

The Body Knowledge Method™

The Body Knowledge Method (BKM) was developed by master teacher, Lara Kolesar. More than just a method, BKM is a paradigm—a new way of communicating with, being in, and understanding the body.

BKM is conceptually layered like the muscles of the human body. The layered boxes in the BKM diagram (next page) signify equalities. This means that each box is equal to the boxes below it that occupy the same horizontal space. For example:

All Apples	
Green Apples	Red Apples

The table above shows that the term "All Apples" is made up of green apples and red apples. Mathematically, we could write the same concept as All Apples = green apples + red apples. Referring to the BKM table of equalities (see Table of Equalities), one can define any of the terms in the table. For example, what is BKM? The table portion below tells us that BKM is equal to the body as a source of information plus the body as a vehicle of intelligence. Thus, the table is a dictionary of sorts—it explains each concept based on other concepts.

BODY KNOWLEDGE METHOD™	
Body as Information	Body as Intelligence

What does it mean to say that body as information and intelligence is equal to Body Knowledge? Imagine information without intelligence—no knowledge is produced. If intelligence is applied to information, you get knowledge. Now imagine intelligence without information—no knowledge is produced. Only when the two are combined is body knowledge produced.

BKM is rooted in these two concepts. Although BKM is made up of hundreds or thousands of conceptual strands, one or both of the central themes of body as information and body as intelligence frame each of these strands. In addition, it is important to understand the importance of "body knowledge." Where some modalities are based on the cores, or various other central tenets, BKM is based on *possessing knowledge in, not of, the body*. This means that the central goal of BKM is to develop a more authentic relationship with your body. It means that BKM is accessible to anyone.

Body As Information

One of the critical distinctions of the BKM is that it views the human body not as an article of physics or of a physical world, but as the manifestation of information. The human body, the client, your own body, is merely a physical manifestation of information. That means that every appendage, every movement, every action, even the body at rest, will provide information. Viewing the body, and the universe, as information has some advantages. Ray Kurzweil (2002) quotes the renowned computer scientist, Edward Fredkin, as saying:

There are three great philosophical questions. What is life? What is consciousness and thinking and memory and all that? And how does the Universe work? The informational viewpoint encompasses all three. . . . What I'm saying is that at the most basic level of complexity an information process runs what we think of as physics. At the much higher level of complexity, life, DNA - you know, the biochemical functions - are controlled by a digital information process. Then, at another level, our thought processes are basically information processing.

As you apprentice in the BKM. You will attune your abilities to recognize and comprehend the information that all bodies (your client's and your own) are transmitting. You will learn the language of the body; the body speaks in the language of patterns. Therefore, your capacity to communicate with the body is directly proportional to your capacity (threshold) to recognize *patterns*. This ability is called pattern recognition "threshold." The good news about thresholds is that they can be expanded through insight and practice.

There are literally thousands of different ways you can glean information from a body (yours or your client's). A few of these ways include listening, touching, watching, injuries, pain, mimicry, or connecting with your own personal experience as a guide.

Pattern recognition is merely the interaction between information transmitted and information received. The BKM perceives the body as constantly emitting a stream of data; it will be up to you to figure out what the body is saying.

There are four Patterns of Knowledge that are in turn made up of two opposing elements. Patterns can be perceived as structural or functional in nature. For a more in depth review of these patterns, see the whitepaper on *Patterns of Knowledge* or the book, Remedial Genius.

Elements Thing Not-thing Part Whole Cause Effect Content Context

Structural patterns					Functional Patterns			
Patterns	Distinctions		Systems		Relationships		Perspectives	
Elements	Thing	Not-things	Part	Whole	Cause	Effect	Content	Context

Perceiving the body as information (combined with the next section on body as intelligence) makes up the core of the BKM. These concepts must be *totally integrated* in order for you to succeed. These two central tenets underlie all of the concepts of the BKM.

Body As Intelligence

When we perceive the body as a physical entity made up of bones, muscles, joints, atoms and quarks we see only a small part of the picture. Instead, we will perceive this jumble of muscles and quarks as having a greater purpose beyond merely holding a physical form. That purpose is body intelligence. Body intelligence can be simply stated as, "the capacity to do things." If you can touch your toes, it is because your body has the intelligence to do so. The good news is that intelligence can be learned.

Body Intelligence is made up of two types of intelligence-homeostatic (which includes structural and functional forms), and distributed (or environmental) intelligence. You will need to understand these two forms of intelligence in depth, both in your own body and in the client's body. In conventional science, the term, g, is often used synonymously with intelligence. We will sometimes refer to the two intelligences as the two g's.

Body as Intelligence	
Homeostatic Intelligence (Structural and Functional)	Distributed Intelligence (Environmental)

Let's take a look at these different forms of body intelligence in greater depth.

Homeostatic Intelligence

Consider the following quotes:

"The human body is a living breathing organism that is constantly self regulating to maintain homeostasis. This means that the body is able to respond to any situation or stimulus that disturbs its normal functioning 'instability is the necessary condition for the stability of the organism.' Charles Richet

"A stable system is not a system that never changes. It is a system that instantly and constantly adjusts and readjusts in order to maintain such a state of being that all necessary functions are permitted to operate at maximal efficiency. Stability demands change to compensate for changing circumstances. Ultimately, then, stability depends on instability." Sherwin B. Neuland, The Wisdom of the Body

In science, homeostasis is defined in many ways-a testament to the utility of the idea:

In complexity science: Resistance to change. The ability of a system to self-regulate and maintain a particular state.

In Biology: the tendency towards a relatively stable equilibrium between interdependent elements, esp. as maintained by physiological processes.

And, The self-regulating process by which living organisms tend to maintain their bodies in a constant physiological state regardless of environmental extremes. The extent to which this is achieved by a particular group is a measure of its success: protozoans, for instance, are affected by many external factors, whereas man is relatively independent. In man, reflex activity of the nervous system and hormonal action are important in achieving homeostatic control.

In medicine: the physiological process by which the internal systems of the body (e.g. blood pressure, body temperature, acid-base balance) are maintained at equilibrium, despite variations in the external conditions.

And, The state arising from the maintenance of a controlled environment within cells. All cells maintain internal conditions which differ to some extent from those of their environment.

However, the more advanced the organism, the greater the sophistication of this ability. Mammals and birds can maintain a constant internal temperature, usually in excess of that of the environment. The internal control of ionic concentration, regulation of pH and the removal of wastes from the body during excretion are all necessary for homeostasis. Virtually all aspects of growth and development are under homeostatic control. In turn, virtually all homeostatic mechanisms are regulated by hormones produced by endocrine glands.

In Ecology: the process whereby constancy is achieved in an organism or community. Homeostatic theory is the contention that a population level remains constant in a pre-industrial society. When there is an imbalance between population growth and resources, there is a corrective response.

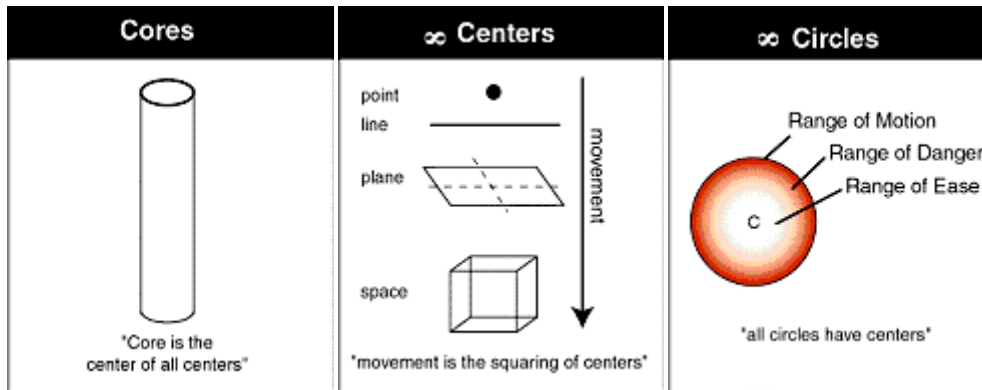
BKM's *Homeostatic Intelligence* is a reflection of this universally important idea of homeostasis. The body, regardless of its environment, needs, contortions, positions or postures will attempt to find a homeostatic balance.

Homeostasis is the scientific equivalent to *resistance to change*. Thus, when the body develops homeostatic patterns that are the result of dysfunctional use, overuse, or underuse, it will be resistant to changing these patterns. Likewise, as the body re-patterns these dysfunctional patterns into functional ones, it will also be resistant to change. In other words, homeostasis is the body's intelligence at work. Sometimes this intelligence is misled into developing dysfunctional patterns. Yet, it is this same natural intelligence that can be utilized to redevelop new functional patterns. BKM uses an understanding of the body's natural intelligence to identify existing homeostatic patterns and to re-pattern new ones.

The body accomplishes homeostasis in many ways—all of the various systems of the body are engineered for homeostasis. In movement, the body accomplishes homeostasis by utilizing its structure and function. Therefore, the structure and the function of a body is also part of its natural intelligence.

Structural Intelligence: Think of structural intelligence as anatomical, stationary intelligence. This means knowledge and understanding of anatomy: bones, muscles, tendons, joints, angles, bony landmarks and millions of other parts of the body and how these parts make up larger whole systems. Underlying myriad anatomical names of these parts are three important geometric and biomechanical principles. These principles are simple although their integration is highly complex. Not only will you need to understand these principles in depth, you will need to spend a considerable amount of time practicing them in order to fully integrate them. We will refer to the Cores, Centers, and Circles Principles as the 3C's. The graphics below explain the 3C's:

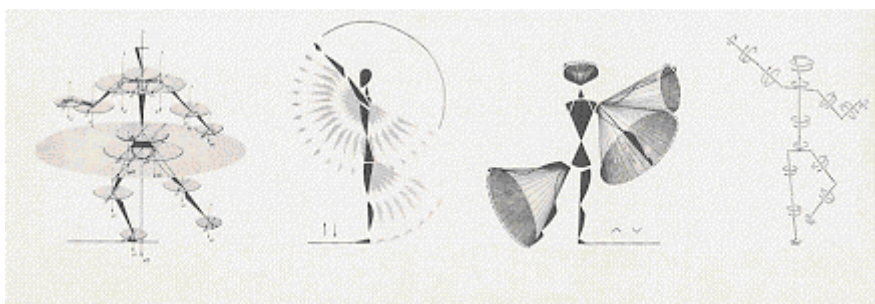
Homeostatic Structural Intelligence		
Cores	Centers	Circles



Functional Intelligence: Functional intelligence is structural intelligence in action; rather than the capacity to move, it is the ability to move-it is movement. Functional Intelligence includes all of the various energetic, kinetic, and biomechanical concepts of flow, flexibility, and dynamic length. Functional Intelligence utilizes the same underlying principles of Structural Intelligence with one important addition-movement is the **squaring** (as in the form c2) of cores, centers and circles.

Homeostatic Functional Intelligence		
Cores2	Centers2	Circles2

In other words, the structural parts, whether they are cores, points, lines, planes, whole spaces, circles, or centers, move in an additional dimension to their structural dimension. For example, a point squared is a line; consider pointing your finger at a dot on the table and then moving it...you get a line. Now square a line...you get a plane. Now square a plane... you get a space. Square a circle...you get a cylinder. Square a center point and a circle...you get a cone. We will often refer to Functional Intelligence as the squaring of the 3C's. The graphic below provides a good visual example of the squaring of the 3 C's.



One of the critical distinctions between BKM and other approaches to Pilates is that the BKM focuses on the "conceptual integration" of the 3C's in relation to homeostasis. For example, if a client has an index finger injury, the conventional cores of Pilates do not provide insight on how to proceed with the finger. Of course, the index finger can be connected to the central core (the "belly") to gain more efficient movement. What BKM adds to the mix is that each body part or system (there are millions) has cores, centers and circles and that each of these parts can benefit from movement within this framework. As a result, the BKM instructor is capable of working

with any individual body part both within the larger context of the body (where the core is the belly region) but also separate from the larger context of the body (where the core may be local to a particular part). The index finger, for example, operates as a core in and of itself; each part of the finger has energetic centerlines and operates within a geometric joint; even a single finger can be viewed in the same complex way that Pilates viewed the core of the human body.

Distributed Intelligence (environmental)

Distributed Intelligence means that you put your intelligence in lots of different places much like you would diversify your stocks, or allocate fat reserves in the body. You already use distributed intelligence. Your mind interacts with your day planner to keep track of appointments, a book to keep apprised of important concepts, the news, magazines, the Internet. Likewise, your body already utilizes distributed intelligence. A chair, a couch, a bed, or a pencil provides ergonomic instruction that structures your form and supports physical functioning. The BKM is truly unique in its expressed use of Distributed Intelligence. In practical terms, distributed intelligence is the various forms of structure and support you will "add" to the environment to structure the client's body and support movement. In the Studio you will use imagery, verbal commands, conceptual structures, the equipment, barrels, reformer, balls, sticks, tactile feedback, the floor. At home and in daily-activities-of-living, you might use a kitchen counter, a doorknob, a board, a couch, a roller, a box, a ball, a helmet, a bike tire, a rock. When considering distributed intelligence, contemplate the following: Your sole purpose, as an instructor will be to become a part of the client's body intelligence.

Distributed Intelligence is made up of a nearly infinite number of conceptual and physical "props" which serve to either contain or release the body and movement.

Distributed Intelligence (environmental)	
Infinite Props	
Contain	Release

For example, when you share the load of a client's leg in order to allow them to "find" and activate their core muscles, you are practicing the art of distributed intelligence. You are adding to the client's environment a kind of intelligence that the client currently does not possess. By containing the leg load, you are allowing the client to support the leg weight of which they are currently capable. This is a simple example of the pervasive nature of Distributed Intelligence in the BKM work. This distributed intelligence is the cornerstone of another part of the BKM that is distinctly different-real v. ideal.

Real vs. Ideal

In order to grasp the important relationship between ideal and real consider the following statements:

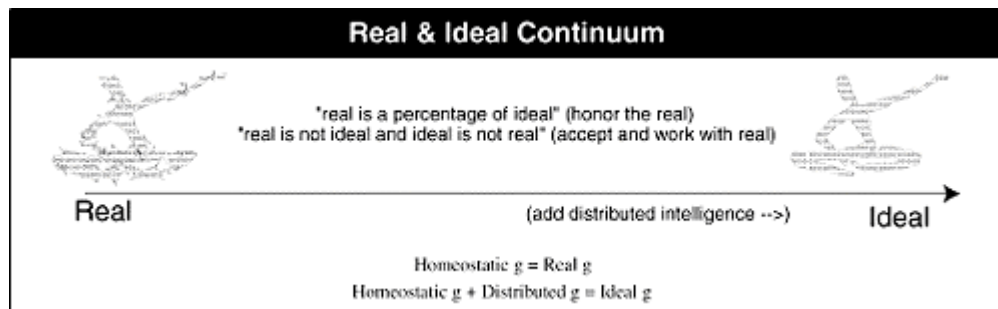
- I want to make \$100 and I only made \$30.
- I made 30% of what I want to make.

The first statement focuses on what you don't have and compares it to what you have. The second statement focuses on what you have as being a percentage of what you want. The second statement "feels" like progress whereas the first statement "feels" like pouting.

Underlying the two intelligences are the concepts of real (the actual current state of the body and movement) and ideal (the potential state of the body and movement). Real is comprised of actual Homeostatic Intelligence. For example, a client's real state is their actual body and actual movement patterns-their actual ability to maintain homeostasis. A client's ideal state involves potential body structure and movement patterns. For this reason, the real state is associated with the Homeostatic Intelligence while the ideal state is associated with the Distributed Intelligence.

Body as Intelligence	
Homeostatic Intelligence (Structural - Functional)	Distributed Intelligence (Environmental)
Real	Ideal

The Ideal state is based on the biomechanics of physically efficient posture in relation to efficient homeostatic patterns. But, it is important to recognize that real is always a fraction (a percentage of ideal). This means that there are qualities of the ideal within the real. These qualities must be recognized. Using the Real-Ideal continuum will help you to identify where distributed forms of intelligence are needed and how to implement them.



BKM always focuses on the real state of affairs and uses the ideal as a backdrop for comparison in terms of number scales and percentages. The reason this is important is that ideologically it means that BKM works with the client's strengths and leverages them against their weaknesses. By placing real in the context of ideal in terms of numbers and percentages (scales of 1-10, etc.) it forces the BKM instructor to remain in the present rather than comparing real to an idealistic future. Instead, real is viewed as a percentage of ideal, right now, right here, in the moment.

Conceptual Toolbelt

There are thousands of additional concepts that we will explore throughout the Apprenticeship. For example, there is the 4-part Footwork concept or the various concepts of the shoulder girdle, of stretching, or of breathing. You should consider these concepts as a toolbelt that you wear during your work with clients. When a particular tool is needed, use it.

The Appendix identifies the numerous concepts that you should master throughout the Apprenticeship. Some will have additional worksheets, others are merely single concepts. (See Appendix).

What is most important to recognize is that all of these concepts are rooted in the foundational principles of BKM. This is the reason why it is so important that you fully integrate these foundational principles. Consider the following example: as a BKM instructor you will go on to learn thousands of lessons and deal with an infinite number of scenarios with client's. All of these lessons and scenarios fit into one or both of the following concepts-recognizing the body as information and/or developing the body as an intelligent being.

Pilates-based Exercises

BKM works *through* Pilates, Yoga, massage, and other modalities not *for* Pilates, Yoga, massage and other modalities. There are countless postures and exercises. Pilates is comprised of nearly 500 differentiated exercises. BKM uses these exercises as a repetitive practice that aids the formation of habits or patterns.