Defining Posture and Alignment

What are the differences and how can we use imagery to improve?

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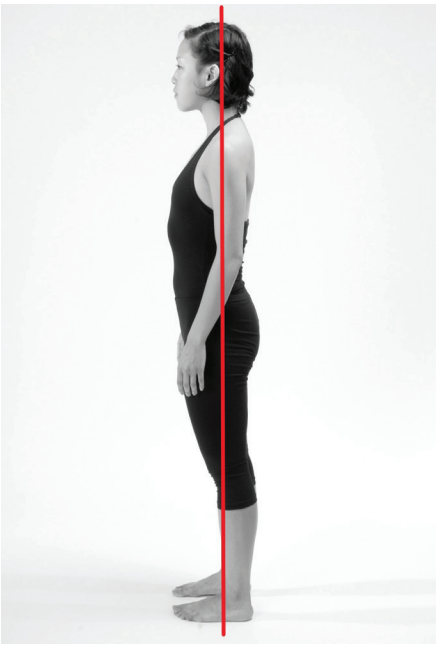

Natasha Poon Woo, photographed for *Conditioning with Imagery for Dancers* by Krasnow and Jordana Deveau / Photo by Gary Rush

Dancers sometimes ask, "What is the difference between posture and alignment?" As these terms are commonly used, they are interchangeable. However, if we explore the history and scientific basis of these terms more thoroughly, we can clarify how to approach these important concepts in more useful ways. While alignment has been a focus in dance classes for decades, it is more important now because we are spending additional time sitting at home working at our computers and phones, which can negatively impact alignment.

Early definitions of posture and alignment examined the "stacking" of the skeleton in relation to gravity. Since the skeleton is a segmented structure, the segments should ideally organize on an imaginary vertical line called the line of gravity, or plumb line. A teacher can view students in profile to see how they are aligned and how the teacher might provide information to encourage improvement. Alignment can also be evaluated from behind to check for problems such as scoliosis (lateral curvature) or to see if one shoulder or hip is higher than the other.

Another way to distinguish posture from alignment uses the perspective of motor control. The human body has certain responses to loss of balance including which muscles fire, the sequence of muscles and the speed of firing, depending on the balance challenge. For example, if you are standing on a bus that suddenly stops, you will begin to fall forward. Very quickly (milliseconds!), the calf muscles fire, then the hamstrings and then the back muscles. These responses are called postural reflexes. Because of the potential confusion of postural reflexes with posture, it is suggested that the term "alignment" be used for skeletal organization and the term "posture" be saved for postural reflexes.

Over time, researchers and educators began to broaden the concept of alignment to include two important ideas: (1) the contributions of muscles, tendons and ligaments to alignment and (2) how to examine alignment during complex movement. These ideas differentiated static and dynamic alignment. In fact, all alignment is dynamic because even when standing still, there are ongoing, small muscular adjustments that contribute to remaining upright. However, as any dancer or dance teacher knows, evaluating alignment during complex dance movement is not a simple process.

Early in the exploration of dynamic alignment, teachers and researchers began to recognize that there were multiple ways to achieve the same look in terms of muscle use (recruitment and release). One can be tense or easeful and have the same skeletal organization. How is a dancer or teacher to determine how to direct muscle activation to achieve efficient alignment? This brings us to another idea about motor control. The most efficient way to achieve our best alignment is to activate the deeper, smaller muscles (e.g., transverse abdominals, deep extensors of the spine), not the large superficial muscles (e.g., quadriceps, gluteus maximus, erector spinae). Unfortunately, we cannot consciously activate these deeper muscles easily, so when we think about using muscles to change our alignment, we will often engage large surface muscles, which are primarily for dynamic movement.

It is the somatic practitioners who first gave us the tools and language to approach this dilemma, which is through the use of imagery. Imagery allows the brain to "see" what the task is and to activate the most appropriate muscles to achieve that task. In this way, the brain can activate multiple muscles and joint actions with a single image. The following are two examples to try at home:

1. For creating an elongated spine without tension in stance: Imagine the body as a candle. The wick runs along the entire plumb line. At the top, a golden flame is floating high in the space. The surface of the body is made of wax, which is melting slowly towards the ground, softening the surface muscles.

2. For aligning the knees and lower legs in pliés/relevés: Imagine two corridors like hallways that run from the hips past the knees and ankles to the ground, along both the outer and inner thighs. See the knees floating inside the corridors as you plié, both on the descent and the ascent. Then as you relevé, the ankles remain in the same corridors. ♦

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