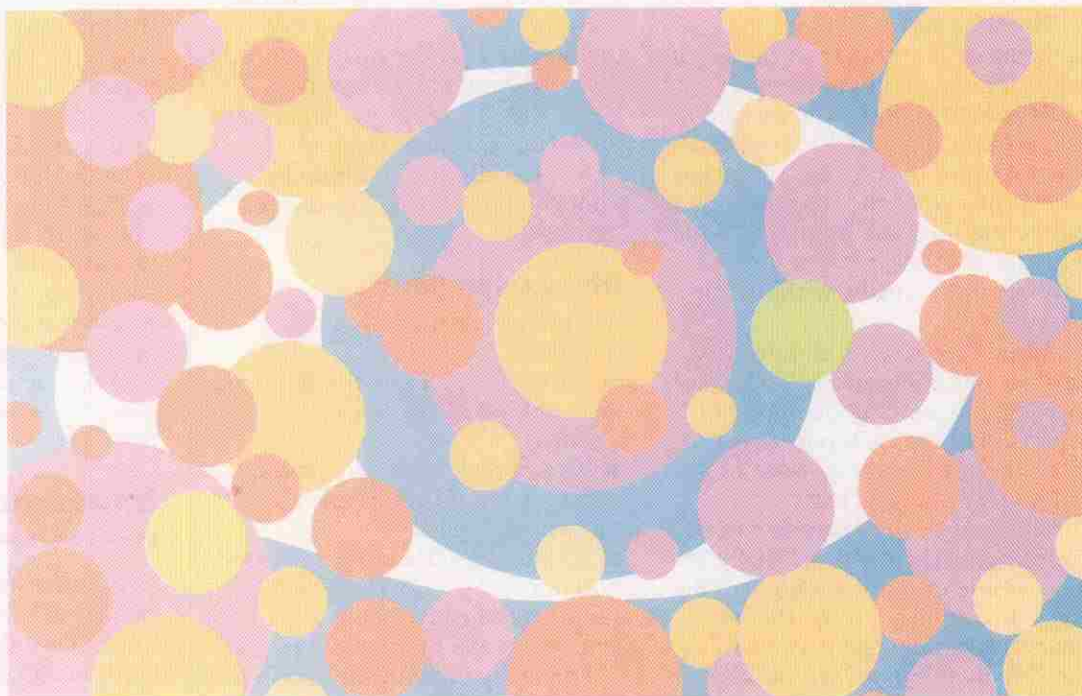


A Blueprint for Perception Training

By Sugato

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The book *Games Trainers Play* is mentioned several times in this article. Two sequels, *More Games Trainers Play* and *Still More Games Trainers Play*, are also available. For ordering information, call ASTD's customer support department, 703/683-8129.



Any HRD professional worth his or her salt knows that all people problems in organizations turn out to be, at least in part, problems of perception. How many times have we seen a departmental meeting go haywire, a brilliant idea get shot down, or a communication channel collapse because people operate with biases—or, in other words, from their own perceptual fields?

In an organization, we continuously interact with people in a wide variety of situations. How we act in those instances is determined to a large extent by how we perceive the people and the situations. Our behavior and actions vary because our perceptions vary.

Because management involves managing people, appreciation of the perceptual process is a logical part of management development. All managers could benefit from the opportunity to learn to understand and appreciate the human perceptual process.

The learning objectives of such a program involve helping trainees discover and understand the answers to the following questions:

- What is perception and why is it important?
- What are the underlying mechanisms of perception?
- How does an understanding of the perceptual process help?

Perception— An Exercise

The old woman/young woman exercise is effective in answering the first learning objective. In other words, it can help show trainees the importance of understanding perceptual process.

The basic exercise is included in Newstrom and Scannell's *Games Trainers Play* (McGraw-Hill, 1980). But this slightly different version may be more helpful in heightening the participants' sense of involvement and excitement.

Old woman/young woman

Materials: The old woman/young woman illustration from *Games Trainers Play* or a similar drawing, either on a piece of cardboard that is large enough to be seen by all the participants, or on a transparency.

What is perception and why is it important?

The drawing is of a woman's head and shoulders as she turns away from the viewer. She wears a hat and scarf and some sort of stole.

Time frame: 5 to 15 minutes, depending on the size of the group, plus time for discussion.

Procedure: Show the picture to the group for about 30 seconds and then remove it. Ask participants to guess the age of the woman shown in the picture. The participants have to make and write down their guesses individually, without any discussion.

Allow them 2 to 3 minutes to write down their guesses. Then ask participants, one by one, to read them aloud. As each participant reads her or his guess, write it prominently on a flip chart.

This part of the exercise can be amusing; participants are likely to have come up with widely varying ages. In a typical group, the woman's maximum age is guessed to be somewhere between 80 and 90 years; the minimum age is between 15 and 20 years.

At this stage, the facilitator can go into the discussion questions (see below), or extend the game further, if time and the responsiveness of the group dictate it.

To extend the game, ask the participants whose estimates are highest and lowest to come to the center of the room. Have the two trainees sit face to face and ask them to discuss the matter with the goal of coming to a consensus about the woman's age. The rest of the group sits and watches.

In all likelihood, the two participants will not be able to reach a consensus.

Discussion points

Ask the group the following questions:

■ Though we all saw the same picture, did we all see the same woman?

■ Why was there such a marked difference in our opinions about the woman's age?

■ If so much difference in perception occurs when we are viewing a simple inanimate object, what happens when we look at real people?

Then discuss with the group just what perception is and how it works. Put very simply, perception is the process by which we interpret sensory data.

We experience the world around us through our five senses—vision, hearing, smell, touch, and taste. The

inputs that go through the five senses are called sensory data. They are transmitted through the nervous system to the brain, which houses the interpreting unit. It is only when the light waves or the sound waves, for example, are interpreted in the brain, that we see a rose or hear a doorbell ring.

Since the interpretation process is, in some ways, unique for each one of us, the correlation between the world around us and our perception of it is less than consistent. In other words, we see, hear, taste, or smell the same things differently. And our behavior is shaped by what we see—not by what is there to be seen.

Underlying Mechanisms

If we want to get an insight into the perceptual process, we will have to understand the laws governing perception and the factors that determine the process.

The principles of perceptual organization can be grouped into two major categories.

■ Structural factors are properties of the physical world that affect perception.

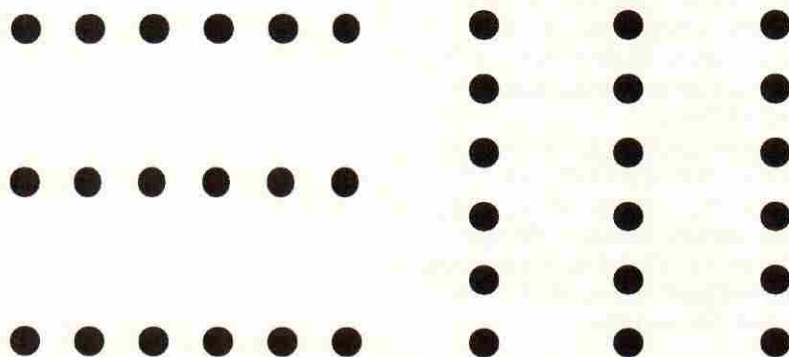
■ Functional factors are properties of our psychological world that affect perception.

To understand structural factors, look at the dots in Figure 1. Rather than random collections of dots, we see dots grouped in certain ways—horizontally in the first example and vertically in the second. That perception is relatively free of psychological factors and is determined by the physical proximity of one dot to another. Such factors are called structural factors because they relate to the structure of the things around us.

Functional factors include needs, cultural and social norms, values, moods, and mindsets.

In one experiment, two groups of children in Boston were asked to judge the sizes of various coins. One group consisted of children from one of Boston's slum areas; the other group came from a progressive school in Boston and consisted of children from rich families.

Figure 1—How do you perceive the dots?



The difference in their perceptions was striking. The underprivileged children tended to overestimate the sizes of the coins. Obviously, their greater need for money influenced their perception in such a way that the coins appeared to be bigger than they actually were.

But structural and functional factors rarely operate alone. Our perception of anything at any given time may be determined by an interplay of both sets of factors.

The Perceptual Process

Let's take a look at the general properties of the perceptual process.

■ **Property I:** Our perceptual field, in its natural state, is always organized and meaningful.

■ **Property II:** Perception is selective.

■ **Property III:** Perception of an object, person, or event is determined by perception of the whole of which the object, the person, or the event is a part.

Let's look at exercises that can help trainees understand those three principles.

Order out of chaos

Property I says that our perceptions organize experience in ways that are meaningful to us.

The "dots" exercise in Figure 1, described above, is a good example. It shows how we instantly tend to perceive objects in an organized way. Similarly, we tend to form overall impressions about people from knowing only one or two facts about them. Those impressions are examples of the fundamental process of meaningful perceptual organization. The next exercise helps to illustrate this principle with extraordinary clarity.

The Family Album

Materials: Any advertisement photograph showing a make-believe family of parents and two or three kids, engaged together in some activity. You'll find such photos in printed ads for breakfast cereal, cars, holiday resorts, and other advertised items. Transfer the pic-

ture—without the ad caption—to a color slide for projection, or make enough photocopies of it to distribute to all participants.

Time frame: 15 to 20 minutes, depending on the size of the group, plus time for discussion.

Procedure: Show the picture to the group for about two minutes, or distribute a copy to each participant. Ask people to study the picture and then to describe the contents, in writing, as objectively and accurately as possible. Emphasize that they should write no more than one or two sentences. Then have participants take turns reading their descriptions aloud.

Almost everybody will describe the picture as depicting a family. For example, people might say it shows a happy family on vacation. A few participants may say that the picture shows a father, a mother, and some children.

Practically none will say that the photograph shows an adult male, an adult female, and two or three children—which would be an objective and accurate description.

Discussion points

Have the group consider the following questions:

■ Why did we describe the characters in the picture as father, mother, daughter, son, and so on?

■ Did the picture objectively convey that information?

■ Do we tend to ascribe our own meanings also to people and events?

Then discuss the implications of Property I. The world around us is never a "blooming, buzzing confusion" of discrete impressions, unrelated experiences, and isolated images. The perceptual field naturally organizes impressions of objects, people, and events into a meaningful order.

What we experience not only appears to be organized in our perceptual field, but it also assumes meaning—no matter how strange, unfamiliar, or bizarre an object or event may be.

The case of an American elementary-school student provides an example of how we tend to perceive strange sounds as meaningful. The

child was listening to her teacher singing "O Tannenbaum, O Tannenbaum." When asked to join in, the child sang "Atomic Bomb, Atomic Bomb."

What is true about our experiences with objects is also true about our perceptions of people and events. This accounts for our snap judgments on encountering new situations and new people. When we join a new department or meet a new colleague, we tend to form an immediate impression, which is more often than not very different from the objective reality.

Natural selection

Property II of the perceptual process says that perception is selective.

The following game can be a useful tool for illustrating this principle. Again, the standard procedure can be found in Newstrom and Scannell's *Games Trainers Play*, but the version here has a slight variation that may produce more effective results.

Count the F's

Materials: The statement given below, typed in capital letters on a small slip of paper, with enough copies to distribute one to each participant.

FEATURE FILMS ARE THE RESULT OF YEARS OF SCIENTIFIC STUDY COMBINED WITH THE EXPERIENCE OF YEARS.

Time frame: 5 to 10 minutes, plus time for discussion.

Procedure: Pass out face-down copies of the statement to the group. When everyone is ready, ask participants to turn the slips over and read the contents carefully. Allow them 15 to 20 seconds to read; then ask them to put the papers face down again.

Ask whether everyone has read the statement. Then ask participants to turn the slip over again and simply to count the number of times the letter F appears. Allow 30 seconds for them to do that; then ask each participant how many F's she or he has found.

In a typical group, most participants report three F's. A few might

report four or five F's. It is extremely unlikely that anybody will find all six F's.

Then ask them to count again and find out if there actually are more than four or five F's.

Discussion points

Have the class consider the following questions:

- Why couldn't all of us see all of the F's?
- Did we give equal importance to all the words while looking for the F's? (For example, the word "of," which appeared three times in the text, was probably ignored.)
- Have you noticed other situations in which we tend to notice certain things while leaving out others?

Then discuss the principle of selective perception.

Every moment of our waking hours, we are bombarded by an unending series of stimuli. But we do not perceive them all at all times. Instead, we perceive selected stimuli and ignore the rest.

We do not accord equal importance to all stimuli that fall upon our sense organs. The aspects that are accorded more importance in perceptual organization are usually those that are in some way significant to the perceiving individual. Both structural as well as functional factors play a role in determining which stimuli will be selected out for perception.

The structural factors are the properties of the object, person, or event that we perceive. Advertising agencies continuously make use of this perceptual property. They try to make their own advertisements noticeable in pages full of other ads, by adding attention-getting qualities to their illustrations or slogans (such as intriguing words or certain colors).

Functional factors—such as needs, mental sets, and cultural practices—also have a major role in determining what we select for perception and what we leave out.

For example, while waiting in an airport terminal or railway station, we pay little attention to the continuous flow of announcements coming through the public address

system. But if our own name is announced for some reason, we hear it immediately.

Fixed beliefs about people or things also influence the selectivity of our perception. If we think a person to be incompetent and worthless, we tend not to notice the successes that he or she achieves. We try to explain them away with real or invented reasons. This human tendency of holding on to already-formed opinions—even in the face of contrary data (which are missed out by selective perception)—is called perceptual constancy.

Parts is parts

The third property of the perceptual process says that our perception of an object, person, or event is determined by our perception of the whole of which the object, person, or event is a part.

When we perceive an object, a person, or an event, we do not perceive it in isolation. Our perception is influenced by the total structure to which the subject belongs.

The following experiential learning exercise is adapted from an experiment by S.E. Asch (reported on in the *Journal of Abnormal Social Psychology*, 1946, number 41). It effectively illustrates this principle.

Word for Word

Materials: Two lists of personality traits with accompanying instructions, typed on slips of paper.

The first list reads as follows.

"Here is a list of personality traits—kind, wise, honest, calm, and strong.

"Suppose you had to describe the person described by those words in the same manner, but without using the terms listed above. What other terms would you use?"

The second list reads as follows.

"Here is a list of personality traits—cruel, shrewd, unscrupulous, calm, and strong.

"Suppose you had to describe the person described by those words in the same manner, but without using the terms listed above. What other terms would you use?"

The words "List 1" or "List 2" are not to appear on the slips of paper. Make enough copies so that half of

the participants can get copies of List 1 and the other half can get copies of List 2.

Time frame: 20 to 25 minutes, depending on the size of the group, plus time for discussion.

Procedure: Distribute the lists so that half of the group receives List 1 and the other half receives List 2. (You should keep track of who got each one in order to make post-game discussion easier. For example, you could distribute List 1 to those sitting on the left and List 2 to those on the right.) After everyone has a copy, read aloud the instructions (which are the same for both the lists) and allow five to seven minutes for participants to complete the task.

Next, ask group members to read their responses aloud, one by one. Write them down on a flip chart in two separate columns, one for List 1 and the other for List 2.

The exercise basically requires participants to give synonyms for the traits on the two lists. The last two words on both lists are the same—"calm" and "strong." But in most classes, the differences are striking between the synonyms given by List 1 participants and those of List 2 participants.

List 1 participants' synonyms for "calm" and "strong" tend to have positive shades—for example, "peaceful" or "tolerant" for calm, and "fearless" or "indomitable" for strong. In contrast, List 2 participants give synonyms with negative shades, such as "cold" or "calculating," and "ruthless" or "dominant."

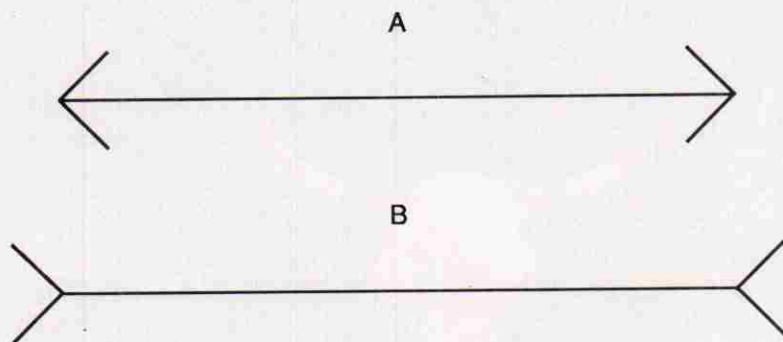
Discussion points

Consider the following questions:

- The last two words were the same on both the lists. Why was there such a marked difference in the shades of meanings that we attached to them?
- What role did the other words on the lists play in making us perceive the words "calm" and "strong" the way we did?
- Can you think of other situations in everyday life in which a whole structure changes our perception of the parts?

Discuss the third property of perceptual process.

Figure 2—Which line is longer?



Perception of anything is, to a large extent, determined by the properties of the larger structure of which it is a part.

This phenomenon can be graphically illustrated with simple, visual forms. Consider, for example, the two lines, A and B, in Figure 2. Line B is perceived to be longer than Line A, though they are exactly the same length. Without the "arrowheads" and "featherheads" that flank them, it is easy to see that the lines are the same length. But with those devices, the lines appear to vary in length, as they are perceived as parts of two different structures.

We see this principle in operation frequently in everyday life. Our perception of a person is influenced by the larger groups of which he or she is a member—groups defined by such factors as department or political affiliations, religious beliefs, and choices of friends and associates.

Views, perceptions, and opinions held by other people at work often seem to us to be inaccurate because we do not know their perceptions of the whole. That is why other people's perceptions and judgments may seem incomprehensible to us.

Guarding against perceptual biases

At the end of your perception training program, you'll want to do some sort of a review. A quiz program can make the review process more interesting. You can conduct

it in any manner that you feel is appropriate, but it will be more lively and exciting if you announce small prizes for the winning team. See the box for suggested questions.

Throughout the program, trainees will have seen that the various perceptual properties, both structural and functional, predispose us to perceive the world around us in certain ways. But if this is a natural process, what can we do about it?

It is here that an understanding of the perceptual process and the underlying mechanisms helps. If we are conscious of the process, we can try to guard against some of the perceptual biases that commonly operate.

We can be a little more conscious of the tendency to ascribe meaning to people, objects, and situations before gathering enough data. An honest analysis of our own needs, mental sets, and cultural norms can help make us aware of the unconscious processes that influence our perceptions.

Avoid making unnecessary generalizations about people because of their membership in groups. We can understand people better if we are ready to grant them their uniqueness.

Before forming opinions about a person or an event, we should ask ourselves "Have I been open to all the facts, or have I been selective in my perceptions?" Accepting people in their entirety, with their virtues and follies, is a goal worth working toward.

Perceptions—A Quiz

Here are a few statements about the ways in which we see the world around us. Have participants decide if each statement is true or false.

- 1. A fact is a fact. There can be no divergence of views on a fact.
- 2. If two people view the same event differently, it logically follows that one of them is right and the other wrong.
- 3. Our perceptions of people and events are almost always colored by our attitudes, values, and beliefs.
- 4. Intelligent people do not ascribe meanings to things and events. They take them as they are.
- 5. People usually see what they want to see.
- 6. In our perception of people, events, and objects, we have a natural tendency to leave out certain aspects that do not conform to our views.
- 7. Other external factors besides a person's characteristics can influence our views of the person.
- 8. We can always trust our eyes and ears, if we are careful, to give us a true picture of the world around us.
- 9. We view the world around us through our own colored glasses.
- 10. Divergence of views about people, objects, and events results from differences in levels of intelligence.

Answers: 1-F, 2-F, 3-T, 4-F, 5-T, 6-T, 7-T, 8-F, 9-T, 10-F.

"Training 101" is edited by **Catherine M. Petrini**. Send your short articles for consideration to "Training 101," Training & Development, 1640 King Street, Box 1443, Alexandria, VA 22313-2043.

