An Interactive Three and Four Dimensional Clinical, Research, Learning, and Teaching Model of Erik Erikson’s Diagram of Psychosocial Development

Because the Model Can Be Manipulated/Interacted With by Researchers, Clinicians, Teachers, and Students the Fourth Dimension of Time Can Be Experienced During Clinical Planning or a Research or Teaching Exercise

There are three steps in interdisciplinary modeling research bridging architecture, design, and psychoanalysis:

1) Identification of a set of psychoanalytic ideas which would be better understood using a multidimensional physical model.
2) Design of the model
3) Building the model

Three-Dimensional Models and Digital Graphic Renderings and Animation of Erik Erikson’s Psychosocial Development Diagram

Abstract

The three-dimensional Erikson models and graphics are an attempt to represent visually Erikson’s developmental perspective. We believe that because Erikson’s developmental model has been presented in two dimensions it has not received the attention it deserves among contemporary clinicians, teachers and researchers. The purpose of this effort is to add clinicians, teachers and researchers in their efforts to develop therapeutic, teaching and research strategies which take into account Erikson’s seminal contributions to an understanding of human development over the course of life. This three-dimensional model better illustrates the non-linear developmental experience of many people, including the subtle shifts experienced by many in the course of their lives. Models of the diagrams were created using AutoDesk Maya and Ogre3D and were then exported to the graphic software Maya 2016. Accompanying the model is a clinical description of this model which emphasizes its capabilities to help mental health professionals better understand their patients.

Model 1 — Three-Dimensional Grid with Eight Levels, representing the eight stages of psychological theory. Each stage is represented as a 3D grid that displays an interactive dynamic visual development in various stages of life as if it were video mapping on the grid. The stage grid is based on the idea that the eight stages are in a 3D form that is related to other stages in the very first half.

Model 2 — Represents the developmental experience of a man of middle age. This model is simple in design and also the first to convey in 3D the idea that a person’s life can be represented in a grid. Accompanying the model is a clinical description of this model which emphasizes its ability to help mental health professionals better understand their patients.

Model 3 — In a grid model, displayed in both graphics and animation on a computer screen, this model conveys the idea that a person’s life can be represented in a grid and that the person’s development is not linear but rather a dynamic process of change and growth.

Model 4 — This cubic model depicts the life of a cube placed anywhere on the three-dimensional grid and interacts with surrounding cubic models.
An Interactive Three and Four Dimensional Clinical, Research, Learning, and Teaching Model of Erik Erikson's Diagram of Psychosocial Development
Because the Model Can Be Manipulated/Interacted With by Researchers, Clinicians, Teachers, and Students the Fourth Dimension of Time Can be Experienced During Clinical Planning or a Research or Teaching Exercise

There are three steps in interdisciplinary modeling research bridging architecture, design, and psychoanalysis:
1) Identification of a set of psychoanalytic ideas which would be better understood using a multidimensional physical model.
2) Design of the model
3) Building the model

Three-Dimensional Models and Digital Graphic Renderings and Animation of Erik Erikson’s Psychosocial Development Diagram

Abstract
The three-dimensional Erikson models and graphics are an attempt to represent visually Erikson’s developmental perspective. We believe that because Erikson’s developmental model has been presented in two dimensions it has not received the attention it deserves among contemporary clinicians, teachers and researchers. The purpose of this effort is to aid clinicians, teachers and researchers in their efforts to develop therapeutic, teaching and research strategies which take into account Erikson’s seminal contributions to an understanding of human development over the course of life. This three-dimensional model better illustrates the non-linear developmental experience of many people, including the state shifts experienced by many in the course of their development. A two dimensional model does not show this with sufficient clarity. It is noteworthy that the late Stuart Hauser, who knew Erikson, told one of us that Erikson felt his model of development should be pictured in three dimensions. The principal investigators, one a professor of architecture, the other a psychoanalyst and professor of psychiatry, have worked together for many years. They believe that the side by side study of their two disciplines results in new insights and perspectives for each field. This submission illustrates the way such interdisciplinary collaboration makes possible an enhanced understanding of human development and an enriched capacity to teach it to students. There are three physical models and one digital model in this presentation.

Model 1 is a three dimensional grid with eight levels, representing the eight stages of development which Erikson described. This three dimensional model brings into focus the dynamic way development in various areas within stages of life are related to each other (along the horizontal), and the dynamic way developmental precursors and subsequent iterations of the various major tasks of each era of life are related to each other (along the vertical).

Model 2 represents the developmental experience of a man of mature age (sixty-five years old). There are twenty cubes placed at various points on this three dimensional grid. Accompanying the model is a clinical description of this man’s life.

Model 3 is a digital model, depicted in both graphics and animations on a computer screen. Here we show the effects of psychoanalytic therapy on the same man depicted in Model #2, which in this version of his life he was fortunate enough to receive.

Model 4 This five cube model depicts the way a cube placed anywhere on the three-dimensional grid interacts with surrounding cubes.

From the School of Architecture, The University of Texas at Austin and the Austin Center for Relational Psychoanalysis and Psychotherapy
Elizabeth Danze, FAIA
Ruben Ruckman, AIA associate
Patrick Winn, AIA associate
Stephen Sonnenberg, M.D.
For more information contact Elizabeth Danze at edanje@mail.utexas.edu
Case Study

Infancy: Trust vs. Mistrust; Unipolarity vs. Premature Self Differentiation
2 cubes, three spaces from the rear.
Patient’s trauma began in infancy, and was never addressed by psychotherapeutic interventions. Thus, on the infancy level he is seen as quite mistrustful, with the cube for that dimension located three spaces from the rear. Premature self-differentiation is also apparent, with that cube three spaces from the rear.

Early Childhood: Autonomy vs. Shame, Doubt; Bipolarity vs. Autism
2 cubes, three spaces from the rear.
In early childhood life continued to be difficult, and the two cubes for that stage, shame/doubt and autism are likewise placed three spaces from the rear.

Play Age: Initiative vs. Guilt; Play Identification vs. (Oedipal) Fantasy Identities
2 cubes, three space from front.
In play age there was some improvement, because of the kindly presence of a playmate’s mother, and initiative moved forward to three spaces from the front, as did play identification.

School Age: Industry vs. Inferiority; Work Identification vs. Identity Foreclosure
2 cubes, three spaces from front.
This continued during school age, when industry and work identification were similarly placed three spaces from the front.

Adolescence: Time Perspective, Self-Certainty, Role Experimentation, Anticipation of Achievement, Identity, Sexual Identity, Leadership Polarization, Ideological Polarization
8 cubes, two spaces from rear.
Unfortunately, during the tumultuous experience of adolescence this man did not do so well. Regression in adolescence is not unusual, and in this case all the cubes along that horizontal axis are placed only two spaces from the rear.

Young Adult: Solidarity vs. Social Isolation; Intimacy vs. Isolation
2 cubes, three spaces from front.
Things got better again in young adulthood, when this man was drafted into the military, and experienced much structure in that environment. In fact, in a display of remarkable resiliency, solidarity moved forward to three spaces from the front of the grid, as did intimacy.

Adulthood: Generativity vs. Self-Absorption
1 cube, three spaces from rear.
But as the enthusiasm and passion aroused by this man’s young adult hopes for his life were subjected to the inevitable compromises and disappointments of adult life there was again regression, and he became quite self-absorbed. The cube representing that is three spaces from the rear of the grid.

Mature Age: Integrity vs. Disgust, Despair
1 cube, two spaces from rear.
Finally, in mature age, when we find him now at the age of sixty-five, he is disgusted and full of despair. The cube representing that crisis is just two spaces from the rear.

Effects of Therapy:
Here we show the effects of therapy, which in this version of his life the man described in Model #2 was fortunate enough to receive while in the military. In fact, while serving as a clerk at a major military hospital in Washington, DC, he went to the mental health clinic at that facility complaining of anxiety, and had the good fortune to be evaluated by a young psychiatrist who was embarking on psychoanalytic training. He was offered analysis at an extremely low fee, and benefited from a six year analysis. Here, in the virtual model we see him move forward past the third space from the front to the second (though there is no grid represented), as regards solidarity and intimacy. In fact, as a result of his analysis he marries, attends college, has two children who he raises with concern and empathy, and becomes a health care professional in the military. During his adulthood he enjoys his life and appreciates his success, despite inevitable disappointments, and his generativity cube on this virtual model remains two spaces from the front. In mature age he maintains his integrity, with his cube two spaces from the front.

From the School of Architecture, The University of Texas at Austin and the Austin Center for Relational Psychoanalysis and Psychotherapy
Elizabeth Danze, FAIA
Ruben Ruckman, AIA associate
Patrick Winn, AIA associate
Stephen Sonnenberg, M.D.
For more information contact Elizabeth Danze at edanze@mail.utexas.edu