

1. We need to seek transformation but we cannot create it ourselves . . . it is a grace gift
2. Focusing on the Transformational Zone and what happens just prior to and after the Transformational Zone
3. The Transformational Zone is where the action is and where the reaction occurs
4. The proprioceptors are the spirit and power of function
5. The importance of sequencing in the Transformational Zone to allow for efficiency and effectiveness
6. The importance of analyzing in the Transformational Zone
7. The test is the exercise and the exercise is the test . . . especially in the Transformational Zone
8. Our rehab is driven from an effective analysis and understanding of the Transformational Zone
9. Coming up with transformational strategies specific to the function of our patients and clients and specific to their required and desired function
10. An improved Transformational Zone requires a better loading zone and results in a better unloading zone
11. The proof of the pudding of function is function itself



FUNCTIONAL DESIGN SYSTEMS

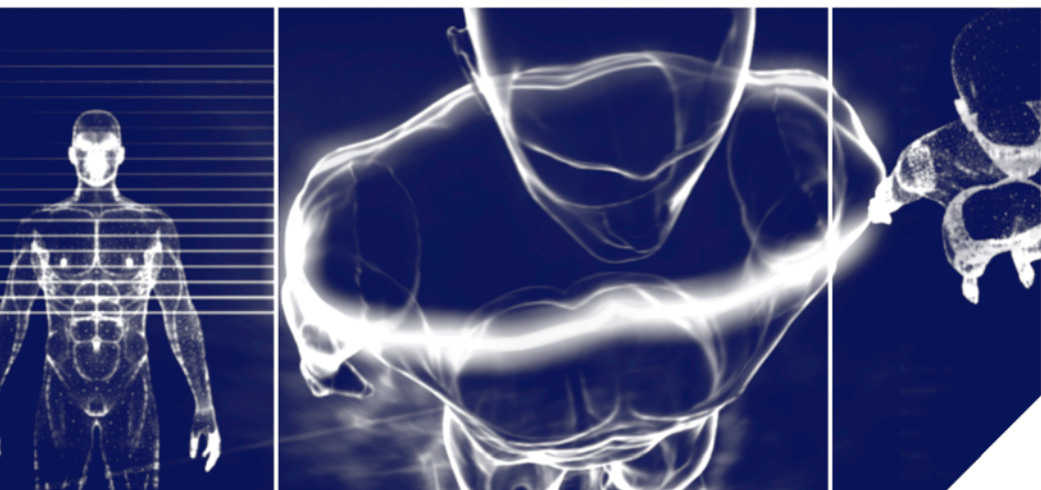
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v4.10 TRANSFORMATION

The Zone of Function

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OBJECTIVES FOR TRANSFORMATION FUNCTIONAL GUIDE

To assimilate up-to-date information and knowledge about Transformation.

To learn how to apply effective functional techniques when testing, training, and rehabilitating using a Transformational approach.

To understand and appreciate the tri-plane **Chain Reaction™** principles as they apply to Transformation

HOW TO USE THIS FUNCTIONAL GUIDE

This *functional guide* can be used as a convenient summary of the program's contents to take with you after viewing. You can also use this guide as a notebook; space has been provided so that you can make notes on relevant tracts as you watch them.



FUNCTIONAL

Video Digest Series

Analogy of a compound bow . . . rigged for a powerful Transformation Zone

STRATEGY 1

Strategically understanding the critical mass of neuromusculoskeletal function all comes together in the Transformational Zone

STRATEGY 2

Strategically appreciating the grace gift of healing, of saving, of the Transformational Zone

STRATEGY 3

Strategically revealing that our functional journey takes us directly to the Transformational Zone

STRATEGY 4

Strategically analyzing before, within and after the Transformational Zone

STRATEGY 5

Strategically determining the Transformational Zone for all functional activities



STRATEGY 6

Strategically blending our Transformational Zone analysis into effective rehab and training and conditioning programs

STRATEGY 7

Strategically gifting our patients and clients with the opportunity to transform

STRATEGY 8

Strategically transforming our abilities to create enhanced **Chain Reaction**™ environments

STRATEGY 9

Strategically taking advantage of the power of transformation

STRATEGY 10

Strategically giving thanks for the grace gift of transformation



Thankful for Dr. David Tiberio's assistance

We talk a lot about transformation . . . transformation of the mind, the body and the spirit . . . this is one of our favorite topics

We need to seek transformation, but we cannot create it ourselves . . . it is a grace gift

We cannot heal, we cannot save . . . we simply create the environment to facilitate the transformation, which is the grace gift

Our journey into the zone of transformation

The breadth and depth of function

Understanding what precedes and follows the Transformational Zone in order to fully understand function

The loading zone where motion is decelerated and transformed into the productive unloading zone

The **Chain Reaction™** zone of loading that leads to a critical mass . . . the Transformational Zone

Discussion of the Transformational Zone of jumping and hitting a volleyball in the air

You can't look at the parts separate from the whole

In most of function the unload feeds the next load . . . example of walking and punching

A successful tri-plane load leads to a successful tri-plane unload which successfully leads to a tri-plane load

In running and in all of function something's gotta feed something

Focusing on the Transformational Zone and what happens just prior to and after the Transformational Zone



The Transformational Zone is where the action is and where the reaction occurs

Our proprioceptors are ambiguously clear . . . the body is looking for clarity - - we need to have a conversion of proprioceptive information in the Transformational Zone

The proprioceptors are the spirit and power of function

Understanding the function of muscles in the Transformational Zone . . . their concentric capability

Our true grace gift is function . . . not taking advantage of function is not taking advantage of the grace gift given to the body

When you go through the complexity of function, what we ultimately facilitate to help others becomes a lot simpler

Discussion of joint motion . . . over 2000 ways a joint can move, therefore, over 2000 ways to stimulate the proprioceptors to turn on the muscles to allow us to function


The importance of sequencing in the Transformational Zone to allow for efficiency and effectiveness

Being able to track down the abnormalities occurring in the loading zone that lead to a dysfunctional sequence in the Transformational Zone

Our journey into functional analysis, rehabilitation, training and conditioning, prevention, and performance takes us quickly to the Transformational Zone

Nervousness, humility, frustration, making mistakes, getting down, getting beat up, our failures, our sins, the awe of the wonder of the body . . . are all essential ingredients to facilitating our own transformation

A special thanks to Dr. David Tiberio



With Dr. David Tiberio

Understanding the function of what our patients and clients need to do and want to do . . . analyzing the Transformational Zone of their functional requirements and desires

Analyzing all aspects of the Transformational Zone

- Effectively loading to “get into” the Transformational Zone
- Getting the “right depth” into the Transformational Zone
- Deceleration of loading in the Transformational Zone
- Sequencing in the Transformational Zone
- Effectively unloading and “coming out of” the Transformational Zone

Starting globally with our initial analysis techniques . . . tweaking the gait, balance reaction analysis, excursion analysis, hip and thoracic three dimensional analysis, foot and locomotor biomechanical analysis, peltrunkula analysis

The importance of analyzing in the Transformational Zone

Understanding the Transformational Zone for the function of walking . . . the minimal requirements

We start strategically tweaking to find out what needs to be found out in the Transformational Zone

“Trick you” so you can subconsciously show us what you “got going on” in the Transformational Zone

Gradually getting more “nit picky”

Example of using various body drivers in all three planes of motion to identify compensations and symptoms and then strategically tweaking to find the cause



The test is the exercise and the exercise is the test . . . especially in the Transformational Zone

As we facilitate reactions in the Transformational Zone we will begin wondering, but that is where we want to wonder

Example of tweaking with various foot positions

The Transformational Zone is complex, but we can logically simplify function in the Transformational Zone in order to understand all of function

Excursion tests in the Transformational Zone

We go "extra functional" when we position and facilitate movement in the Transformational Zone and then appropriately tweak

The need to be a Ph.D. in tweakology

Tweaking in the Transformational Zone

The Transformational Zone of lifting

- Strategically utilizing anterior, same side lateral, and same side rotational lunges
- Strategically utilizing bilateral anterior hand reaches at various heights
- Strategically driving the pelvis in all three planes of motion
- Strategically driving bilateral hands in all three planes of motion
- Strategically using the head as a driver
- Strategically using speed tweaks, distance tweaks, and load tweaks



Analyzing the entire **Chain Reaction™**

Subtle tweaks are powerful tweaks

Progressively getting more complex

Understanding and taking advantage of all of our movement tweaks, dimension tweaks, and influence tweaks

"I am going to find out what is wrong with you"

The intelligence of being able to analyze without causing pain . . . tweaking out of the pain, yet remaining in the Transformational Zone in order to gain valuable functional information

The Transformational Zone of throwing

- Strategically using balance reaction
- Strategically understanding the two Transformational Zones of throwing
- Strategically understanding the excursions that are required in each of the Transformational Zones
- Strategically tweaking stability and understanding balance reaction

The Transformational Zone of walking versus running . . . with running requiring single leg balance in the Transformational Zone

Quick hitter examples in the **TrueStretch™**



Our analysis within the Transformational Zone gives us guidance and direction with respect to our treatment strategies

Building upon success into, in, and out of, the Transformational Zone

In the **TrueStretch™** we get upright, four point, functional stability and safety in order to analyze the required three dimensional **Chain Reaction™** mobility within the Transformational Zone that is required for functional mostability

Discussion of functional range in the Transformational Zone to facilitate efficient function

A great place to start is to position the feet and hands in the required and/or desired Transformational Zone and drive the pelvis in all three planes of motion

Our rehab is driven from an effective analysis and understanding of the Transformational Zone

Gifting our patients and clients with a better Transformational Zone

A special thanks to Dr. David Tiberio



Gary's opportunity to train and condition with Dougy

"A giggly yet butt kicker workout" The Transformational Zone Bodyblade™ Workout

Developed and marketed by my precious friend, Bruce Hymanson, PT
Bodyblade 800-772-5233

A tool to enhance our Transformational Zone . . . the Bodyblade™ creates a special reaction in the Transformational Zone

Right stride stance (RXX), bilateral hands right lateral at shoulder height, eyes anterior

- Blade vertical with sagittal drive
- Blade horizontal with vertical drive
- Blade vertical with frontal drive
- Blade horizontal with frontal drive

Left stride stance (LXX), bilateral hands left rotated at overhead height with eyes anterior

- Blade horizontal with vertical drive
- Blade horizontal with frontal drive
- Blade horizontal with sagittal drive

Left sagittal plane pivot with bilateral hands opposite rotation at shoulder height

- Blade vertical with transverse drive

Left leg balance with bilateral hands anterior at shoulder height

- Blade vertical with frontal drive
- Blade vertical with sagittal drive

Left leg balance with bilateral hands left lateral at shoulder height

- Blade vertical with sagittal drive
- Blade horizontal with vertical drive
- Blade vertical with frontal drive
- Blade horizontal with frontal drive

Left leg balance with left hand left posterior lateral at overhead height

- Blade vertical with frontal drive
- Blade horizontal with vertical drive
- Blade vertical with sagittal drive
- Blade horizontal with frontal drive

Right leg balance, left toe touch at left posterior lateral, with left hand left anterior lateral at knee height

- Blade horizontal vertical drive
- Blade vertical with sagittal drive
- Blade horizontal sagittal drive
- Blade vertical with frontal drive



Right leg balance, left toe touch, left posterior lateral, with left hand left rotated at knee height

Blade vertical with transverse drive

Right stride stance, wide, externally rotated (RWE) squat

Blade vertical with frontal drive

Blade horizontal with sagittal drive

Blade horizontal with vertical drive

Blade horizontal with frontal drive

Blade vertical with sagittal drive

Discussion of dosage while in the Transformational Zone

Left leg balance with bilateral hand right anterior lateral at knee height

Blade vertical with frontal drive

Left leg balance with bilateral hand left anterior lateral at knee height

Blade vertical with frontal drive

Wide, internally rotated stance (XWI) squat with bilateral hands at overhead height

Blade horizontal with vertical drive

Minimal wide stance (XWX) with bilateral hands left rotated at overhead height

Blade horizontal with frontal drive

Blade vertical with sagittal drive

Blade horizontal with vertical drive

Blade vertical with frontal drive

Minimal wide stance (XWX) with bilateral hands anterior at shoulder height to left rotation at overhead height

Blade vertical with transverse drive

Right leg balance, left toe touch, left lateral, bilateral hand right rotated at overhead height

Blade vertical with transverse drive

Blade horizontal vertical drive

Coming up with transformational strategies specific to the function of our patients and clients and specific to their required and desired function

Special thanks to Doug Gray



Transformational Drills in the Transformational Zone

In skilling we analyze our patients and clients getting into the Transformational Zone, getting out of the Transformational Zone, and sequencing properly while in the Transformational Zone

An improved Transformational Zone requires a better loading zone and results in a better unloading zone

Start with analyzing and facilitating the Transformational Zone with respect to the movement of the pelvis

Analyzing and facilitating the movement of the femur in the Transformational Zone . . . therefore analyzing relative rotation at the hips

Giving the gift of the sense of what we are really after in the Transformational Zone

When we feel, see, sense and facilitate motion in the Transformational Zone we can effectively begin to determine the potential causes of abnormal compensations

Continued analysis and facilitation of the femur, knee, lower leg, ankle joint, subtalar joint and foot



Going from the pelvis into the lower extremities with our transformational analysis and facilitation

Going from the pelvis to the thoracic spine and the scapula . . . then into the lumbar spine and cervical spine and shoulders

Analyzing and facilitating the follow through Transformational Zone

Demonstrating various Functional Manual Reaction (FMR) techniques in the Transformational Zone

The fun of foundational exercises, enhancement exercises and skilling exercises is that they have a consistent reaction in the Transformational Zone

Example of a follow through Transformational Zone FMR technique of the left hip

Figuring out what body fault causes the swing fault and giving the gift of a three dimensional mostability exercise . . . the gift of hitting the ball farther and straighter

Special thanks to Doug Gray



RESEARCH ROUNDTABLE AND DEBRIEF WITH DR. DAVID TIBERIO

The enjoyment and transformational power of talking about transformation

Cronin JB, et al. Magnitude and decay of stretch-induced enhancement of power output. *Eur J Appl Physiol* 2001, 84:575-581.

Cronin JB et al. Force-velocity analysis of strength-training techniques and load: implications for training strategy and research. *Journal of Strength and Conditioning Research* 2003, 17(1): 148-155.

We view plyometrics as proprioceptively turning on the system

Plyometrics are a "tweaked way" to facilitate the eccentric load of force in order to facilitate a more effective concentric production of force to do what we want to do

The lighter (40%) load created a more instantaneous enhancement reaction where the heavy (80%) load allowed that enhancement to last longer

Taking advantage of loading tweaks in the Transformational Zone

Taking advantage of speed tweaks in the Transformational Zone

Load and speed tweaks are not an either or consideration . . . power truly is speed and force

Discussion of different types of loads in the Transformational Zone

Understanding how much the load mimics the desired **Chain Reaction™** function

Expanding the envelope of three dimensional function in the Transformational Zone

When we "out tweak ourselves" is when we functionally test, train with tweaking, and redo the functional test and find no improvement

The proof of the pudding of function is function itself

Trying to facilitate more of an appropriate proprioceptive response

Tweaks are simply drivers of motion . . . determining the **Chain Reaction™** motion that we want to facilitate



Revealing sequencing with the use of the Bodyblade™

Understanding and taking advantage of range tweaks in the Transformational Zone

What range and in what plane and at what joint do we want the **Chain Reaction™** to occur

We need to know how much motion (and at what planes and at what joints and in what sequence) do we need in the Transformational Zone for that functional activity

Tweaking plane to plane to plane within the Transformational Zone

Transformational Zone training is successful functional threshold training properly tweaked

Tweaking the two relative non-dominant planes in 3D function within the Transformational Zone

A great quote by Phil Yancey "Reaching for the Invisible God"

In the morning I ask for grace to live for God alone, and yet when the phone rings with a message that strokes my ego, or when I open a letter from an irate reader, I find myself slipping back - no, tumbling back - to a self-consciousness in which other people, or circumstances, determine my worth and my serenity. I sense my need for transformation and keep going only because that sense is the one sure basis for potential change. The motions of Grace; the hardness of heart; external circumstances, Pascal jotted down in one of his cryptic notes. These three things encompass our lives. External circumstances press in: family strife, job pressures, financial worries, global concerns. The motions of grace, God's gifts within, seek to ground us in a deeper reality. Hardness of heart? Of the three, this alone falls somewhat under my control. All I can do is pray daily for God to "batter my heart," in John Donne's phrase, or better yet to melt it with his love. Transformation comes, in the end, not from an act of will, but an act of grace. We can only ask for it and keep asking.

The transformational power of our friendship

Special thanks to Dr. David Tiberio

