OUT of our HEADS: Philip Shepherd on The Brain in our Belly, by Amnon Buchbinder *The Sun*, April 2013; pp 7 – 14; (pp 7 – 10 available at http://thesunmagazine.org/issues/448/out of our heads)

Excerpted below

Philip Shepherd's book, <u>New Self, New World</u> explores the implications of the little-known fact that we have two brains: in addition to the familiar cranial brain in the head, there is a 'second brain' in the gut. This is not a metaphor. Scientists recognize the web of neurons lining the gastrointestinal tract as an independent brain, and a new field of medicine – *neurogastroenterology* – has been created to study it.

According to Shepherd, there is a good reason that we talk about 'gut instinct.' If cranial thinking sets us apart from the world, the thinking in the belly joins us to it. If the cranial brain believes itself surrounded by a knowable world that can be controlled, the brain in our belly is in touch with the world's mystery. The fact that the second brain has been discovered, forgotten, and rediscovered by medicine three times in the past century suggests how complicated our relationship with our bodily intelligence is.

... He argues that we, as a culture and as individuals, have become walled off in our heads, losing touch with the intelligence of our bodies. We have reached a point, Shepherd tells us, were the cranial brain's efforts to solve our problems are the problem. Only by leaving the 'tyrant's castle' of our heads and entering into a profoundly embodied relationship with the mystery and beauty of the world will we successfully turn our planetary crisis into an 'initiation.'

Buchbinder: You've said that we have a misguided cultural story about what it means to be human. What does that story tell us?

Shepherd: It tells us that the head should be in charge, because it knows the answers, and the body is little more than a vehicle for transporting the head to its next engagement. It tells us that *doing* is the primary value, while *being* is secondary. It shapes our perceptions, actions, and experiences of life. It separates us from the sensations of the body and alienates us from the world. And there is no escaping this story; it's embedded in our language, our architecture, our customs, and our hierarchies. It's like the ocean, and we are like fish who swim in it and barely notice it because we've lived with it since infancy.

By interpreting reality for us, stories frame and give meaning to our actions. But there's a danger to living by a story that you can't question, because you start to mistake the story for reality. And that's where my work starts — in formulating questions that can expose that story and hold it to account.

Buchbinder: Where did this story come from?

Shepherd: It dates back to the Neolithic Revolution, which was underway in most of Europe by 6,000 BC and gave us a new way of living: agriculture, permanent settlements, domesticated animals. We started taking charge of our environment. When you domesticate an animal, you become like a god to it. You determine with whom it will mate, and you own its babies. You choose what it will eat and when. And you determine the moment of its death. So at the start of the Neolithic Era humankind was radically altering its relationship with the world. The unforeseen consequence of that, which our culture hasn't yet begun to appreciate, is that we also began to take control of the self in ways that created within us the same divisions we were creating in our relationship with the world. If you go back to the Indo-European roots of the English language, which date from the Neolithic, you find that the word for the hub of a wheel came from the word for navel. The hub is the center around which the wheel revolves. The metaphor suggests that the center of the self was located in the belly.

The idea of being centered in the belly shows up in many cultures — Incan, Maya. There is a Chinese word for belly that means "mind palace." Japanese culture rests on a foundation of *hara*, which means "belly" and represents the seat of understanding. The Japanese have a host of expressions that use *hara* where we use *head*. We say, "He's hotheaded." They say, "His belly rises easily." We say, "He has a good head on his shoulders." They say, "He has a well-developed belly."

Buchbinder: This isn't just a semantic issue, is it?

Shepherd: No, it's deeper. These cultural differences point out that we have lost some choice in how we experience ourselves. Our culture doesn't recognize that hub in the belly, and most of us don't trust it enough to come to rest there. Our story insists that our thinking happens exclusively in the head. And so we are stuck in the cranium, unable to open the door to the body and join *its* thinking. The best we can do is put our ear to the imaginary wall separating us from it and "listen to the body," a phrase that means well but actually keeps us in the head, gathering information from the outside. But the body is not outside. The body is you. We are missing the experience of our own being.

To get a sense of what we have lost, it helps to appreciate the forces that carried us into the head. The Neolithic Revolution spawned two major changes in our story: the experiential center of the self, which had been located in the belly, began to migrate upward to the head; and the spiritual center of our culture began to migrate from the earth goddess up to the sky god. In mythological ways of thinking, the body and the world of nature generally are associated with the feminine, while the head and the realm of abstract ideas are associated with the masculine.

By around 700 BC, we find the Greek poet Homer making frequent use of the word *phren*, which translates as both "mind" and "diaphragm." So by Homer's day the migration of our thinking was about halfway to the head, balanced between male and female. Some rich developments came out of that ancient Greek culture: the birth of Western science, philosophy, literature, theater. But by 350 BC or so the philosopher Plato locates the center of our thinking in the head. In his dialogue *Timaeus* the title character explains that the gods made us by fashioning the soul into a divine sphere, the cranium, and then gave it a vehicle, the body, to carry it around. So the head has the spark of divinity, and the body is a machine. That's been our metaphor ever since.

Our culture has been intolerant of attempts to reclaim this lost center of consciousness. In the early 1900s a Chicago anatomist named Byron Robinson wrote a book called *The Abdominal and Pelvic Brain* in which he describes the neurology of an independent brain in the gut. His work was quickly forgotten — it had no relevance to our cultural story. Then, in the late 1920s, Johannis Langley mapped out the autonomic nervous system. He said there were three divisions: the sympathetic, the parasympathetic, and the enteric. The enteric nervous system, which governs the gastrointestinal functions, is exactly what Robinson called the "abdominal brain." Langley's book became a classic, but the enteric nervous system was widely ignored, and students were taught that the autonomic nervous system has just two divisions.

Finally, in the 1960s, Dr. Michael Gershon rediscovered the brain in the gut. In his book *The Second Brain* he describes how it took him fifteen years of presenting his research and answering refutations before his fellow neuroscientists capitulated and agreed that the neuromass in the belly is indeed an independent brain. [Gershon is a professor of pathology and cell biology at Columbia University. — Ed.]

Robinson, who first discovered the pelvic brain, was much freer in his assessment of its importance than scientists are today. He **talked about it as the "center of life."** I completely agree with that. It is the center of one's being.

Buchbinder: How does it meet the criteria for being a brain?

Shepherd: We shouldn't imagine it as a lump of gray matter. The enteric brain is a web of neurons lining the gut. But it perceives, thinks, learns, decides, acts, and remembers all on its own. You can sever the vagus nerve, which is the main conduit between the two brains, and the brain in the gut just carries on doing its job.

So they are both brains, but they are radically different. The enteric brain exists as a network that suffuses the viscera as a whole — which mirrors the way the female aspect of our consciousness feels the world around us as a whole, enabling us to exist in the present. The cranial brain, by contrast, is enclosed in the skull. And that mirrors the way the male aspect of our consciousness can separate itself from the world and create a subject-object

relationship, enabling us to think abstractly. These two ways of engaging our intelligence reveal two different versions of the same world.

Buchbinder: Why bring "male" and "female" into it? Why associate "doing" with the male and "being" with the female?

Shepherd: The terms are imperfect, certainly, because people will tend to hear "men" and "women" — but I'm not talking about men and women. I'm talking about the complementary opposites that exist in each of us. Whether you are a man or a woman, there is both a masculine aspect to your consciousness and a feminine aspect. To come into wholeness is to realize the indivisible unity of these parts. At this point in our culture the male aspect has eclipsed the female aspect. I see this in both men and women. We have been taught to mistrust our bodies, to mistrust our intuition, to mistrust any information that is not analytical.

This head-based, masculine perspective gives rise to three serious misunderstandings that drive our culture: we misunderstand what intelligence is, what information is, and what thinking is. Take our understanding of intelligence. We think it's the ability to reason in an abstract fashion, something you can measure with an IQ test. So we remain blind to the impotence of reason in areas of vital concern to us. You cannot reason your way into being present. You cannot reason your way into love. You cannot reason your way into fulfillment. If you wish to be present, you need to submit to the present, and suddenly you find yourself at one with it. You submit to love. There's that great quote from the Persian mystic Rumi: "Your task is not to seek love, but merely to seek and find all the barriers within yourself that you have built against it."

Buchbinder: If intelligence isn't abstract reasoning, what is it?

Shepherd: It's sensitivity — specifically a grounded sensitivity, because a reactive sensitivity isn't able to integrate information. A sensitivity to music, to the flight of a swallow, to arithmetic relationship, to a child's tears — all of these are forms of intelligence. And your sensitivity isn't a static, permanent condition. Anything that increases it increases your ability to live more intelligently. Conversely, the constant noise and distractions of modern life have the opposite effect. The jackhammer you walk past on the street diminishes your intelligence by blunting your sensitivity.

Buchbinder: If this focus on the head began in the Neolithic, are you saying that we need to go back to the Mesolithic? What if the rise of consciousness to the cranial brain was an important part of our development as humans?

Shepherd: Our task at this point isn't to go back. It's not a matter of giving up the ability to think consciously or abstractly; it's a matter of coordinating the two brains. Picture the first astronaut who went into orbit and took a photo of our planet. He brought that unprecedented perspective back home and showed it to people. Suddenly they were newly sensitized to what it means to be a citizen of the planet. They became slightly more intelligent about their relationship with it. I think that new sensitivity contributed to the range of environmental initiatives, such as the Earth Day movement and Friends of the Earth, that sprang forth in the years following that first photo of the earth from space.

That story of the astronaut stands as a metaphor for the evolution of our consciousness, but we are only halfway through the journey. We have left our home in the belly and are now "in orbit" in the head, viewing the world from a new, somewhat remote vantage point. Just as the astronaut gains perspective by separating from the earth, we gain perspective by stepping back from the body, separating our consciousness from its sensations and dulling our awareness of them.

The problem is, we don't know how to bring those perspectives back home so they can be integrated. Without that integration our abstract perspectives can't sensitize us to the world. They merely abet our ability to assert control over it. Our culture has a tacit assumption that if we can just gather enough information on ourselves and our world, it will add up to a whole. But when you stand back to look at something, there are always details that are hidden from you. The integration of multiple perspectives into a whole can happen only when, like the astronaut bringing the photo back to earth, we bring this information back to our pelvic bowl, back to the ground of our being, back to the integrating genius of the female consciousness. The pelvic bowl is the original beggar's bowl: it receives the gifts of the world — of the male perspective — and it integrates them. As you bring ideas down to the belly and let them settle there, they sensitize you to who you are and eventually give birth to insight. Our task is to learn to trust that process.

The central theme of my work is that our relationship with the body shapes our perceptions, which in turn direct the actions we take and guide the theories we generate. The atomic theory began as a philosophical concept that was

first expounded by Democritus around the same time Plato declared the head to be the soul's container and the body its vehicle. Having individuated ourselves from the world, we saw a reality made of individuated bits, a shattered universe of random pieces that have no real relationship with each other. And we still see it that way, because we live in the head. But that's an alienating impoverishment of reality. Quantum mechanics has revealed that not even an electron exists as an individuated bit. It exists as part of a web of relationships.

Our relationship with the body has similarly affected our politics, our corporate culture, our language, our cultural values — all of human history. Language tells us explicitly that the head should rule. You'd better have a good *head* on your shoulders. You need to get ahead. The bosses work in corporate headquarters and head up committees. Chief, captain, and capital all come from the Latin word for head, so Washington, DC, is literally the "head" of the U.S. We call the pope the "head" of the Roman Catholic Church. We could call him the "heart" of the Church, to emphasize that it's an institution based on faith. Or we could call him the "lungs" of the Church, because spirit means "breath." The Church might look to its original model, Jesus, who did not live from the head. Instead it's organized as a top-down tyranny, with the pope as its "head."

Buchbinder: You're talked about our task of integration in terms of what mythologist Joseph Campbell called the 'hero's journey.'

Shepherd: Campbell showed us that almost all cultures have a myth of the hero who journeys into an unfamiliar realm to secure a boon or elixir – a new perspective, as I see it – that, when brought home, will re-energize the hero's society. Now, this myth is telling us about different parts of ourselves. The male aspect of our consciousness has the tendencies of both hero and tyrant. What sends it one way or the other is its relationship to the female aspect of consciousness, which puts us in touch with being. The hero, as Campbell puts it, is the 'man of self-achieved submission' – a submission to 'what is,' When you submit to being, you attune to what the world asks of you; the hero's 'call to action.' But Campbell characterized the tyrant as the 'man of self-achieved independence' – and that independence is a separation from being, a refusal of the call.

- ... we are like an astronaut stuck in orbit. We are alienated from being and cannot find our way home. ... We need to come home to our bodies, come to rest in the core of our being and sensitize ourselves once more to 'what is.'
- ... our culture misunderstands what information is. We are addicted to 'digital' information . . . information that, like a digital signal, is made up of bits and pieces broken off from the whole. We think that's real information. But there is also 'analog' information. Analog information comes to us in a wave... The form of the wave never changes. A wave carries more information than even an endless number of bits. Waves from outer space can still tell us about the big bang.

 ... In mythic terms, we are the tyrant who won't become the hero. We receive the hero's call but refuse it because we believe ourselves safe and secure. The head has become our fortified abode . . . we believe our thinking will save us.
- ... Myth warns us that when we indulge our tyrannical tendencies, we inherit the tyrant's lot in life. . . we live with the tyrant's anxieties. We try to fill the emptiness of our being, and so we suffer the tyrant's greed and restlessness. We divorce our doing from our being, and so we suffer the tyrant's loss of grace. . . . we have even come to share the tyrannical ideal of freedom, which is the ability to disconnect.
- ... What is asked of the hero at this point in the myth is to surrender; not to assert yet more control, but to come into harmony with the whole... [In] our culture we misunderstand harmony to mean order, because when you're living in your head, order is all you can perceive. . . . But harmony is the opposite of control; it's an organic whole in which every part answers to every other part... Harmony requires us to change along with the whole. If you open yourself to the hum of the world if you live in the present rather than in your idea of it it will change you.
- ...My work is not about 'listening to the body.' It's about listening to the world through the body. In our "doing" society, we have a zeal for sorting out our agenda and implementing it. But inmy experience the world is there to guide you at every moment. The world is calling you to come play, to come risk, to let your heart burn with a passion that will make sense of your life. The world will speak to you intimately ... if you can allow the body to teach you its different way of listening. There's a story about George Washington Carver, the brilliant African American botanist. Someone asked him, "How is it that you understand these plants so well?" and he replied, "If you love it enough, anything will talk to you."

...Our elevation of reason over the real, material world we can touch and taste and feel is part of our demeaning of the feminine. The word *material* is related to *maternal*. There's this urge to leave the material world of sensation and ascend toward the sky, the heady upper realms, where we find the abstract, perfect forms generated by the cranial brain.

Buchbinder: But is materialism any better? Isn't our consumer society some sort of consolation prize for being separated from the body?

Shepherd: Modern materialism doesn't honor the material world — it demeans it.

Consumerism comes out of a craving, at the root of which is our dissociation from being. There's a restless emptiness at our core, an emptiness that has obliterated our sense of 'enough.' Our relationship with our body is broken, but it is always the last thing we think about. We try to fix our lives or the world...

Buchbinder: What about the heart? If the cranial brain is taking care of abstract thought, and the pelvic brain is taking care of our connection to being, what role does the heart play?

Shepherd: The heart is where the two poles of our consciousness meet; it's the point of balance between the two... If we're going to continue to evolve as a species, we need to experience our intelligence not as a unipolar phenomenon—all head or all belly—but as an axis... our integrated intelligence is an axis through which all these exchanges between the cranial brain and the pelvic brain occur, and its field is our sensitivity.

Buchbinder: When you teach all of this in a workshop, how do you reply to somebody who says, "That sounds great, but I have to go to work on Monday in the world of ideas and 'doing.'"

Shepherd: You can go into your job and remain in touch with your breath. Allow it to drop to your pelvic floor. Remain in touch with that still point at the core of your being. You don't have to quit your job to do this. Of course, if you do bring your breath down to the pelvic floor, you might realize that you need to quit your job!

- ... you can acknowledge the pelvic brain even though you still may be working with ideas.
- ... A problem arises when your ideas distract you from your experience.

Buchbinder: That's the tyranny of ideas.

Shepherd: Yes. The way to escape it is the process of self-achieved submission that Campbell describes. It's called a "heroic" surrender for a reason, because it takes courage. It also takes faith. You're sacrificing the illusion of control. But it's the only means by which you can come home to your self and truly feel in unity with all that is around you.