



### **I am a beginner, what do I do?**

First things first, there are a few important items you will need. These are: a Road bike (nothing fancy), clipless pedals, an adjustable stem or able to exchange stems, handlebar width should match shoulder width, and finally an indoor trainer (not rollers) or access to one. Bike stores offer a bike fit that will get you started, they can also help you with saddle selection. Invariably your body will make adaptations and the bike setup will require refinements. At this point there is no reason to purchase a “power meter” or time trial bike.

To perform at your potential, begin with a subscription to the Rhythm of Athletic Movement in Cycling – Video Collection. I won’t tell anybody you are imitating a skeleton. The point is to begin with simple principles that you can visualize and imitate. These are the building blocks that will prepare you for the event of choice. Begin with the SBHH, most people gravitate to this movement pattern. If you identify that you prefer the TPR, then you know the answer. At the very least, adopt and learn one movement pattern, and do it well. In time, you will want to address both, advancing each at their own pace. Work the program on your own, pairs or at the club level with like minded individuals.

### **Why do I need an Indoor Trainer?**

Begin each training segment on the fixed indoor trainer, this frees you up to practice, learn new things and make mistakes without fear of losing balance. You can’t possibly try new movements on the rollers. It may also be the only time that your coach can video and see what you are actually doing.

### **How long will it take to learn the program?**

I expect it will be several years before you can learn the program to the point where you can ride or climb respectably, provided you remain on task and continue to improve. I suggest taking the long view.

Over the short term, look at small technique gains that you build upon and reinforce over time. Your frame of mind will range from the excitement that comes from an accomplishment to complete frustration at the pace of some improvements. Aim at the Expert-level performance and keep the focus there.

### **I’m tired of getting dropped.**

When you are stressed and can’t find any relief in the group, watch that you are not throwing skill out the window and replacing this with less effective movement patterns. The suggestion is to train with likeminded and like talented athletes; I don’t expect the fruits of the work to be apparent for at least 3 years. Best to learn the optimal skill in the first place rather than have to break any bad habits later on.

### **Everything is so much harder in a head wind.**

When facing a headwind, relying solely on the downstroke for propulsion will result in prompt fatigue, the arms, shoulders and body tense up and the game is over. Relax the hands and everything else; focus on your handlebar

weight shifting. The downstroke is  $\frac{1}{4}$  of the pedal stroke, which leaves 3 remaining quadrants to work on. I suggest leaving the downstroke as is and leading the effort with the SBHH and the Hip Hike and hip flexors in particular. This should cover the forward and perhaps the backsweep as well, the key is to practice these things constantly; it won't help you at all to be inspired in the moment to suddenly practice the SBHH.

### **In what way is this program an improvement over the unskilled sprint?**

At some point I indicated that the TPR was the movement pattern of choice in the sprint; that may have to be revised to include the SBHH, at the very least to filter in the hip hike. If we assume that your technique is very good, especially off the saddle, the sprint is a 10-fold magnification of the effort; stay relaxed if you expect to focus on each and every detail. If you do that well, your body will be dynamically steady over the saddle. Greater energy imparted to the crankarm, excellent control and longer tolerance to the sprint are the result of excellent technique and attention to detail.

### **Tell me what I need to do in a paceline?**

Either the SBHH or the TPR are appropriate for Paceline riding, it's a matter of preference. Get your work done in the advance line, recover in the relief. There are several tactics you can use to protect yourself in a paceline; you can learn those during a club ride. Having said this; a paceline is a good place to practice, once you feel that your technique is well practiced and sustainable.

### **I am not making the progress I should be making. What am I doing wrong?**

The learning curve is steep; there will be several facets of each movement pattern which need to come together before you can feel there is improvement. A video assessment would be useful to document the start point, and prepare the training plan. No one can predict whether you will make gains, and you may need a longer time frame than most, but I will do the best I can to prepare the best information. Videos are available in the Video Collections which demonstrate various levels of expertise, take that opportunity to learn from other performances. There are multiple factors at work, and training involves building muscle memory, timing and physiology, among other things. If your focus has been fully physiological up to this point, then there may be habits that linger, which you need to break before improvements can take hold.

### **What do you think about "Skills Clinics"?**

Club programs include practical and effective instruction for pace lines, group riding dynamics, cornering and bumping shoulders, to mention a few. This instruction refines bike handling skills; which are integral to the overall safety of training rides and races. More formal "skills" programs include a number of training topics, meant to improve performance: topics include "balancing skills", off the saddle techniques, "looking over the shoulder" and proper posture for example; all of which are well meaning and but superficial in scope. That approach ignores or at the very least oversimplifies the fundamental need to instruct in a cycling specific movement pattern. In the absence of a unifying concept, it is highly unlikely that this form of instruction will result in meaningful performance gains

for the majority of athletes. Make the comparisons, and I know you will recognize that Précis Velo provides the most comprehensive program.

### **My real goal is track racing.**

I am not sure there is great value to embark on track events until you are well on your way to learning one movement pattern on your road bike. Then it will be a matter of setting the hand grip and saddle (in relation to the bottom bracket) exactly as on your road bike. People have their own theories about handlebar and saddle placement, listen politely; consider the source of the information and ask yourself if that helps or hinders your progress. My only concern is a good fit, such that your movement patterns continue to develop and improve. The track bike demands a high level of precision of the movement pattern. Keep up with visualizing and learning from the video examples to be the best possible athlete you can be.

### **I want to begin using my time trial bike right away.**

Think in terms of transferring the physical position and orientation (in space) of the trunk and pelvis, and the movement pattern to the time trial bike. Saddle position transfer should be comparable to what you have on the road bike. The challenge is the “aero pad” and “hand grip” placement; bring the aeropads up to the athlete. When you are done, the overall position should feel more or less like on the road bike.

You will be surprised at how drastic the so called “aero time trial bike” really is. Athletes are either unable to do much of anything or become unstable in those artificial positions. Some compromises will have to be made, and hopefully you did not already spend much money. If you are about to slap “aero bars” on your road bike, think twice about it, chances are they may have to be set further back and higher than you might think.

Continue using the road bike for time trials or Triathlon until you have a good command of your very own movement pattern, the position in which you train on the road bike should guide positioning and set up for the time trial bike. Make some useful approximations to your road bike with aero bars and practice on the indoor trainer (it really is a good investment, but dangerous on rollers).

Power output should not change and aerodynamic gains will result in improved times. Aerodynamic gains are tempting, though in the absence of a sound movement pattern, there will only be disappointment.

### **What is the meaning of “to unstable/self correct”?**

Are you unstable? This may not be very easy to determine, and you may have gotten used to it to some extent. For example, if you are on the track and begin to bounce, then the answer to the correction lies in both the movement pattern and the balance between the downstroke/upstroke with the timing to the whole thing. If the bounce continues then pull up track, recover and attempt the drill once again; pushing the envelope further back on each attempt. The last thing you want to do is reinforce bouncing, which may be more common than you might think. The goal is not to stop bouncing, but to build upon the effectiveness of your movement pattern. There are some notables with a minor bounce; however, their power output is likely triple that of most.

### **Why do I have to wait so long before I can practice road sprints?**

Practice sprints throughout the year, and certainly as the event nears. The focus of this program are the building blocks, if these are sound you will be able to cobble them together in the final phase of training.

### **I'm a Triathlete, my movement pattern is the SBHH, why do I need to practice the TPR?**

If you are dynamically stable on the time trial bike and your power output is in the range you might expect, then you are fine.

If you are unstable in the “time trial” position, you are not alone. At the moment it is not clear that the SBHH alone can provide the required rotational stability, and practicing the TPR would be of benefit. In addition, you might need to reexamine your position.

Climbing off the saddle is another matter, and this would fully justify either of the movement patterns. It's also a matter of preference. The placement of the hand grip on a time trial bike tends to be low and forward, which is a questionable set up in the first place. What can you reliably and effectively do in that position? The backdrop to all of this is that I don't see quality climbing from amateur Triathletes, rather there is rising and lowering of body weight which is both unstable and lacks skill. If athletes insist on this hand grip placement, then the TPR may be a good option for climbing.

### **What is the point of reviewing video? I want to ride my bike.**

Videotaping is the only way to assess how you perform on the bike. This allows you to make the comparison with the “gold standard” of performance. Under the best of circumstances (without video), a trainer observer will only have a general impression of what you are doing. Consciously, they will miss most details; it is too much information to process at one time.

We learn from imitating others, if you learn from Expert performances, then chances are you will build upon a good mental picture. Imitating a teammate might be a good option, but only if they demonstrate an Expert and well defined movement pattern. Don't go by category, which guarantees nothing. You need to look at a clearly defined set of movements which you can copy. If we go to the other extreme, I can almost guarantee that if you studied video of athletes with poorly defined and unstable movement patterns; sooner than later you too would end up doing much the same.