

Discovery Complex

2025

Thomas A. Burns PhD.

Klamath Falls, Oregon

Introduction

Apart from basic perceptual input – vastly enhanced with our technology, there are two mental operations that underlie the human discovery process: Intellect and Intuition. What follow are the primary contrasting characteristics of these two mental functions:

Intellect

Beta range of brain waves
Language and Math Based Thought
Logic.....
Analysis.....
Objectivity.....
Observation.....
Systematic Relationship of Parts...
Separateness of All Things.....
Concentration.....

Common phrases that promote the use of Intellect:

“Get Serious,”
“Use Your Head,”
“Think About It,”
“Figure It Out,”
“Try It Again.”

Intuition

Alpha and Theta range of brain waves
Visual Thinking [Kinetic Imagery]
Insight
Synthesis
Subjectivity
Inspiration
Integration of the Whole
Connection/Unification of All Things
Reflection – Reverie – Meditation

Common phrases that promote the use of Intuition:

“Relax,”
“Take a Break,”
“Release It and It’ll Come To You,”
“Use Your Imagination,”
“Meditate on It.”

Commentary

The human mind is capable of utilizing different modes in our efforts to seek solutions. This fact is reflected in the varied brain wave ranges that predominate when different modes are in the ascendant. At its best, Discovery is not an either-or but a both-and process with emphasis placed to different degrees on one operation or the other. A few tasks require primarily one or the other, but in most cases both functions are active – providing alternative input, even though we are not aware of it. In the case of intense concentration in contrast to deep meditation, we fully recognize that very different mental modes are involved, but we only informally distinguish among pondering, reflection, rumination, musing, reverie, and daydreaming in the continuum in-between.

When it comes to the Intuitive, western and eastern cultures tend to have different biases. Western culture places supreme value on the intellectual function and in large measure fails to recognize the input of the intuitive function. Accordingly, western sciences focus on cultivating intellectual sophistication in its rigorous methodology while avoiding intuition. Interestingly in this regard, western science is at a loss to deal with the fact that many of its greatest scientists have attributed their major theoretical breakthroughs to moments of “inspiration.” In addition, the same scientists who deprecate the intuitive in science will celebrate the value of creativity and insight at the intuitive core of art and ritual. At the opposite extreme, some Asian/Eastern cultures place supreme value on the intuitive function and tend to set the intellectual function to the side. While in both cases significant awareness can be gleaned in the focused use of a single mental function, the greatest potential for expanded awareness arises when both functions are highly developed and appropriately integrated and utilized. Western cultures unfortunately associate the intuitive mental function with religion and “magic” leading to the result that they tend to throw the valuable baby out with the bathwater. Alternatively, in their sophisticated meditation traditions, Eastern cultures encourage extensive intuitive development at the individual level but unfortunately discourage its use in the pragmatics of everyday living and at the social level.

Conclusion

Achieving balance in the systematic development and use of both major human mental functions at the individual and social levels should be a central goal as modern global cultures seek to optimize discovery. The advent of mindfulness training for elementary school age children in western cultures and commitment to rigorous intellectual scientific pursuits in eastern cultures suggests a beginning.

We now know from science itself that reality is mostly immaterial energy and that as material entities, we humans must understand ourselves as complex bundles of highly integrated energy and not just as physical phenomena. In recent years, the serious investigation of reality from the perspective of universal, immaterial energy fields at all scales has begun. From this perspective, it is entirely possible that reality unification at the energy level may be the basis for the presence, operation and success of the human intuitive function [witness the paranormal and entanglement in quantum theory]. In this regard, evolution would naturally favor a species with the ability to explore and interact within reality both energetically through the intuitive and materially through the intellect.

The Dynamic of Mind