

Here's how trainers (and learners) can boost their right-brain thinking

# Training both sides of the brain to work together

by George Prince

There is a growing body of evidence suggesting neglect of a marvelous human resource: the right hemisphere of the brain. Dr. Gorgi Lozanov in his Research Institute of Suggestology in Bulgaria, teaches a three-year course in French in 20 half days; graduates know the language as well as three-year stu-

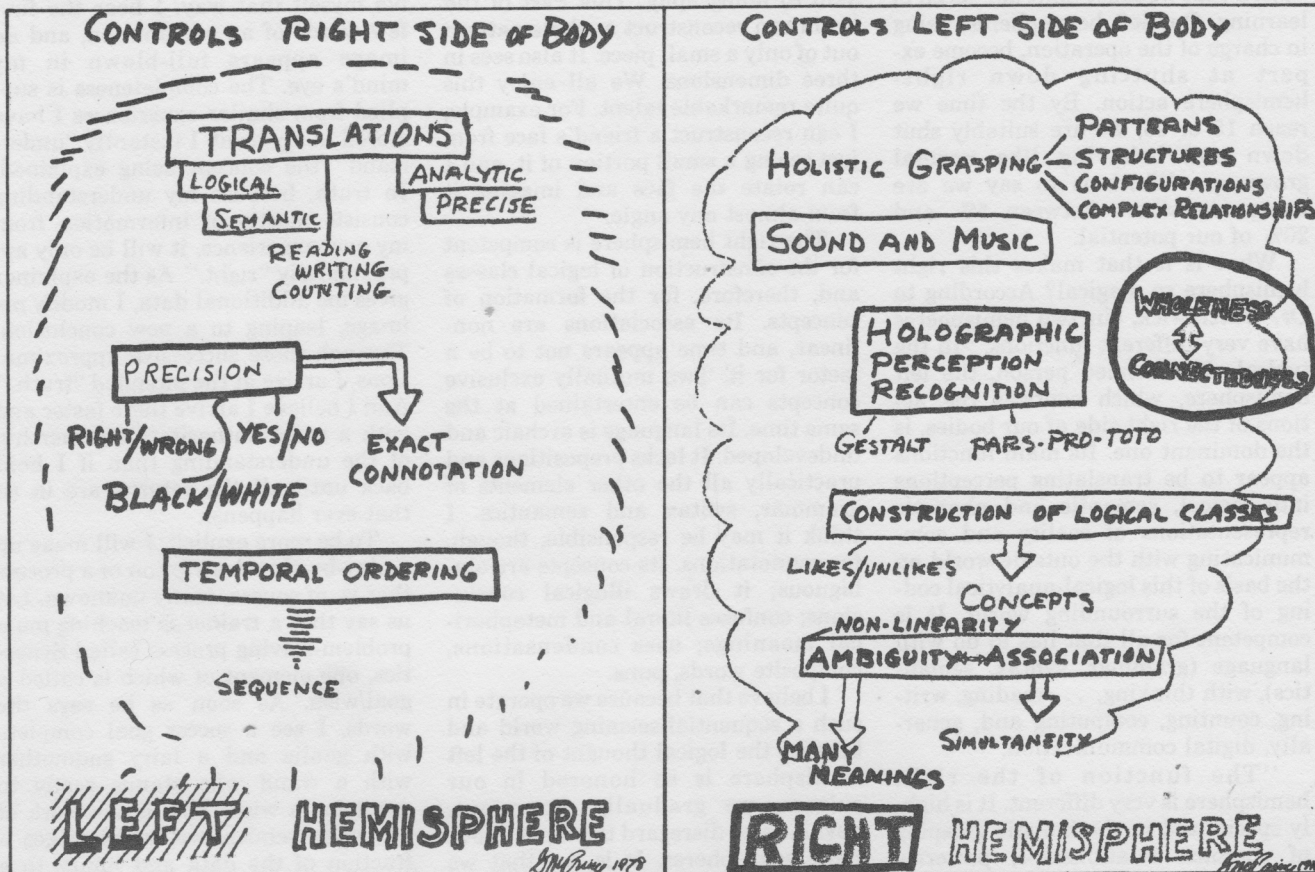
dents. D. Paul Watzlawick helps patients achieve behavior changes with a speed that was unthinkable to psychiatrists just a few years ago.<sup>2</sup> Dr. W. C. Ellerbroek experimented with 36 subjects suffering from acne, a disease notoriously resistant to treatment. Six of the subjects dropped out of the experiment, but the remaining were judged 80% improved within eight weeks. After 16 weeks, 17 patients had

clear skin, while the rest were 80% to 90% improved.<sup>3</sup> A group of people are working on a tough problem, which they have attacked before without success. Then, using some special procedures, they develop not one but three solutions to the problem.<sup>4</sup>

The common thread running through these experiments is that the experimenters were able, in one way or another, to get the subjects to establish cooperation between the right and left hemispheres of their brains. With this internal cooperation, remarkable things happen.

My own experience with this phenomenon comes from studying groups attempting to solve difficult problems. The difference between a successful group and one that isn't appears to lie in right-hemisphere involvement. In a successful group people are able to engage their right hemispheres in the action. In addition, the other members of such groups are able to tolerate support and build upon this thinking.

I believe that we all come into the world able to use both hemispheres of the brain comfortably and effortlessly. Because of this easy cooperation that nature engineered and intended, we learn and grow at phenomenal rates. We learn with such incredible skill that, without anyone telling us




## Try them on your trainees, too

# Ten ways to develop your right brain

**F**or trainers and for learners in general, there is a goldmine in finding ways to systematically increase right-hemisphere thinking. Below are 10 suggestions, outrageous and otherwise, with which you might experiment, using students, subordinates and self as subjects.

- When presenting information, have a musical background that occasionally drowns out the presentation.
- Give everyone in meetings colored pens and ask them to mix their notes with doodles.
- Give each participant in a meeting a lump of modeling clay.
- Give a 30-second explanation of something, and ask people to guess what you're getting at.
- At the beginning of every third meeting, set this ground rule: We can explain a point only a single time. No repeating. No "in other words." If someone wants to ask a question, he does; but before getting an answer, he guesses what it will be.
- In every meeting where old solutions are

not working, have everyone leave his or her shoes at the door. This is a signal that we will welcome confused, beginning ideas, and use ourselves to build on them rather than shoot them down.

- When it is a shoes-off meeting, have the person presenting the problem limit his explanation to two minutes. Then ask each participant to connect the problem with an experience that is *approximately* relevant.
- At every third meeting, institute the ground rule that the chairman will randomly interrupt to ask a member to describe the images going through his or her mind at that instant. Other members listen to see if they can use this image to give them a beginning idea, one that does not yet work.
- One day a week, make it a rule that *no one* in the office or plant can use the word *no*. (The right hemisphere has no equivalent of *no*.) If something is not acceptable, the person must deal with it by saying, "yes, if...."
- Before a meeting when new speculative thinking is needed, have a ritual idea "dance" and light some punk so you can each read an idea in the smoke. 

directly, we somehow become convinced that we must limit our speed of learning. Our left hemispheres, being in charge of the operation, become expert at shutting down right-hemisphere action. By the time we reach 15 or so, we are suitably shut down and behaving like normal grown-ups. Which is to say we are using somewhere between 5% and 20% of our potential.

What is it that makes this right hemisphere so magical? According to Dr. Watzlawick, our two hemispheres have very different functions. "In the typical right-handed person, the left hemisphere, which controls the actions of the right side of our bodies, is the dominant one. Its main functions appear to be translating perceptions into logical, semantic and phonetic representations of reality and communicating with the outside world on the basis of this logical-analytical coding of the surrounding world. It is competent for all that has to do with language (grammar, syntax, semantics), with thinking, . . . reading, writing, counting, computing and, generally, digital communication.

"The function of the right hemisphere is very different. It is highly specialized in the holistic grasping of complex relationships, patterns, configurations and structures." It is

suggested that this ability is somehow akin to holography. This Part of the brain can reconstruct a whole pattern out of only a small piece. It also sees in three dimensions. We all enjoy this quite remarkable talent. For example, I can reconstruct a friend's face from just seeing a small portion of it, and I can rotate the face and imagine it from almost any angle.

The right hemisphere is competent for the construction of logical classes and, therefore, for the formation of concepts. Its associations are non-linear, and time appears not to be a factor for it. Two mutually exclusive concepts can be entertained at the same time. Its language is archaic and undeveloped. It lacks prepositions and practically all the other elements of grammar, syntax and semantics. I think it may be responsible, though, for connotations. Its concepts are ambiguous; it draws illogical conclusions; confuses literal and metaphorical meanings; uses condensations, composite words, puns.

I believe that because we operate in such a sequential-seeming world and because the logical thought of the left hemisphere is so honored in our culture, we gradually damp out, devalue and disregard the input of our right hemispheres. It is not that we stop using it altogether; it just

becomes less and less available to us because of established habit patterns. Thus, we inadvertently put a damper on two important capacities: the ability to understand deeply and learn speedily and the ability to retrieve and use experiences that are only approximately relevant to the matter at hand. I will discuss understanding and learning speed first.

As children, we were blessed with the willingness to jump to conclusions. This practice is widely thought to be sloppy thinking that leads to error and misunderstanding. After observing thousands of people as they work to understand and solve problems, I am convinced that jumping to conclusions is the natural and efficient way to understand, learn and invent. It is the way the right hemisphere uses its talent for holographic reconstruction.

The traditional way we are taught to think (actually, few of us are directly taught how to think—we learn it by indirection and inference) is an effective block to developing holistic (holographic) skill. The "good" thinker is careful to avoid jumping to conclusions. He waits until all the data are in. He asks questions to fill in any apparent gaps. Finally, he draws the appropriate conclusion. His right hemisphere is discouraged from making contributions.

In contrast, as a child, I do not hobble myself that way. I hear the first few words of an explanation, and an image appears full-blown in my mind's eye. The completeness is supplied from similar experiences I have stored in my head. I instantly "understand" the concept being explained. In truth, because my understanding consists mostly of information from my *own* experience, it will be only approximately "right." As the explainer gives me additional data, I modify my image, leaping to a new conclusion. Through these successive approximations, I arrive at the intended "truth." And I believe I arrive there faster and with a more authoritative ownership of the understanding than if I hold back until all the returns are in (if that ever happens).

To be more explicit, I will make up a play-by-play description of a process that is, of course, really unknown. Let us say that a trainer is teaching me a problem-solving process called Synectics, one element of which is called a goal/wish. As soon as he says the words, I see a soccer goal complete with goalie and a fairy godmother with a wand who stands ready to grant me a wish. This is the work of my right hemisphere, which takes a fraction of the data and jumps to a complete conclusion. It is also the

work of my left hemisphere, which keeps me aware that these conclusions are useful but temporary. Through training, my left hemisphere does not (as a traditionally trained one might) reject these images as incorrect and, therefore, not to be entertained. As the full explanation of goal/wishes emerges, there is a kind of dialog between the hemispheres in which the earlier images are transformed into new ones, but the old images are not thrown out or devalued. They are kept as background aids to more complete understanding of the whole concept of goal/wishing.

In this mode of operating, the two hemispheres cooperate to produce an understanding and learning synergy that equals much more than the sum of the two parts.

We know that this synergy occurs from experiences in our creative problem-solving course, which is designed around the participants' problems. Each person takes a turn being client, the owner of a problem who presents it to his group for their help. Early on, the group spends 15 minutes or more making sure that the members understand enough of the problem to begin to help with it. Typically, the client is bombarded with questions to add to the information. After four days of training, most participants understand enough after the first minute of explanation to begin to work on the problem. At the end of three minutes, nearly all feel that they understand it sufficiently. There are few questions because each participant has jumped to enough conclusions and drawn from his own experiences enough to have a satisfying approximate knowledge of the problem.

My conclusion, jumped to a couple of years ago, is that understanding and learning speeds can be multiplied (and the quality improved, too) if we can relearn to involve our right hemisphere more fully.

The other capacity we damp is the ability to retrieve and use experience (and observations) that are only approximately relevant to the matter at hand. Somehow, perhaps in the service of precision, accuracy and positive discrimination, we develop a strict internal censor. We give it the power to make instant decisions on whether or not a given thought or observation is relevant to an enterprise. When I am doing a routine task—one where tested answers work, such as filing, driving or tying my shoe—it is appropriate to repress as irrelevant any interrupting thought that might disrupt my performance. But when I am problem solving or learning, it is efficient to welcome any retrieval and check out its relevance in a tolerant way.

The great thinkers, who share an openness to everything they think or observe, can teach us something here. It is as though they have trained themselves to believe that *anything* is relevant until proved otherwise. For example, Archimedes and his overflowing bath (displacement), Fleming and his culture that was spoiled by an alien mold (penicillin), Goodyear and his spilled latex (vulcanization), Pasteur and the patch of green grass (source of Anthrax) and so on and on. In every example, lesser thinkers had dismissed the observations as irrelevant or erroneous.

The very heart of creative thinking and of learning is the willingness to honor approximate and seemingly irrelevant thinking. This gives our right hemisphere a chance to exercise its enormous power to connect, to see a pattern, to grasp a complex relationship, to construct a whole out of a tiny hint of an idea.

When we permit our domineering left hemisphere to eliminate instantly that which seems irrelevant, the enterprise had better be routine. Otherwise, we are reducing our ability to learn something new and to invent

or improvise by between 5% and 20% of what we are really capable.

For me, the moral is clear: If I wish to enhance my learning and problem-solving abilities, I will cultivate activities and attitudes that encourage my right hemisphere to contribute aggressively to my thinking—and learn to *value what it presents me*. What this requires is re-evaluating such things as illogical thinking, guessing at causes, guessing in general, making up patterns from small amounts of data, leaping to conclusions, occasionally cultivating ambiguity and confusion, making puns, looking for double entendres and, in general, playing around.

These activities, which are characteristic of right hemisphere thinking, tend to be associated with mistakes and wrongness, which is why they have dubious reputations. If we can reframe them, perhaps we can make them easier to tolerate. This messy, approximate and seemingly careless kind of thinking is not supposed to stand on its own; its job is to develop beginning raw possibilities, which are then refined in cooperation with the analytic, logical and precise powers of the left hemisphere. The full, cooperative involvement of *both* hemispheres is what gives the synergy that produces great thinking. T

#### REFERENCES

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