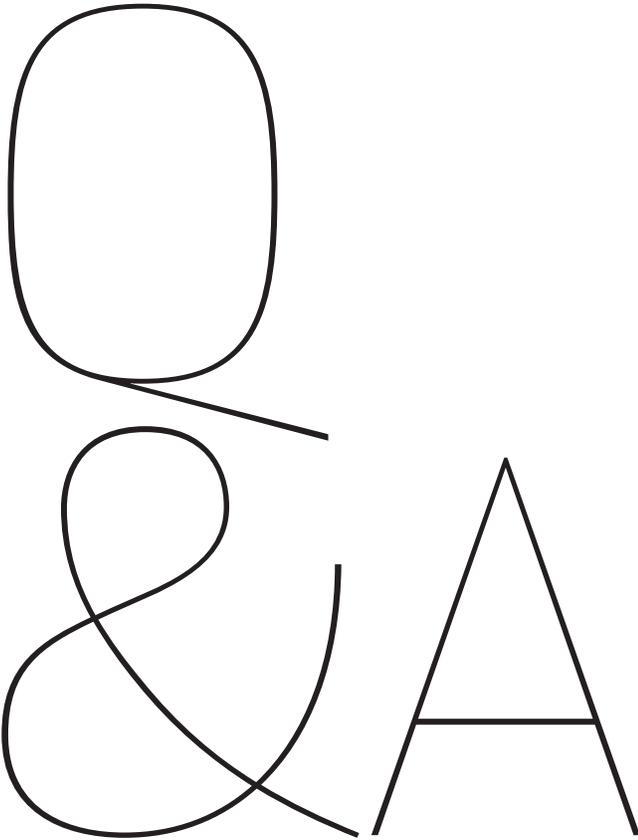




Questions for:

**Dan Siegel**



The UCLA psychologist talks about **the emerging field of Interpersonal Neurobiology** and the new science of personal transformation.

**Interview by Karen Hegmann**

**What is 'mindsight', and how can we use it to enhance our lives?**

Mindsight is a powerful lens through which we can understand our inner lives with more clarity, transform the brain and enhance our relationships. Mindsight is the ability of the human mind to see itself. Many people are blind to the energy and information flow inside of themselves, which can make them behave impulsively and reactively. They may even behave destructively – not intentionally, but because they suffer from a sort of ‘mind blindness’. It’s almost like putting a blind person behind the wheel of a car. The good thing about the mind is, almost everyone can be assisted in developing the skills to see more deeply into their energy and information flow, and that is the basic idea: that you can ‘drive the car’ with more balance and equilibrium if you are actually watching where you are going.

Within each of us there is an internal mental world – what I think of as ‘the sea inside’ – a wonderful rich place filled with thoughts and feelings, memories and dreams, hopes and wishes. Of course, it can also be a turbulent place where we experience the dark side of all those wonderful feelings and thoughts – fear, sorrow, dread, regret, nightmares. Who among us has not at one time or another felt overwhelmed by the sensations generated from within our own minds? It might not even occur to us that we can change them. This is where the skill of mindsight comes in. It has the potential to free us from patterns of mind that are getting in the way of living our lives to the fullest.

We are not defined by the limits of our bodies: there is also a ‘self’ that is part of our family, our school or our community. At a deeper level, we’re part of our city, nation, and part of humanity and the planet earth. Through mindsight, we become part of a wider whole. Research shows that we’re happiest when we feel that we are part of this larger whole. Through mindsight, we realize that we can actually work towards a common goal of bringing more positive energy into the world. In short, mindsight is the idea that you can see and



When we don't allow elements of a system to be both differentiated and linked, integration is impaired and the system is vulnerable to chaos or rigidity.

shape your inner world, so that you are not just a passive passenger along the ride of life: you can actually become an active author of your own story.

#### What does a lack of hindsight look like?

Our hot buttons can get pressed by other people or by conditions, such as being hungry or sleepy, and then our *prefrontal cortex* can be temporarily disabled. Things go kind of haywire; you 'flip out', and areas in the brain beneath the prefrontal cortex have a field day. Survival reflexes like fight-or-flight kick in, and you do things to people – your friends, your kids – that you'd never do otherwise. It helps to understand why we lose our minds.

#### What role does integration play in hindsight?

A *system* is any collection of elements that function together. That could be your nervous system, your body or your family – perhaps even a community or company. In my journey over the last 20 years to try to illuminate the nature of a healthy mind, what has emerged is that when people or organizations go awry, they usually fall into one or a combination of two categories: chaos or rigidity. As I said, a system is a collection of elements that function together. In the case of an integrated system, they function together in well-being, and where there is a lack of integration, it moves towards chaos or rigidity. In a chaotic company, emotions are high, everyone is upset and everything is kind of random. They're stuck, and there's no creativity or energy. Morale might be low, and life there in general is totally predictable. It's a case of the 'same old same old.' Not surprisingly, these companies don't thrive; they wither.

Conversely, in an integrated system, there is both *differentiation* and *linkage*. The different elements of the system are honoured for their unique features and specializations, and they communicate with respect, creating linkage between them. They honour what each person is doing. An analogy would be a smoothie, where you blend all the fruit together – there is no integration, just blending. Yet with a fruit salad, each piece of fruit retains its own unique flavour. This is an integrated system – the functional linkage of the basic elements of a system that retain their differentiated features. In many ways, the whole is larger than the sum of its parts.

In the end, the beauty of integration is that we're all in this life together. We each face the challenge of surviving, but we can take steps to move toward thriving. Integration can take us from survival to 'thrival.' When we examine the deep layers of our neural selves we come to glimpse not only the roots of our mental and social lives, but the essential reality of ourselves as part of an integrated whole across the span of life.

I use the acronym FACES to explain the qualities of an integrated flow: Flexible, Adaptive, Coherent, Energized and Stable. Any healthy complex system has a FACES flow. The FACES flow is similar to a river that flows between the banks of chaos and rigidity. I call this the 'river of integration'. When we don't allow elements of a system to be differentiated and/or linked, then integration is impaired and the system is vulnerable to being in chaos or rigidity. This can happen to a family, a company or even your own nervous system.

The idea behind hindsight is that we can awaken our mind to the reality of integration to find where differentiation has not occurred, and promote it. Once you've promoted differentiation, linkage can then be cultivated. Amazingly, new states of vitality and harmony will emerge, whether it's a company, school, family, individual or couple. Integration then becomes the fundamental view building a strong foundation of well-being across all these aspects of human activity.

#### What is 'Interpersonal Neurobiology'?

This emerging field is attempting to extract the wisdom from over a dozen different disciplines of science to weave together a picture of human experience and the process of change across the lifespan. The goal is to build a model within which the objective domains of science and the subjective domains of human knowing can find a common home.

Here's an example of the research we're doing: We now know that intentionally focusing your attention on something can specifically activate certain areas of the brain. This process is called 'neural firing', and it creates an electrical flow. For example, if you spend a lot of time practicing the scales on the piano by putting your fingers on the keys for an hour every day, we can show that you will expand a specific part of your brain's *cortex* – the part of your brain that controls your fingers. However,

we recently discovered that if we had you just *imagine* playing those scales, you can also expand the cortex.

### How do early relationships shape our brains?

In my days as a child psychiatrist and researcher, I studied parent-child relationships in an effort to understand some of the basic mechanisms of the healthy human brain. Studies were showing that the brain wasn't just processing perceptual input and regulating the body: it also played a central role in how we interact with each other. Indeed, our brains are shaped by our earliest social interactions. Much of the work thus far in Interpersonal Neurobiology is based on the idea that early relationships shape the brain, altering its very structure and function. The circuits of the brain that are socially responsive are also the same circuits that are called 'regulatory', which means that they are able to shape how our heart and intestines function, as well as how our whole body and brain functions. These important circuits also regulate our emotions and thinking, how we pay attention, and how we form relationships with other people.

### In what ways does mindfulness promote social and emotional intelligence?

**Daniel Goleman**, who wrote the book on emotional intelligence as well as the forward to my book, believes that mindfulness is the mechanism beneath both social and emotional intelligence. When we consider what is required for us to act intelligently within a social setting, we need to understand both the inner subjective world as well as the mind behind behaviour. The more we can do this, the more we are able to understand the mental experience behind behaviour, which enables a higher degree of social intelligence. Likewise with emotional intelligence. Emotional intelligence is the ability to know how our own emotional worlds, a part of the mind, influence how we experience life and interact with other people. In writing the book it became clear to me that mindfulness provides a link not only between social and emotional intelligence – but it can also open the door to understanding the concept of *mindfulness*. Mindfulness sheds light on the whole process of awareness and how it can move us towards creating a more compassionate civilization.

### How do you define mindfulness?

Mindfulness involves paying attention, in the present moment, on purpose, without grasping onto judgments. Mindful awareness has the quality of receptivity to whatever arises within the mind's eye, moment to moment. Recent studies of mindful awareness practices reveal that it can result in profound improvements in a range of physiological, mental, and interpersonal domains of our lives: cardiac, endocrine, and immune functions are improved with mindful practices, and empathy, compassion and interpersonal sensitivity also appear to be improved. People who develop the capacity to

pay attention in the present moment without grasping on to their inevitable judgments also develop a deeper sense of well-being and what can be considered a form of mental coherence.

### How can mindfulness transform companies?

The secret to applying mindfulness is that each member of a company be taught how to allow differentiation to happen at a number of levels, while still being able to actively encourage inter-departmental communication. When a company takes on the mindfulness idea with integration at the heart of it, it requires differentiated levels of responsibility, specialization and expertise of activity. If you simply treat the different departments within a company as separate entities who have their own individual focus, you are promoting differentiation, but there's no linkage. The company will not do as well as another company that promotes integration. You have to acknowledge that every department (which is a subset of the larger whole) has individuals in it yet needs to be connected to the others.

The elements of the system are not just at the departmental level – differences among individuals within each department need to be cultivated. If you do that, people will feel empowered and respected. Morale will be high, and people will feel motivated to employ their creative juices to come up with more inspired and imaginative ideas. They are now actively contributing to the larger whole. When people are honoured for their differences and are also linked to one another, they feel a sense of ownership in the whole process. They're in sync, and have a vested interest in the future of the company. There's membership, yet there is individuality as well. Of course, this whole process has to begin with a company's leadership.

### What can we do to move towards '20/20' mindfulness?

There are things we can do every day, what I call 'brushing the brain', just like we brush our teeth. I encourage people to do a basic breath-awareness exercise for two or three minutes and then review what your five senses are telling you: what are you seeing, hearing, tasting, smelling, feeling on your skin? Then invite the sixth sense in: what is your body telling you, your heart, your intestines, your muscles? And then the seventh sense, mental activities: what thoughts, memories, feelings do you have right now? What intentions do you have for the day? And finally, the eighth sense: How do you feel connected to others or to the world at large? This is a way to keep the brain clear of all the muck that gets stuck in there. **R**

---

**Dan Siegel** is a clinical professor of Psychiatry at the UCLA School of Medicine, co-director of the UCLA Mindful Awareness Research Center, and executive director of the Mindfulness Institute. He is the author of *Mindsight: The New Science of Personal Transformation* (Random House, 2010) and *The Mindful Brain* (Norton, 2007).