

Lesson 1.1

LESSON 2. REPRESENTING AND COMPARING GRAPHS

Knowledge has Organizing Power

Wholeness of the lecture: The relationships in a graph organize adjacency and incidence matrices that give the information contained in the graph in another useful way. *Science and Technology of Consciousness*: Knowledge has organizing power.

Main Points

1. Adjacency and incidence matrices encode all of the information in a given graph in a new and useful way and give a different perspective on the graph. *Science and Technology of Consciousness*: Research shows that practice of the Transcendental Meditation technique improves efficiency of visual perception and gives increased freedom from habitual patterns of perception.¹
2. A graph isomorphism shows that two graphs, even though they may appear to be different, are essentially the same in their structure. *Science and Technology of Consciousness*: With regular practice of the Transcendental Meditation technique, we are better able to perceive deeper levels of life where there is greater harmony and connectedness.

UNITY CHART

Connecting The Parts Of Knowledge With The Wholeness Of Knowledge

Understanding Graphs

1. Graphs contain knowledge about how objects (vertices) are related to one another (edges).
 2. Graph isomorphisms and adjacency and incidence matrices are useful tools for working with and understanding graphs.
-
3. **Transcendental Consciousness** is a field of pure knowledge.
 4. **Impulses within the transcendental field** structure the first relationships between objects.
 5. **Wholeness moving within itself**: In Unity Consciousness, when we see all objects connected to our Self, we are successful in all activity.



¹Dillbeck, M.C. (1982). Meditation and flexibility of visual perception and verbal problem solving. *Memory and Cognition* 10(3): 207-215; Alexander, C.N., Davies, J.L., Newman, R.I., and Chandler, H.M. (1983). The effects of Transcendental Meditation on cognitive and behavioral flexibility, health, and longevity in the elderly: An experimental comparison of the Transcendental Meditation, program, mindfulness training, and relaxation. Department of Psychology and Social Relations and Graduate School of Education, Harvard University, Cambridge, Massachusetts, USA, and Macquarie University, North Ryde, New South Wales.