind blown, and I really don't say that lightly. You are gonna enjoy this, and you'll have a lot to take notes on. And there will of course be tons in the show notes at

fourhourworkweek.com/podcast. But without further ado, here we go. Please meet Pavel Tsatsouline.

Pavel, welcome to the show.

Pavel Tsatsouline: Thank you, Tim.

Tim Ferriss: I'm so thrilled to have you, and I thought we would start with the answer to a question that I ask all of my guests, which is how do you pronounce your name properly?

Pavel Tsatsouline: Pavel Tsatsouline.

Tim Ferriss: Tsatsouline. And –

Pavel Tsatsouline: That's right.

Tim Ferriss: And you'd mentioned before we came on what you tell people at Starbucks if you order coffee. And what is that?

Pavel Tsatsouline: It just has to be Pablo. Coffee for Pablo. There is no other way.

Tim Ferriss: And I've really admired your work and expertise, and also just your method of teaching, quite frankly, for so many years. And I was having trouble piecing together how we first came in contact. Of course, I was well aware of your work prior to us having any direct contact. But do you recall how we came to know each other?

Pavel Tsatsouline: Yes I do, Tim. As you, I am a big fan of simplicity in my life, and different aspects of my life. And Four Hour Work Week really resonated with me. And at that point, I remember writing an article, and I entitled that article "Ferris Bueller's Day at the Gym." And I sent you that article, and I submitted it for your blog.

Tim Ferriss: Oh, that's right. That's right. Okay. And that really set a cascade of events in motion, and I became very very fascinated. I mean, of course, like a lot of people, I think I was initially exposed to you as the strength trainer who used the word 'comrade' a lot, and really hadn't delved into a lot of the details of your strength training specifically, which we'll of course get into. And I guess there are two questions I'd love to ask, but the first is: What do people consider you – the people who know you well, what do they consider you world class at?

Pavel Tsatsouline: Tim, I have been able to take very complex subjects, take them apart, and put them back together in a manner that's very simple, that can be delivered to regular people without losing the essence of what these – of these systems. So I'm talking about specifically serious strength training. I'm talking about both programming, and I'm talking about what I would refer to as the body language of strength.

Tim Ferriss: Um-hum. And could you explain for people who are perhaps not inductees into the world of strength training yet, what do you mean by programming?

Pavel Tsatsouline: Programming. Planning your training. You go from A to B. You want to add 50 pounds to your deadlift. This is what you do. And unfortunately, the world of programming is very confused. Well, the whole world of fitness is very confused. And again, what I attempt to do is to bring principle-based training. So when you understand the principles, applications are many. Applications are easy.

Tim Ferriss: Right. And I think that's where I feel such a degree of kinship with what you try to do with these subjects, because of course, whether I succeed or fail, and sometimes I do both, it's very much what I try to do with the subjects that I tend to obsess on. And for those who aren't familiar with your background, you've worked with many different types of elite athletes, and also Special Forces and so on. Would you mind just giving a little bit of background on your bona fide, so to speak, some of your background as it relates to training?

Pavel Tsatsouline: Sure, Tim. I used to be a PT training instructor, physical training instructor, for Spetnas, the Soviet Special Forces. And my education is in sports science. And I did, over the years, train a number of high end units in the West. I've been a subject matter to US Marine Corps, to the Secret Service, to US Navy Seals, and others. And my methods are used officially by some very high end military and counterterrorist units in two countries that are meta-analyzed in the United States. What I do – pardon me?

Tim Ferriss: Oh, I'm sorry. No, I was just – my brain erupted with something nonsensical. Please continue.

Pavel Tsatsouline: So what I do is I take methods that perform very well in very rugged environments, and I take these methods, and I apply it to other environments. So if somebody decides, I just want to change my life. I want to get stronger. I want to have a better

game of tennis. I want to succeed in a given sport. I take the same methods that have been tested by operators before, and I bring these people the same methods.

Tim Ferriss: And just to drill into that, because I've seen the many, I'm sure at this point, thousands of photographs that are sent to you by deployed troops overseas, or people in special forces, of their kettle bells, or their rigged gyms, with sort of makeshift pull-up bars and whatnot. What is it that you have to keep in mind when you're designing, or why have your methods had such appeal for elite military? What are the things that you've considered, perhaps, that other people have not for those types of trainees?

Pavel Tsatsouline: Well Tim, Plutarch, who said thousands of years ago that the training of a soldier and the training of an athlete is radically different, that an athlete has the luxury of a pampered lifestyle, and the soldier doesn't. So this is pretty much the difference. So what you want to do is you want to build a training that becomes, in the words of one of my favorite authors, Nassim Taleb, anti-fragile. It's a type of training that thrives on a very harsh environment that's really robust in these different environments. And that's pretty much the difference. How do we do that? We have to strip all the nonessentials down. Pretty much what you do in your work with different business, with lifestyle, and so on. And once we got down to those things that really matter, we apply them. Then everything suddenly becomes very simple.

Tim Ferriss: Have you spent any time with Nassim?

Pavel Tsatsouline: No, I have not.

Tim Ferriss: Oh, okay.

Pavel Tsatsouline: I am looking forward to meeting him.

Tim Ferriss: I should introduce you guys at some point. He's exactly what you see is what you get, if you've read his books. And I think you guys would really hit it off. The – what you just said brought to mind a conversation that I had with a friend of mine who was formerly Navy Seal, and now he's doing things that he can't tell me about. Not that he could tell me much about what he did before, but he – and actually, not to be named, but another, now that I think of it – you introduced us.

Pavel Tsatsouline: Oh, so let's call him Victor.

Tim Ferriss: Victor. Yes. Victor, amazing guy. And Victor is the most efficient trash compactor I've ever seen in my life. He can eat anything, and make fuel out of it. And he was criticizing, in a very good-natured way, some of his colleagues, because he said, "Well, some of the guys that I work with out in the field, some of them are the body builder types, and they get really grumpy if they can't have their protein shake every two or three hours." And he said, "I view it as a real competitive and practical advantage that I can consume anything, and then go for a 30, 40, 50-mile run."

Pavel Tsatsouline: Well, and Victor, for his strength also, but the gentleman is exceptional, both in his strength and his endurance. But for his strength, he relies on the nervous system, not so much in the muscle, Tim. And again, that's what so – that's what's so different. You can, if you look at – or a typical person, and how do you get him stronger? Let's say that you have a four-cylinder engine. And what the person would do is they would make that a six-cylinder engine. But before you're firing in two. Now you're firing in three. But if instead, what you do is you learn to fire in all four. So there are ways of training your nervous system to engage your capacity so much more fully.

And if you look at high level performers at my body weight in some fields. Let's say they're a high level martial artist, somebody very skinny, breaking a stack of boards. Or a very skinny guy like Lamar Gant, that's lifting five times his body weight. So this is so much about the concentration of mental force. And for your listeners, I could give a very simple example how you can use – you can do that in your gym. Let's say that you perform – try it with the simplest exercise possible. Try it with a dumbbell curl, or barbell curl, because I know you sissies out there, you all do that. And so let's say that you're going through your curls, and things are suddenly starting to get tougher. So when they suddenly start to get tougher, I want you to just crush the dumbbell or the barbell, or the kettle bell. Whatever it is that you're curling, just white knuckle pressure. And what you will see is you're gonna definitely be able to get several more repetitions out.

And I'm gonna give you two more techniques, in addition. Once you have practiced that, then on the next set, in addition to crushing the bar on the way up, also contract your gluts as tight as possible, like somebody's gonna kick you in the butt. Very very tight, so you're just like crunching [inaudible]. And at the same time, tighten your abs as if somebody's gonna kick you, which somebody might. So if you do that, if you do these three things,

if you contract your gluts, contract your abs, contract your grip, everything that you do, absolutely everything, is gonna be greatly amplified. And this is just a small example of the skills of strength that I do teach.

Tim Ferriss: And we're gonna dig really deeply into this, because I have personally reached a point where I want to return to the training of an athlete who's trying to optimize relative strength, and opposed to just tacking on slabs and pounds of muscle, which quite frankly, just my frame and my joints and my entire system is finding aggravating to sustain, just the fulltime eating and.

Pavel Tsatsouline: Well the fulltime eating, Tim, that's what gets you.

Tim Ferriss: Oh, god. It's the worst. Especially someone who has, depending on how you look at it, like the most acute form of conditioned like body dysmorphia or orthorexia possible through a decade of wrestling. It's just my eating habits are really astonishing. Sort of like a German shepherd has like broken into the pantry, and eating sticks of butter on more than a few occasions. But the question I wanted to ask you next is: What are the biggest misconceptions that people have about Pavel Tsatsouline? And I am trying myself to say Tsatsouline because I've heard everyone say Tsatsouline, so I'm trying to correct that. But what are the biggest misconceptions that people have about you?

Pavel Tsatsouline: Well, Tim, they call me the kettle bell guy. They call me the father of the kettle bell, which I appreciate very much. I did introduce, together with my business partner, I did introduce the kettle bell to the West. And right now, the kettle bell has become mainstream. But what I'm really all about is the principles, the underlying principles of strength training. The underlying principles of power generation. And it doesn't really matter what modality you use, whether you use a kettle bell, barbell, your body weight. Whether you're arm wrestling, fighting, lifting rocks. It really doesn't matter. So I am not about the kettle bell. I am about the principles that make you strong. What I have done is I have reverse engineered the way the strongest people move naturally, and I have brought it to the people. I have shown to people how to move in this matter, and how to shave off years, and if not decades, of training to progress to a much higher level.

Tim Ferriss: You've worked with some incredible strength athletes. Would you mind mentioning some of them? And some of them, you've co-authored books with. But who are some of the strength

athletes that you've collab – or strength trainers that you've collaborated with?

Pavel Tsatsouline: Andy Bolton. He's the first person to deadlift over a thousand pounds. He's an amazing athlete. He's a very, very smart trainer. So Andy Bolton and I, we have written a book together called The Deadlift Dynamite. And the reason Andy and I have written this project together is, again, Andy's a very smart trainer, and his particular style of deadlift looks exactly like the kettle bell swing that I teach. So it's, again, that fit of the body language. I have written a book called Easy Strength with Dan John. Dan John is a strength coach extraordinaire. You would really love interviewing Dan on the show because –

Tim Ferriss: He's a beast.

Pavel Tsatsouline: Dan is. And he's so – again, he just gets past the fluff. He gets to the things that matter, and Dan does not try to impress you. Dan tries to get the results. So Dan and I, collaboration with Dan over the years, we have taught each other a lot, and our views and strengths are very similar, even though they are colored in some way. So that's why we have written this book called The Easy Strength. And so Easy Strength was about making yourself strong for your sport, not making lifting your priority. That's what Easy Strength was about.

Tim Ferriss: And just since you brought it up, what are some of the things that you've – what would be an example, or examples of things you've learned from Dan?

Pavel Tsatsouline: Dan has a terrific concept of the quadrants, the four quadrants. And one grid, you are gonna see the level of development, the level of – on the other one, you're gonna see the level of specialization. It's really quite hard to explain that over audio, but if you look up, type in Dan John and quadrants. It's a terrific concept. So what that allows you to do is it allows you to place yourself today in the particular quadrant, according to your status, according to your goals, and select the correct type of training for yourself. That alone's gonna save years of preparation for you. So that's just one of the many things. Then I have exchanged these little tactical tidbits and details over the years, and I highly recommend Dan John's work to anybody who's athlete, or anybody who thinks of himself or herself as an athlete.

Tim Ferriss: And I'd love to – I want to personally give a few examples of just how quickly, or how significantly you can shave off what people

assume is required to make massive gains. You introduced me to Barry Ross in Los Angeles, and that became the effortless superhuman chapter in *The Four Hour Body*, and I was able to put – I would have to say, it must have been between 100 and 150 pounds on my deadlift in less than three months. I mean, it was –

Pavel Tsatsouline: Outstanding, Tim. Outstanding.

Tim Ferriss: It was just – it was crazy. And particularly when you consider the inputs, or the total amount of time under tension, and actual lifting frequency and time, it really – I've seen, just given that we are cut from the same cloth, and that we try to distill very complex things, and use 80/20 analysis, and so on. I've seen a lot of disproportionate outputs for inputs, but it really just – it really blew me away. And the testing of assumptions where, in that particular case, it's a deadlift-based protocol that's using what many people would consider the weakest range of motion, so from the floor up to the knees, effectively, really impressed me. And then to highlight a couple of the points you made earlier, the crushing with the grip, and the abs and the gluts, I recall when I did RKC1 and RKC2. For those people not familiar, the Russian Kettle Ball Certification one and two, which was a tremendously positive experience for me.

Pavel Tsatsouline: Thank you, Tim.

Tim Ferriss: And encountering Max Plank, if I'm getting – that is his last name, right? Am I getting that right? Is that Max, Big Max? He was – I believe that's the fellow who's name is – it's coming to mind, but there were a few people, yourself included, who I did not pass all of the tests for RKC2 the first time around. And one of them, if I'm remembering correctly, was cleaning and pressing a kettle bell that's roughly half your body weight.

Pavel Tsatsouline: Um-hum.

Tim Ferriss: And I was – I guess I ultimately made three attempts, and I failed on the first two attempts. And with a few minor corrections, just moving my weight slightly back towards the heels, cleaning with my elbow closer to – basically dropping my elbow a little bit lower, and then really focusing on the grip, I was able to press it. And the third attempt felt easy. And it was just –

Pavel Tsatsouline: Outstanding, Tim.



Tim Ferriss: Astonishing. Also some of the demonstrations that you've done in front of trainees, where you've taken people out of the crowd and said, "All right. Who's somebody who would consider their" – and I'm paraphrasing here – but "your maximum press X number of kilos?" And then you'd bring them up, and in front of everyone, within five minutes or so, you'd increase their press by whatever it might be. Five kilos or ten kilos. You once mentioned to me in casual conversation – I called you for some type of training advice, or it might've been via email. And correct me if I'm wrong, but you said when in doubt, train your grip and your core. Is that –

Pavel Tsatsouline: Correct.

Tim Ferriss: Could you elaborate on that? Because I think it's very – it's not advice that many people have received.

Pavel Tsatsouline: Well, Tim, there is such a thing – it's called irradiation. So the phenomenon of irradiation, what it really means is if you contract a muscle, the tension from that muscle's gonna spill over to the neighborhood muscles. So for your listeners, I'd like to try this. Make a fist. Probably gonna feel tension in your forearm. Now make a tight fist. You're gonna feel tension in your biceps, triceps. Now make a white knuckle fist. You're gonna find that tension's gonna spread into your shoulder, your lat, your back, and so on. Okay folks, you may relax now. And the same thing happens. So certain areas of the body have this great overflow of tension, so the gripping muscles are amongst them. Why? In part because they have such a great representation in your nervous system, in your brain. And as for the abs, and as for the gluts, that has a lot to do with creating your inter-abdominal pressure. So what does this mean, exactly?

Visualize your muscles as speakers. And visualize your brain as the gadget that plays the music. Whatever it is these days, iPad, iPhone, whatever, and record player. Doesn't matter. And the amount of your pressure, the pressure in your abdomen, the inter-abdominal pressure, that's the amplifier. That's the volume control. So by increasing the pressure in your abdomen, it's like you're turning up the volume, and vice versa. So when you're trying to stretch, when you're increasing your flexibility, if you see somebody there trying to do a split, and you see them, "Uhh, uhh," it's – the person is creating high inter-abdominal pressure, and that just increases the tension of the muscle. Instead, what you need to do, you need to [sighs] completely release and let go, and bring it down. So for strength, we do the opposite. We have special

techniques where you increase that pressure, and maximize your power.

So that's – those are just a couple of the different ways we can increase your strength. And that's what you've seen by certifications. FYI, I am no longer with that organization, so my company today is called StrongFirst. And as of the certification, that's that same curriculum that you have learned back then.

Tim Ferriss: And the – just to touch on two points, and then we're gonna jump into more training, and ask about how you would rank certain aspects of what people would traditionally consider perhaps fitness. What would be good – what would you recommend as good methods for developing the grip and core, or abdomen, for those people listening if they wanted to take a simple protocol, and perhaps experiment for the next few weeks. What – is there any basic approach that you might suggest for those two things?

Pavel Tsatsouline: Sure, Tim. It can be done in conjunction with a full body training and regimen that uses, let's say, kettle bells, climbing ropes, and so on. But if it is not, then what I recommend that you do is you get some grippers. So the company is called IronMind, IronMind.com. And they carry hand grippers. One thing you need to understand is these are not those little sissy plastic grippers you get at a store. These are heavy-duty grippers. They go up to 365 pounds, which a couple people in the world have done that. And they also do have resources on how to do that. But even without reading how, I can tell you how to train. So get yourself a couple of grippers. Use their charge, the recommendations that IronMind offers. And start training them in the manner that I refer to as grease the groove. Grease the groove is a highly simplified training methodology that's been derived from Soviet weightlifting methodology.

So in a nutshell, this is what you do. Throughout the day, every day, whenever you feel fully recovered – so you have to have at least 15 minutes of rest between sets, maybe 30, maybe even more – is you're gonna do a set, and you're only gonna do about half the repetitions that you're capable of. So for example, you picked out a particular gripper. You start squeezing it. And you probably could do it ten times. But you only do five, and you put it down. Let's say you later on pick up a gripper that's a little heavier. Maybe you could do three reps with it, but you do one. And in this particular manner, you accumulate reps, and you keep going and going and going. And everybody tells you that's

impossible to get strong in this particular manner. Yet science and experience shows that this makes you strong.

This makes you strong fast, this makes you strong in a safe manner, and this makes – you can apply this particular methodology – again, I call it grease the groove – to any strength exercise or any strength endurance exercise. Just to give you an example of its effectiveness, my father-in-law, former Marine, at the age of 64 started following this routine. He was able to do about ten pull-ups at that point. In several months, he was up to 20 when he tested. And he could not do that many as a young jarhead. So you young bucks out there, you can definitely get this done. So this is how you guys are gonna train your grip, with these grippers. Carry with you throughout the day – you’re not gonna get sweaty. Just whenever you feel like it, just take it out and squeeze.

As for training your abdomen, there are many different methods of training the abdomen, but you have to abide by the following rules. You have to keep the repetitions to five and under. No more than five reps. Anything more than five reps is bodybuilding, and you need to make a focus on tension. Make a focus on contraction, as opposed to on reps and fatigue. Just to give you an example of the plank. The plank is kind of a fashionable exercise in the core training circles. And by the way, we don’t use the word core at StrongFirst. Why don’t we use the word core? Because, well – because people who use the word core, they do things we don’t like. We don’t like at all. So we just say midsection. And so the plank. So traditionally, they would put you in the plank, and you were supposed to stay in this plank for a couple minutes. And what’s happening is you see this poor person who cannot even assume the proper posture to start with. And then as fatigue sets in, other muscles, wrong muscles start kicking in. The back starts arching. The butt starts shooting up. And what you’re doing is what Greg Cook calls putting fitness on top of dysfunction. And what we do instead is if we do a plank, we call it the hard stop plank, we would do a plank for no longer than ten seconds. And when you do the plank, you try to contract everything. Absolutely everything. When I showed that to –

Tim Ferriss: Everything? Your shin, your forearms, your neck, everything?

Pavel Tsatsouline: Everything but your neck and face. Everything below your neck, you’re going to contract. It’s not for folks with high blood pressure, heart condition, and that’s true for pretty much any type of training. But for everybody else, it’s an extremely powerful

tool. So you get down in a plank. You make fists, okay? You contract your abs. You contract your gluts. You contract your entire body. You pretend that somebody's gonna walk by and kick you in the ribs, which again, somebody might, at least in my course. And Andy Bolton and other top power lifters [inaudible] this technique. They swear by this. Because this is the abdominal training for strength. This is not just some nonsense that you do cranking out the reps.

So to sum up your abdominal training, find whatever abdominal exercises that you like. It can be the plank, it can be some kind of a sit-up. It can be something from your book, *The Four Hour Body*. It can be from my book, *The Hard Style Abs*. It can be something else. That's not important, as long as it's a good exercise that's been recognized that it does work. And three times a week, do three to five sets of three to five reps. Okay, folks? Just remember this. Three to five sets of three to five reps. Focus on contraction. Don't focus on fatigue. Don't focus on the reps. And I promise, if you do these two things for several months – you work your grip in this manner. You work your abs in this manner. Everything that you do today is gonna be stronger. I don't care what it is. It's a bigger deadlift. It's a tennis serve. It makes no difference. You're gonna be stronger.

Tim Ferriss: And in the case of the ab – let's just – the midsection, and we're working with the plank. If people decided they were gonna keep it simple just so they can remember it, and do three sets of three reps three times a week. Let's just say Monday, Wednesday, Friday.

Pavel Tsatsouline: For the plank, let's do just three sets of ten seconds.

Tim Ferriss: Got it. Okay.

Pavel Tsatsouline: Three sets of ten seconds three times a week, and try to contract everything below your neck.

Tim Ferriss: Got it. And just as further exhibit – exhibit A, I've always had, and I'd be curious to dissect this just for a second, but I've always had difficulty with pull-ups. I have a relatively strong pull from, say, the floor, in large part thanks to wrestling, and other types of strength training, but also the Barry Ross protocol. When it comes to pulling myself up to a bar, though, I can use weight for low repetitions, but I've never been able to do higher repetitions very well. And I did this greasing the groove walking around San Francisco for a few weeks, where any time I passed a construction

scaffolding, I would jump up and – there are enough crazy people in San Francisco, fortunately, or unfortunately, that it didn't really raise any eyebrows. They're like, "Oh, there's just some crazy guys doing pull-ups with a backpack. Whatever."

And I would do two or three pull-ups, and then I'd just continue on my way. And it was astonishing. I didn't really test my max repetitions, but how much my velocity – I guess the equivalent of bar speed – increased over that period of time. I mean, I really became much, much more explosive. It was just astonishing. And but for people who have, perhaps, trouble with higher repetition pull-ups, how would you troubleshoot that?

Pavel Tsatsouline: Well, Tim, I guess first of all, it depends what high repetitions mean. If it's – if your goal is 20 or 25 straight pull-ups –

Tim Ferriss: Yeah. Let's use that.

Pavel Tsatsouline: Then yes, that's one thing. Because if you go beyond that, and in Russia, they even have specialized competitions where they do straight pull-ups for some crazy insane reps, then training becomes so weird, and so state of the art, then you better not even bother. But most people don't need to do that. So if you want to be able to do 20 or 25 pull-ups, you can achieve that level purely by training your strength, which means that you never even have to do more than five reps in training. And just whenever you go out and test, and you're going to get those reps. Here's something – here's a note about strength endurance. The more resistance that you're overcoming in your endurance effort, the more strength helps. So what does that mean? It means that if you're strong – that is, let's say you have a good [inaudible], that's going to help you carry beer kegs to the second floor. But on the other hand, it's not necessarily going to help you hammering a nail all day, if that makes any sense, because a hammer's light. Beer kegs are heavy.

So when you're doing a 25-repetition effort, the weight is significant. It's still a significant percentage of your one-rep max. So that can be pumped up purely just by getting stronger. So that'd be my recommendation. For people who have a hard time doing pull-ups to start with, I would recommend start by learning to get tight through their abs. That's very important. There was an article a couple years ago saying that women cannot do pull-ups, which is of course absolute nonsense. In StrongFirst organization, we have some ladies who can do – we have a lady in Boston, Amanda Perry, who can do strict dead hang, 14 pull-ups,

neck to the bar. So the way we do pull-ups is no kicking, no swinging, pause on the bottom, and you have to touch your neck to the bar. So she can do 14, for example. So – [inaudible] she's a much better man than most of them, and that's her weight.

Tim Ferriss: Just for those who have not tried this, having gone through some of this training with Pavel, if you have just done – if the difference between doing a strict pull-up, or what you envision to be a strict pull-up, where you kind of throw your chin up above the bar height, versus pulling in to touch your neck slowly to the bar, is so different as to – it's not a difference in degree. It's sort of a difference in species. But anyway. So I challenge everyone to try that. It's really challenging.

Pavel Tsatsouline: Well, Tim, for people who have a hard time just to get started in pull-ups, and again, that's true for some ladies. Many ladies. That's true for a number of gentlemen as well. A lot of the problem is they're unable to contract their abdominals strongly enough. They're unable to even assume the strong posture. Remember I told you earlier that I reverse engineer what the strong people do naturally. So if you watch a gymnast perform any kind of maneuvers on the rings, let's say, you will see something called the hollow position. So what's the hollow position? The hollow position is the body is like your tail is tucked in, and your body kind of forms a – like a dish. Your body looks like a dish, pretty much.

So if you want to learn to do pull-ups, first you need to master the hollow position. It's very easy for you to type in – you type it into your search engine, the hollow position, find a picture, see what it looks like, and just practice this hollow position, this hollow rock. Listen, the exercise is called the hollow rock. I explained it in my book *Hard Style Abs*, but I'm sure you can find it anywhere else. And so you practice this hollow rock, and this hollow rock is going to not only strengthen your abs, but it's also going to teach you how to acquire that position. And then after that, you can start working with assisted reps, and that's a very big difference. We're not talking about negatives. We're not talking about forced reps. We're talking about assistance reps. Assisted reps. So what's the difference? The difference is an assisted rep feels like a moderately challenging rep that you do on your own. So your training partner or your trainer is gonna push you in your mid-back, and enable you to do that with some degree of difficulty, but definitely not make you struggle.

And when they have done a study on young gymnasts years ago in the Soviet Union, and they used this type of methodology. They

called it artificial control environment, where the partner allows you to do a perfect repetition, but in a way that doesn't really kill you. IT doesn't make you struggle. They found that the speed with which they progressed was absolutely remarkable. So practicing hollow rock. Don't forget your grip. And then start three times a week, with the help of your training partner, do, let's say, three to five sets of three to five reps of assisted pull-ups. And I just want to reiterate again, the lower reps are key, guys. If you want to be strong, you want to keep your reps at five and under.

Tim Ferriss: And at five reps or under, is what you're really working on sort of – and I'll get out of my depth and into yours pretty quickly, but the sort of neural pathways, and the recruitment of motor neurons, and sort of firing capabilities and so on, or –

Pavel Tsatsouline: Pretty much. You're gonna have a high level of neural adaptations, and you also are going to build some muscle as well. So you're gonna build the high threshold motor units as well, but not – it's not a bodybuilding protocol. You will build some muscle, but it's not really the end goal itself. So you were trying to – also, you're trying to avoid the fatigue. You're trying to avoid the burn, because whenever you start experiencing the burn, that's from something called the hydrogen ions that leads to a whole lot of problems for you. So one of the problems is it interferes with the command that your brain sends to the muscle to contract. And another problem that it creates, these hydrogen ions literally are destructive. So if you leave them around the muscle for too long, they really start destroying your muscle. So just keep those reps under, and five, three to five, don't worry about getting bulkier. You're not gonna get bulky. It's not gonna happen. And approach your training as a practice. So this is not a very important point, Tim. I hate the word workout.

Tim Ferriss: This is a super important point. No, I'm glad you're bringing this up.

Pavel Tsatsouline: I hate the word workout. The word workout does not exist in the Russian language. We talk about a training session, or we talk about a lesson. We never talk about a workout. Just think of what does the word working out, what is the – what do you envision?

Tim Ferriss: Sweating and grunting, and –

Pavel Tsatsouline: Let's see how much I can punish myself and drain myself. So the goal is not to get stronger. The goal is just to get worn out. And there are simpler ways of doing that. Run up the mountain, okay? So, no. The idea here is practice. Strength is a skill, and as such, it must be practiced. And if you approach it in this manner, not only are you gonna get stronger so much faster, but you're gonna truly enjoying the training process. Training should be something that should be enjoyed.

Tim Ferriss: No, this rings so true to me. And it was really a revelation, just coming from the masochistic world of the few sports that I practice, and I certainly did not get to a world-class level, but competed on a national level in a few different sports. And the mind shift from depleting your reservoir or reserves as much as possible to identifying the skills and practicing them, even if you feel better at the end of a workout than at the beginning, was really a huge shift for me in a few places. Certainly in strength training. I think that Barry Ross's protocol was eye-opening in so much as, just like you mentioned, put I think it was around 120 – this was all detailed in *The Four Hour Body*, so I'm losing the specifics, but about 120 pounds on my max deadlift through the full range of motion, not just the range in which we were practicing, in a short period of time, and gained fewer than ten pounds of additional muscle.

Pavel Tsatsouline: And you probably enjoyed your training, Tim.

Tim Ferriss: Loved it. Oh, it was just amazing. I mean, felt on fire, I mean, partially because you're blowing a foghorn into your nervous system's ear when you do good. But the other area, and I think this is such a fantastic principle that applies to so many different areas, was in the world of swimming. And some people might recall, if they've followed my stuff for a while, that I was not able to swim a lap in a proper pool until I was in my 30s. And what really shifted the mindset completely was going from swimming workouts, and hiring coaches who viewed it that way, to looking at total immersion, where they really focus on the skill of deconstructing the biomechanics of swimming, challenging the assumptions of how swimming's taught. And it became this really joyful, wonderful experience, and I was able to go from basically zero laps to sort of 20 laps per practice in less than ten days. So it's such an important shift, and I'm glad you brought it up, which kind of leads me to the next question. And it's about prioritization.



So when people think of fitness, and particularly non-athletes, I think that there tends to be a very scattershot approach, and there's a paradox of choice challenge that they have, where they're fed a lot of recommendations from many different people. And they have strength, and let's just talk strength, not necessarily muscle gain, but just getting stronger. They have hypertrophy. It's increasing their muscular size, for lack of a better description, endurance, flexibility. How would you rank these in order of priority and why?

Pavel Tsatsouline: Tim, as long as the person has their required ability and symmetry, the priority is always on health. The priority is always strength. Strength has to be first. So the first step that you do is you assess your mobility. You find specialists who can do that. FMS would be a recommendation of mine, the [inaudible] FMS.

Tim Ferriss: Functional movement screen.

Pavel Tsatsouline: Function movement screen is gonna find out how mobile you are, and also how symmetrical you are. So as long as that is dialed in, that is in place, you have to get strong. And strength is the mother quality of all physical qualities. And that's not a statement by me. That's a statement by Mafeso Matwe, the father of fertilization, one of the greatest sports scientists ever. And greater strength increases your performance in absolutely everything. So you can see, of course, okay, of course, yeah. Being stronger is gonna help you in, let's say, punching somebody harder, or lifting something. But how is that gonna help me if I'm, let's say, a triathlete? How is that gonna help me if I'm a marathon runner? It is going to help me in several different ways. One is the perceived level of exertion is gonna go down. Several years ago, Norwegians did a very interesting study where they put elite endurance athletes – some were bicyclists, some were runners – on a pure strength regimen. That's four sets of four reps of heavy squats. It's about as pure strength as it gets.

And in the end of the study, not surprisingly, all these guys were stronger. They could jump higher, and so on, but they were not impressed with that. That didn't matter to them. What did impress them is they ran faster. Their times – their race times went down because strength just enables everything else. If you're trying to, let's say, lose weight, being stronger is gonna help you help you do that, because you're gonna have a bigger furnace. You're gonna train yourself much harder on the exercises that are fat loss exercises. So it truly doesn't matter what it is that you're

trying to achieve. Strength is the No. 1 attribute you need to address. And that's why my company's called StrongFirst.

Tim Ferriss: I love that you – one of the things that I love about you, Pavel, is that you say what you mean, and mean what you say, and I just – there's a degree of clarity that I envy. And I might include it for people, but when we did our sound check, I asked you to do – to give me an answer so we could test the audio, what you had for breakfast, and what was your answer?

Pavel Tsatsouline: Coffee.

Tim Ferriss: And that was it. That was the sound check. I love this – the simplicity. Now speaking of simplicity, and also sort of undoing the confusion that a lot of people suffer from, what are the most counterproductive myths or misconceptions about strength training that come to mind?

Pavel Tsatsouline: Well, the No. 1, Tim, I guess, is that idea that you have to go to failure every time you train. And I can tell you one thing, that the Soviet weightlifters, I have done a very thorough analysis of the Soviet weightlifting methodology from through the '60s, through the '80s, the glory days. And I found that they typically did 1/3 to 2/3 of maximal repetitions per set. So what does it mean? If, let's say, that you're using a weight that's your ten rep max. Ten is all you could do if you push yourself very hard. They would do three to six, consistently. Now you'd probably ask yourself, okay. I'm not a weightlifter. And what does this Soviet stuff from the '80s have to do with today? Well, two things. First of all, even though a person who's not a lifting athlete is not going to train exactly as a weightlifter or power lifter, nevertheless, the methodology has to be derived from these sports, because these are specialist strength sports. So they just have to be adapted to your needs. Second of all, this particular Soviet methodology is still superior to this day. This is very interesting, but you keep hearing about all these new world records set in the sport of weightlifting. Well, if you compare the world records of today to the world records of the '80s, you will see, then, in most cases, the records today are inferior to records in the '80s. How can that be? They accused people of doing drugs, and they changed weight classes twice since the '80s. Of course it's so wonderful, I'm so happy that today, nobody does drugs anymore. It's just terrific. And so if you look at the lifts performed by Soviet lifter Yudic Varbanjon, in 1980, at the Moscow Olympics, these lifts have never been exceeded. These lifts have never been approached.

So this particular methodology does work extremely well. It's still the best methodology, period.

Later on, the Soviet power lifting team adapted this methodology for power lifting, with tremendous success. They dominate. And the same particular methodology has been adapted to body weight training, kettle bell presses, and so on and so forth. So it's the same thing that can apply for everybody, because this is principle-based training. So the major misconception is that you have to go to failure. So that's – if you just overcome that, and if you make it a habit to do 1/3 to 2/3 of the repetitions that are possible, and do more sets instead, you are gonna make much greater progress. You're gonna do much safer. And folks, you're gonna enjoy your training.

Tim Ferriss: And how does the approach shift if your focus is maximal hypertrophy?

Pavel Tsatsouline: If you're after maximal hypertrophy, it's volume. So they figured out in the Soviet Union that there is a direct correlation between volume and hypertrophy. So you just pretty much have to do more sets. You're gonna have to do more sets in the like 60 to 70 percent of your max range. And a whole bunch of sets of five and six, just many of them. And your rest periods might be compressed a little more. But that's it. If you do that, do this a couple times a week, many sets of five or six, don't even worry about how many, just keep going. Don't kill yourself. Enjoy yourself. Eat more. You're gonna get bigger. It's just as simple as that.

Tim Ferriss: And of course, I've spoken with fans, and written about the applications of to failure training for primarily hypertrophy, just because you're doing so much with the sarcoplasm, and maximizing the sort of cellular volume, that the challenge is not so much the training with hypertrophy – it's the eating. It's just, I mean, you really – you feel like the Japanese hotdog eater Kobayashi after a while. It's just waking up in the middle of the night to eat meals and whatnot is – that's by far the most punishing aspect of it, for me at least.

Pavel Tsatsouline: It is, Tim. It is. And –

Tim Ferriss: Any tricks there?

Pavel Tsatsouline: Also, nobody knows – yeah, there are a couple tricks. I'll mention them in a second. Nobody does know exactly what

happens on the cellular level when you try to stimulate muscle hypertrophy. Anybody who tells you that they know, it's just speculation at best. There are a number of theories. Some of the theories are more credible than others. But the fact is, we still do not know. And what makes the Soviet weightlifting methodology of the '80s so spectacular is that was a purely empirical methodology. They tried to explain what happens on the cellular level, but they didn't try too hard. It was pretty much a trial and error. They would analyze the training logs of successful lifters and successful competitions. They analyzed this data. They made recommendations, and it's kind of chicken and egg. Where does it start? Scientists watching what the best lifters do, or the best scientists telling the best lifters what to do? It was kind of both, and they kept narrowing it down, narrowing it down, narrowing it down. And this is how it works. But we still don't know exactly what happens there.

Tim Ferriss: What is your – I definitely want to touch on the tricks for not making yourself nauseous all day when you're trying to pack on pounds of muscle. But before that, what is your favorite pet theory, even if it's speculative at this point – what is your preferred theory for muscular growth?

Pavel Tsatsouline: Okay. Vadim Patasinger's theory makes most sense to me. And according to this theory, when the muscle comes – the contraction comes to an end, or close to an end, when you have depleted the creatine phosphate in the muscle, that's the primary stimulus for hypertrophy, according to him. And again, what could that possibly, or how could that possibly do? And if the muscle contraction stops, not as a result of mounting acidity, and that's very, very important, but as a result of there's something, not creatine phosphate, supposedly the cross bridges no longer can really disengage properly. So supposing –

Tim Ferriss: And by cross bridges, you're talking about the myosin axis?

Pavel Tsatsouline: That's right. Yeah. Supposedly, this is what tears them apart. Supposedly, that's what causes the micro-trauma that makes satellite cells do their thing. So that's one fairly credible explanation. I don't know if this is true or not, but training, in my experience, that – Patasinger's approach to training, where you're gonna hit it pretty hard, the set would probably be about 20, 30 seconds in duration, if you're trying to target your high threshold motor units. And then you're gonna have to stop. And you have to rest a long time between the sets. So this, it does make a lot of sense. There is another theory that works fairly well with

it. Parkasa Victo Sulianav, according to him, the role of creatine phosphate here is once you deplete your creatine phosphate, and you do have a lot of free creatine, which is pretty much byproduct, what that does is makes a membrane of the cell permeable to the hormones, anabolic hormones.

Tim Ferriss:

Ah, very interesting. So what Sulianav says, there are four prerequisites to muscle hypertrophy. One is obvious, is that's the presence of amino acids. The second is the presence of anabolic hormones, which obviously has to do with the capacity of your endocrine system, but also your training as well. Training stress does seem to do that. And third is the presence of free creatine, as again, the same thing. That free creatine, a lot of free creatine is formed when the muscle's squeezed hard, but not before it gets acidic. And finally, the fourth one is the presence of hydrogen ions, not for too long. So again, hydrogen ions, it's again – it's something that you get out of muscle contraction, any muscle contraction. And the service that they do for muscle hypertrophy, according to Sulianav, is just like the free creatine. They make the membrane more permeable to the hormones.

So then what happens is these hormones, which are pretty much messengers, they go into the cell. And as they go into the cell, they get the whole process of transcription translation, protein synthesis, going. The also very interesting element of Sulianav's theory and Sulianav's methodology, and again, something that sits well with me, having observed effective training, is very long rest periods between sets. So Sulianav recommends five to ten minutes of rest between the sets, and that rest has to be active. So you pretty much have to move around. So you don't just sit. You just move. You wave your arms, you kind of shake your muscles, you shake your legs, you walk. And that's supposed to get rid of the – clear out the hydrogen ions as quickly as possible. Because having them there briefly is good. Having them there for too long, it's not good, because they're literally destructive. It's a charged particle. That's what it is. And –

Tim Ferriss:

So they're walking, or are they on stationary bikes, on like an Aerodyne?

Pavel Tsatsouline:

No, it's – you don't need a stationary bike. You just pretty much want to walk. There's a particular type of relaxation exercises, Tim. We call them fast move exercises. All Russian athletes do. So pretty much what they are is if you may remember my kettle ball certification. I had people kind of stand and shake out their arms and legs.

Tim Ferriss: Right.

Pavel Tsatsouline: So you just pretty much shake your arms and legs, and you just walk around. That's pretty much what you do. So that is Sulianav's theory, which also seems to make sense. Notice that in both cases where there's [inaudible] and Sulianav's, you are going to push yourself much closer to failure, direct reps. So when you're training just for strength, you don't need to do that. You just do 1/3 to 2/3 of your maximum reps. When you're trying to train for hypertrophy, yes, you can do just simply more maximal sets, but sometimes you just have to push yourself harder. Not to failure still, but harder. And Sulianav also has the most fascinating slow [inaudible] fiber protocol as well. I'd like to tell your readers about it, because there are a lot of misconceptions about training the slow fibers. Well, if you think about slow fibers well –

Tim Ferriss: Which most people sort of see it with endurance.

Pavel Tsatsouline: Yeah, exactly. And they do have endurance, that's true. But they are also – people think, well, they're thin. They're weak. They're small. And why should I do that? Why would any self-respecting power athlete demean himself to anything slow fiber? And Sulianav has a very different point of view on this. First of all, if you look back on some studies done in the '60s, if you compare the strength of your slow fibers and fast ones, they are just as strong for the same cross section. So which means that if you have a bundle of slow fibers that's as thick as your finger, and you have a bundle of fast fibers that's as thick as your finger, they're equally strong. Just the slower bundle is gonna have more smaller fibers, but it doesn't matter. No. 1. No. 2, because their velocity of contraction for the fast fibers can be 20 to 40 percent higher, for the slow fibers, the presumption is, well, I need to move fast. I can't afford that.

So but Sulianav's work has found out that even in sprint, 50 percent of the output is provided by slow fibers. And he says even though in vitro, that may be true, that these fibers are contracting faster, but in vivo, in real life in sport activities, you're not really gonna go so fast. So that advantage is no longer valid. He has put experienced sprinters on a training protocol that hypertrophied their slow fibers. And these sprinters improved their sprint for a hundred meters on average from 10.9 seconds to 10.7 just from this slow fast – slow fiber hypertrophy. And there is additional benefits of hypertrophy for slow fibers, something we

can discuss a little bit later if you just talk about endurance, is these slow fibers come pre-equipped with mitochondria, which means they have a lot of endurance. So for other types of athletes, that can be very beneficial. So Surianav has this fascinating training protocol for training for hypertrophy of slow fibers. So here's how this goes.

He says the biggest problem that you have is typically, people just try to go and burn them out. Well, but all that does, again, that just – the gig comes to an end because of the mounting acidity. That's not the right stimulus right there. You want to make sure that you exhaust that creatine phosphate, and get that free creatine flowing. So how do you do that? You create occlusion. So he would have you do –

Tim Ferriss: Is that occlusion?

Pavel Tsatsouline: Occlusion. It means basically shut – or the contraction prevents the blood flow. So it's a constant tension. With body builders, we call it constant tension. And what you would do is you would do, let's say, squats. You would go a little bit below parallel. You go a little bit above parallel. You're going slow. The timeframe is 30 to 60 seconds, now the duration. And you have to come to failure or close to failure. Now this is, again – this is what's really fascinating. After that, and this is what's so different from the traditional slow [inaudible] training, is you have to take that same five to ten minute active rest. Because he says if you don't, that mounting acidity is gonna mess everything up. And on one day a week, typically, you would do four to nine sets in this manner, and then three to four days later, you do a second day, where you do one to three sets. So that's the protocol. One more time. Super slow movement, no rest, 30 to 60 seconds in duration. One day a week, four to nine sets. Three to four days later, one to three sets. Five to ten minutes of rest in between, active rest.

By the way, active rest can also mean working different muscle groups. That's very fine as well. And just to tell you how effective this protocol is, he put a number of athletes, experienced athletes from different sports, on – who knew how to squat – on a back squat protocol using these types of reps and sets and so on. And in eight weeks, these guys increased more than – added more than 25 percent to their back squat.

Tim Ferriss: Holy crap.

Pavel Tsatsouline: Yeah. And you realize, these guys were not your typical American college subjects. The guys were very fast thumbs. Facebook people. No, I'm joking. I'm talking about athletes.

Tim Ferriss: And what percentage of their one rep max were they using for these 30 to 60 second sets? Because that's a challenging micro-range of movement for me.

Pavel Tsatsouline: Okay. It's – the typical guidelines, you have to find it for yourself, because that depends on your fiber composition. Typically, it's about 30 to 60 percent for your lower body, and 10 to 40 percent for your upper body. So why is the difference? And the difference is determined by the fact that your upper body's more fast switch. So if you look at an average person, an average person's gonna have about 70 percent fast switch fibers in the upper body. And the lower body, about 50/50. But so you have to use a lighter weight, relatively speaking, for the upper body to stand that timeframe.

Tim Ferriss: I see. Got it.

Pavel Tsatsouline: But it's trial and error, Tim. It's just trial and error.

Tim Ferriss: No, of course. And what would people – what would you suggest they Google or search for to learn more about this?

Pavel Tsatsouline: Nothing, I'm afraid. But I think that's –

Tim Ferriss: And that means don't search for "nothing, I'm afraid." That means you can't search for it.

Pavel Tsatsouline: Yeah. But if they've been listening very carefully to what I've said, they should have no problem doing that. I can give you couple of exercises, other exercises that you can do. So for the lower body, you can use the back squat, or you can use the front squat. And for the upper body, you could use something like the diamond pushups, for the triceps, and what you need to do is you need to adjust the difficulty based on – adjust the elevation. Elevate your hands if you want it easier. Elevate your feet if you want to make it harder. But again, the idea is to come to failure in 30 to 60 seconds. And for the pushup, you're gonna be working in the mid-range, so you're never gonna come to lockout.

You're never gonna come to the bottom. You're gonna slowly keep working through that mid-range. If you want to do this for the upper body, it's probably the best idea would be some kind of a



rowing machine, and you're gonna be working through the mid-range. Or curls. I hate to say it, but yes, curls. Sulianav has been extremely successful with athletes from very diverse sports. He's worked with national team for judo, sambo, full contact karate, bicycle racing, soccer, and these guys have seen terrific results from this. So you guys may want to give it a try.

Tim Ferriss: That's – yeah. The fascinating – the most unexpected aspect of that for me is the five to ten minute rest sets. That's really fascinating. And I should also – I'd love to underscore one thing for people. And please correct me, Pavel, if I'm getting this incorrect, but a lot of folks think about the burn as being a product of lactate, or lactic acid, but it's actually a byproduct, or a side effect, a primary effect, of the hydrogen ions that you were talking about.

Pavel Tsatsouline: It is.

Tim Ferriss: And I think that has a lot of implications.

Pavel Tsatsouline: There is some swelling, some nerve endings there, yeah. Yeah. It really, folks, it really doesn't matter. The only thing that you need to realize is this: on this particular training protocol, you go for this burn. This burn is needed. The important thing is that burn is all wrapped in 30 to 60 seconds, and then you try to get rid of it as fast as possible. And for other types of training, if you're trying to train for strength, you want to try and avoid the burn altogether. The burn is your enemy.

Tim Ferriss: So I have two questions on the details here. The first is, if free creatine – I guess that's just free creatine in serum, although I could be wrong on that, is one of the stimuli that produces the training adaptation, can you accelerate that, or even catalyze it, with supplemental use of creatine? Monohydrate, for instance?

Pavel Tsatsouline: Yeah, absolutely.

Tim Ferriss: Okay. And then second question is related to what some people have called the golden era of steroids, which was the '80s, right? So I guess what I'm very curious to know is why have the Soviets changed their approach, or what has caused the – what has prevented them from obtaining or surpassing the records of the '80s? And understood, obviously, that athletes are still using many different types of performance enhancing drugs, but what has changed, and why did they change it?

Pavel Tsatsouline: Tim, I think Dan John has said it really well. It worked so well, I got bored with it, and I stopped doing it. And before – shortly before their death, not in the last decade, both Vysev Alexsyev, who is a great champion, and Akasi Braviov, who was a great champion, and a sports scientist, they criticized these practices very, very heavily. Alexsey Medvedev, who also has done the same thing, they'd say basically you guys are barking up the wrong tree right here. So I just think that people are trying to get fancy. It's funny that what's happening in Russia is probably reflecting the whole trend, Western trend, that Nassim Taleb would call new mania. People love the new. People do.

Tim Ferriss: Yeah, absolutely.

Pavel Tsatsouline: People just absolutely love the new. They're forgetting that with stuff that it worked much better. You could consider the results. The results were superior back then. The same thing, you can look at the power lifting methodology, also going back to the '80s. The classic American power lifting methodology, the classic cycling, as exemplified by lifters like Ed Cohen and Lamar Gant, and systematized by Marty Gallagher. Again, people are saying, well, we have better training methods these days, and they're showing you different numbers in the squats and the bench press and so on, to which I say, well, in the squat and the bench press, it has become impossible to really compare apples and apples because of all these crazy shirts and suits that people are wearing. Exactly. But in the deadlift, you're still seeing – look at the record tables. The record tables, the number of the deadlift records are still set back in the '80s and '90s, and they're still sitting. These are all time historic records. And even the advancement of some systems geared for the deadlift, and advancement of the longer bars, [inaudible] bars and so on, you had improved the samples. But still, many of these records still do stand.

And the '80s is a fascinating era for strength. I wrote a blog a little while ago that I call *The Forward to the Past*. It was inspired by the upcoming 30<sup>th</sup> anniversary of the movie *Back to the Future*. And the point I made in there, look. If Marty McFly wanted to travel, there are plenty of reasons to travel to today's day. But looking for strength advice, that he would have been much better off staying home. Because there's so – the weightlifting methodology in the '80s, the American power lifting methodology of the '80s, they still remain superior. And that's not something you can argue.

Tim Ferriss: Yeah. Ed Cohen, even for people who are not familiar – perhaps especially for people who are not familiar with power lifting, I think would just be fascinated by Ed Cohen. What was it, he pulled – ah, god. I’m blanking here.

Pavel Tsatsouline: 901 probably was his best pulled.

Tim Ferriss: That’s the one. At what body weight? That was 220 or something?

Pavel Tsatsouline: 901 at 220, that’s correct.

Tim Ferriss: God, that’s insanity.

Pavel Tsatsouline: And Ed has set somewhere close to 100 world records, and he has competed in weight classes. So many different weight classes over the years. And he also had a remarkably injury free career. Just remarkably.

Tim Ferriss: His hips gave him – I mean, he’s had hip issues since then. Do you think that’s a result of sumo style deadlift?

Pavel Tsatsouline: I doubt it very much.

Tim Ferriss: You do. Okay.

Pavel Tsatsouline: I doubt it very much. I mean, deep squat, if you talk to somebody like Greg Cook. If you talk to somebody, Professor Stuart McGill, you will find that deeper wide squats could probably lead to some problems. Sumo deadlift, it’s extremely, extremely unlikely.

Tim Ferriss: Very interesting. And one of the things that –

Pavel Tsatsouline: And by the way, Tim, sorry to interrupt you. How many people do you know who don’t sumo deadlift anything heavier than the newspaper who have to go get their hips replaced?

Tim Ferriss: No, exactly. And this is actually something I was gonna bring up, which is when people see the Lyle Alzados of the world, the body builders who get cancer, and they go, oh my god. The steroids cause cancer. And it’s like, well, you have to look at it in the context of how many people out of a thousand would get cancer, whether they’re in the gym, or injecting steroids or not to really have a fair assessment of causal factors, right?

Pavel Tsatsouline: Exactly.

Tim Ferriss: So your point's well-taken. The thing –

Pavel Tsatsouline: Sorry to interrupt you. I'll interrupt you, though, and I will say one thing.

Tim Ferriss: No, keep interrupting.

Pavel Tsatsouline: Many of these guys who competed at a very high level in the '80s and the '70s are very healthy and doing extremely well. If you look at Gallagher himself, right now he's in his 60s. He's very strong, very spry, fully healthy. Hikes in the woods every day. If you look at weightlifters, well, forget the '80s. Let's go back a little farther. Ruben Hookfailure, he was a Soviet German. He was an Olympic champion in weightlifting at the age of 37. And that's something that's never been replicated.

Tim Ferriss: That's incredible.

Pavel Tsatsouline: Absolutely. It is incredible. Today, he's somewhere in his mid-80s, and every day, as part of his training regimen, he does jump squats with 200 pounds, 90 kilos. So he goes rock bottom in a squat, and jumps up. And that's a guy in his mid-80s. And in fact, he looks so good, some journalist who came to interview him said, "Excuse me, sir, may we speak to your dad?"

Tim Ferriss: That's amazing. Wow. Something to aspire to. I've been, just on the weightlifting point, I've been spending time with an amazing gentleman named Jersey Gregoric. I'm not sure if that rings a bell, but –

Pavel Tsatsouline: Yes, it does. He's a very nice man. He's Polish, a very accomplished lifter.

Tim Ferriss: Very accomplished world-class weightlifter, I think primarily in the Masters division. But he's – I'm speculating here – probably in his mid-60s. I'm spending time with him, and he can still throw – I don't know the exact weight, but he had two to 300 pounds over his head in the snatch, no problem.

Pavel Tsatsouline: Jersey still can do full splits?

Tim Ferriss: He is amazingly flexible. I haven't asked him to do any Van Dam type stuff for me, but his ability – his hamstring flexibility, which of course is much more than hamstrings, but what I

perceive, what a layperson would perceive as hamstring flexibility, just blows my mind. It's amazing how flexible this guy is. So it's – that's – I'm very interested in the long game, so. But increasingly interested, the older I get. I'm 37, and I can't – I'm certainly not gonna be winning any Olympic gold medals any time soon in weightlifting.

Pavel Tsatsouline: My father took up bar lifting at the age of 71. He's 77 today. He deadlifted 413 pounds without a belt, and he set several American records in his age group, and over training for five years. So he put on 20 pounds in muscle. If you look at my father, if you look at him from the back, you will think that this guy's gotta be in his 40s. And he looks like a wrestler. He's just massive. And Stu McGill, when he examined him, he says he's got – he's never seen such muscular development of a 70-year old. And he started when he was 71.

Tim Ferriss: Would you consider the – and please disagree if this is not the case, but if you had to pick one movement for strength, longevity, would the deadlift be that movement, or is it not possible to choose one movement? How would you try to answer that question?

Pavel Tsatsouline: If you were to choose one movement, Tim, yes, I would choose the deadlift, or I would choose the kettle bell swing. Obviously, the kettle bell swing is not something you can compete in, and something you're not – it's not gonna give you the same satisfaction as lifting heavy weight, but those are the two main full body exercises, the full body expressions of power that will go such a long way for you for longevity, strength, just the quality of life.

Tim Ferriss: What are the biggest mistakes that people make with the deadlift, whether that's technically or in programming? What are the biggest mistakes? And not asking you to repeat things you've already said, but are there any things that, top of mind, that –

Pavel Tsatsouline: Well, Tim, I think the very big mistake is because they think, okay, I have picked up things from the floor. This looks so simple. It's not an Olympic lift. Therefore, it's very simple. So I just start piling on plates and start training. The deadlift is a very technical lift. And even if you're just a recreational lifter, you owe it to yourself to learn to deadlift correctly. So that's as simple as that. So I say that's the primary mistake, and that mistake goes for every exercise that people do out there.

Tim Ferriss: Yeah. And I would highly recommend people check out your book with – now I want to say with Mr. Bolton.

Pavel Tsatsouline: Deadlift Dynamite.

Tim Ferriss: Yeah. Really very, very dense. Shifting gears just a little bit. Dense in the best way possible. No fluff.

Pavel Tsatsouline: Thank you.

Tim Ferriss: I'd love to shift gears, and just ask you a few questions about sort of your philosophies and your thinking, not so much the highly specific training questions. But when you think of, for instance, the word successful, who's the first person who comes to mind for you?

Pavel Tsatsouline: Tim, I am fortunate enough to know many successful people, and I think that what separates them from the rest is the CEO of StrongFirst, Eric Frohardt, he put it very well. He says balance with priorities. Balance with priorities. So Eric, yourself, and many others I'm fortunate to know, they exemplify success for me.

Tim Ferriss: And the – how do you – what is the best way – what are the habits that you've observed that allow people to have balance with priorities? What are the things they do that other people don't do? Or maybe the things they don't do that other people do?

Pavel Tsatsouline: Well, I think one is calm. These people are calm. Because people who are hyper, they get so trapped in their reactive modes. They get too trapped in the every day minutiae of their work and their existence, so they just do not pause, and they do not think. Again, Eric has a great quote from a Vietnam, Eris Seal, who says calm is contagious. Calm is contagious. So when a person is calm, then he or she has the time to meditate, reflect, set the priorities, and set the balance.

Tim Ferriss: Yes, that certainly holds true, from what I've seen. And the opposite, of course, is true. Hysteria is contagious.

Pavel Tsatsouline: Or it's just chasing the tail, absolutely. Chicken Little, the sky is falling. Yes, everything is urgent.

Tim Ferriss: Sounds like the Internet in a nutshell right there.

Pavel Tsatsouline: That's right.

Tim Ferriss: Do you have any morning rituals? What does the first hour or two of your day look like, typically?

Pavel Tsatsouline: I like to ease into my day. I will get up early, 6 AM, typically. And my wife and I will just have coffee, and read the newspaper, and make small talk. And I really take my time. I pointedly read a paper, not watch TV, not get any kind of electronic news or radio. I really appreciate the calm of print, because whenever you're watching TV, it's just the latest news, the breaking news, and it's again, that same tail chasing. After that, if I decide to lift – train with kettle bells, I'll go to the beach and do that. If I do not do that that morning, I'll just still go to the beach for half an hour.

Tim Ferriss: What time is that, typically?

Pavel Tsatsouline: That'll probably be about 7:00. And I will take a dip. I'll meditate a little. I might stretch a little. So again, it's a time to be composed. After that, it's a time to do creative work. So I will either write, or I will do research. And when I do that, I very pointedly have the email down, so my whole email application's down. If I need to use the Internet for research, the browser will stay up, but not the email. And my colleagues know to call me if there's something urgent. And not a lot of people call me because I have – my business card only has my email, so that's [inaudible]. And my –

Tim Ferriss: So does it have my email, and it says please call if urgent, with no phone number?

Pavel Tsatsouline: No, it doesn't. No, obviously my colleagues do have that. So, and when I write, I will sometimes change the environment. I'd like to go to a coffee shop, or go to a park or something. And I do have a particular method when I write. So I will just select some topic, and I'll work on this topic. And as soon as I hit the wall on this topic, I just switch to something else. I never fight the writer's block.

Tim Ferriss: To a new topic.

Pavel Tsatsouline: I just – absolutely. I just have a lot of different things, a lot of different projects, chapters, articles, books, whatever, going at the same time. And I'm very flexible about it. And I also do let my books evolve. And sometimes they evolve in a very unpredictable manner. The Naked Warrior started out as a book for strength training in the field for the military, and then it

evolved in a sort of manifesto for reverse engineering the body language of the strong. So I just kind of let that happen. Towards the end of the day, it's make a call. Make a call with my coworkers. Take care of some business. Dinner with my wife, and pretty much relax. First read some nonfiction, then read some fiction. That's a pretty standard day. I like my days.

Tim Ferriss: I like the sound of your days too. The – do you listen to music? And if so, what type of music? What are the most frequently played songs or albums on your iPhone, or work?

Pavel Tsatsouline: I – my music tastes are – I like the yin and yang. I don't like stuff in the middle. So on one hand, I enjoy 1980s heavy metal. I like Sept, Iron Maiden, Saxon. These are my favorite bands. On the other hand, I will listen to Jackson Brown, Carli Brunie, Ematon. So in my opinion, music has to be either yin or yang.

[Crosstalk]

Tim Ferriss: On or off, it's like everything you do.

Pavel Tsatsouline: Yeah, exactly. Seriously. If you think of performers, it's the same thing. The art of physical performance is the art of turning on a switch and shutting it off. For maximal strength, you have to turn it on. For maximal ability and endurance, you have to turn it off. And for a lot of sports, it's the ability to turn it on and off, on and off, back and forth, back and forth, tension and relaxation. So I do like these extremes in my music.

Tim Ferriss: Right. So you're either Vivaldi or Pentara, and no pop music in between.

Pavel Tsatsouline: No. The stuff in the middle has no right to exist.

Tim Ferriss: And when you're writing, are you writing – do you write on a laptop? Do you write – and if so, do you use Word or some other program? Or are you writing in a journal? How are you jumping between these various articles that you're working on?

Pavel Tsatsouline: Tim, I write in Word. And what I do is I have a very peculiar type of organization data in my mind. In my mind, I have many different shelves, with many different projects, and many different research studies, and so on. So I can kind of see in my mind what connects with what. I see the pattern. So I can go back and forth. And I really think that the computer does enable me to do that so much easier, and I'm generally not a fan of technology.



But I have to say that the word processor is one piece of technology that I'm a very big fan of. I think on the page. I don't think in my mind. I think on the page.

Tim Ferriss: Yeah, that's something that I've heard from a number of good writers, is that they have to write to clarify what they're actually thinking.

Pavel Tsatsouline: Correct.

Tim Ferriss: It's not like they form the thought and put it down. They use the process of writing to clarify their thinking. Do you have a private journal or anything like that?

Pavel Tsatsouline: No.

Tim Ferriss: You do not. Okay. And just since I love talking about this, but I won't take too long – a recommendation that really was a game changer for me is using a program called Scrivener in place of Word. And Scrivener is, as it sounds – what that allows you to do, it was originally designed for movie scripts, I believe, for screenwriting. And what it allows you to do is have all of your various documents, which would each otherwise be a separate Word file, in a table of contents on the left-hand side of the screen, which you move around, and modify, and put in folders, which I've used for all of my last three books. And then you can look at two different pieces of writing on the right-hand side. So what I'll typically have is a folder that's all research documents, and I will have a split pane on the right hand where the top is what I'm working on, what I'm actually writing, and the bottom right is the research document. So rather than having a million windows open with different Word documents – and as you've probably experienced, once you have enough of those open, eventually it just craps out on you, and it jumps off the cliff. I don't think I've ever had, in however many years I've used it, Scrivener fail on me. And it's because it strips out a lot of the bloat. But you might really – I don't have –

Pavel Tsatsouline: Thank you. I'll definitely try it.

Tim Ferriss: Yeah. It's a fun program to play with. And I don't have the mental – I have too many plates spinning at once in terms of articles, if I'm working on a larger project like a book. So Scrivener helps me to codify that, which I find very helpful. How do you change your – do you change your typical routine on the

weekends? Is there anything that you do differently on the weekends to decompress, or otherwise?

Pavel Tsatsouline: Not a lot. Go to church. Go for a hike with my wife, Julie. But otherwise, pretty much every day, I try to have a balance of work, a balance of family, a balance of recreation, and a balance of self-improvement.

Tim Ferriss: Speaking on the last point, self-improvement, what are things that you're currently trying to, or would like to improve about yourself?

Pavel Tsatsouline: Well, about myself, that would be private. Tim, I think that –

Tim Ferriss: It's just between – it's just us girls. Between us.

Pavel Tsatsouline: I think that over-sharing is one of the major malfunctions of the modern world. So I think I'm gonna keep this one to myself. But I'm gonna tell you what I'm trying to improve professionally.

Tim Ferriss: Okay, that's fine.

Pavel Tsatsouline: I have – as I mentioned, again, I have been able to dissect the very successful weightlifting methodology of the '60s through the '80s, which is extremely complex methodology. And I've been able to bring it down to the underlying principles, and codify it, and write down algorithms. So what I'm doing right now is trying to bring this very sophisticated, very amazing system of training to regular people who just want to get stronger. So I am in this refining phase.

Tim Ferriss: Got it. And so to touch on that, just as a segue, I'd love to talk about flexibility, because I get a lot of questions about flexibility. I don't consider it my area of expertise, so I constantly refer people to your work.

Pavel Tsatsouline: Thank you.

Tim Ferriss: But I'd love to hear you talk about where flexibility fits into the picture, or when it does. Because I think for me, and for other people, there's a lot of confusion around mobility versus flexibility. One of the questions I get most often, for instance, is how do I get to the full side splits? They want to go between the chairs like Van Dam. And is that a worthwhile goal? Is it a terrible goal? I mean, this is a lot coming at you at once. But how does flexibility fit into the picture or not for what types of people?

Pavel Tsatsouline: Okay. Well, first of all, let me tell you about the goal of a split, whether if you choose to achieve that. It's achievable. I will tell you a great success story. He's one of the StrongFirst instructors, and he's truly a product of the system. The gentleman's name is Steve Freebies, and he's a music professor. He was severely injured. His lower back was herniated very bad. He spent eight or nine months in bed on Percocet. It was very bad. And then he decided to become a man. Decided to train seriously for strength, for flexibility training like a real athlete, after getting the proper medical clearance and so on, of course. So fast forward to today. Steve Freebies, who is 59, if I'm not mistaken, he holds a number of American records for his age group in the deadlift, and he deadlifts without a belt. And Steve Freebies, 59-year old man who used to have horrendously messed up back, can do suspended side splits just like Van Dam. So you big sissies out there saying that you are too old or too whatever, you just gotta shape up.

Tim Ferriss: All right. So touching on the – all right. I will –

Pavel Tsatsouline: Let's go back to the [inaudible].

Tim Ferriss: I will raise my hand. I'm one of those sissies. If – and I've had this – I think there are many to dos that are – they're the nice to have things, then the must have things. And for me, it's been at least a decade, maybe 20 years, where I've had these suspended side splits on the to do list. And it just gets renewed. It's kind of like car insurance. Like I renew it every year. But I never really make any use of it. So.

Pavel Tsatsouline: Tim, we'll deal with that. We'll get you there. Whether it's a worthwhile goal or not to pursue, obviously there's the obvious just because it is there. And there's no way of judge that kind of goal. Somebody climbs to the mountain. Somebody learns to do a side split. Is that something that you need to do for your performance outside of several sports like tae kwon do or gymnastics? No, you really don't. Is that going to improve your wellbeing? I do have to say that the sense of freedom that you have in your hips when you consistently can do a full split, it's really pretty awesome. To have that feeling of freedom in the hips, you can only know that freedom if you also have known what not to have it, if that makes any sense.

Tim Ferriss: Right, of course.

Pavel Tsatsouline: So I will periodically – for a while, I kind of not take it too seriously, take some time, stretch very lightly, kind of keep maybe at 70 percent. And I will just make the push again and bring it back, and I always really enjoy that feeling of freedom. So that’s – it’s a decision, though. But let’s talk about this mobility and flexibility business. Let’s talk about how people should proceed about it. So mobility, pretty much, we’re talking about the full range of motion in the joint when the length of the muscle is not an issue. So let’s use an example of a full squat, okay. So if you’re in a full squat, not a whole lot of muscles are preventing you from hitting that range of motion. So it may be possible that you need to just pretty much get your joint moving smoother. So what does that mean?

Folks, it just literally means just doing a whole bunch of squats very slowly. And just very slowly, and building up progressively a range of motion. I’m also, an admission, I’m also the famous Soviet scientist who was a kind of house guru. He would perform these movements every day. He would perform 100 squats every day and 100 other things. If you’re not up for doing that, you just simply hold onto the doorway. So you just unload your self partially. You shift your weight more to the heels to make it easier on your knees, and you start squatting. And don’t go to pain. Be very progressive. Go as deep as you can. Eventually go deeper. Just do multiple sets. If – and the same thing is true really for pretty much all the other joints. But obviously the hip joints, that’s a big one. And everybody needs this type of training.

I like a very simple joint mobility protocol. Obviously, you can make this as complex as you want, seriously. And many people have. But like in my book, Kettle Bell, Simple And Sinister – that’s my latest book – I give this protocol where there are just a couple different exercises you do. One exercise you do is you just kind of move a weight around your head in a circle, a halo. Loosen up the shoulders. And another exercise you do is a very particular type of squat, kind of prying goblet squat. That’s a terrific exercise. So you can do a search, prying goblet squat.

Tim Ferriss: And just for people – I remember the first time I heard you say that. I embarrassed myself at the certification because I thought you were saying goblin squat, and I asked you what a goblin squat is. So for people – it is a goblet, like drinking out of a goblet.

Pavel Tsatsouline: Goblet squat, the name by Dan John, and it’s a terrific type of a squat that’s literally squat for the people. See, the problem with

the squat exercise is most people are – don't know how to move well. They're tight. And you try to put the bar in their back, and they just cannot do that. So the goblet squat is kind of a squat for the people that then developed. And the prying that is added to that is something that really allows you to increase your mobility and flexibility. So what you need to do when you're trying to get your flexibility increased, let's say that – and mobility. Let's pick any exercise that you're doing, any kind of a stretch that you're doing, whatever it is. So there are certain rules that you need to abide by. And I call these the three S. So use your strength, find space, and spread the load. Use strength, find space, spread the load.

So what does that mean, exactly, Tim? Well, let's use an example of the squat. Using strength for the squat means pulling yourself down into the squat, instead of just dropping yourself. Using example of the split, instead of trying to drop yourself down into the split, you're very actively pushing your feet out, like you're trying to spread the walls apart. So spreading the walls apart, that means you're using strength. Find space. So what does finding space mean? Finding space meaning just pretty much kind of prying and moving your body into the position, and trying to find more space in the joint. And also try to loosen up the fascia, that fiber sheet around your muscles. It's – a very good analogy would be trying to pull a post out of the ground. So let's say you're trying to pull a post out of the ground. It's a concrete post. You're pulling hard, and it's not gonna come out. And I can tell you because I have tried. Then –

Tim Ferriss: What are you doing down in southern California?

Pavel Tsatsouline: Oh no no, that was not in California.

Tim Ferriss: Vandalizing parking lots.

Pavel Tsatsouline: That's before. Back in the past, we had a house, and we bought a house, and there were some things in the back that I wanted to demolish. So I'm trying to pull out this concrete post. So I tie a nylon rope to this post, attach it to a crowbar, get a nice strong sumo deadlift position, and I pull. Well, what happens is the nylon rope rips, and I do a backflip into a pile of dirt. Because I'm very smart, I do this two more times. And then my wife Julie walks by. She says, "You know, you could just kind of wiggle it around, pry it." I said, "Oh. That's right, honey." So the same thing is really with your flexibility. So let's – Tim, let's use the

example of the straddle. Let's say you're trying to get the straddle. Instead of simply trying to force yourself down –

Tim Ferriss: Straddle meaning side splits?

Pavel Tsatsouline: A side split, but maybe lying on your stomach, or maybe sitting up. Doesn't really matter. Either way.

Tim Ferriss: Okay. So you look like a frog on its stomach.

Pavel Tsatsouline: Pretty much. So what you're trying to do is not just force your way in one direction, but you're trying to kind of pry it and loosen up in every direction possible. So let's say that you are resting on your forearms. So you're trying to get into this straddle. So you're first pushing your legs out, but then you're also kind of tilting your pelvis back and forth. Now you're gonna try to kind of wiggle your butt side to side. Now you will try to turn your body one way. You're gonna try to turn your body the other way. So pretty much what you're doing is you're taking advantage of the fact that your fascia that covers your muscles, it runs in all sorts of different directions, kind of like plywood. So you need to loosen it up in a lot of different ways.

So if you keep going in different directions all around, you will progress to this goal so much faster. So use strength, find space, and spread the load. And again, spreading the load just pretty much means that you are not just trying to focus on that particular joint. So you're just spreading it all around. And relaxation is the absolutely – relaxation and patience are the two things that are absolutely fundamental if you're trying to get a high level of flexibility, like a split. You see, you get a recommendation. Let's say oh, I'll hold the stretch for – and they'll give you some duration. 30 seconds or whatever. Like how did they arrive at that number? I have no idea. Just somebody decided, well, that sounds like a nice round number. Let's recommend that. But what you're trying to do –

Tim Ferriss: It's disturbing how much of the world comes about that way.

Pavel Tsatsouline: Well, it's like how many glasses of water you're supposed to drink a day. It's the same thing. So yeah. Hold the stretch for 30 seconds. But the fact is, you're trying to wear out your stretch reflex. You're trying to let the muscle relax. And depending on your fiber composition, depending on your mental state, emotional state, training history, injury history, that can take different time. So just don't worry about it. So you just get in this position, and

you kind of pry a little bit for a while, and then you just relax. And when you relax, you try to breathe through that tight spot. When I say breathe through, I'm saying just listen to my breathing. [Breathes] You completely release the tension totally. If you do this, uhhh, which is pretty much what most people do when they're trying to stretch, you're tightening up the muscles. You just have to completely let go. You have to be patient. And you have to spend a good half an hour, 40 minutes on this type of practice a day if you really are serious about reaching that level.

Tim Ferriss: How long, I'm sorry?

Pavel Tsatsouline: About 30, 40 minutes. But even if you don't – well, there are ways of doing it faster, Tim, but that involves isometric stretching, and that's a little bit more technically involved to talk about here on the show. But even if you do not pursue this extreme flexibility goal. Even if you just want to be flexible to whatever level you want to be flexible, and understand that the idea of relaxation, breathing, and patience are absolutely fundamental. You have to be patient. Flexibility training is not something you should ever do when you're in a hurry for some appointment. It's something you should save for the end of the day. Let's say you're watching some TV show. Just go and stretch. Or you're reading a book. One of my colleagues, Dr. Marchain, a StrongFirst senior instructor, he has these beautiful side splits. The way he worked up to his side split is he would just sit and read a book in a straddle on the ground. And then at some point, whenever he felt like he could, he just tried to spread his legs a little wider. And that's it. He'd go back to reading his book. So you see, acquiring flexibility, it's an exercise in patience. So if you do not have the patience, or if you do not have the time, I suggest you just give up.

Tim Ferriss: And the isometric, just to touch on that, is that a variant, or perhaps the same thing, as PNF, the –

Pavel Tsatsouline: Pretty much.

Tim Ferriss: Like sequential sort of contractions and release?

Pavel Tsatsouline: So here's how this works in a nutshell. Imagine that you are – let's say that you're stretched out far, and it feels like I cannot go any farther. The muscle cannot get any tighter. Then you slowly contract that muscle. Slowly. It's important for safety. And you build up the tension. And you hold that tension for a while. And then you release that tension. The important thing

is, again, [breathes] and release. And when you have release, you will see this contrast. So in a way, you kind of climb from the fire into the frying pan. It's still hot, but not as hot. And you can eke out just a little bit more range of motion. So these isometric contractions can be added to any type of stretching, and the idea – the very important thing about them is you need to make them steady. Do not make them jerky in any way. The only thing about them that's sudden is that release. Otherwise, steady, steady, steady.

Tim Ferriss: And when you're holding the contraction, and this is hard to quantify, but sort of as a guideline, what percentage of maximal contraction is that?

Pavel Tsatsouline: You know there are various methods. Some of them attempt for you to bring the attention to very, very high level. Gradually still, very gradually, but very high level, to the point where the muscle literally shuts down. Something could go, a tendon, organ, just fires, boom. The muscle just goes. That's an advanced technique. It takes a lot of practice. You can go, or you can just go for a very steady tension of about 30 percent, and just try to stay there for pretty much as long as you can handle it. Just the important thing is that the tension doesn't diminish. Whatever – when you feel like the tension's about to diminish, whatever level that you've chosen, then you just release, and then you pry a little farther.

Tim Ferriss: Mark Cheng has one of the most impressive Turkish getups I've ever seen. Very impressive. So for people who are not familiar with that move, you can certainly do a search and see some examples. That is a very very very technical move.

Pavel Tsatsouline: And the Turkish getup, the beautiful thing about the Turkish getup that somebody like yourself, who is minimalist, can appreciate, is you get done so much or so little. It's one of those amazing all around one stop shop exercises. And some food for thought for people in general, when you think about training – earlier we talked about learning straight offs, what to do in the program, is – training is just like a budget. A budget for a person who has a regular paycheck. So you have to decide, am I going to buy a couch, or am I going to go on vacation? Am I going to get in debt and do both? Am I gonna buy a really good couch and not go on vacation, or buy a cheap couch, and take a short vacation? Do you see where I'm going? So there are a lot of choices, a lot of tradeoffs. And these tradeoffs have to do with both your time, but also with the capacity of your endocrine system.



Your endocrine system can only handle so much training. And all these different types of training that they are added up, and plus the stresses of your life, and so on. So whenever you're deciding on what it is that you do for your exercise, you have to identify really what's important, stripped and unessential, and make compromises and sacrifices somewhere.

Tim Ferriss: Um-hum. Yeah, true for so many areas. I wanted to come back to something you said about over-sharing earlier, and the – I guess it was the flaws, or the dangers of over-sharing.

Pavel Tsatsouline: The malfunction.

Tim Ferriss: The malfunction, even better, of over-sharing. So that's kind of my business model, I guess. But so the – I'd love to hear –

Pavel Tsatsouline: Tim, it's my opinion. I'm not judging.

Tim Ferriss: Oh, no no no. You can feel free to judge. I think that over-sharing is a problem also. But I'd love to hear your thoughts on what Americans could learn from perhaps the culture you grew up in in the former Soviet Union, or vice versa. Because I personally, and this is not meant as a slight at all. I have so much respect for so many people in the former Soviet Union. Most of my observation's been in the sports arena. I mean, looking at people like Constantine Constaninov, or Dmitri Klovov, or just these amazing specimens. But I have a very tough time when I meet some people from the former Soviet Union socially, with getting through the cultural differences. And I don't usually find that hard, unless there's a lot of vodka involved. But –

Pavel Tsatsouline: Well, that's the social lubricant. You just need to drink more vodka. That takes care of that.

Tim Ferriss: So what could Americans learn from the culture you grew up in, or vice versa?

Pavel Tsatsouline: Okay. Well, first of all, I'm speaking about the Soviet culture. I'm not talking about the current culture, the post-Soviet culture. Because unfortunately, this is my observation, that oftentimes, when different countries learn something from America, they choose to learn not the things that are worth learning.

Tim Ferriss: Right. Agreed.

Pavel Tsatsouline: I really would like to see for Russia to learn about free enterprise, about fair competition, about freedom. And unfortunately, the things they're learning are not. These are like reality TV. That's what they're learning. And that's not unique to Russia. That's pretty universal around the world, for some reason. Instead of getting the best from America, people are just sort of getting the Las Vegas version of America. So – and what people can learn, what Americans can learn, is they can learn to limit their choices. You mentioned earlier the paradox of choice – it's the Barry Schwartz book, right?

Tim Ferriss: That's right.

Pavel Tsatsouline: It's a very good book. I enjoyed that book very much, and I think that it's very true. When there are so many choices to exercise, these choices are difficult. It takes a lot of processing power. There's a great moment in film, *Moscow and the Hudson*, a film with Robin Williams, where he walks into an American grocery store, and he sees coffee everywhere, and he says, "Coffee, coffee, coffee," and he just passes out. So what is very difficult in this country is exercising the choice, because options are just so many. And choices are difficult. And in fact, you will find out that a number of Eastern Europeans who have failed to assimilate, or failed to make their life in America, are the ones who just have a hard time making choices. They're used to a lot of choices being made for them. And there is an obvious downside to that in terms of freedom. There is obviously an upside of it because there are fewer distractions. So you personally – not you, Tim, but the listeners – you need to figure out how to limit your choices. Then make these choices and stick to them. The Constantinov and Klovov and these other Russian athletes you mentioned, these guys do not train with 360 degree [inaudible] curl bench that you see in the typical gym. These guys have the basics, and they just hammer, just absolutely hammer on the basics. The – I'm a big admirer of the free enterprise system. Unfortunately, as much as that's worked in so many fields and industries, it's completely failed in the exercise industry, the fitness industry, because it's constantly chasing its tail with the novelty, the new, the best, the whatever. And it's a fad that just goes away again. But the simple fact is, certain things just do not change.

What I think also, I think Americans could really learn is they could learn from themselves. They could learn from the past. I have a great idealized image of America that I did when I was growing up, and that came from -- my favorite film is *The Magnificent Seven*. It's interesting that they showed that film

when my dad was in the service, and it came out first, and then I saw it many years later. They showed it again, and I was just very impressed with this ethos that you could see there. These very strong, self-reliant people who don't waste words, who do not get stuck in a part of hierarchy, who ride into the sunset. I think it's just very powerful. I think if America would just a little bit more reconnect with what makes it great, it wouldn't have to search elsewhere. We can talk about American exceptionalism. There really is such a thing as American exceptionalism. Because no other country has that same sense of freedom, has the same opportunities, and that same spirit of everything is possible. No other place.

So even people who go out and start criticizing America, usually it happens because of envy. That's really all it is. So maybe let's just go back to the older times. Maybe some of them didn't even exist, Old West, whatever it is, where just people had the pride in being pioneers, the pride in just getting ahead. Or let's even look – Tim, let's even look in the '50s or '60s. Like today, where do the brightest young people – what do they end up doing? They end up designing apps, right? Well, in the '50s and '60s, they designed spaceships.

Tim Ferriss: Right.

Pavel Tsatsouline: So their dreams were just so much bigger, right? And not, ooh, here is this hot new app. Ooh, golly gee Martha. So let's just try to go back to what made this country great, to a grand vision, and not just the petty little app stuff.

Tim Ferriss: Who are some of the people for you, whether current day or hundreds of years ago or more, who exemplify the best of what America has to offer? If people listening were looking for role models to revisit, or to try to emulate, who would you put on that list?

Pavel Tsatsouline: I would say the Founding Fathers. Ben Franklin, definitely. There are so many great people in American history that are worth emulating. There's the great generation of the World War II. These were the quiet people who just went and got the job done, and didn't whine and complain about the lack of opportunities, and life is hard, and we're having it so tough. There are many. I have – and just even people who are just – even people who are younger. I have a good friend named Stony. Stony was a Marine. He fought in Vietnam, and just Stony is just such a good person who has just such a positive outlook on life. He just is a

true American. You will not hear him complain. He thinks that Americans have had great things. And that's what – seriously, this is what disappoints me as a naturalized American. Because I think America is so much bigger, so much better than its – than it has been. So just look back into the world before.

Tim Ferriss: No, I'm of course born and raised here, but very much feel the same way. And it's been uplifting to me, though, to see that although the kids building apps, some of which are very world-changing, I think, but many of which are not, and are very trivial. If we look at apps as just the new software applications, and mobile devices as the new computers, there are people changing the world, but there's also been a resurgence of people aspiring to be like Elon Musk, for instance, who is building spaceships.

Pavel Tsatsouline: True.

Tim Ferriss: And that's been really reassuring to me in some ways. But the Ben Franklin example I think is a great one, and for anyone who hasn't read the Walter Isaacson biography of Benjamin Franklin, it's a fascinating, fascinating picture of a deep, very capable, but also hilarious figure. I wanted to just, in closing, a few more questions. But the first is, how do you personally limit your choices to avoid the coffee, coffee, coffee experience? And the distraction? How do you – what are some ways in which you contain those choices in life?

Pavel Tsatsouline: Tim, professionally, I use the same technique that you use for voting. I remember that you mentioned that you don't like following the current affairs before you vote. You just talk to a number of people whose opinion you respect, and who vote the way – who believe the way you do. So I do the same thing in training, pretty much. So when I do research, most of my time is spent reading the classics, industry texts and studies. And once in a while, I will raise up my periscope, and I'll talk to several people I respect in the industry, and ask what's going on? What's new? And they will just brief me on that. Most of the time, frankly, nothing's going on. But so this is an example of my technique. I am very ruthless about limiting my communications. I am very protective of my time to write. I am very protective of my time to read. And that's about it.

Tim Ferriss: No, that's – I think this is a really important topic, and I appreciate the answers. And I also encourage everyone to think about how they can create their own choice minimal lifestyle, so they can preserve their creativity and unique abilities for the –

[Crosstalk]

Pavel Tsatsouline: Well, I think also you need to. We need to teach people around us, be it to understand that not to over-communicate. Again, it's an interesting modern phenomenon that it's play by play. Everything has to be play by play. It's like kids in the car. Are we there yet? Are we there yet? No. We're driving. We're en route, and no.

Tim Ferriss: So this has been really fun, Pavel. I really appreciate the time.

Pavel Tsatsouline: Thank you, Tim. My pleasure.

Tim Ferriss: How – what are you up to – focused on currently? Where can people learn more about you? Where would you suggest people look to learn more about the things you work on?

Pavel Tsatsouline: Actually, Tim, my company's called StrongFirst. StrongFirst.com is the website, and we are about changing lives, making the world a stronger place through strength. So we teach various skills through courses, certifications, and so on. So just please stop by at StrongFirst.com, and I also recommend picking up a copy of my book, Kettle Bell: Simple and Sinister, and I can assure you that this book definitely fits with the spirit of this conversation. There's absolutely nothing fluff. No fluff there whatsoever.

Tim Ferriss: And just to also add my own two cents related to my direct experience, Pavel's methods – your methods, Pavel, and those that you've distilled from all of the minds and practitioners, the operators that you've researched and observed, really do work. So for those people who know me, I obviously conduct hundreds and thousands of various experiments. I mean, my house right now just looks like a laboratory/pharmacy. There's so much crap strewn about related to all the various odd human guinea pig stuff that I'm doing. And I've really run the gamut, and tested so many things available out there. And in a world that tends to complicate to profit, I think you really simplify to results. And so I commend you for that.

Pavel Tsatsouline: Thank you, Tim.

Tim Ferriss: And I've seen tremendous, tremendous transformations in my own life thanks to a lot of your advice, so I really encourage people to check it out. And this was a blast. So hopefully sometime we

can do a round two in person, but thank you so much for the time, Pavel, and until next time.

Pavel Tsatsouline: Thank you, Tim, and power to you.

Tim Ferriss: All right, and same to you.