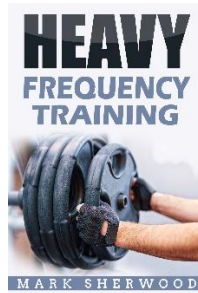


Heavy Frequency Training



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Heavy Frequency Training

By Mark Sherwood

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Table of Contents

Introduction

Chapter 1: Heavy Frequency Training

Chapter 2: Super Aggressive Training

Chapter 3: Very Aggressive Single Rep Training

Chapter 4: Perfect Form Single Rep Training

Chapter 5: What A Perfect Form Single Rep Looks Like

Chapter 6: Ideal Single Rep Weight = Adjusting The Weight for Full Recovery

Chapter 7: Keep The Exercise Selection Simple and Minimal

Chapter 8: The Basic Heavy Frequency Workout

Chapter 9: Individual Differences In Capacity

Chapter 10: The Wisdom of Ed Coan

Chapter 11: Intensity Set-Point Programming

Chapter 12: First Timers with High Frequency Training or Heavy Weights

Chapter 13: The Power of Micro-loading

Chapter 14: Use Micro-loading On Your Warm up Sets!

Chapter 15: What If You Have No Access to Fractional Weight Plates?

Chapter 16: Rate of Gain

Chapter 17: Alternating Between High Volume and Low Volume

Chapter 18: A Short Linear Loading Cycle

Chapter 19L Periodic Heavier Workouts

Chapter 20: Cut Back On Frequency Every Third or Fourth Week

Chapter 21: The 3 Biggest Keys

About the Author

Additional Resources By The Author

Introduction

Why lift heavy? Most lifters would agree that maximum strength development requires heavy lifting. The best thing about training with heavy weights is that it often leads to quick strength gains. Even so, there are potential drawback to heavy lifting which include:

1. Heavy weights can lead to injuries; especially when overused
2. Too much heavy lifting can lead to burnout and training plateaus

Is it possible to train in a manner that allows you to receive the benefits of heavy lifting while minimizing or avoiding the drawbacks? Heavy Frequency Training is a book that is designed to help you accomplish this.

In Heavy Frequency Training you will learn how to train heavy on a regular basis without training so heavy that you are constantly at risk for injuries and overtraining. Guidelines are given to provide limitations for how heavy you should lift while also making necessary adjustments according to your capacities for training volume and recovery. In addition, you will learn several variations of the Basic Heavy Frequency Training Program to help promote consistent progress.

Effort without precision will often lead to wasted effort. Don't make this mistake with your training. Learn the precise details of how to train heavy on a frequent basis in order to get the most out of your training. The rest of this book will show you how.

Chapter 1

Heavy Frequency Training

Perhaps the quickest way to build strength is to lift heavy weights on a regular basis. You can do this in a very precise, systematic manner with a training program called Heavy Frequency Training. What is Heavy Frequency Training?

The basic concept behind Heavy Frequency Training consists of frequently working up to a heavy single rep for a given exercise or muscle group four or more workouts per week. For the purposes of this program, warm up sets can be done using multiple reps per sets, but the heaviest weight used in each workout will be done in conjunction with single reps. Some lifters may assume that doing single reps means maximum weights must be used, but this is not necessary for effective training.

Testing for Strength vs. Training for Strength

It is important to understand that there is a difference between training with heavy weights and testing to see how much weight you can lift. For example, if you test your strength today, the idea is to lift as much weight as possible without any regard for how it will influence your future progress or performance. Constantly **testing** your strength with max lifts on a high frequency basis may give you some quick gains, but it will likely undermine your long-term progress instead enhance it. In contrast, the central idea behind **training** with heavy singles is to do workouts that produce positive results on a repeated basis over a long period of time. The difference between training and testing is an important distinction as the program is called Heavy Frequency Training, not Heavy Frequency Testing.

A common training concept is to implement the use of heavy singles on a short term basis when peaking. Heavy frequency training can certainly be used as a peaking phase, however, it is also appropriate for lifters whose primary goal is to train with heavy singles on a regular basis in order to make long term progress.

Those who are experienced lifters understand that lifting heavy on a frequent basis can quickly lead to burn out. This is especially true of highly aggressive forms of single rep training, however, the intensity level of Heavy Frequency Training is designed to be adjusted to your own recovery capacity to help prevent burn out and over-training.

Even though highly aggressive forms of training often lead to overtraining and a plateau, it is undeniable that some lifters have made very rapid strength gains with this type of training. This being the case, some of you may be interested in the aggressive forms of high frequency training with heavy weights. For this reason, I will briefly discuss a couple of these methods before explaining how to carefully control your training intensity with Heavy Frequency Training. Heavy Frequency Training will still allow you to gain quickly if you have the capacity to do so, but it will also provide a plan that allows for long-term sustainable progress if that is your primary goal.

Chapter 2

Super Aggressive Training

Super aggressive training consists of pushing for record lifts as often as you can. Any time you are able to lift more weight than you could in previous workouts, you do it. If you can't break a record, you still try to lift as much as possible. The strategy is simple; lift as much as you can for a single rep on a frequent basis. The Bulgarian lifters used this strategy under Coach Ivan Abadjev and it produced several lifting champions.

The Bulgarians often lifted three or more times per day and weren't afraid to do the same lifts every day, or even multiple times per day. Almost everything was done with single reps. They would select one exercise and begin their warm up with single reps using light weights. They would then work their way up to progressively heavier singles until they reached a max effort attempt (sometimes more than one max attempt). A rest period was then taken that was long enough to permit them to once again work up to a max on a different exercise, or they would rest a little longer to recover for their next workout, which was usually the same day.

The Bulgarian method is an extreme method. It was designed primarily for Olympic weight lifting, although the Bulgarians did squats and front squats using the same method in order to build their strength. Olympic lifting involves more speed and the use of momentum to perform the lifts. This is different than powerlifting as max attempts in the squat, deadlift and bench press usually involve slower bar speed than the clean and jerk and the snatch. Grinding out slow max effort reps in the powerlifts has the potential to wear you down very quickly.

Do I recommend the aggressive form of lifting where you constantly go for max effort lifts when strength training? If it works for you and you can do it safely without getting injured, then of course it would be a method that you can consider using. However, my honest opinion is that I think it is bad idea for most people, because the risk is too high for getting hurt or quickly burning out.

The daily goal of super-aggressive training is to lift more weight than you have lifted before. Lifters may succeed at this on a fairly regular basis for a while. In fact, I have heard of lifters who increased their strength by over 100 pounds within six weeks with super-aggressive training. This is undeniably great progress. However, as time progresses, it becomes harder to keep improving and personal records are broken less often. Instead of trying to go for a max lift in every workout, many lifters take a slightly less aggressive form of training where they only try to lift the maximum weight possible once per week. This form of training may not be super-aggressive, but many would still consider it to be very aggressive.

Chapter 3

Very Aggressive Single Rep Training

Those who use high frequency training with heavy weights will often come to the conclusion that they must give their body a break from going all out every day. If they still want to go for a max lift once per week, they will back off a little on the weight for the majority of their workouts and only go all-out once per week. This is still very aggressive training considering the weights are consistently heavy on a high frequency basis, and a max lift is attempted at least once per week in hopes of personal record. I will include three variations that provide an example of this type of training. The training is done by choosing two to three basic exercises per workout, and working your way up to the following percentages of your single rep max for each workout day listed:

Variation 1

85% on Monday

90% on Tuesday

95% on Wednesday

90% on Thursday

Rest on Friday

Max effort lift on Saturday

Variation 2

80% on Monday

85% on Tuesday

90% on Wednesday

95% on Thursday

Rest on Friday

Max effort lift on Saturday

Variation 3

95% on Monday

85% on Tuesday

90% on Wednesday

Light warm up weights with **30%** or less on Thursday for active recovery

Work up to a **max effort** lift on Friday

Chapter 4

Perfect Form Single Rep Training

Perfect form single Rep Training is another step down in intensity from aggressive training. The idea is still to go heavy on a frequent basis, but never with a weight that would cause you to miss a lift, and never so heavy that your form or lifting speed is compromised. **Perfect from single rep training is more of a systematic long term approach** that can be used when weekly personal records don't seem to be possible anymore with very aggressive training approaches. While it can be used as a temporary block or a phase of a lifting cycle if desired, it is also designed for lifters who prefer to lift heavy on a regular basis. The rest of the book is based on perfect form single rep training and adjusting the weights if necessary to achieve an ideal training weight for high frequency training with heavy weights.

Individual Body Proportions

While perfect form single rep training is based on using the best form possible, I realize that ideal lifting technique will be somewhat different from person to person. Some lifters have long arms relative to their body and some have short arms. Some lifters have long legs and a short upper body, while others have short legs and a long upper body.

Individual Differences in Body Part Strengths

Not only do lifters vary in terms of leg length, body length, and arm length, but some lifters have naturally strong triceps, while others have naturally strong pecs or front deltoids. Some lifters are super strong in the hamstrings, glutes, or lower back, while others are naturally strong in their quads and frontal thighs. All of these factors will have some bearing on the ideal lifting form for a given lifter. However, once a lifter figures out the ideal lifting technique for his or her own body structure and muscle group strengths, they need to practice it and perfect their ideal lifting form. In order to accomplish this, I definitely recommend working on mastering ideal lifting form with light weights or even an unloaded barbell.

As far as how to perform the lifts, the following link will take you to videos that provide excellent instruction on how to perform the lifts.

[Link to Video Instructions on How To Perform Exercises](#)

Once a lifter has perfected their lifting form, they can use it as one of the determining factors for knowing how heavy they can go in a workout. When working up to a heavy weight, you can keep adding weight to the bar as long as you can maintain all of the ideals for a perfect form single rep.

What are the ideals for a perfect for single rep? There are three of them that will be discussed.

1. Perfect Body Position throughout the Lift

The first aspect of perfect lifting form is based on the ability to maintain ideal body position at any given point during the lift.

2. A Smooth Non Stop Lifting Motion

A second aspect of perfect lifting form is based on the ability of maintain a smooth nonstop lifting motion throughout the entire lift. If the speed of your rep slows down, stops, or pauses at any point during the lift, your form is less than perfect in the context of Perfect Form Single Rep Training. The idea is to train your nervous system in a positive manner without any negative feedback from slowing down, pausing, or losing control of your form. Perfect practice makes perfect, so do not use weights that exceed your ability to perform your reps perfectly.

3. Reasonable Lifting Speed

The third aspect of perfect form is the ability to perform the lift with reasonable speed. Most people will suffer a break in form or experience some degree of pausing or slowing down at some point in the lift if it takes them more than two seconds to complete the lift. However, a small percentage of lifters have the ability to perform a smooth nonstop lift with perfect form over the course of three or more seconds. The bar moves at a steady speed from start to finish without slowing down, and there doesn't seem to be any observable break in lifting form. The only problem is that the lift is very, very slow, and slow heavy single rep lifts can be extremely taxing on the nervous system. When you perform them on a high frequency basis it can quickly lead to burn out. Because of this, reasonable lifting speed must be included as a part of the equation when determining perfect form for training. The question is, what is reasonable lifting speed?

Reasonable lifting speed will vary somewhat according to the exercise and height or build of a lifter. Bench presses can usually be performed faster than squats or deadlifts, and people with shorter limbs will be able to complete their lifts faster than average because they don't need to move the bar as far. The opposite would be true for tall lifters with long limbs. For this reason, I am going to give a time range as to how long the positive portion (or upward motion) of each lift should take. The times do not include the time it takes to lower the bar. The shorter time listed for each lift applies to people with shorter limbs, and the longer time listed applies more to people with very long limbs. Everyone else should fit somewhere within the time range listed.

Bench press, Presses, Rows, and Pulldowns

1 second or less for lifters with short limbs

1.5 seconds for lifters with long limbs

Squat and deadlift:

1.5 seconds or less for lifters with short limbs

2 seconds or less for lifters with long limbs

A Full Second May Be Longer Than You Think

Some people may think that a second is a very short amount of time for a lift. I often hear people who lift weights talk about an ideal rep speed consisting of two seconds down and one second up. If this is true then a set of twelve reps should take 36 seconds to perform, but when I time them doing a set of twelve reps for the bench press, it only takes them twenty seconds or less. I have watched one instructional video on bodybuilding where the instructor said it should take three seconds to lift the weight and four seconds to lower the weight. This means that it should take a lifter 36 to 42 seconds to do six reps, but when I time the lifter who was demonstrating, it only took them fifteen seconds to do six reps. They think they are lifting slow because when the upward lifting motion of the rep takes a full second to complete, it does not look as fast as most people would think, this is even more true of a rep that takes two full seconds.

I strongly recommend that you take the time to check out the links to videos of lifters doing single reps in the next chapter. The videos are designed to demonstrate what a smooth nonstop lifting motion looks like when done with a reasonable lifting speed. These single reps are being performed with heavy weight. I doubt if the upward lifting motion of any of the reps takes more than two seconds, and if you take the time to time them, you will find that some of them only take about a second.

Chapter 5

What A Perfect Form Single Rep Looks Like

Remember that perfect training form is based on three ideal components consisting of:

1. Excellent lifting technique throughout the entire lift.
2. A smooth nonstop lifting motion
3. Reasonable lifting speed

A clear understanding of what this should look like is critical to success when using Heavy Frequency Training. The videos at the following link will provide excellent examples of what a single rep training lift should look like in terms of technique, a smooth nonstop lifting motion, and reasonable lifting speed.

[Link to Videos That Show What Perfect Single Rep Form Looks Like](#)

Chapter 6

Ideal Single Rep Weight = Adjusting The Weight for Full Recovery

One reason lifters are hesitant to train with heavy weights on a high frequency basis is that they are afraid they will not recover between workouts. This is undoubtedly a valid concern. In order to account for this concern, selecting the right weight for your heavy single reps is essential. If you find that you have been consistently staying within the boundaries of perfect form, a nonstop lifting motion, and reasonable lifting speed, but you can't recover from the workouts on a high frequency basis, you will have to decrease the amount of weight that you are using.

Adjust the Weight for Full Recovery when Training With Heavy Singles

Remember that your primary goal is not to lift the most weight possible within given workout, rather it's to find a weight that leads to progress when used on a high frequency basis. **What I am about to say is very important so slow down and read this paragraph carefully with thoughtful consideration.** You may have the ability to do a 300 pound squat when you go for your absolute heaviest single rep squat possible. However, when limited to a perfect form single rep with a smooth nonstop lifting motion and reasonable lifting speed, you are limited to a 270 squat. Furthermore, you may find that when you train with heavy singles on a high frequency basis, you can't recover enough to make consistent progress unless you limit the amount of weight you use to 250 pounds. If this is the case, then you should be using 250 pounds in your workouts; even though you can maintain perfect form with 270!

Recognizing Individual Differences

If you have ever seen Andrey Malanichev squat in a power lifting competition, you may notice that he makes some of the hugest squats in the world look easy. This is even true of some of his world record lifts, which look like training lifts with sub-maximum weights. Even when doing some of the heaviest raw squats ever, Andrey maintains a smooth nonstop lifting motion and a rather fast lifting speed.

Either Andrey is lifting weights that are well short of his true max, or he has such excellent form that his lifting form remains fluid and fast even when he is very close to his true max. This means if Andrey used perfect form and a smooth nonstop lifting motion with reasonable lifting speed as a means for determining his training max, he might be very close to 100% of his true max. If he used almost 100% of his max every day, he would probably burn out very quickly and have a hard time making consistent progress. This is one reason why some lifters may need to make adjustments to the amount of weight that they train with by decreasing the amount of weight well below the maximum amount they can use with perfect form and a smooth nonstop lifting motion. **The bottom line is that the amount of weight used must be adjusted to enable full recovery between workouts that are only 24 hours apart.**

Adjustments to the amount of weight you train with should only be made if necessary. Some lifters may be able to easily recover from the heaviest perfect form single rep that they can perform using a smooth nonstop lifting motion with reasonable lifting speed. Others may need to make adjustments by reducing the weight a little bit, or even a substantial amount in order to recover and make consistent long term progress.

Ideal Weight For Single Reps = Perfect Single Rep Form + Adjustments for Full Recovery

Every lifter needs to find their own ideal weight for their heaviest single rep training lifts. **The ideal weight equals the amount of weight that can be used with perfect form, plus any necessary adjustments to enable full recovery and consistent long term progress.**

Chapter 7

Keep The Exercise Selection Simple and Minimal

In my opinion, high frequency training must be simple and minimal in terms of exercise selection within a workout. If you do too many different exercises for a given muscle group, the workout will tend to be longer and consist of a lot of sets. One of the concepts behind high frequency training is to keep the training sessions fairly brief. Why short workouts? Because you can recover quickly from short workouts which is necessary if you are going to be working out again within twenty-four hours.

When doing heavy frequency training, I advise selecting three basic exercises including:

1. A Squatting exercise or a deadlift exercise. Choose one or the other, not both.
2. A pressing exercise.
3. Either cable rows, one arm dumbbell rows, or pulldowns for your back muscles. You can include bent over barbell rows as part of your warm up sets, but I don't recommend them for heavy singles as the risk of injury is too high.

While I have included deadlifts as a part of the exercise selection, I must warn you that that heavy deadlifting on a regular basis can quickly cause burn out. I recommend that you squat often, but deadlift only once or twice per week.

If you want to change the exercises from workout to workout by doing variations of the basic lifts listed, you can do so, but only do exercises that you have already mastered. For example, do not work up to a heavy single rep with front squats if you are not already skilled at them; master the exercise before you do heavy singles with it, and make sure you know how heavy you can go without exceeding your ability to recover.

Consider Using Exercise Variations on Warm up Sets

Another consideration when doing variations of presses, squats, deadlifts, and rows or pulldowns, is to utilize the variations while doing your warm up sets. This will help to hit your muscles in different positions and will help to build up muscles groups that tend to get neglected from doing the basic exercises the same way all of the time.

Chapter 8

The Basic Heavy Frequency Workout

When considering the actual heavy frequency workouts, I recommend a basic workout that can easily be adjusted to your individual capacities. The basic workout consists of seven warm up sets followed by one to three perfect form single reps with your top weight of the workout. Beginners who have never trained with weights before should start out with just the first three warm up sets. Likewise, those who have never used high frequency training should start out with just three workouts per week before working up to four, five or six workouts per week, and those who have never performed heavy single reps should start out with just the first five warm up sets and take at least a month to gradually work up to their heaviest perfect form single rep. All these adjustments will be discussed in future chapters, but in this chapter, the emphasis will be on knowing how to perform the basic heavy frequency workout.

Warm up

Before doing your heavy single reps, I recommend starting with lights weight for the exercise you will be doing and performing a seven set warm up. The reason I recommend seven warm up sets is that it adds training volume to your workout. If you only do single reps, the total workload will be very low and it is hard to stimulate muscle growth when the training volume is very low. I also believe that even light weights begin to have a training effect when repeated over and over again on a high frequency basis.

If we just look at the first warm up set that is done for 10 reps with 50% of your top set, those ten reps will add up to 50 reps by the end of the week if you do five workouts per week. By the end of the year it will add up to 2,500 reps. Add on the other six warm up sets and it starts to produce a training effect that you can add to little by little over time for long term progress. For this reason, I believe that warm up sets play a very important role in high frequency training success.

Warm up sets are also good for adding variations of the basic exercises that you choose for your workout. For example, when working your up to do heavy back squats, you can start with goblet squats or front squats for your first warm up sets. You could also do high bar squats, wide stance squats or narrow stance squats. These variations can be done during your first three or four warm up sets that are done with 50% to 65% of your single rep max. You can then switch to your standard exercise form that you normally use for your heavier sets.

The warm up sets that I have listed below are based on percentages of the heaviest weight you will be using for your workout. I must emphasize that you should not base the percentages on the heaviest weight you have ever lifted, but on the heaviest weight you will be lifting for your workout. The recommended warm up for the Basic Heavy Frequency workout is listed below:

Warm Up Sets

Set 1: 10 reps with 50%

Set 2: 8 reps with 55%

Set 3: 5 reps with 60%

Set 4: 5 reps with 65%

Set 5: 3 reps with 70%

Set 6: 2 reps with 80%

Set 7: 1 rep with 90%

Heavy Singles

Once you have completed your warm up sets, I recommend the following:

Do 1 to 3 perfect form single reps with your ideal training weight.

Post Workout Easy Exercise

I recommend some very easy lifting to help your muscles relax and to stimulate some gentle blood flow to your muscles after your workout. This will help to facilitate recovery. Don't do the reps too fast or forcefully, but don't make the reps slow and laborious either. Keep a nice relaxed rep pace. Just do 20 bodyweight squats and 20 relaxed reps of dumbbell bench presses with 10 to 15 pound dumbbells. Add in a set of lat pulldowns or seated pulley rows with 40 pounds and you are done. It shouldn't take more than five minutes.

The seven set warm up plus your heaviest single reps comprise the Basic Heavy Frequency Workout. Reference will be made to this workout throughout the rest of this book. Once you have had a chance to see how you respond to the workout, you can make adjustments if necessary.

Chapter 9

Individual Differences In Capacity

The previous chapter ended with the recommendation of doing one to three perfect form heavy single reps after the warm up for a given exercise. Let me be very clear that one to three heavy single reps is a norm that many lifters will fall into, not a rule that all lifters must follow. It is hard to prescribe a specific amount of heavy single reps that applies to everyone because it depends on each person's individual training capacity and recovery ability. Individual training capacity is based on how many perfect single reps you can do before a compromise occurs in one of four areas:

1. Your lifting technique begins to suffer.
2. You cannot maintain a smooth nonstop lifting motion.
3. Your lifting speed starts to slow down.
4. You can't recover back to full strength from workout to workout.

If your first heavy single rep is perfect, it will serve as a precise standard by which the rest of your single reps can be judged. Assuming your first heavy single rep is perfect, the rest your single reps should look exactly like your first rep in terms of rep speed, technique, and a nonstop lifting motion. If your form starts to break down, or your rep speed or lifting motion are compromised, you have gone too far and have done too many heavy single reps.

Full Recovery

You have a capacity for how much you can do without compromising your form during a workout, but this must also be considered in combination with your recovery ability between workouts. If you learn that you have the capacity to perform three heavy singles before your form breaks down, then you can try doing three heavy singles per workout and see how well you can recover from it. If you aren't fully recovering from one workout to the next, drop to two or one single(s). Remember that you can also adjust the amount of weight that you are using for your heavy singles in order to enable full recovery between workouts.

I want to point out that there are sizeable variations when comparing individual capacities. Some people may only be able to perform one perfect single rep before their form, speed, or lifting motion begin to suffer. If you can only do one perfect rep, then just do one. Others may have an exceptionally high capacity with the ability to do five or more heavy singles, but once again, if you do that many heavy single reps, you must also be able to recover from it by your next workout or you should cut back.

Finding the Perfect Weight for Progress

The whole goal behind training is to make progress and the key to progress is to find a workout that allows you to keep adding weight little by little over the long term. I must emphasize that there is a difference between short term and long term lifting strategies. High intensity training helps you to

quickly reach a peak in the short term, but the problem is that it is difficult to keep progressing from a peak. The goal of long term progression is not to always be at your maximum strength level, but to workout at a level that allows you to keep adding weight little by little over a long time.

Chapter 10

The Wisdom of Ed Coan

One lifter who serves as an excellent example of someone who took advantage of both short term rapid gains, and long term gradual gains is Ed Coan; one of the greatest powerlifters ever. Ed was fairly small at a bodyweight of 135 pounds when he began training as a teenager, but he was very strong for his size and pushed himself to make rapid gains when he began training. By maxing out on his lifts twice per week, Ed was able squat 500 pounds in less than a year. In other words, Ed trained very aggressively and had the natural ability to gain a lot from this type of training in a short amount of time.

By his early twenties, Ed was putting up enormous numbers. But even then, he knew he couldn't make rapid gains forever. It was early in his career that he devised a long-term plan that was based on fourteen week training cycles. He knew he could do about four of these cycles per year and about twenty cycles over the course of five years. If he simply got five pounds stronger every cycle for twenty cycles, all of his lifts would improve by 100 pounds within about five years, and no one would be able to compete with him. He literally had all of the poundages, sets, and reps planned out for every workout over the course of several years. He stuck with his plan and never tried to lift more than his plan called for, nor did he lift less. In the process, he never failed to successfully lift any of his planned weights and reps in nearly two decades of workouts, and he rarely missed a lift in competition. Ed was smart, he understood the power of a long term training plan, but it wouldn't have worked if he didn't understand how hard to train in order to achieve long term progress.

Ed Coan's Plan

How could Ed plan out years of training in advance and actually succeed without any failures in any of his workouts? If you listen to Ed, he often emphasized two things; the **first** was to learn how to train with perfect form on each exercise; **second**, he would say that he knew how to pick his numbers, which is Ed's way of saying he knew exactly how hard to push himself so that he was always training hard enough without training too hard.

If you don't train hard enough, you won't stimulate strength gains. On the other hand, if you train too hard, you will over-train which will nullify your hard work and prevent consistent strength gains. Ed purposely chose a starting point consisting of weights and reps that he knew he could successfully lift in every workout throughout a fourteen week cycle. This did not consist of choosing an amount of weight and reps that he could barely lift with a maximum all-out effort.

People often fail to complete the desired number of reps when they select weights and reps that they can barely lift. How do you avoid making this mistake, yet still lift hard enough without lifting too hard? By choosing weights that are heavy enough to be somewhat challenging to lift while still allowing you to attain four qualities while lifting. Of course these four qualities include:

1. Perfect form on every rep.
2. A smooth nonstop upward lifting motion on every rep.

3. A reasonable lifting speed on every rep.
4. Adjusting weights and sets to match your recovery ability.

These qualities should be present on every rep of every set of every workout. When you do this, you will be able to keep on adding to your lifts little by little. In Ed Coan's case, **after he would complete a fourteen week training cycle, he would repeat the cycle with an additional five pounds.** This is a whole different mindset than going all out to push yourself to break a record every workout or every week. Ed took his time by using an intensity level that allowed him to keep adding a little too each successive cycle, and it eventually made his big numbers even bigger.

Chapter 11

Intensity Set-Point Programming

One of the key concepts of Heavy Frequency Training is to find the right starting point in terms of using the right amount of weight for the right amount of sets and reps. Ed Coan referred to this as picking your numbers right. The main idea behind this type of training is to start with a level of intensity that your body can manage on a high frequency basis. If you were to do this by rating the level of intensity one through ten, with the number ten being the highest possible intensity, the intensity level that you should be training at would probably be around a seven or eight.

Program The Level of Intensity

The key is to repeat the workouts with the same weight and reps at the same level of intensity until your body has been programmed to manage the stress without becoming tired, sore, weak, or depleted. You should feel good between workouts and be at full strength for each workout. Training in a way that causes your strength and energy to significantly fluctuate up and down should be avoided. From a steady level of intensity, you can add to your weights little by little and your body will get stronger in order to keep the added weight from feeling as though it is becoming harder to lift.

SPP

The basic concept is that if you start at an intensity level of seven out of ten, your workouts should keep feeling like a seven out of ten as weight is gradually added over time. I call this **Intensity Set-Point Programming** or **ISPP**. In other words, your body should be set and programmed to work out a specific level of intensity so that it will keep getting stronger in order to keep additions of weight from becoming more difficult to lift. It is hard to add on to workouts that are already hard. When workouts are not overly hard, you can add to them; and if they never become overly hard, then you can keep adding to them.

Of course a small addition of weight will always make the lift a little more difficult, but if you have programmed your body to function at a specific intensity level, your body will quickly gain strength in order to help you return to the previous level of difficulty that your body was more familiar with before the weight was added. The key is to start at the right level of effort and add weight in small amounts at the right rate. This will be discussed more in the chapter on Micro-loading.

Running A Cycle

Even if you program your body with a cycle where the intensity systematically increases from a six, to a seven, to an eight; and you then repeat the cycle with a little added weight, your body will want to repeat the cycle at the same intensity level of six, seven, and eight with the added weight. You can program your body to work through cycles at specific intensity levels if you progress from the right intensity and the right rate.

Intensity set-point programming is one reason why high frequency training works when done correctly. Any behavior that you do on a frequent basis tends to become a habit. When your body forms a habit of functioning at a certain level of intensity, the habit is programmed into your physiology. This is why every part of the Heavy Frequency Program is important; including the warm up sets. When your body is programmed to handle the warm up sets on a regular basis, you can gradually add to them and your body will do its best to keep the added weight from becoming harder to lift. If you add twenty to thirty pounds to your warm up sets every year, but the warm up sets never feel as though they are getting harder, you are going to be a lot stronger in five years.

Keep Adjusting Until You Find the Right Numbers

Much of the Heavy Frequency Training program is based upon finding the ideal amount of weight and reps that will enable you to keep making sustainable progress. While Heavy Frequency training provides you with a workout to start with, you may need to make adjustments to the workout which will probably take some time. Just because you try a specific high frequency workout and you don't make any progress, that doesn't mean that high frequency training will never work for you; it only means the amount of weight and lifts per workout that you used didn't work. I've already discussed quite a bit about how to determine the right amount of training that will produce a consistent training effect, but beginning weight lifters and those who have never trained heavy or frequently will probably need some additional advice. This will be discussed in the next chapter.

Chapter 12

First Timers with High Frequency Training or Heavy Weights

It is possible that some of you who are reading this are beginners who have never trained with weights before. It is also possible that you have never tried high frequency training or have never trained with heavy weights. If any of these situations apply to you, you may run into a bad experience with extreme soreness, fatigue, or injuries if you suddenly jump into the training without preparing your body for heavy frequency training by gradually working your way into it. If you are new to weight training, or heavy training, or high frequency training, my suggestion is to start with just the first three warm up sets that are listed for the Basic Heavy Frequency Workout in chapter eight. Do the workout at least four, but no more than six times per week. The first three sets are listed below:

Set 1: 10 reps with 50%

Set 2: 8 reps with 55%

Set 3: 5 reps with 60%

After doing the first three warm up sets the first week, you can add on can warm up set #4. Keep adding one set per week according to the sets listed for the Basic Heavy Frequency Workout listed in chapter eight. If you follow this plan, you will be doing all seven warm up sets by the fifth week.

If at any point during the first five weeks, you feel discomfort or negative side effects from your workouts, immediately back up to the previous week until the discomfort goes away. The negative side effects that you should be looking for consist of any of the following:

1. Soreness in your joints, back, or ongoing soreness in any of your muscle groups.
2. Loss of energy and a sense of wellbeing in between workouts.
3. Loss of strength from lack of sufficient recovery.

Only progress to doing more warm up sets when you feel 100% healthy and free of injuries, aches, and pains. When you reach the point where you can make it through all seven warm up sets with perfect form without any pain or discomfort, you are ready to move on to a full workout that includes heavy single reps. Once you have started using the Basic Heavy Frequency program, your next step is to figure out how much as how often to add weight.

Chapter 13

The Power of Micro-loading

You may have noticed that there are times when I have been talking about adding on weight little by little. Why not add on a lot of weight instead? Of course you should add on a lot of weight if you gain enough strength to do so, but what happens when you run out of adaptive capacity to make repeated gains with big additions of weight? In this case, you will need to adjust and strive to make repeated gains with small additions of weight. Your body can make repeated small adaptations easier than it can make repeated big adaptations. This being true, I believe in the power of micro-loading, as it allows for small adaptations which are easy for your body to make. What is micro-loading? It is simply a method by which you add weight to your lifts in very **small increments of a pound or less**. When done on a regular basis, those small additions of weight will add up to a substantial amount of weight over time.

I believe there are **two basic reasons** why micro-loading isn't used by lifters more often:

The **first reason** is that it that those little plates seem wimpy to a lot of lifters. Many believe that an effective training method should produce substantial strength gains that would allow you to add on a substantial amount of weight to your lifts. Of course this is true until you hit a plateau, at which point you may find that you can't add on any weight unless it is a very small amount. Micro-loading will help solve this problem.

The **second reason** why more people don't use micro-loading is because they don't have access to fractional weight plates that are a pound or less. Just about any gym has five pound plates, and a lot of them have two and a half pound plates, but few gyms have fractional weight plates that are a pound or less. If the smallest plates that you have access to are two and half pounds, and you put one on each side of the bar, it adds up to five pounds. Five pounds may not sound like a lot, but most people reach a point where they can no longer gain strength in five pound increments. This is when fractional weight plates become necessary.

Fractional weight plates may seem like an insult to a lifter's ego because they are so small, but a little math can usually solve this problem. What if you add a half pound to each side of the bar once every week for a year? Two half pound plates equal a pound, and a pound per week equals just over fifty pounds in a year. In other words, you will be able to add on a twenty five pound plate to each side of the bar by the end of the year; not bad. Keep it up for four years and you will be two hundred pounds stronger by just adding a half pound to each side of the bar every week! Who wouldn't be happy with that if they are a serious lifter?

One of your goals is to learn how often you can add a pound to your lifts while maintaining the ability to use perfect form with a nonstop lifting motion and reasonable lifting speed. If you have the ability to gain quickly and haven't been training very long, you may be able to add a pound two or more times per week. If you have been lifting for many years and have never been a quick gainer, you may only be able to add a pound once every three weeks or less. The following data shows you how often you must add a pound to gain various amounts of strength over the course of a year:

Add one pound twice per week = 105 pounds in one year

Add one pound every week = just over 50 pounds in one year

Add one pound every ten days = 36 pounds in one year

Add one pound every twelve days = 30 pounds in one year

Add one pound every two weeks = about 25 pounds in one year

Add one pound every eighteen days = 20 pounds in one year

Add one pound every three weeks = 17 pounds in one year

Even if you just add one pound to your lifts once every three weeks, you will be 100 pounds stronger in six years. In ten years you will be 170 pounds stronger. Once Ed Coan made his initial rapid gains, he realized that a twenty pound strength gain every year would add up to a lot if he kept doing it year after year. If you come to the same realization that Ed Coan did, and you love weight training enough to stick with it, you can keep on patiently gaining a little at a time over the course of many years just like he did. Those repeated modest gains eventually add up to big gains.

Chapter 14

Use Micro-loading On Your Warm up Sets!

Since I've been discussing the value of micro-loading, I must emphasize that it works even better when you micro-load all of your sets, including your warm up sets. This is especially true if you plan on being a long term lifter who plans on lifting for several years. If your first warm up set is done with 100 pounds for ten reps, and you add a pound to it every 12 days out of the year, you will be using 130 pounds for ten reps by the end of the year. In three years you will be doing 190 for ten.

Little things that don't seem to make any difference over the course of a week or a month will start to make a noticeable difference within a year, and they will make a big difference within three years. That being said, if you are adding a pound to your heaviest set every twelve days, make sure you add a pound to all of your warm up sets every twelve days and you can't help but get stronger. If you keep adding to your warm up sets and feel as though they are becoming so heavy that they are robbing you of energy for your top sets, then reset your warm up weights by reducing the weight enough so that you are starting at about 50% of your ideal single rep training weight. You may need to do this every so often. After resetting your warm up weights, start adding to them again as it will add to your strength.

Some people believe that warm up sets have no training effect in terms of promoting strength gains. I strongly disagree! Warm up sets will add necessary volume to your workout and they will contribute to strength gains over the long term; especially if you add weight to them little by little over an extended period of time.

Chapter 15

What If You Have No Access to Fractional Weight Plates?

Since I keep advocating the use of fractional weight plates, some of you may be wondering where you can get them. The simplest thing to do is do a search online for “fractional weight plates” and order some. You will have plenty of choices to choose from if you search for them online. If you don't have access to fractional weight plates, you'll have to add to your lifts five pounds at a time.

When adding to your lifts five pounds at a time, I still recommend adding five pounds to all of your sets; including your warm up sets and your heaviest single rep sets. Once again, adding to your warm up sets may not seem to make a difference in the short-term scheme of things, but the benefits will start to show up within a year, and will be quite obvious within three years. If adding weight to your warm up sets eventually causes the sets to become so heavy that they are taking too much energy away for your heaviest sets, then cut back on the warm up weight to reset your warm up poundages. When resetting your warm up poundages, reset them to an intensity level that you feel comfortable adding to again.

If you become very strong to the point where you can bench 400 pounds and squat 600 pounds or more, you may find it beneficial to adjust the warm up that I have listed for basic heavy frequency training. The first warm up set starts at 50% of the heaviest weight that you will be lifting in your workout. If you develop the ability workout with a 400 pound bench, your first warm up set at 50% of 400 will be 200 pounds. If you squat 600 or more pounds, then your first warm up set at 50% of 600 will be 300 pounds. That's a lot of weight to start with on your first set and you may prefer to start with much lighter warm up weight for your first set.

Ed Coan, Andrey Malanichev, Richard Hawthorne, and Eric Spoto are all great powerlifters and generally start with close to 135 pounds for their first warm up sets. When they work up to heavy triples or singles, it often takes eight to ten sets to work up to their heaviest set. If you are a very strong lifter, you may need to start well below 50% on your first warm up set in order to avoid starting your warm up with 300 pounds or more. If your first warm up set becomes so heavy that it no longer seems like a warm up set, add in a lighter set to your warm up so that you can start with light weight. You can also readjust the weights of the rest of the warm up sets if necessary. Once you have done this, start adding on to them again and readjust whenever necessary.

Chapter 16

Rate of Gain

Adding five pounds to your lifts doesn't sound like much, but if it is repeated enough over time it adds up to a lot. Adding five pounds once per month will seem very slow if you recently went through a phase where you were able to add five pounds every workout or every week. But simple math will show you that adding five pounds per month add up to sixty pounds in a year, and 300 pounds in five years which would be phenomenal progress.

Assuming your goal is to add five pounds per month, and you are doing seven warm up sets, plus your work sets, you can develop a simple plan to systematically add to all of your sets each month. One plan that you could try is to add weight to a set every Monday and Thursday. The steps to this plan are listed below:

Add five pounds to your first warm up set on Monday of week 1.

Add five pounds to your second warm up set on Thursday of week 1.

Add five pounds to your third warm up set on Monday of week 2.

Add five pounds to your fourth warm up set on Thursday of week 2.

Add five pounds to your fifth warm up set on Monday of week 3.

Add five pounds to your sixth warm up set on Thursday of week 3.

Add five pounds to your seventh warm up set on Monday of week 4.

Add five pounds to your heaviest single reps on Thursday of week 4.

Gaining 60 pounds of strength within a year would be considered excellent progress for an advanced lifter who has been lifting for several years. A thirty pound strength gain per year would also be good progress for an advanced lifter. This could be accomplished by adding five pounds to one warm up set per week for seven weeks and adding five pounds to your heaviest single reps the eighth week.

Most people don't want to hear about adding five pounds every eight weeks because it sounds slow and ineffective, but remember that Ed Coan reached a point where he was content with a twenty pound increase in strength over the course of a year. The trick is to do it year after year like Ed did to become enormously strong. Adding twenty pounds every year would mean adding five pounds to one warm up set every week and a half when using the Basic Heavy Frequency program, and adding five pounds to the heaviest single reps once every twelve weeks.

Go ahead and make rapid gains as long as possible, but when the gains stop, make a systematic plan. The plan consists of sticking to perfect form, a nonstop lifting motion, and a reasonable lifting speed. Keep your weights within a range that allows you to recover quickly so that you are always at full

strength by your next workout. Add little by little to your warm up sets, and add little by little to your heaviest sets until it adds up over time. Follow this plan and you will get much stronger.

Chapter 17

Alternating Between High Volume and Low Volume

One concept that I have found to be very effective in combination with high frequency training is to increase the training volume a little beyond normal during the first half of the week, followed by a substantial cut back in training volume the second half of the week. Although you can do this by increasing the number of heavy singles during the first half of the week, I have found it better to increase the number of warm up sets. This can be done by simply adding on to the Basic Heavy Frequency program. Recall that the Basic Program is done as follows:

Warm Up Sets

Set 1: 10 reps with 50%

Set 2: 8 reps with 55%

Set 3: 5 reps with 60%

Set 4: 5 reps with 65%

Set 5: 3 reps with 70%

Set 6: 2 reps with 80%

Set 7: 1 rep with 90%

Heavy Singles Reps

Once you have completed your warm up sets, I recommend the following:

Do 1 to 3 perfect form single reps with your ideal single rep training weight.

The Basic program can be adjusted by increasing volume as follows:

Warm Up Sets

Set 1: 10 reps with 50%

Set 2: 5 reps with 55%

Set 3: 5 reps with 55%

Set 4: 5 reps with 60%

Set 5: 5 reps with 60%

Set 6: 5 reps with 65%

Set 7: 5 reps with 65%

Set 8: 3 reps with 70%

Set 9: 2 reps with 80%

Set 10: 1 rep with 90%

Heavy Singles Reps

Once you have completed your warm up sets, I recommend the following:

Do 1 to 3 perfect form single reps with your ideal single rep training weight.

Notice three extra warm up sets have been added to the overall workout which increases the total number of warm up reps from 34 in the Basic program to 46 when volume is increased. If you do this program two or three days in a row, you may start to feel like you are on the brink of overtraining. To compensate for this, cut back a substantial amount by making the following adjustments the next two or three days of training:

Warm Up Sets

Set 1: 5 reps with 50%

Set 2: 5 reps with 55%

Set 3: 3 reps with 60%

Set 4: 3 reps with 65%

Set 5: 2 reps with 70%

Set 6: 1 reps with 80%

Set 7: 1 rep with 90%

Heavy Singles Reps

Once you have completed your warm up sets, I recommend the following:

Do 1 to 3 perfect form single reps with your ideal single rep training weight.

Notice that when you reduce the training volume, the total number of warm up reps will drop from 46 reps the first two or three days to 20 reps the second two or three days. Notice also that the number of heavy single reps listed for the first two or three days is a range of one to three. However, when volume is reduced, a range of one to three is no longer given as you are to do only one heavy single rep with your ideal training weight.

The reduction in training volume will make it easy to recover. If the volume seems low, don't worry because the training effect from the higher volume phase will carry over to the lower volume days and you will probably feel very strong by the third low volume day.

If you work out six days per week, do the high volume for three days in a row and the low volume three days in a row.

If you work out five days per week, do the high volume for three days in a row and the low volume two days in a row, or vice versa whichever you find works better.

If you work out four days per week, do the high volume for two days in a row, rest a day, and do the low volume two days in a row.

Chapter 18

A Short Linear Loading Cycle

You can also try a short linear loading cycle. The warm up sets would remain the same as the Basic Heavy Frequency Program, but the heaviest single reps would change over time. The cycle would start by working up to 90% of the heaviest weight that you would be using for your single reps when doing the Basic Heavy Frequency program. This would be the heaviest weight that would use for your workout and you would do eight single reps with 90% for three workouts. The next three workouts would be done with 92% to 93% for six single reps, followed by 95% for four single reps the next three workouts. This would be followed by using 97% to 98% for one to three single reps the next three workouts and would finish with 100% for one to three reps the last three workouts. Let me emphasize again that the percentages are always based on your ideal single rep training weight, not the heaviest weight that you can lift. The cycle listed below:

Days 1-3: Use 90% for 8 single reps. Rest 60 seconds between singles.

Days 4-6: Use 92% to 93% for 6 single reps. Rest 90 seconds between singles.

Days 7-9: Use 95% for 4 single reps. Rest 2 minutes between singles.

Days 10-12: Use 97% to 98% for one 1 to 3 single reps. Rest two to three minutes between singles.

Days 13-15: Use 100% of your perfect form single rep weight for 1 to 3 single reps.

This variation could also be used in conjunction with alternating higher training with lower training volume. However, instead of adding the volume to the warm up sets, the volume is already added to the heaviest single reps, as eight single reps will be done at the start of the cycle. The basic seven set warm up would always be used for workouts during the first half of each week, and the reduced volume warm up listed in the previous chapter would be used for the workouts during the second half of the week. The warm up sets are listed below:

Full Warm up for Workouts During the First Half of each Week

Set 1: 10 reps with 50%

Set 2: 8 reps with 55%

Set 3: 5 reps with 60%

Set 4: 5 reps with 65%

Set 5: 3 reps with 70%

Set 6: 2 reps with 80%

Set 7: 1 rep with 90%

Reduced Warm up for Workouts During the Second Half of each Week

Set 1: 5 reps with 50%

Set 2: 5 reps with 55%

Set 3: 3 reps with 60%

Set 4: 3 reps with 65%

Set 5: 2 reps with 70%

Set 6: 1 reps with 80%

Set 7: 1 rep with 90%

When you combine the warm up sets with the heavy single reps, the complete workouts over a five week period are listed as follows:

Week 1

First half of the week: Full warm up plus 8 single reps using 90% in each workout

Second half of the week: Reduced warm up plus 1 single rep using 100% in each workout

Week 2

First half of the week: Full warm up plus 6 single reps using 92% to 93% in each workout

Second half of the week: Reduced warm up plus 1 single rep using 100% in each workout

Week 3

First half of the week: Full warm up plus 4 single reps using 95% in each workout

Second half of the week: Reduced warm up plus 1 single rep using 100% in each workout

Week 4

First half of the week: Full warm up plus 1 to 3 single reps using 97% to 98% in each workout

Second half of the week: Reduced warm up plus 1 single rep using 100% in each workout

Week 5

First half of the week: Full warm up plus 1 to 3 single reps using 100% in each workout

Second half of the week: Reduced warm up plus 1 single rep using 100% in each workout

Chapter 19

Periodic Heavier Workouts

Some lifters may feel as though the amount of training intensity is too limiting when using the heavy frequency program. Many lifters may find it hard to train with a lot of intensity on a frequent basis and still recover. The only way for these lifters to recover every 24 hours is to train with less intensity by decreasing the weight enough to allow for full recovery before the next workout a day later. Not all lifters will have this problem, as some will find that they can maintain all three qualities of perfect lifting form with a weight that is over 90% of their single rep max and still recover. Others may find that even when they limit the amount of weight to the three qualities of a perfect form single rep, they must still decrease the weight a significant amount in order to recover on a daily basis. They may feel that this will prevent them from using enough weight to fully stimulate their strength potential because they are sacrificing intensity to enable frequency.

If you are one of those people who feel as though you must decrease the weight too much in order to recover from the high frequency schedule, you have an option that will help you deal with this issue. The first thing to do is to keep doing most of your training within the boundaries of full recovery when working out with singles on a high frequency basis. However, once every two or three weeks, you would train as heavy as possible while maintaining your ability to perform your single reps with perfect form. If you choose this strategy, make sure you have a rest day the day before and the day after your heavier training day in order to insure recovery.

When performing heavier workouts on a periodic basis, the majority of the high frequency training is still done at a lower training intensity. This provides a training stimulus that your body can manage when it is repeated on a high frequency basis. These are the conditions that allow you to add to your lifts little by little and your body will keep gaining strength to keep from feeling as though the added weight is becoming harder and harder to lift, which is the strategy behind ISPP (Intensity Set-Point Programming). At the same time, you can do some higher intensity lifting on a periodic basis in order to insure that there are workouts in which your nervous system is being fully activated for full muscle fiber recruitment.

Chapter 20

Cut Back On Frequency Every Third or Fourth Week

One training strategy that you may find beneficial is to consistently use high frequency training for two to three weeks, and cut back to a lower training frequency every third or fourth week. Remember that high frequency means hitting each muscle group four or more times per week. When you cut back to a lower training frequency, you would just do two workouts with at least 72 hours of rest between workouts, or three workouts with at least 48 hours of rest between workouts.

This strategy can be used in conjunction with the Basic Heavy Frequency workout. You don't need to alter the workouts, you just alter the training frequency by reducing it every third or fourth week. However, if you find it beneficial to alter the workouts during the weeks in which you reduce the frequency, you can do so.

Chapter 21

The 3 Biggest Keys

The variations of Heavy Frequency Training can certainly add variety that will help you to keep making strength gains. However, in my opinion, the three biggest keys consist of:

1. Abide by the 3 factors for a perfect form single rep;
2. Adjust workouts to fit within your capacity to recover from high frequency workouts.
3. Progress at the right rate

Do these things and you will be able to add weight over time.

Remember that Heavy Frequency Training is just one type of training and there are other forms of strength training that are highly effective. If you find that your body responds well to Heavy Frequency Training on a regular basis, there is no reason why you shouldn't use it on a consistent basis. You may also find that it works well as a short term training block in a periodization plan or training cycle. If so, use it in whatever way seems most beneficial to your own training plan. Your training will work if you make a habit of planning, learning, analyzing, and adjusting when necessary. Best of Training to You!

About the Author

Mark Sherwood is a long time fitness enthusiast who has pursued weight training and other fitness activities for over thirty years. His educational and professional background include a B.S. degree as an exercise specialist in physical education from the University of Wisconsin Madison, and positions as a fitness instructor and physical education teacher.

One of Mark's passions is to distinguish between strength training concepts that are consistently effective as opposed to those that are effective for a short time period. Through his education, research, and personal trial and error, he has endeavored to gain the necessary knowledge to share effective training strategies with those who desire to maximize their training results.

Mark resides with his family in Southern California. For more training resources from Mark, you can visit www.precisionpointtraining.com. In addition, you can view more books on strength training that he has authored on the next page.

Additional Resources By The Author

A Quick Guide To Strength

Beginning Strength Training

High Frequency Strength Training

Individualized Workouts For Hardgainers

Overcoming Strength Training Plateaus

Quick Workouts For Quick Muscles

Rest-Pause Training

Strength Training Capacity

Strength Training Thresholds

Strength to the Max

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