

Institute for Christian Teaching
Education Department of Seventh-day Adventists

A PROPOSED MODEL
FOR AN ARCHITECTURE REFLECTIVE PRACTICUM
IN A CHRISTIAN UNIVERSITY SETTING

by

Neville Clouten

Department of Architecture
Andrews University
Berrien Springs, MI

ICT Seminar
Held at Union College, Lincoln, Nebraska
June 11-27, 1989

058 - 89 Institute for Christian Teaching
12501 Old Columbia Pike
Silver Spring Md 20904, USA

INTRODUCTION

Pablo Casals not only performed as a master cellist, he taught with a high level of artistry. One of his students described the Master Classes in musical performance (Delbanco, 1985:51). During the first hour of a three-hour class, Casals faced the student a few feet away and played a short phrase of a Bach suite. The student then played the phrase, using the same bowing and fingering as the master. Phrase after phrase was played by Casals and then by the student. After several days the student could mirror the complete Bach suite.

Just as the two cellists finished working their way through the musical score, Casals invited the student to sit down and listen to the suite in its entirety. With total surprise the student watched as Casals changed every bowing, fingering, phrasing and emphasis. He sat spellbound, listening to the beautiful and unexpected rendition. At the conclusion, Casals smiled and said, "Now you've learned to improvise in Bach. From now on, you study Bach this way."

In "The Reflective Practitioner" and "Educating the Reflective Practitioner", Donald Schon (1983, 1987) uses the term "artistry" to refer to "the artistic intuitive processes" which some practitioners sometimes display in "unique, uncertain and conflicted situations of practice." The artistry is "a high-powered, esoteric variant of the more familiar sorts of competence" exercised daily but which highly competent practitioners can bring to situations of uncertainty and value conflict. In a society, the leading practitioners in surgery, law or any licensed profession can perform

beyond what is expected of the profession and may eventually be described as professionals with artistry. The outstanding surgeon as a professor of surgery at a teaching hospital can dissect, communicate to medical students and respond to an unexpected development without pausing to list alternatives or take time to reflect on them. This ability for "reflection-in-action" is part of the artistry that integrates a leading professional's work as a master practitioner and master teacher. It is this level of performance that elevated Pablo Casals from a cello player and teacher, or distinguishes the leading surgeon who exhibits the unexpected mastery of practice and teaching in combination. In this paper, the chosen profession is architecture and the associated educational process is set within a Christian university. The conceptual model of a reflective practicum in this setting is proposed as a curriculum innovation.

The architect's post-secondary education typically extends for eight years, of which five or six years lead to a professional degree at a university. This is followed by an internship of two or three years in an architect's office. The National Architectural Accrediting Board provides some guidance for a liberal education component and specifies more than seventy performance criteria for the professional program curriculum.

The educational process for an architect assumes as an outcome a responsible and ethical graduate who is aware of many issues of the contemporary world; who understands the diverse subject areas of design theory, structures, environmental technologies, the history of architecture and professional practice; and who is able to complete many design and technical assignments expected of the architect intern. Architectural educators live daily with the dangers of knowing a little from a multitude

of disciplines. All of the liberal and professional education components must inform the architectural design process as the centralizing focus. There is here a dual emphasis on the importance of a liberal arts college setting for a professional program and the search for excellence in all aspects of professional education.

The architectural design studio has been considered "the heart and head of architectural education." (Deans, 1981:826) Students and faculty engage in intellectual dialogue, conceptual graphics and practical considerations both in small groups and in one-on-one associations at the drawing board. The modes of thinking regularly include analysis, synthesis and evaluation. While the architectural design studio is the universally recognized core curriculum in schools of architecture, the wide-ranging and far-reaching objectives for studios have generated periodic expressions of disquiet. For example, Gelernter (1988) has written on the failure of a transference from abstract principles presented in lectures to design work in studios¹ and Dutton (1987) has expressed concerns on evidences of some asymmetrical practices of power in society being reproduced in studios.²

¹"Despite the claims of the educational theory, the abstract principles offered in the lectures do not seem to be generating or shaping the students' architectural forms in the studios with any reliability ... Students in their very first design project need sophisticated information about structures or construction or social behavior which the lecture courses are going to reveal three years later." Gelernter, Mark, "Reconciling Lectures and Studios," Journal of Architectural Education, 41/2 (Winter 1988), p. 46.

²"While architecture is intimately related to societal relations of power, it is important to judge what effect this relationship has on the education of future architects. As professional predilections and dispositions become manifest in schools, and become the content of design studios, it is clear that studios are likewise steeped in the complex interplay of ideology and power, within which knowledge is shaped and distributed. What is taught in design studios plays a strategic role in the political socialization of students." Dutton, Thomas, "Design and Studio Pedagogy," Journal of Architectural Education, 41/1 (Fall 1987), p. 17.

Several conceptual models have been proposed to overcome the difficulties encountered by architectural educators and students. Gelernter (1988:47) has suggested a Piagetian interactive knowledge and application cycle so that a "mental category and new information mutually construct each other: without the category the new information cannot make sense, but the category itself is shaped and developed as the individual actively struggles to make sense of new information."

A practicum is described by Schon (1987:37) as "a setting designed for the task of learning a practice. In a context that approximates a practice world, students learn by doing. The practicum is a virtual world, relatively free of the pressures, distractions, and risks of the real one, to which, nevertheless, it refers. It stands in an intermediate space between the practice world, the 'lay' world of ordinary life, and the esoteric world of the academy."

A reflective practicum provides a setting to assist students in acquiring aspects of professional practice that may ultimately enable them to practice with artistry in unexpected situations. This is the basis for a conceptual model which is developed in this paper as an intensive curricular component within a school of architecture in a Christian university setting. It is proposed that the pervasive elements of the curriculum would come together in this one intensive core studio. Other studios, as is normally the case in art and architectural education, would concentrate on specific design aspects and orientations.

The educational objectives for the pervasive curricular components are here expressed as preferred outcome statements of Christian faith:

1. Recognition of the Creator.

Students would gain first-hand experiences in the creative process. Harold Best, in his essay "God's Creation and Human Creativity" (1987), suggests that the integrity of the Creator never changes with the purpose or transiency of created works. "There is no model whatsoever in the creation for a division between worth and function, or immediacy and timelessness."

2. Affirmation of the humanness of humans.

As an extension to a blended core of liberal studies and from the experiences of life, students would see and feel the agony and ecstasy of the human condition.

3. Understanding of environmental stewardship.

Students would gain insights into responsibilities as "keepers of the garden" as outlined by Johnson (1988), Walsh and Middleton (1984).

4. Appreciation of the arts and architecture.

Students would increase the breadth and depth of their experience by allowing aesthetics to add to the compass of life and to enrich joy, sympathy and compassion. Terian (1989:42) suggests that architecture can be both grace of form and a form of grace. "An architect who sees him or herself as part of the cycle of goodwill and reciprocity, designs from a feeling of bounty rather than a feeling of scarcity. Rather than for the mere fulfillment of needs, such as architect will design with grace as a gift to human beings."

5. Recognition of the importance of craftsmanship.

Students would experience the dignity in the purpose of making, using the hands to shape details. Hogbin (1978) describes the practical and symbolic purposes of craftsmanship.

6. Experience of cultural sensitivity.

Students would perceptively see and describe the uniqueness of individuals and communities in the global setting and in relation to Christian faith.

7. Preparation for service.

Both from an attitude of service and a willingness to design or build for disadvantaged individuals and families and communities, students would "in His Name" begin to share.

Projects chosen for the reflective practicum would meet real needs of people rather than egocentric agendas.

The above preferred outcomes would guide the organization of a core reflective practicum which, for the purpose of this paper, shall be positioned as a full credit load for students during the first semester of the third year in a five- or six-year professional program in architecture. The assumptions within a program structure can include a first semester of university-wide liberal education, three semesters of lectures and design studios, the intensive practicum to be described in this paper, and the remaining semesters of lectures and studios—three or five in number depending on the length of the professional degree program.

THE REFLECTIVE PRACTICUM

In order to highlight the pervasive elements of the curriculum within a core-intensive semester, the reflective practicum will be discussed in terms of the program constituents, educational climate and participants.

The curricular program for the reflective practicum is considered as the separate agendas that will inform the design process. A community service orientation would begin the process by an interaction of Christian and non-Christian members of society with architecture students. The perceptions and dialogue of human needs forms a community program. As the students and studio master analyze the collected data and reflect on it, some aspects of the human needs will be distilled into a client program of a scope and direction appropriate to the reflective practicum. Perceptions of the natural, urban or suburban environment will also speak to the nature of the developing project, and the ecological and physical resource needs must be brought together by the students and studio master into an environment program. Finally, the studio master and students will individually have designer's programs that should color discussions and inform design actions along with the other agendas.

In a fuller description of the design process, Clouten (1988) describes the sequence of perceiving needs, analysis, synthesis, evaluation by screening, detail design, implementation and evaluation by monitoring as a parallel to defining creativity in general.

The intellectual and social climate for the practicum will require a balance between the need for physically meeting community participants in their territory and the advantages of an equipped university design studio. The initial meetings would have objectives for isolating and defining

problems, and are most likely to take place off-campus at locations where the problems exist. The success of the Byker housing development in England, as a New Town to replace sub-standard housing, is largely attributed to an attitude for user participation on the part of the architect Ralph Erskine. He opened his architectural practice office in the abandoned funeral home of the community and kept the door open for user participation.³

Schon (1983:42) refers to the dilemma of rigor and relevance in professional practice, and illustrates this as "a high, hard ground where practitioners can make effective use of research-based theory and technique" and "a swampy lowland where situations are confusing" but where problems are of greatest human concern. Shall the practitioner stay on the high, hard ground or will there be a willingness to descend to the swamp and engage the most important and challenging problems?

The rigor and relevance of the reflective practicum and the relevance of the Christian life can help resolve the dilemma within an architectural project and in later life. The educational climate must encourage intellectual challenge by questioning conventions of society, the architectural profession and Christian faith within a setting of community. Diversity in thinking towards every aspect of the practicum must be accepted, or at least tolerated, by all participants. The studio master has informal opportunities on a daily basis to guide individuals to see

³ Erskine's design project developed "in an unpretentious way with an open door policy, inviting people to dialogue about their hopes and worries for the future, vandalism, leaking radiators, play facilities and sometimes even about their new houses." Erskine, Ralph, Byker Redevelopment (Tokyo: Global Architecture Series, Hennessey Ingalls, 1980), p. 2.

expressions of Christian faith.

The most important part of the reflective practicum is the relationships that grow between the students and studio master. In order for a responsive environment to develop in which faith can be modeled to a student group having a diversity of ethnic and economic backgrounds, the studio master must be perceived as a professional who performs at the level described by the term artistry. The Christian architect as leader of a reflective practicum will be all of the following:

1. Skilled in the design professions.

Unless the studio master is outstanding within the field of architecture, students can rightly be discontent—for excellence in content should be expected in a professional program.

2. An ambassador for Christ.

As a Christian, the studio master of the reflective practicum will have found ways in which faith can shine through the academic discipline and practice of architecture. The example of the studio master would encourage students to pass all aspects of life and the field of architecture under a Christian critique.⁴

3. An educator.

The studio master must understand the educational process and the importance of curriculum, climate and relationships within a responsive educational environment.

⁴Clouten (1984) suggests seven areas in considering appropriateness in architecture—environment, culture, human activities, safety, climate, cost and symbolism.

In summary of the above three criteria, the master teacher of the reflective practicum will be an outstanding architect who teaches with artistry in terms of Christianity and the architecture profession.

As an extension to the integration of the life of the teacher and the studio there would be:

4. An individual orientation to each student.

The importance of the individual will be demonstrated by responding to individuals at the drawing board, in group discussions and critical evaluations, and to individual questions and comments in lectures and seminars.

5. A "persona" of the studio master that supports integration.

The social front to convey the role of master teacher would not stand in the way of the students' experience of the reflective practicum as a safe environment. The studio master would be perceived as secure and unafraid of the risks associated with independent and critical thinking.

6. An ability and willingness to mentor.

The high qualities expected of the studio master in a reflective practicum are needed each year for each generation. Some of the qualities have been met historically in Eastern and Western civilizations. In particular, the master teachers of Zen philosophy come to mind. The following statement is a translation by Barrett (1956) from the writings of D.T. Suzuki. "Is it not the most natural thing for Zen ... that it's development should be towards acting or rather living its truth instead of demonstrating or illustrating it in words?"

There are examples in Zen Buddhism that parallel the illustration of the master class in cello by Pablo Casals. From the sermon of Goso (Barret, 1956:129) the story is told of the master who, in passing on an art, complicated the life of his son by locking him at night in a large chest at a neighborhood house. He then awoke the whole family and slipped away. With ingenuity, the son escaped and in anger came to his father. After the account of the escape, the master remarked, "There you are, you have learned the art!" Unfortunately, it was the art of burglary.

It is the biblical account of Christ and the practice of Christian faith, not an arrogance of human knowledge or clever methodology, that must shine through every aspect of the reflective practicum. Christ is the Master Teacher who used a wide variety of forms of communication and figures of speech.

The main point in the discussion of the reflective practicum is that the most effective teaching comes out of the life of the teacher. The mentoring procedure creates the intellectual and practice setting in which the student will develop and may later perform at a level of artistry.

REFLECTION-IN-ACTION

From the proposal for a reflective practicum, the term reflection-in-action follows on to describe a process of learning by doing, in which a student is coached to see the nature of professional practice at a level of normality, and especially when unexpected conditions call for unusual reflection and action. The procedure involves active coaching by a master teacher—giving students practice facing problems, testing solutions, making mistakes, seeking help, and refining approaches. In every way, the studio master can enhance opportunities to develop reflective conversations with

all the materials of the situation.

The following statement from Schon (1987:93) describes the predicament of learning to design. "The paradox of learning a really new competence is this: that a student cannot at first understand what he needs to learn, can learn it only by educating himself, and can educate himself only by beginning to do what he does not yet understand.

"It is as though the studio master had said to him, 'I can tell you that there is something you need to know, and with my help you may be able to learn it. But I cannot tell you what it is in a way you can now understand. I can only arrange for you to have the right sorts of experiences for yourself. You must be willing, therefore, to have these experiences. Then you will be able to make an informed choice about whether you wish to continue. If you are unwilling to step into this new experience without knowing ahead of time what it will be like, I cannot help you. You must trust me."

Schon further concludes (1987:99): "The student must begin to design before she knows what she is doing, so that the studio master's demonstrations and descriptions can take on meanings useful to her further designing. But this 'virtuous circle' depends on the capacity of student and studio master to communicate effectively with each other, in spite of the potential for vagueness, ambiguity, or obscurity inherent in the things about which they try to communicate."

The reflective conversations in the design studio begin the process of teaching artistry through reflection-in-action and will affect continual learning as part of a professional career. In this regard, Schon refers to a ladder of reflection. The climbing of the ladder makes the step below into an object of reflection.

Within the Christian university setting, this concept can be applied to the biblical statements of being created "in the image of God." Owen Hughes (1988) proposed a model of core characteristics of personality from a Christian perspective. Eight categories are arranged in an ascending order of complexity, and each embodies all of those characteristics that precede it. Hughes suggests that the model could be seen as successive layers of an onion which encapsulate all smaller layers within; his diagram, however, presents the core characteristics as a series of steps in two dimensions. The characteristics listed in ascending order are physical attributes, abilities to perceive, think, feel, choose, act, create, and relate. Hughes accepts that the human being is able to reflect on earlier core characteristics, illustrated in the statement (1988:9): "Emotion is generated as individuals perceive the elements of a situation and reflect upon it."

Relationships between fellow human beings and with the Creator are a climax to the human personality core characteristics in that they are informed by actions such as perceiving, thinking and feeling. The basis for the worship of God is the relationship between Creator and a created human being. However, the establishment of relationship is also a new beginning for a further understanding of what it could mean to be created "in His image." Reflection on the relationship to God brings the human being closer to an understanding of "being created." This is illustrated by adding the concept of Schon's ladder of reflection to the model of human personality. Figure 1 had adapted the diagram from Hughes to include the abilities to reflect on the relationship, to be able to describe the reflective thoughts, to reflect on the reflection, and perhaps then to make the unexpected leap to a new idea. On the basis of relationship, the new idea is described in

the terms of the Christian faith. Without the acceptance of the relationship to God, the human being may reflect relative to the earlier characteristics, and may arrive at a new idea through reflection on creativity and through expressionistic descriptions of reflection. This initiation of a new idea is possible through the common grace shared to all humanity.

Ultimately, the concept of reflection-in-action within the setting of Christian faith suggests that the highest evidence of being created in the image of God is the spark of creativity born as a new idea. A statement of O. W. Holmes seems appropriate: "Man's mind, stretched to a new idea, never goes back to its original dimensions."

CONCLUSIONS

In the field of architectural education there is a challenge to practice within and beyond a reflective practicum in order to perform at a level of artistry. When the opportunities for blending the development of Christian faith with the architectural agenda are realized, there is the greater challenge for the practice of artistry to contribute to a full integration.

The Seventh-day Adventist Church needs a community of scholars, each a specialist in a scholarly or professional discipline and each contributing to an integration of faith and learning.

Fundamental to the assumptions of this project is the importance of selecting professionals who practice with artistry. There are then opportunities for developing the potential to new generations through the mentoring process. In a reflective practicum, as in other types of learning, the most effective teaching comes out of the life of the teacher.

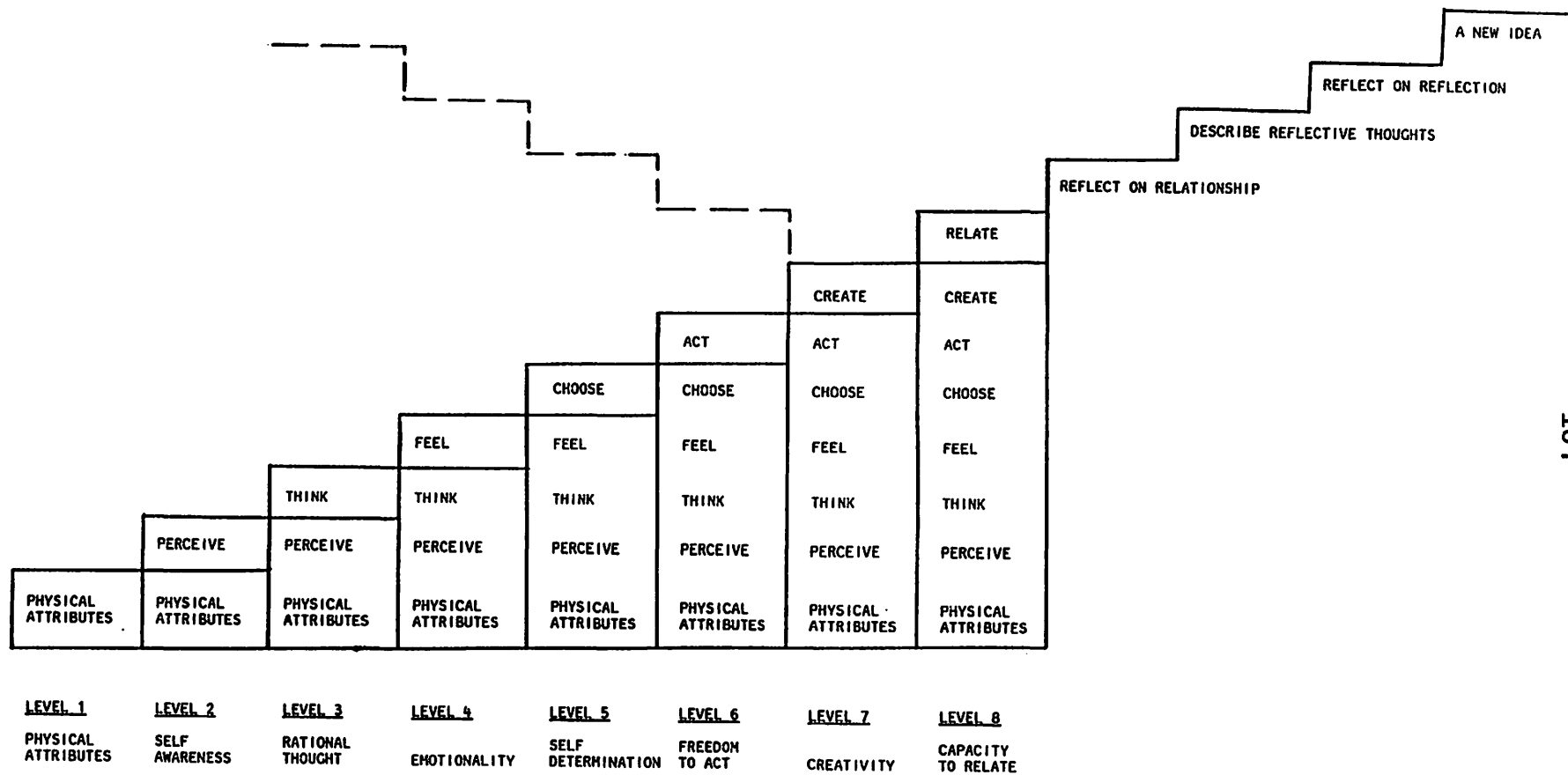


FIGURE 1. EXTENDING THE CHARACTERISTICS OF HUMAN PERSONALITY IN RELATION TO BEING CREATED IN THE IMAGE OF GOD (ADAPTED FROM HUGHES)

This both confirms the value of mentoring and cautions on the recognition of what constitutes artistry. On the one hand, major achievers in adult life often report the significance of a mentor in their lives. On the other hand, it must be assumed that the mentor is not concentrating on a position of arrival, but sees herself or himself as a fellow traveller with professional colleagues. He or she has simply been longer in the process of isolating problems and stretching to develop endowments and abilities. Mentoring involves not only perpetuating the critiques and evidences of artistry, but passing on experience to a new generation. At the close of a long life as a mime, Marcel Marceau has spent the past few years creating a school of mime in Paris as a means for sharing the artistry of his art to students of great potential.

With an orientation to artistry and the mentoring process, the church and the university can combine to form a crucible for the development of professional and educational leadership. In view of the importance of Christian values and of professional and educational artistry, it may be useful for Christian scholars through research to increase the understanding of personality types as they relate to mentoring and teaching.

A research opportunity also exists in progressing beyond an awareness of present societal trends to a state of readiness for possible futures if time should last. Church leaders need to rehearse the questions that are likely to be asked later. An example of this challenge is reported (Olson and Kurent, 1988:7) in the findings of the American Institute of Architects Vision 2000 project.

"At the pinnacle of the VALS Model of value and lifestyle groups, where experienced Achievers and Socially Conscious people continuously interact and influence each other, a new category is growing ... said to have a

quality of mind and character that allows them to transcend dichotomies, finding the best in opposing views and blending them into a new synthesis. ... Psychologically mature, they are both thinkers and doers, idealists and realists, easy going yet powerfully mission-oriented in matters they consider important.

"Integrated individuals ... have the qualities of leadership that are most likely to set the tone of the next cycle of idealism. 'The remarkable person will be the agent of change,' not 'the central government or large bureaucratic organizations'."

The development of the individual is the purpose of education. Artistry and the architectural design process, both by nature a synthesis of experience, can play a larger part in education and in society.

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