A Reply To Verhoshansky
On Periodization

A World Roundup piece in Track Coach #148 was a criticism of periodization by Russian authority Yuri Verhoshansky. Obviously this touched a nerve with Peak When It Counts author Bill Freeman. Here is his rebuttal.

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Is periodization a doomed system, an antique holdover of Cold War training methodology? Is it so inflexible, so robotic, so incapable of change that a modern athlete cannot use it effectively? Reading Verhoshansky is like listening to Chicken Little predicting imminent training doom. His critique of Matveyev is certainly interesting, but I would like to see the examples that underlie his criticisms.

Many of the criticisms argue that the theory fails to understand how the human body works and what contemporary training is like. As I have seen only Jess Jarver's abstract, I cannot address the particulars of his charges. On the surface, at least, they appear rather shaky—a grandiose attack that sets up a rigid, fictional version of periodization, then argues that it does not work.

If Verhoshansky's criticisms were true, periodization would never have worked at any level. That is demonstrably false.

One category of complaints confused me—the charge that Matveyev does not understand the “technology of the preparation of athletes” and those charging him with ignorance of the “legalities of training concepts and reality in an arbitrary division of training processes.” Frankly, these charges seemed like gibberish to me. The technology of training changes over time, but the human body’s response mechanisms do not change. The only real question about technological changes is whether they work more effectively—or succeed at all.

For the legalities of training—is he suggesting that slavery is a question? Are there laws against particular training methodologies? Does periodization require some mysterious illegal training method?

Verhoshansky wrote of Matveyev’s supposed “ignorance of... reality in an arbitrary division of training processes”? What on earth does that mean?

On the first charge, the pattern of stimulus and response, with an eye toward compensation and supercompensation, lies at the core of the training process. That biological principle existed before periodization was defined, and I do not believe Verhoshansky can repeal it. It is the core concept of training at every level.

The second charge, which is the true source of most attacks on periodization, is that it is mechanical. If the coach is an idiot, it will be mechanical. However, that is true in any training system. Less experienced coaches tend to be rigid in their application of their knowledge. That does not mean that the system is flawed—only the person applying it.

Enough writings exist (beyond my own) that explain the flexibility of periodization. One of the strengths of periodization is that the training process is adapted to any changes in the athlete’s fitness. Athletic performance is accomplished by humans, and their performance through a training cycle does not progress at a steady rate.

In 30 years of coaching athletes I...
had only one athlete who trained for as long as three months with no significant changes in the training plan. The norm is regular tweaking, and sometimes major changes, in response to the athlete’s fitness and other circumstances. Periodization is a living system, not an iron robot or a computer running on data from the 1960s.

The third charge is of a lack of research proving that it works. Well, I haven’t seen research proving that Morelli’s training methods work, or those of El Guerrouj or the Kenyans. I have seen them run, however, and as Frank Horwill correctly argues, the proof is in the pudding—their performances speak for themselves. Few training systems are thoroughly researched—primarily because in most countries sport research is not considered prestigious enough for scientists to spend much time or money on it. Also, elite athletes are notably unwilling to risk sacrificing their training to such experiments.

In large part, this unwillingness to participate in such research is the result of another trait that Verhoshansky cites: the extended competitive seasons that we see today. He argues that you can no longer separate the training and competition phases. I do not believe this charge invalidates periodization. Training has rarely been completely distinct from competition—certainly athletes still train during their competition season.

In reality, the professionalization of sport leads to extended seasons, designed largely to increase income. It has nothing to do with the improvement of performance. In a sense, the bulk of the competitive season in a professional setting is aimed not at the improvement of performance, but at its maintenance at an “acceptable” level that will draw a paying crowd. An outstanding performance is almost an anomaly, as the system of professionalism works against it.

Periodization aims at producing the best possible performance at a specific point in time, the major competition or peak. Professional sport, for the most part, does not. It aims to entertain with acceptably high levels of performance over a period of time, because constant record-setting is not possible. In most athletic events a large number of competitions will diminish the likelihood of either a peak or an outstanding performance.

For example, I have argued for many years that the primary function of high mileage in middle distance runners is not to enable them to run faster—it is to enable them to run fast many times, thus increasing their income. We have enough instances of men running sub-4:00 miles on 20 or fewer miles of training per week that we should know better than to assume the need for high mileage.

To improve training, we must see it as a complex organism, with many, many factors that affect progress and performance. The system of periodization gives a way of accounting for as many as possible of those variables and organizing them into a coherent, productive training program that adapts to changing realities as it goes. It is never a static system.

The core of periodization is its objectivity. The coach records as many of the variables as possible, allowing more objective measures of progress—precisely what Verhoshansky complains is lacking.

Is periodization a perfect system? No system is a perfect system, for two inseparable reasons: Coaches and sport scientists are not all-knowing, and human performance is far more complex than the level of our knowledge and understanding of its processes.

Is there a better system? I have not seen one. Every training system uses aspects of periodization. Every system has a preparation phase—no training system has meaningful competitions from the start of the cycle. And if they are not meaningful, then they serve primarily a training function—back to preparation.

I do not believe that personal pique, or a personal argument between two scholars, has invalidated or will invalidate periodization as an effective approach to high performance training.