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EVALUATING THE EPISTEMOLOGICAL DEVELOPMENT OF PRE-MINISTRY UNDERGRADUATES AT BIBLE COLLEGES ACCORDING TO THE PERRY SCHEME

A Thesis

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the Faculty of

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Doctor of Education

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Gregory Brock Long

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APPROVAL SHEET

EVALUATING THE EPISTEMOLOGICAL DEVELOPMENT
OF PRE-MINISTRY UNDERGRADUATES AT BIBLE
COLLEGES ACCORDING TO THE PERRY SCHEME

Gregory Brock Long

Read and Approved by:

_____
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_____
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Date_____

To Christy,

my helper, my beloved, my friend.

A Proverbs 31 wife—

trustworthy, hard-working, wise, strong, kind, God-fearing, praiseworthy.

TABLE OF CONTENTS

Page

LIST OF TABLES viii

LIST OF FIGURES ix

PREFACE x

Chapter

1. INTRODUCTION 1

Introduction to the Research Problem 2

Current Status of the Research Problem 7

Research Question 12

Research Purpose Statement 12

2. LITERATURE REVIEW 13

Description of the Perry Scheme 13

Overview 14

Positions 14

Alternatives to Growth 19

A Biblical Analysis of the Perry Scheme 20

Epistemological Development 22

Personal Commitment 24

Truth 26

Knowledge and Certainty 30

The Source of Knowledge 33

The Goal of Epistemological Development 40

The Path of Epistemological Development 43

Chapter Page

Summary of the Perry Scheme 50

Contextual Features of a Bible College Education 50

Description of Bible Colleges 51

Characteristics of Bible Colleges 51

Epistemological Development in Bible Colleges 52

Possible Interactions with the Perry Scheme for Bible Colleges 53

Integration 54

Wise Appropriation 55

Inverse Consistency 55

Definitions 58

Research Hypothesis 60

3. METHODOLOGY 63

Research Question Synopsis 63

Research Purpose Statement 63

Design Overview 64

Population 66

Sample 66

Delimitations 68

Limitations of Generalization 68

Instrumentation 69

Dissertation Study Participation Form 69

Interview Protocol 69

Procedures 70

Contact Participants and Confirm Their Participation 70

Conduct a Pilot Study 71

Conduct, Transcribe, and Submit the Interviews 71

Chapter Page

Perform an Independent Content Analysis 72

Evaluate Findings and Draw Conclusions 73

4. ANALYSIS OF FINDINGS 75

Compilation Protocol 75

Participation Form Data 76

Gender 76

Institutional Context 77

Degree and Program of Study 79

Local Church Involvement 79

Para-church or Humanitarian Ministry Involvement 81

Timing of Decision to Pursue Vocational Ministry 81

Research Question Synopsis 82

Summary of Findings 83

CSID Ratings and Reporting 83

Generalized Findings 84

Positional Examples 87

Trentham's Epistemological Priorities and Competencies 91

Presuppositions for Knowledge and Development 93

Metacognition, Critical Reflection, and Contextual Orientation . . . 95

Personal Responsibility for Knowledge—Within Community 100

Recurring Themes 104

Findings Related to Bible College Culture 116

Challenges to Personal Beliefs and Values 116

Interaction with Ideological Diversity 118

Exposure to Multiple Disciplines 119

Evaluation of the Research Design 121

Chapter Page

Strengths 121

Weaknesses 122

5. CONCLUSIONS 126

Research Purpose and Question 126

Research Implications 127

Implications Drawn from Form Data 127

Implications Drawn from the Research Question 128

Implications Drawn from Trentham's Categories and Themes 131

Research Applications 133

Research Limitations 135

Further Research 136

Appendix

1. DISSERTATION STUDY PARTICIPATION FORM 139

2. STANDARDIZED PERRY INTERVIEW PROTOCOL 141

3. ALTERNATE PERRY INTERVIEW PROTOCOL 142

4. TRENTHAM INTERVIEW PROTOCOL 144

5. SCORED POSITIONS AND RATER NOTES 146

6. CATEGORIES OF TRENTHAM'S EPISTEMOLOGICAL PRIORITIES AND COMPETENCIES ADDRESSED. 148

BIBLIOGRAPHY 150

LIST OF TABLES

Table Page

1. Applying the principle of inverse consistency to the Perry Scheme 57

2. Trentham's categorical chart for assessing epistemological priorities and competences 73

3. Institutional characteristics 78

4. Participants' program of study 79

5. Position 2-dominant sample statements 88

6. Position 3-dominant sample statements 89

7. Position 4-dominant sample statements 90

8. Position 5-dominant sample statements 91

A1. Scored positions and rater notes 146

A2. Trentham's epistemological priorities and competencies addressed 148

LIST OF FIGURES

Figure Page

1. Summary diagram of the Perry Scheme 5
2. Detailed diagram of the Perry Scheme 15
3. Trentham's principle of Inverse Consistency 56
4. General time periods in which students made commitments to vocational ministry 82
5. Percentage of students in each range 86
6. Range and mean of scores 87
7. Average Trentham priorities expressed in each position grouping 93
8. Higher forms of thinking—percentage of students articulating 96
9. Higher forms of thinking—average number of articulations per interview . . . 97

PREFACE

The apostle Peter commands Christians to "grow in the grace and knowledge of our Lord and Savior Jesus Christ" (2 Pet 3:18). This endeavor has certainly been a means of growth in my life, growth in both grace and knowledge. As I studied the epistemological development of others, I have learned much about God, about His Word, and about how He has "fearfully and wonderfully made" (Ps 139:14) our minds to know Him. I have learned much about myself—my strengths and especially my limitations. And I have learned much about God's sustaining grace and strength in the midst of challenges.

God used a number of people to carry me through this project. First and foremost, my loving wife, Christy, was always there with another smile, another word of encouragement, and another prayer to help me complete another assignment, conduct another interview, and write another page. She kept our family and household running smoothly in the midst of the hectic schedules of two teenage boys, and I could not have done this without her support. Our sons, Nathan and Andrew, endured times when Dad was submerged in his studies, and yet they did their part to help our family move forward each day.

My extended family also played a role. My parents, Don and Dee, supported this undertaking in a number of ways and were always excited to hear of another step completed. I am happy and honored to follow in my father's footsteps as a "Dr. Ed." My brother and sister-in-law, Jeff and Christy; mother-in-law, Lorene; Grandpa Brock and Ruth; and grandmother-in-law, Evie; encouraged and prayed for me and my family.

I must also wholeheartedly thank the faculty at the Billy Graham School of Missions, Evangelism and Ministry at the Southern Baptist Theology Seminary. Thank

you to Dr. Timothy Paul Jones for talking me into the Ed.D. program and for providing words at two specific points of discouragement that lifted me up and spurred me to go on. Thank you to Dr. Jones, Dr. Michael Wilder, and Dr. Anthony Foster for the classroom instruction and the personal interactions that stretched and molded my thinking. A special word of thanks is due Dr. John David Trentham for guiding, advising, and encouraging me throughout my journey through Perry's Progress.

Among the many good things I will take away from this experience are the friendships I formed with the members of my 2012 Ed.D. cohort. Thank you, Mike Atherton, John Cartwright, Michael Davis, Matt Dixon, Chris Jackson, Shelly Johns, Bekah Mason, Emmanuela Nyam, Nick Ostermann, Matt Ross, Eun Sung Roh, Zach Vester, and Matt Vander Wiele for the meals, laughter, discussions, and "good words" we shared as we sharpened each other's thinking.

To the elders and members of Grace Church, as well as my fellow pastors, thank you for allowing and enabling me to complete this degree.

My Lord and Savior Jesus Christ has given me wisdom and strength throughout my life and certainly during this doctoral program. My hope and prayer is that this thesis may, in some small way, assist His Church in preparing young people for vocational ministry. "To him be the glory both now and to the day of eternity" (2 Pet 3:18).

Gregory Brock Long

Des Moines, Iowa

December 2014

CHAPTER 1
INTRODUCTION

Although the college years are a time of great change in the lives of young adults, up until the last half-century little research had been done to explore the nature of college student development. This changed in the late 1960s with the publication of William Perry's *Forms of Ethical and Intellectual Development in the College Years: A Scheme*. William Perry's developmental scheme, or the "Perry Scheme," as it has come to be known, traces the progression of the forms of worldview perception among college students. Perry's research indicated a progression from a dualistic and objective to a relativistic and subjective understanding of truth and of the world in general.[1]

John David Trentham used the Perry Scheme as a theoretical lens to examine the epistemological development of college students who have expressed their intentions to pursue vocational Christian ministry.[2] Trentham compared the epistemological development of pre-ministry undergraduates at three different types of institutions: Bible colleges, Christian liberal arts universities, and public universities. Trentham found that the average epistemological positioning along the Perry Scheme among these pre-ministry undergraduates was generally consistent with those of typical college students.[3]

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[1]William G. Perry, *Forms of Intellectual and Ethical Development in the College Years: A Scheme*, Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1999), 64.

[2]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012).

[3]Ibid., 150.

This study built upon Trentham's initial research by examining the epistemological development of pre-ministry undergraduates attending Bible colleges.

Introduction to the Research Problem

The apostle Paul wrote to his protégé Timothy, "The saying is trustworthy: If anyone aspires to the office of overseer, he desires a noble task" (1 Tim 3:1).[4] Many centuries later, God is still placing within the hearts of young people the desire to serve him as an overseer or in other forms of vocational Christian ministry. To these young people, the call of God upon their lives for vocational ministry as a pastor, missionary, church planter, evangelist, Christian educator, or some other occupation, is clear. And yet to many of them, the educational path ahead is not as clear. Should they attend seminary, or is Bible college training sufficient? If they have decided to attend seminary, should they first attend a Bible college, a Christian liberal arts college or university, or a secular college or university for their undergraduate studies?

Obviously many factors affect such a decision. Factors such as proximity, cost, and educational course load are important and should not be ignored. However, another factor that should be considered is that of personal development. In other words, undergraduates-to-be should ask themselves, How will this college develop me as a person?

Undoubtedly, students who experience college undergo tremendous personal development.[5] There are several aspects of personal development, such as spiritual, emotional, or physical development, that could be examined. The focus of this study, however, was on epistemological development. Epistemological development (also

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[4]Unless otherwise noted, all Scripture references are from the English Standard Version.

[5]Alexander W. Astin, *What Matters in College? Four Critical Years Revisited*, The Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1993), 396; Ernest T. Pascarella and Patrick T. Terenzini, *How College Affects Students: A Third Decade of Research*, The Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 2005), 2:577.

known as cognitive or intellectual development) describes "the nature and processes of change, concentrating on the epistemological structures individuals construct to give meaning to their worlds."[6] Theories of epistemological development, or "personal epistemology," "focus on how people think, reason, and make meaning of their experiences."[7]

Given the importance of epistemological development in college students, how can colleges measure this development and incorporate strategies into their educational philosophy and pedagogy that will enhance students' epistemological development? Back in the 1950s and 1960s, a professor at the Harvard Graduate School of Education, William G. Perry, Jr., decided to address this very question by examining the epistemological development of young adults during their years of study at Harvard University.

In addition to his teaching duties, Perry was also employed at the Bureau of Study Counsel at Harvard. As he and his colleagues provided counseling for students with academic concerns, they noticed students were responding to the relativism they encountered in the university environment in a variety of ways.[8] Perry and his colleagues undertook a study to better understand these responses. They initially administered a quantitative survey to 313 students and followed up with open-ended interviews with 31 of those students. As they analyzed these interviews, they began to discern what they perceived to be a "common sequence of challenges to which each student addressed himself in his own particular way."[9] They observed that the reasoning of these students

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[6]Pascarella and Terenzini, *How College Affects Students*, 2:33.

[7]Nancy J. Evans, Deanna S. Forney, and Florence Guido-DiBrito, *Student Development in College: Theory, Research, and Practice*, The Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1998), 124.

[8]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 4.

[9]Ibid., 8.

seemed to be based on certain underlying assumptions about knowledge and learning.[10] As a result, they extended and expanded their qualitative research, eventually conducting 366 interviews with 109 students. Sixty-seven of these students were interviewed after each of their four years of college.[11]

Based on this research, Perry and his team developed a scheme of progression describing the cognitive and ethical development of young adults during the college years. Their research was later validated by independent, trained judges[12] before their findings were first presented in a U. S. Department of Education report[13] and then published in book form.[14] Perry's research indicated an "evolution in students' interpretation of their lives"[15] as they progressed from a simplistic and dualistic to a

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[10]These assumptions will be explained in more detail in chap. 2, but are typified by Perry in the following way: "Let us suppose that a lecturer announces that today he will consider three theories explanatory of _____ (whatever his topic may be). Student A has always taken it for granted that knowledge consists of correct answers, that there is one right answer per problem, and that teachers explain these answers for students to learn. He therefore listens for the lecturer to state which theory he is to learn. Student B makes the same general assumptions but with an elaboration to the effect that teachers sometimes present problems and procedures, rather than answers, 'so that we can learn to find the right answer on our own.' He therefore perceives the lecture as a kind of guessing game in which he is to 'figure out' which theory is correct, a game that is fair enough if the lecturer does not carry it so far as to hide things too obscurely. Student C assumes that an answer can be called 'right' only in the light of its context, and that contexts or 'frames of reference' differ. He assumes that several interpretations of a poem, explanations of a historical development, or even theories of a class of events in physics may be legitimate 'depending on how you look at it.' Though he feels a little uneasy in such a kaleidoscopic world, he nonetheless supposes that the lecturer may be about to present three legitimate theories which can be examined for their internal coherence, their scope, their fit with various data, their predictive power, etc. Whatever the lecturer then proceeds to do (in terms of his own assumptions and intent), these three students will make meaning of the experience in different ways which will involve different assessments of their own choices and responsibilities" (ibid., 1–2).

[11]Ibid., 9.

[12]Ibid., 12–15.

[13]William G. Perry, *Patterns of Development in Thought and Values of Students in a Liberal Arts College: A Validation of a Scheme. Final Report* (U.S. Dept. of Health, Education, and Welfare, Office of Education, Bureau of Research, Final Report, Project No. 5-0825, Contract No. SAE-8973, 1968).

[14]William G. Perry and Harvard University, *Forms of Intellectual and Ethical Development in the College Years: A Scheme* (New York: Holt, Rinehart and Winston, 1970).

[15]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 1.

complex and relativistic understanding of truth and of the world in general.[16] The Scheme can be simplified into four general categories: Dualism, Multiplicity, Contextual Relativism, and Commitment in Relativism.[17] Figure 1 presents these four categories as well as a brief explanation of the transitions between them.[18] Further breakdown of the progression resulted in a total of nine positions in the Scheme, with three additional positions of deflection.[19]

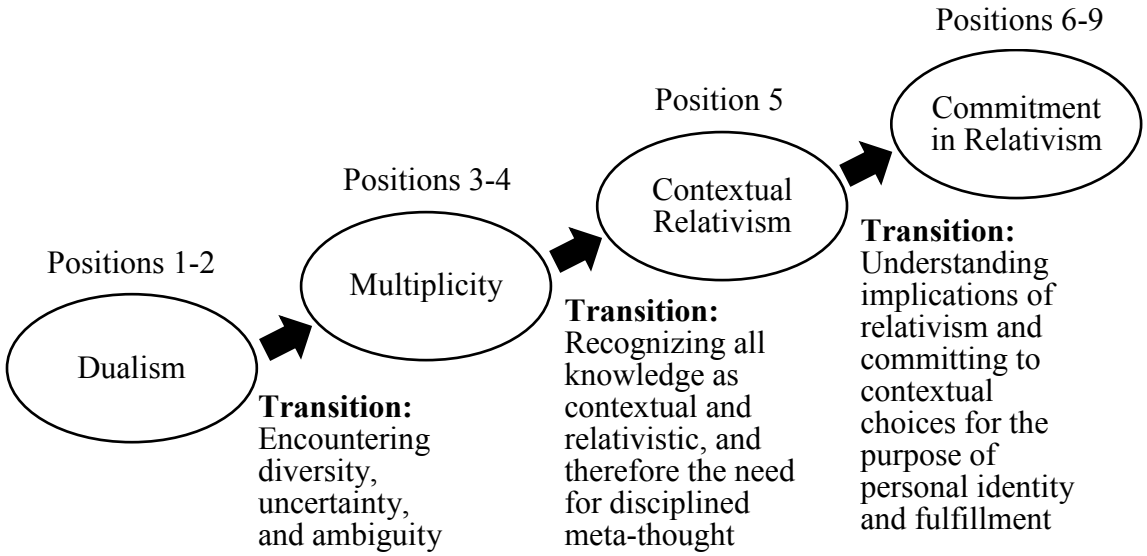

Figure 1. Summary diagram of the Perry Scheme

[16]William G. Perry, "Sharing in the Costs of Growth," in *ASHE Reader on College Student Development Theory*, ed. Maureen E Wilson and Lisa Wolf-Wendel, ASHE Reader Series (Boston: Pearson, 2005), 485.

[17]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 61.

[18]Jamie L. Turner, "Perry's Scheme of Intellectual and Ethical Development," ENGR1201 Blog, entry posted September 10, 2013, http://engr1201.blogspot.com/2013/09/perrys-scheme-of-intellectual-and.html (accessed October 22, 2014); William J. Rapaport, "Critical Thinking and Cognitive Development," *Procedings and Addresses of the American Philosophical Association* 57, no. 5 (May 1984): 611–12; Michael J. Pavelich and William S. Moore, "Measuring the Effect of Experiential Education Using the Perry Model," *Journal of Engineering Education* 85, no. 4 (October 1996): 288–89.

[19]These deflections, or alternatives to growth, include Temporizing, Retreat, and Escape, and are discussed in chap. 2.

Students who progress through the Scheme come to a "radical reperception of all knowledge as contextualistic and relativistic."[20] Perry believed the "optimally congruent and responsible" way to "understand and confront with integrity the nature of the human condition" is "personal commitment in a relative world."[21] This commitment "refers to an act, or ongoing activity relating to a person as agent and chooser to aspects of his life in which he invests his energies, his care, and his identity. . . . [It] refers to an affirmatory experience through which the man continuously defines his identity and his involvements in the world.[22]

On the surface, encouraging students to make a "personal commitment in a relative world" appears to be goal that could be "Christianized"—adapted and adopted by Christians with a commitment to biblical truth. If so, the Perry Scheme could be appropriated into the educational philosophy and pedagogy of Bible colleges in order to enhance the epistemological development of students.

However, the foundational beliefs and educational philosophy of most Bible colleges may seem to be antithetical to the pragmatic and relativistic philosophical assumptions of the Perry Scheme.[23] For example, the first statement of one Bible college's philosophy of education is, "Faith Baptist Bible College recognizes truth as absolute,"[24] while the Perry Scheme describes a progression away from belief in absolute

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[20]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 121.

[21]Ibid., 38, 64.

[22]Ibid., 149–50.

[23]Ibid., 3, 5, 226, 233; William G. Perry, "Cognitive and Ethical Growth: The Making of Meaning," in *The Modern American College*, ed. Arthur W. Chickering, The Jossey-Bass Series in Higher Education (San Francisco: Jossey-Bass, 1981), 80.

[24]Faith Baptist Bible College and Theological Seminary, "Philosophy of Education," 2011, http://www.faith.edu/about-faith/position-statements/philosophy-of-education (accessed March 15, 2013); Baptist Bible College and Seminary, "Confession of Faith," http://www.bbc.edu/confession.asp (accessed March 15, 2013); Boyce College, "Beliefs," 2013, http://www.boycecollege.com/discover-boyce/beliefs/ (accessed March 15, 2013).

truth.[25] This raises the following questions, among others: Is it true that the educational philosophy of many Christian institutions of higher learning is opposed to the philosophical foundations of the Perry Scheme? How will the epistemological development of pre-ministry undergraduates attending Bible colleges relate to the development described by the Perry Scheme? What does this mean for the validity of the Perry Scheme in Bible college settings?

Although the Perry Scheme describes a progression of both epistemological and ethical development, this study focused primarily on epistemological development. This is because college students rarely progress past the first five positions of the Perry Scheme—those relating to epistemological development—into the later positions of the Perry Scheme (nos. 6-9, Commitment in Relativism), which are more closely related to ethical development.[26]

Current Status of the Research Problem

Since his research was originally published in 1968, the Perry Scheme has been the basis for a wealth of additional research into the epistemological development of college students, as many researchers have used Perry's original methodology of semi-structured interviews to "replicate and extend Perry's work."[27] Some have conducted

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[25]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 66; L. Lee Knefelkamp, "Introduction," in *Forms of Intellectual and Ethical Development in the College Years: A Scheme*, Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1999), xxxi; William S. Moore, "Understanding Learning in a Postmodern World: Reconsidering the Perry Scheme of Ethical and Intellectual Development," in *Personal Epistemology: The Psychology of Beliefs about Knowledge and Knowing*, ed. Barbara K. Hofer and Paul R. Pintrich (Mahwah, NJ: L. Erlbaum Associates, 2002), 19–20; William S. Moore, "Student and Faculty Epistemology in the College Classroom: The Perry Schema of Intellectual and Ethical Development," in *Handbook of College Teaching: Theory and Applications*, ed. Keith W Prichard and R. McLaran Sawyer (Westport, CT: Greenwood Press, 1994), 47.

[26]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 150, 235.

[27]Robert A. Mines, "Student Development Assessment Techniques," in *Measuring Student Development*, ed. Gary R. Henson, New Directions for Student Services (San Francisco: Jossey-Bass, 1982), 69; Perry, "Cognitive and Ethical Growth," 110–16.

longitudinal studies to assess epistemological development of college students over time.[28] Others have developed quantitative instruments to assess epistemological development based on the Perry Scheme.[29] Still others have built upon and expanded Perry's work by examining more closely the role of gender,[30] reading comprehension techniques,[31] ethnicity,[32] and nationality,[33] among other things, in the epistemological development of college students according to the Perry Scheme.

In spite of the extensive research that has been done since Perry's seminal publication, a threefold need existed for the present study. First, this study sought to further bridge a gap in research related to the epistemological development of pre-ministry undergraduates. Although the Perry scheme and other theories have been used to analyze the epistemological development of college students in a variety of settings, including Christian colleges and universities,[34] minimal research has been conducted to

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[28]P. M. King et al., "The Justification of Beliefs in Young Adults: A Longitudinal Study," *Human Development* 26, no. 2 (March 1983): 106–16.

[29]Lee Knefelkamp, Carole Widick, and Clyde Alvin Parker, *Applying New Developmental Findings*, New Directions for Student Services, no. 4 (San Francisco: Jossey-Bass, 1978); William S. Moore, "The Learning Environment Preferences: Exploring the Construct Validity of an Objective Measure of the Perry Scheme of Intellectual Development.," *Journal of College Student Development* 30, no. 6 (1989): 504–14; T. Dary Erwin, "The Scale of Intellectual Development: Measuring Perry's Scheme," *Journal of College Student Personnel* 24, no. 1 (January 1983): 6–12.

[30]Marcia B. Baxter Magolda, *Knowing and Reasoning in College: Gender-Related Patterns in Students' Intellectual Development*, The Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1992); Mary Field Belenky et al., *Women's Ways of Knowing: The Development of Self, Voice, and Mind*, 10th anniversary ed. (New York: BasicBooks, 1997).

[31]Michael P. Ryan, "Monitoring Text Comprehension: Individual Differences in Epistemological Standards," *Journal of Educational Psychology* 76, no. 2 (1984): 248–58.

[32]Robert L. Durham, Janice Hays, and Ruben Martinez, "Socio-Cognitive Development Among Chicano and Anglo American College Students," *Journal of College Student Development* 35 (May 1994): 178–82.

[33]Li-Fang Zhang and David Watkins, "Cognitive Development and Student Approaches To Learning: An Investigation of Perry's Theory with Chinese and U.S. University Students," *Higher Education* 41, no. 3 (2001): 239–61.

[34]Nancy K. Elwell, "An Investigation of the Epistemological Development of Traditional and Nontraditional College Students Using William Perry's Scheme of Intellectual and Moral Development" (Ph.D. diss, Capella University, 2004); Dennis R. Humphrey, "Influence of Educational Context on

investigate the epistemological development of students studying for vocational Christian ministry.

This gap in research was addressed with Trentham's study of the epistemological development of pre-ministry undergraduates. In the course of Trentham's research, thirty different students from three different institutional contexts—Bible college, Christian liberal arts, and secular university—were interviewed using a modified Perry Interview Protocol. These interviews were scored and the participants rated along the Perry Scheme by William S. Moore of the Center for the Study of Intellectual Development (CSID).[35] In addition, Trentham conducted an analysis of the interviews based on his own analytical framework of epistemological priorities and competencies and then compared his analysis to the CSID ratings.

However, as Trentham himself noted, his research was limited and preliminary:

> This study represents the first known major research endeavor that addressed epistemological maturity among pre-ministry undergraduates. In light of the findings, conclusions, and limitations associated with this research, numerous recommendations for further inquiry into the area of pre-ministry undergraduate development are apparent.[36]

The first item on Trentham's list of "possible avenues of research that may serve to deepen, extend, or augment this research study" is, "Using a similar design and method as exemplified in this research, three separate studies may be undertaken to explore the variance of epistemological development among pre-ministry undergraduates at multiple institutions *within* the institutional types addressed in this research."[37] The current study

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Students' Personal Epistemology: A Study of Christ Following Students in a Bible College and a State University" (Ph.D. diss, Trinity International University, 2010). I am indebted to Trentham for referencing these studies.

[35]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 132.

[36]Ibid., 220.

[37]Ibid.

sought to augment Trentham's research by examining the epistemological development of pre-ministry undergraduates at Bible colleges according to the Perry Scheme.

Second, this study, as it built upon and expanded Trentham's research, further explored "the identification of epistemological trends among pre-ministry undergraduates according to institutional type, and the suggestion of some distinctive environmental conditions inherent in particular higher educational contexts with respect to the impact of social and academic experiences on student maturation."[38] In other words, what is the relationship between institutional type and the epistemological development of pre-ministry undergraduates? Although the specific impact of different institutional types on college students is difficult to study and may be overstated,[39] differences exist nonetheless.[40] In the case of this specific study, how does attendance at a Bible college, as opposed to a Christian liberal arts university or secular university, impact the epistemological development of a young person seeking to enter vocational Christian ministry? Trentham observes, "The influence of institutional type represents an important topic worthy of exploration with regard to pre-ministry undergraduates' worldview, identity, and lifestyle."[41] Such research may help Bible colleges better develop the epistemological maturity of students so they are more effectively prepared for the intellectual demands of vocational Christian ministry.

Third, this study, unlike Trentham's, examined the appropriateness of incorporating the Perry Scheme into Bible college educational philosophy and pedagogy. Perry's scheme described a progression from dualistic and absolutist ethical thinking to

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[38]Ibid., 3.

[39]Astin, *What Matters in College?*, 363–64; Howard Rothmann Bowen, *Investment in Learning: The Individual and Social Value of American Higher Education* (San Francisco: Jossey-Bass, 1977), 237; Pascarella and Terenzini, *How College Affects Students*, 2:170–71, 595–96.

[40]Pascarella and Terenzini, *How College Affects Students*, 2:595–96.

[41]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 2.

relativistic ethical thinking.[42] As has been noted, the purpose of evangelical, theologically conservative Bible colleges is to impart to students absolute truth based on the belief in a divinely inspired, wholly inerrant Bible.[43] Trentham found that the average epistemological positioning along the Perry Scheme among these pre-ministry undergraduates was generally consistent with those of typical college students.[44] The fact that Bible College and Christian liberal arts students progressed along Perry's path towards a commitment to relativism, even in the midst of a college environment with a commitment to absolute truth as revealed in Scripture, raises questions about the true nature of Perry's epistemological progress. If Bible college students are consistently found to progress along the Perry Scheme as do secular university students, does the Perry Scheme truly describe development in "personal commitment in a relative world"? Or is there some other aspect of epistemological development that is at the heart of the Perry Scheme that manifests itself in different ways relative to the institutional context?

Although his research was preliminary, one possible implication of Trentham's research is that at the heart of the Perry Scheme is growth in critical thinking. Trentham's independent analysis revealed development in his structured framework of epistemological priorities and competencies was consistent overall with epistemological development along the Perry Scheme.[45] The most significant correlation was seen when Trentham looked for "a preference for higher-level forms of thinking according to Bloom's Taxonomy." His research indicated students who were rated at higher positions

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[42]Perry, "Cognitive and Ethical Growth," 79.

[43]Faith Baptist Bible College and Theological Seminary, "Historic Position Statement," 2011, http://www.faith.edu/about-faith/position-statements/historic-position-statement (accessed September 7, 2013).

[44]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 150.

[45]Ibid., 167.

in the Perry Scheme evidenced a preference for higher-level thinking.[46] Trentham's research may indicate the essential discovery of the Perry Scheme is growth in critical thinking that is manifestly different according to a person's closely held beliefs and according to the environment in which the growth in critical thinking is fostered. With this in mind, this study sought to further critique the findings and assertions of the Perry Scheme and evaluate its appropriateness for use in Bible college educational philosophy.

Research Question

What is the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual and ethical maturity according to the Perry Scheme?

Research Purpose Statement

The purpose of this qualitative, cognitive research study was to explore the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual and ethical maturity according to the Perry Scheme.

[46]Ibid., 172–73, 212–13.

CHAPTER 2
LITERATURE REVIEW

This project investigated the relationship between pre-ministry undergraduates' attendance at Bible colleges and intellectual development according to the Perry Scheme. Because this study used the Perry Scheme to analyze the intellectual development of Bible college students, it is necessary to describe the Perry Scheme as well as the characteristics of Bible colleges before suggesting several ways to interact with the Perry Scheme in a Bible college environment. This chapter includes a description of the Perry Scheme and its positions, an analysis of the scheme from a biblical perspective, a summary of the unique contextual features of a Bible college education, and a discussion of possible interactions with the Perry Scheme for Christian institutions of higher learning, before concluding with definition of terms and the research hypothesis.

Description of the Perry Scheme

The *Forms of Ethical and Intellectual Development in the College Years, A Scheme*, or the "Perry Scheme" as it has come to be known, has been highly influential in the fields of epistemological development and college student development since its genesis in the late 1960s. Although it is over forty years old, the Perry Scheme still resonates with many educators today because of its seemingly intuitive validity, because it was groundbreaking in its focus on the development of college students and young adults, and because it has proven foundational to much of the current research and perspectives on college student development.[1]

[1]Patrick G. Love and Victoria L. Guthrie, "Perry's Intellectual Scheme," *New Directions for Student Services*, no. 88 (Winter 1999): 5.

The historical background of the scheme has already been described in chapter 1 above. In this section, a brief overview of the Scheme is provided as well as a description of the progression of the Scheme through its various positions.

Overview

The Perry Scheme traces the "epistemological Pilgrim's Progress" of young adults in their college years by detailing the positions and transitions of their intellectual and ethical growth. It organizes and categorizes the various ways college students describe how they understand and interpret their college experience as well as "the nature and origins of knowledge, of value, and of responsibility."[2] In general, the Scheme involves a progression of development from a simplistic and dualistic to a complex and relativistic way of viewing knowledge and values, and ultimately to a personal affirmation of one's own commitments in this newly discovered world of contextual knowledge and values.[3]

Positions

The Scheme can be simplified into four general categories: Dualism (or Simple Dualism), Multiplicity (or Complex Dualism), Contextual Relativism, and Commitment in Relativism.[4] Further breakdown of the progression resulted in a total of nine positions in the Scheme, with three additional positions of deflection. Figure 2 reveals Perry's own diagram of the nine positions of the Scheme.[5]

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[2]William G. Perry, *Forms of Intellectual and Ethical Development in the College Years: A Scheme*, Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1999), 1.

[3]Ibid., 3.

[4]Ibid., 61; William G. Perry, "Cognitive and Ethical Growth: The Making of Meaning," in *The Modern American College*, ed. Arthur W. Chickering, The Jossey-Bass Series in Higher Education (San Francisco: Jossey-Bass, 1981), 79–80.

[5]Perry, "Cognitive and Ethical Growth," 80.

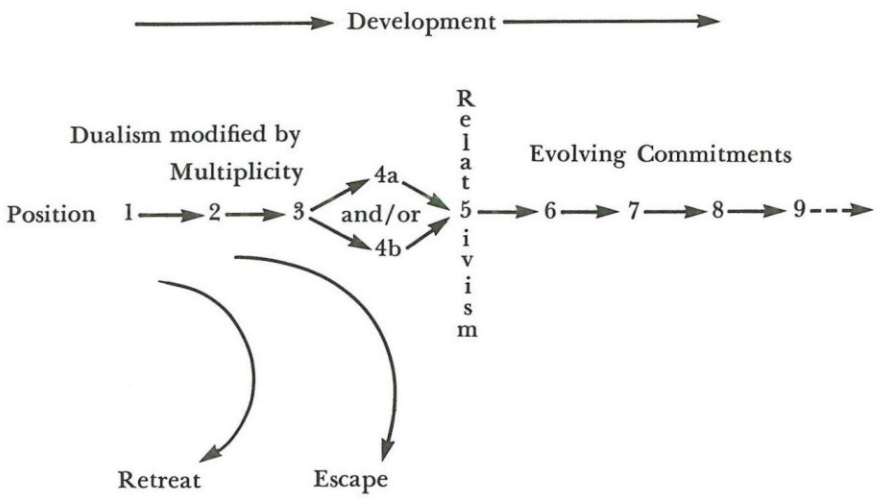

Figure 2. Detailed diagram of the Perry Scheme

Position 1. This position, entitled Basic Duality, describes a perspective that divides the world into black and white, wrong and right, bad and good.[6] Truth is believed to be Absolute and is communicated by the Authority; what the Authority says is Truth.[7] Therefore, the student is obligated to respond to Authority with obedience. A college student with this perspective believes it is the teachers' job to communicate the Truth to him by giving him the facts. It is the student's job, then, to memorize those facts and use them to respond correctly to examination questions.

It is important to note that Position 1 was held by almost none of the students at the time of their interviews, but was added as a position by way of inference based on the students' descriptions in retrospect of their outlook entering college.[8]

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[6]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 71.

[7]Ibid., 66. Perry used capitalized terms to refer to *The* Truth and *The* Authority. "Truth" with a capital "T" is used interchangeably with "Absolute", and is defined as "The established Order; The Truth, conceived to be the creation and possession of the Deity, or simply to exist, as in a Platonic world of its own; The Ultimate Criterion, in respect to which all propositions and acts are either right or wrong." "Authority" with a capital "A" is defined as "The possessors of the right answers in the Absolute, or the mediators of same (as viewed in Adherence); or the false or unfair pretenders to the right answers in the Absolute (as viewed in Opposition)" (ibid., "Glossary").

[8]Ibid., 67.

Position 2. In Position 2, called Multiplicity Pre-legitimate, the student is awakened to a wide diversity of perspectives and opinions in the college environment.[9] Some professors refuse to provide absolute "answers" but simply present what are perceived to be "vague theories" by these students.[10] Uncertainty creeps in, and the student judges Authority to be confused or to be refusing to state the Truth in order to force the student to find it on his own. In other words, absolute Truth still exists, but it is up to the student to discover it for himself or to find the Authority who will communicate it to him.[11] Some students who find it difficult to tolerate this uncertainty choose a career path in mathematics and science over the humanities, because the sciences are seen as precise and fact-based, while the humanities are seen as vague and opinion-based.[12]

Position 3. As a student continues to progress along this scheme, he begins to tolerate his increasing awareness of diversity and uncertainty. In Position 3, Multiplicity Subordinate, he comes to believe the reason Authority does not provide absolute Truth is not merely because they are hiding it from the student in order to help him discover it on his own, but because they are legitimately uncertain as to its nature. In other words, sometimes even the Authority doesn't know the Truth . . . yet.[13] This discovery that uncertainty is unavoidable results in a quandary for such a student: if the Authority

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[9]Moore notes that these encounters with diversity are one of the central dynamics of the Perry Scheme (William S. Moore, "Student and Faculty Epistemology in the College Classroom: The Perry Schema of Intellectual and Ethical Development," in *Handbook of College Teaching: Theory and Applications*, ed. Keith W Prichard and R. McLaran Sawyer [Westport, CT: Greenwood Press, 1994], 50).

[10]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 81.

[11]Ibid., 86; William G. Perry, "Different Worlds in the Same Classroom: Students' Evolution in Their Vision of Knowledge and Their Expectations of Teachers," in *ASHE Reader on College Student Development Theory*, ed. Maureen E Wilson and Lisa Wolf-Wendel, ASHE Reader Series (Boston: Pearson, 2005), 476.

[12]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 88.

[13]Ibid., 99.

doesn't know the "right" answer, how can they grade any answer as "right" or "wrong"? A student in Position 3 is therefore often puzzled as to the standards used in evaluating his work. This can lead to frustration, discouragement, disillusionment, or even opposition to Authority.[14]

Position 4. As Perry analyzed students who were forced to deal with the seeming incongruity of Authority that is uncertain about absolute Truth, yet passing judgment on the rightness or wrongness of student opinions, he saw those students split into two distinct groups in their intellectual development. Some students, opposed to the perceived hypocrisy of Authority, return to a modified form of the dualism from whence they came. In the world of Authority, there are certain Right Answers, but in their own personal world, Multiplicity reigns: "Everyone has a right to his own opinion; they have no right to say I'm wrong!" Perry labeled this position "4a: Multiplicity Correlate."[15]

Other students, a majority in fact, are less opposed to and more trusting of Authority. These students come to recognize that in certain courses Authority is less interested in *what* the answers are than in *how* the student came up with those answers. Authority, in requiring the student to support his answers, is teaching him how to think. Because the student still sees this as the exception to the norm of dualism or multiplicity, Perry labeled this position "4b: Relativism Subordinate."[16]

Position 5. Position 5 in the Perry Scheme is the point of "drastic revolution" in which the students comes to a "radical reperception of all knowledge as contextual and

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[14]Ibid., 99–101.

[15]Ibid., 107–11; Perry, "Cognitive and Ethical Growth," 84–86; Perry, "Different Worlds in the Same Classroom," 477.

[16]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 111–20; Perry, "Cognitive and Ethical Growth," 86–87.

relativistic."[17] Position 5 is labeled Relativism,[18] because contextual relativism is now "perceived as the common characteristic of *all* thought, *all* knowing, all of man's relation to his world," and "dualistic right-or-wrong thinking" becomes the exception rather than the rule.[19] This is the realm of "disciplined meta-thought and irreducible uncertainty."[20] The student also realizes Authority shares this same relativistic world. *The* Authority becomes *an* authority in a given social construct, losing its "cosmic aura."[21]

Position 6. As the student transitions from Position 5 to Position 6, he begins to come to grip with the full implications of this radical change of worldview. If all knowledge and values are relativistic, how can he find personal meaning and identity in a world where nothing is certain? Perry and his colleagues discovered students choose either to escape into a denial of personal responsibility or to invest their energies, care, and identity into whatever "obligations or causes or expectancies [they have] undertaken." This affirmation of one's own "truths, relationships, purposes, activities, and cares" is referred to as Commitment. Position 6, labeled "Commitment Foreseen," describes the dawning realization that personal Commitment is necessary in order to find one's purpose and meaning in life.[22]

Positions 7-9. The later positions of the Perry Scheme describe the "degrees of ripening" and "degrees of seasoning" of the student's Commitment to personal choice,

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[17]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 121.

[18]In his original work, Perry and his colleagues saw variations in this position in the extent to which Relativism saturates the student's world, and labeled Position 5 "Relativism Correlate, Competing, or Diffuse" (ibid., 128). In a later work, Position 5 is simply called "Relativism" (Perry, "Cognitive and Ethical Growth," 88).

[19]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 123.

[20]Perry, "Cognitive and Ethical Growth," 88.

[21]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 135.

[22]Ibid., 149–53.

affirmation, and responsibility in his own life as he learns to become "the kind of person I am." Position 7 is entitled "Initial Commitment," in which the student makes his first commitment in some major area of his life to a set of values, to a person, or to a career.[23] Position 8, "Orientation in Implications of Commitment," describes the awareness of the implications of personal Commitment and the struggle to choose and balance Commitments in other areas of life.[24] The final position, Position 9, labeled "Developing Commitment(s)," describes the settled realization of contextual relativism in all of life, the ability to move forward within that worldview, and the mature affirmation of personal identity.[25] As Trentham notes, Positions 6-9 "move beyond intellectual development (the acknowledgement of relativism) to focus primarily on ethical development (personal responsibility in light of relativism)."[26]

Although the judges in Perry's study rated 75 percent of students interviewed to have attained Positions 7 and 8 by the end of college,[27] according to the CSID scores beyond Position 5 are rare among traditionally-aged student populations.[28]

Alternatives to Growth

Perry and his colleagues also observed that although most students progress along the Scheme, there are exceptions. They described three alternatives to, or deflections from, growth in relativism.

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[23]Ibid., 170; Perry, "Cognitive and Ethical Growth," 79, 94.

[24]Perry, "Cognitive and Ethical Growth," 79, 95.

[25]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 171; Perry, "Cognitive and Ethical Growth," 79.

[26]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 95.

[27]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 171.

[28]William S. Moore, e-mail message to author, January 22, 2014; cf. Moore, "Student and Faculty Epistemology in the College Classroom," 50.

Temporizing. The first alternative to growth is Temporizing, which is a pause at any point in progression for a year or more. In Temporizing, a student demonstrates—or even states explicitly—that he is "just not ready yet" to move on.[29]

Retreat. Second, some students choose to retreat rather than to progress. While Temporizing describes a pause in progress, Retreat describes regression into a previously held position. Retreat is more likely to occur at the early to middle positions of the Scheme, back into Multiplicity or Dualism, than at the later positions.[30]

Escape. Third, other students choose the route of escape. Escape refers to "the deeper avoidance of personal responsibility known as alienation." It is the "defeat of care." Some students Escape through disassociation as they "drift along," passively delegating all responsibility to fate. Others Escape through encapsulation, learning how to "play the game" while avoiding engagement with epistemological complexity.[31]

Resumption of growth. These alternatives to growth are not necessarily permanent, however. For some students, these alternatives become the catalyst that spurs them on to the resumption of growth.[32]

A Biblical Analysis of the Perry Scheme

The Perry Scheme purports to describe, based on qualitative research, the way college students develop and grow intellectually and ethically during their college years.

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[29]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 199–203; Perry, "Cognitive and Ethical Growth," 90–91.

[30]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 204–11; Perry, "Cognitive and Ethical Growth," 91.

[31]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 212–23; Perry, "Cognitive and Ethical Growth," 91–92.

[32]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 221–23.

However, Perry and his colleagues, like anyone else, were constrained by their worldview. They interpreted the data they gathered through the lens of their assumptions about truth, knowledge, human beings, and the world, which colored their perspective on what they found from their research.

To his credit, Perry makes no attempt to hide the foundational philosophical assumptions underlying his Scheme, detailing them at the end of his work. In describing the philosophical context of his study, Perry writes,

> In the broadest sense the study shares the assumptions of modern contextualistic pragmatism (Dewey 1958b; White, M., 1963; cf. also Quine, 1963).[33] This is most evident in the priority given to purpose. The students' ultimate purpose is postulated to be to find those forms through which they may best understand and confront with integrity the nature of the human condition.[34]

In this section, an effort is made to describe the foundational assumptions of the Perry Scheme and to compare and contrast them with biblical teachings regarding the nature, source, means, and ends of truth, knowledge, and epistemological development. Biblical teachings are established with a brief survey of relevant Old Testament and New

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[33]Although rooted in the European tradition, pragmatism is a uniquely American school of philosophical thought associated with Charles Sanders Pierce, Williams James, and John Dewey. These philosophers sought to root philosophy in human experience (Raymond D. Boisvert, *John Dewey: Rethinking Our Time*, SUNY Series, The Philosophy of Education [Albany: State University of New York Press, 1998], 15). Dewey believed philosophy was meaningless to the common man and the problems of his everyday life because of its focus on the esoteric search for ideal truth. According to Dewey, the true test of the value of any philosophy is as follows: "Does it end in conclusions which, when they are referred back to ordinary life-experiences and their predicaments, render them more significant, more luminous to us, and make our dealings with them more fruitful? Or does it terminate in rendering the things of ordinary experience more opaque than they were before, and in depriving them of having in 'reality' even the significance they had previously seemed to have?" (John Dewey, *Experience and Nature*, Lectures upon the Paul Carus Foundation [Chicago: Open Court, 1929], 7). For Dewey, the purpose of philosophy is "to focus reflection upon needs *congruous to present life* [and] to interpret the conclusions of science with respect to their *consequences for our beliefs* about purposes and values in all phases of life" (John Dewey, *The Quest for Certainty: A Study of the Relation of Knowledge and Action*, Gifford Lectures 1929 [New York: Minton, Balch, 1929], 313; emphasis added). Philosophy should function as a "liaison officer between the conclusions of science and the modes of *social and personal action* through which attainable possibilities are projected and striven for" (ibid., 311; emphasis added). Such an epistemological view gives meaning to life and provide "authoritative guidance *for its own affairs* which it now vainly seeks in oscillation between outworn traditions and reliance upon casual impulse" (ibid., 313; emphasis added).

[34]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 226.

Testament passages, with emphasis placed upon the Wisdom literature of the Old Testament and the Johannine literature of the New Testament. There are some areas of convergence, while there are other clear areas of divergence.

Epistemological Development

The first area in which the Perry Scheme can be examined from a biblical perspective is regarding its view of epistemological development. Both the Perry Scheme and the Bible indicate human beings develop and grow epistemologically.

Perry: Developmentalism. The Perry Scheme, based on the work of Dewey and Piaget, is a developmental scheme which purports to describe personal growth, "an orderly progress in which more complex forms are created by the differentiation and reintegration of earlier, simple forms."[35] Perry characterized the movement by students along his scheme as a "progression," "evolution," or "development" along a "logical order" of an "increasingly complex experience."[36] He was fond of comparing this development to "an epistemological Pilgrim's Progress."[37] Perry avoided the extremes of hard Piagetian stage-based structural models,[38] preferring instead to call the areas of progression in his Scheme "positions,"[39] and placing as much emphasis on the transitions

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[35]Ibid., 48.

[36]Perry, "Cognitive and Ethical Growth," 78; Perry, "Different Worlds in the Same Classroom," 473.

[37]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 49; cf. 41; Perry, "Cognitive and Ethical Growth," 77, 97; Perry, "Different Worlds in the Same Classroom," 475.

[38]William S. Moore, "Understanding Learning in a Postmodern World: Reconsidering the Perry Scheme of Ethical and Intellectual Development," in *Personal Epistemology: The Psychology of Beliefs about Knowledge and Knowing*, ed. Barbara K. Hofer and Paul R. Pintrich (Mahwah, NJ: L. Erlbaum Associates, 2002), 25.

[39]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 53–54; Perry, "Different Worlds in the Same Classroom," 475.

between the positions as on the positions themselves.[40] Perry stressed that growth is "rarely linear," but rather wave- or helix-like, occurring in surges.[41]

Bible: Progressive sanctification. According to the Bible, humans do, and should, develop and grow. For Christians, this growth is referred to as "sanctification." Sanctification refers to both the initial act of God at salvation whereby he sets the elect apart from sin and to himself (Acts 20:32; 1 Cor 1:2; 6:11; 1 Pet 2:9), and to the ongoing process of growth in holiness as believers become more like Christ (Rom 6:19; 2 Cor 3:18; Col 3:10; 1 Pet 1:15).[42] This sanctifying growth includes the whole of a person including his intellect (2 Pet 3:18).

The Old Testament Wisdom book of Proverbs calls those who are wise to "increase in learning" (Prov 1:5; 9:9). In the New Testament, Jesus Christ is revealed as the perfect model of epistemological growth, because although he was fully God, as a human he "increased in wisdom" (Luke 2:52). In the same way, Christians are not to allow their minds to stagnate or atrophy, but are instead to follow Christ's example by growing in wisdom. Christians are also called to renew their minds (Rom 12:2; Eph 4:23), which refers to a complete change of the mind in order to bring it in conformity to the mind of Christ (cf. Phil 2:5). Christians are also commanded to "grow in the grace and knowledge of our Lord and Savior Jesus Christ" (2 Pet 3:18).

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[40]Perry, "Cognitive and Ethical Growth," 78.

[41]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 198; Perry, "Cognitive and Ethical Growth," 97.

[42]Millard J. Erickson, *Christian Theology*, 2nd ed. (Grand Rapids: Baker Book House, 1998), 980–81; Wayne A. Grudem, *Systematic Theology: An Introduction to Biblical Doctrine* (Grand Rapids: Zondervan, 1994), 746–49.

Personal Commitment

A second area of convergence between the Perry Scheme and a biblical epistemology is that of personal commitment. Both the Perry Scheme and the Bible call for individuals to make a commitment to their beliefs.

Perry: Commitment to personal knowledge. As described above, Positions 6-9 in the Scheme describe the realization and development of Commitment within the student's epistemology. Perry believed that although humans cannot ever be absolutely certain or assured that their choices are correct, they must still make choices and be committed to those choices.[43] Perry's dependence upon philosopher Michael Polanyi is most evident here, as Perry himself acknowledges.[44] Polanyi advocated what he called "personal knowledge": "Into every act of knowing there enters a tacit and passionate contribution of the person knowing what is being known, and . . . this coefficient is no mere imperfection, but a necessary component of all knowledge."[45] Because of this, each person must commit himself to his own personal understanding of truth and knowledge and act upon that commitment.[46] Commitments are necessary, according to Perry, because they "structure the relativistic world by providing focus in it and affirming the inseparable relation of the knower and the known."[47]

Bible: Personal commitment to wisdom and to knowledge of a person. In contrast to Modernist views of knowledge, in which the knower is detached from the known, true biblical knowledge requires participation and commitment. In the Wisdom

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[43]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 149–51.

[44]Ibid., 226.

[45]Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago: University of Chicago Press, 1962), 312.

[46]Ibid., 312–24.

[47]Perry, "Cognitive and Ethical Growth," 97.

literature of Proverbs, the author calls his son to commit himself to finding and appropriating words of wisdom by making them a part of him: seeking for, receiving, and treasuring them so that they "come into [his] soul" (2:1-11). Similar language of personal relationship, participation, and commitment is used in chapter 7, which states, "My son, keep my words and treasure up my commandments with you; keep my commandments and live; keep my teaching as the apple of your eye; bind them on your fingers; write them on the tablet of your heart. Say to wisdom, 'You are my sister,' and call insight your intimate friend" (Prov 7:1-4). Estes points out, "Foundational to all of the goals of education in Proverbs 1-9 is the development of the personal commitment of the learner. The teacher does not just seek passive acceptance of the tradition that he transmits, but rather cultivates an active desire by the learner to appropriate wisdom for himself."[48]

In the New Testament Gospel of John, Jesus teaches that the only path to true discipleship, true knowledge, and true freedom is to "abide (remain, dwell, continue in) in [Jesus'] word" (John 8:31-32). John's use of "abide" refers to "continuation in a personal bond."[49] Abiding in Christ refers to a personal commitment to an ongoing relationship with him. Jesus promises that the result of this personal commitment is spiritual fruit, while at the same time warning that a failure to abide in him will result in a lack of fruit (John 15:1-11). The biblical emphasis on personal participation and commitment is described by Rae, who writes,

> An unmistakable feature of the biblical account of how God may be known is the consistent assumption that knowledge is attained by those who share in a history with God, who commit themselves to walk in the way of the Lord, who respond to Jesus' invitation to discipleship. Knowledge is not attained through detached contemplation but through committed participation in the unfolding of God's purposes for the world. . . . Knowledge of God does not consist in the accumulation of true propositions about God by the person who otherwise remains unchanged. It

[48]Daniel J. Estes, *Hear, My Son: Teaching and Learning in Proverbs 1-9*, New Studies in Biblical Theology (Grand Rapids: Eerdmans, 1997), 65.

[49]Horst Robert Balz and Gerhard Schneider, eds., *Exegetical Dictionary of the New Testament*, PC Study Bible electronic database (Grand Rapids: Eerdmans, 1990), s.v. "meno."

> consists rather in the formation of persons who share a life in communion with God.[50]

Additionally, Schindler says,

> It is . . . not merely the abstract mind that is elevated to receive God's self-communication, but the whole of one's person. In other words, it is not, in the end, the mind that knows God, but the *person* who knows God through the mind. . . . The knowing of God is an act that includes the whole of one's life, unto its existential extremities, and both gives and demands that this life be properly ordered.[51]

Knowing, then, is more than pure rationality, and includes the personal commitments that we bring to the knowing process.[52]

Truth

Although there are areas of convergence between the Perry Scheme and the Bible, as noted above, there are also areas of divergence. To begin, there is a difference between the assumptions of the Perry Scheme and the teachings of the Bible regarding the nature of truth. Progression through the Perry Scheme involves a move away from a belief in absolute truth, while the Bible assumes the existence of and identifies the source and nature of absolute truth.

Perry: Denial of absolute truth. According to the Perry Scheme, it is the naïve students in Position 1 who presume the existence of absolute, ideal truth, which is believed to be "*The* Truth, the criterion of all knowledge."[53] Perry used the term "Absolute" interchangeably with Truth to refer to "unchanging, universal, timeless facts

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[50]Murray Rae, "'Incline Your Ear So That You May Live': Principles of Biblical Epistemology," in *The Bible and Epistemology: Biblical Soundings on the Knowledge of God*, ed. Mary Healy and Robin Parry (Colorado Springs: Paternoster, 2007), 169, 174.

[51]D. C. Schindler, "Mystery and Mastery: Philosophical Reflections on Biblical Epistemology," in *The Bible and Epistemology: Biblical Soundings on the Knowledge of God*, ed. Mary Healy and Robin Parry (Colorado Springs: Paternoster, 2007), 186–87.

[52]C. Stephen Evans and Merold Westphal, "Introduction: Christian Perspectives on Religious Knowledge," in *Christian Perspectives on Religious Knowledge*, ed. C. Stephen Evans and Merold Westphal (Grand Rapids: Eerdmans, 1993), 2.

[53]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 66.

and knowledge."[54] Students who progress along the Scheme move from believing the Authority knows the Absolute to assuming in some cases the Authority doesn't know the Absolute to realizing there *is* no Absolute.[55] William S. Moore characterized the Scheme as a "progression [which] traces *a fall from a world of Absolutes and Truth* into a world of contexts and Commitments in which one must take stands and choose as a way of making meaning in one's life through identity choices."[56]

The denial of absolute truth has been several centuries in the making. With the dawning of the Age of Enlightenment, modernist philosophers bifurcated mind and body, reason and emotion, objective and subjective, reality and experience, and knowledge and belief, denying the role of revelation in knowledge and instead turning to rationalism and empiricism. Reactions to the overreaches of modernistic dualism included skepticism, a denial that truth exists or can be known, and pragmatism, which rooted philosophy in human experience and disavowed the notion that "truth exists ready-made somewhere."[57] Modernism and pragmatism gave way to postmodernism, in which truth is seen as subjective and merely a social construct.[58] The concept of truth has shifted away from the primacy of the object in the search for truth and given priority instead to the "cognizing

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[54]Love and Guthrie, "Perry's Intellectual Scheme," 7.

[55]L. Lee Knefelkamp, "Introduction," in *Forms of Intellectual and Ethical Development in the College Years: A Scheme*, Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1999), xxxi.

[56]Moore, "Understanding Learning in a Postmodern World," 19 (emphasis added); cf. Moore, "Student and Faculty Epistemology in the College Classroom," 47.

[57]John Dewey, *Democracy and Education* (1916), in vol. 9 of *The Middle Works of John Dewey*, *1899-1924*, ed. Jo Ann Boydston (Carbondale: Southern Illinois University Press, 2008), 344.

[58]R. Albert Mohler, "Truth and Contemporary Culture," in *Whatever Happened to Truth?*, ed. Andreas J Köstenberger (Wheaton, IL: Crossway, 2005), 58; Grant R. Osborne, "Christianity Challenges Postmodernism," in *The Relationship between Epistemology, Hermeneutics, Biblical Theology and Contextualization: Understanding Truth*, ed. Douglas Welker Kennard (Lewiston, NY: E. Mellen Press, 1999), 94.

subject" as the determiner of truth.[59] Even some Christian theologians deny any objective foundation to knowledge.[60]

Bible: Objective truth. In truth, though, the search for truth is not a new one, as people have always been inquiring as to the nature of reality and ultimate truth. A Roman governor in the first century asked a man on trial before him, "What is truth?" "By mocking the question he was able to evade an answer. Clever, but cynical."[61] In this case, the man standing before the Roman governor was Jesus Christ, God in the flesh, who had earlier declared "I am the Truth" (John 14:6). With this statement, Jesus confirms the existence of objective, absolute truth.

The Bible does not argue for, but rather assumes, the existence of truth, and that "truth statements do indeed correspond to what is out there."[62] In the Old Testament, this assumption of the existence of truth is typified in the Wisdom literature, specifically in the writings of Solomon. In the Book of Proverbs, Solomon personifies wisdom as a woman calling out for people to listen to and learn from her (8:1-9:12). In her speech, Lady Wisdom makes the following claim: "Hear, for I will speak noble things, and from my lips will come what is right, for my mouth will utter truth; wickedness is an abomination to my lips" (8:6-7). In other words, what she is saying accords with the truth, presupposing that a standard of truth exists. In the Book of Ecclesiastes, Solomon describes his mission to discover and teach truth at the end of the book: "Besides being

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[59]Peter Lampe, *New Testament Theology in a Secular World: A Constructivist Work in Philosophical Epistemology and Christian Apologetics*, trans. Robert L. Brawley (New York: T & T Clark, 2012), 15–16.

[60]David Heywood, *Divine Revelation and Human Learning: A Christian Theory of Knowledge* (Burlington, VT: Ashgate, 2004), 103.

[61]Robert Runcie, *Theology, the University and the Modern World*, ed. Paul A. B. Clarke and Andrew Linzey (London: Lester Crook Academic, 1988), 17.

[62]David F. Wells, *The Courage to Be Protestant: Truth-Lovers, Marketers, and Emergents in the Postmodern World* (Grand Rapids: Eerdmans, 2008), 80.

wise, the Preacher also taught the people knowledge, weighing and studying and arranging many proverbs with great care. The Preacher sought to find words of delight, and uprightly he wrote words of truth" (Eccl 12:9-10).

This same assumption of the existence of objective, absolute truth can be traced throughout the New Testament as well, specifically in the writings of John, in which truth is a major motif.[63] John records Jesus, in His High Priestly Prayer the night before His crucifixion, praying to the Father, "Sanctify them in the truth; your word is truth" (John 17:17). There can be no doubt that Jesus believed in the existence of truth (cf. John 5:33; 8:32, 40, 44, 45, 46; 16:13; 18:37).

What is the nature and source of eternal truth? The Bible tells us that Yahweh is "the God of truth" (Isa 65:16). He is the only true God (John 17:3; cf. Jer 10:10-11; 1 John 5:20). All other so-called gods are false gods; God is the only one who conforms to what God truly should be. Because God is the God of truth, he also speaks truth. Yahweh himself asserts, "I the Lord speak the truth; I declare what is right" (Isa 45:19). By contrast, the devil is "the father of lies" who "has nothing to do with the truth, because there is no truth in him" (John 8:44). Vern Poythress states well, "Truth belongs to God. He is its author. Ultimately all truth is truth in the mind of God. All truth whatsoever drives from him."[64]

Moreover, in John's Gospel truth is inseparably tied to the person of Jesus Christ, who is the Truth (John 1:14, 17; 14:6). As Jesus told Pilate in response to Pilate's question, "What is truth?", the very reason Jesus was born and came into the world was

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[63]In the Gospel of John there are forty-eight instances of the *aleth-* word group as opposed to only ten in the Synoptic Gospels combined (Andreas J. Köstenberger, "'What Is Truth?' Pilate's Question in Its Johannine and Larger Biblical Context," in *Whatever Happened to Truth?*, ed. Andreas J Köstenberger [Wheaton, IL: Crossway, 2005], 20, 30).

[64]Vern S. Poythress, *Inerrancy and Worldview: Answering Modern Challenges to the Bible* (Wheaton, IL: Crossway, 2012), 131.

to bear witness to the truth that he heard from God (John 18:37; cf. 3:11, 32; 7:7; 8:14, 40). Therefore, "the fundamental truth about reality is truth about a *person*," Jesus Christ.[65] When Jesus returned to heaven, he sent the Holy Spirit—the Spirit of Truth—to guide believers into all truth (John 14:16-17; 15:26; 16:12-15; 1 John 5:6).

The Perry Scheme, therefore, is built upon a very different understanding of reality than that which is presented in the Bible.

Knowledge and Certainty

A second area of divergence between Perry and the Bible is seen in the realm of knowledge and certainty. The view of Perry is that all knowledge is contextual and uncertain, while the Bible asserts that people can "know the truth."

Perry: Contextual knowledge and uncertainty. Perry compared the early positions of his Scheme to Adam and Eve's state of innocence in the Garden of Eden when they believed that the Absolute (absolute truth) could only be derived from the Authority, before their eyes were opened to "the knowledge of values and the potential of judgment."[66] Students are expected to grow away from this naïve understanding of knowledge, however. In later positions, knowledge is contingent on circumstance and relative to environment.[67]

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[65]Alvin Plantinga, "Reason and Belief in God," in *Faith and Rationality: Reason and Belief in God*, ed. Alvin Plantinga and Nicholas Wolterstorff (Notre Dame, IN: University of Notre Dame Press, 1983), 18.

[66]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 67. Perry often compared progression away from Position 1 as leaving Eden (ibid., 68, 73, 74, 83, 133, 197; Perry, "Cognitive and Ethical Growth," 80; Perry, "Different Worlds in the Same Classroom," 476).

[67]Perry, "Cognitive and Ethical Growth," 80.

Additionally, progression in the Perry Scheme involves first wrestling with, and then coming to accept, uncertainty.[68] "Knowledge" is uncertain and held loosely and tentatively.[69] As Perry says, "It is better to have a dubious truth than a false certainty."[70]

Bible: Knowledge of the truth. An examination of the Bible, however, reveals that knowledge of the truth is possible. Solomon begins the Old Testament Book of Proverbs with the following purpose statement:

> The proverbs of Solomon, son of David, king of Israel: To know wisdom and instruction, to understand words of insight, to receive instruction in wise dealing, in righteousness, justice, and equity; to give prudence to the simple, knowledge and discretion to the youth—Let the wise hear and increase in learning, and the one who understands obtain guidance, to understand a proverb and a saying, the words of the wise and their riddles. The fear of the Lord is the beginning of knowledge; fools despise wisdom and instruction. (Prov 1:1-7)

From this purpose statement, it can be seen that Solomon wrote the Book of Proverbs[71] to help his son (1:8, 10, 15; 2:1; 3:1, 11, 21; 4:10, 20; 5:1, 20; 6:1, 3, 20; 7:1; 19:27; 23:15, 19; 23:26; 24:13, 21; 27:11) and others "know wisdom" (1:2). In other words, such knowledge is possible. Truth, along with "wisdom, instruction, and understanding," can be obtained, and are so important that they should be bought and not sold (Prov 23:23). Proverbs concurs that "the wisdom through which Yahweh governs the world is, within certain definite limits, accessible to the mind of man. Reality is knowable" (cf. Prov 2:1-5; 14:2; 28:5).[72]

Similarly, the New Testament Gospel of John records Jesus saying, "If you abide in my word, you are truly my disciples, and you will know the truth, and the truth

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[68]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 97.

[69]Perry, "Cognitive and Ethical Growth," 96.

[70]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 120.

[71]Solomon is the primary author of the Book of Proverbs, even as others contributed to it.

[72]Alan W. Jenks, "Theological Presuppositions of Israel's Wisdom Literature," *Horizons in Biblical Theology* 7, no. 1 (1985): 47.

will set you free." (John 8:31-32). In fact, God himself "desires all people to be saved and to come to the knowledge of the truth" (1 Tim 2:4). It is indisputable from these and other New Testament statements (cf. 2 Tim 2:25; 3:7; Titus 1:1; Heb 10:26; 2 John 1) that objective, absolute truth can indeed be known.

Theologians through the centuries, from Augustine[73] to Aquinas[74] to Alston,[75] have taught that this ability to know and understand, to think rationally, is an essential part of the *imago dei* that sets mankind apart from the animals.[76] God created human beings as rational creatures, and, as J. P. Moreland puts it, "As humans, we live and ought to live our lives not merely by truth but by knowledge of truth. Knowledge of truth gives us confident trust and access to reality.[77] Additionally (in what is especially relevant to this examination of epistemological development in Christian institutions of higher education), Moreland calls educators to "impart and defend knowledge of the truth":

> Moreover, as those called to be teachers and scholars for the church and, indeed, for the unbelieving world, we are called not only to impart and defend truth, but to impart and defend knowledge of truth and, even more, to impart and defend knowledge of truth as knowledge of truth. This entails that we must impart and defend the notion that we do, in fact, have knowledge of important spiritual and

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[73]Augustine, *On Genesis: A Refutation of the Manichees, Unfinished Literal Commentary on Genesis, the Literal Meaning of Genesis*, ed. John E Rotelle, trans. Edmund Hill, vol. 5 of *The Works of St. Augustine: A Translation for the 21st Century* (Hyde Park, NY: New City Press, 2002), 313. I am indebted to Francis Martin for this reference (Francis Martin, "The Word at Prayer: Epistemology in the Psalms," in *The Bible and Epistemology: Biblical Soundings on the Knowledge of God*, ed. Mary Healy and Robin Parry [Colorado Springs: Paternoster, 2007], 49).

[74]Thomas Aquinas, *The Summa Theologiae*, trans. Fathers of the English Dominican Province, PC Study Bible electronic database (Seattle: Biblesoft, 2006), I, Q. 93, Art. 4, 6. Thanks to William P. Alston for this reference (William P. Alston, "On Knowing That We Know: The Application to Religious Knowledge," in *Christian Perspectives on Religious Knowledge*, ed. C. Stephen Evans and Merold Westphal [Grand Rapids: Eerdmans, 1993], 51).

[75]Alston, "On Knowing That We Know: The Application to Religious Knowledge," 50–51.

[76]The naturalistic assumptions underlying the Perry Scheme can be seen in his reference to man as a "higher animal" and his subsequent statement, "Man is distinguished from the ape not by his reason, at which the ape is often no slouch, but by his metareason, which is a blessing with which the ape is presumably uncursed" (Perry, *Forms of Intellectual and Ethical Development in the College Years*, 37).

[77]J. P. Moreland, "Truth, Contemporary Philosophy, and the Postmodern Turn," in *Whatever Happened to Truth?*, ed. Andreas J. Köstenberger (Wheaton, IL: Crossway, 2005), 91.

> ethical truths. Among other things, this gives confidence in truth and knowledge to those we serve. Thus, we are irresponsible not simply if we fail to achieve knowledge of reality; we are doubly irresponsible if we fail to impart to others knowledge as knowledge.[78]

Christians, then, are summoned to know the truth, live in light of the knowledge of the truth, and impart the knowledge of the truth to others.

Nevertheless, certain voices in the Christian community are denying that Christians can know anything with certainty, because our knowledge "is always partial, flawed, slanted by personal and cultural idiosyncrasies.[79] On the contrary, "God wants us to be certain of the things about which He has instructed us."[80] David Wells writes, "It is not immodest, nor arrogant, to claim that we know, when what we know is what God has given us to know through His Word."[81]

However, the incomprehensibility of God (Isa 55:8-9; Rom 11:33), the limits of human understanding, and noetic effects of sin on Christians' ability to properly interpret Scripture should lead to epistemic humility. Christians do not know the sum total of truth, but rather "progress toward truth with the help of numerous God-given tools."[82]

The Source of Knowledge

Another area of divergence between the Perry Scheme and the Bible relates to the source of knowledge. The assumption of the Perry Scheme is that truth, knowledge,

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[78]Ibid., 91–92.

[79]Daniel Taylor, *The Myth of Certainty: The Reflective Christian & the Risk of Commitment* (Downers Grove, IL: InterVarsity Press, 1999), 78, 92.

[80]John M. Frame, *The Doctrine of the Knowledge of God*, Kindle e-book, vol. 1 of *A Theology of Lordship* (Phillipsburg, NJ: Presbyterian and Reformed, 1987), loc. 1784–85.

[81]Wells, *The Courage to Be Protestant*, 77–78.

[82]Mark E. Henze, "Re-Examining and Refining Perry: Epistemological Development from a Christian Perspective," *Christian Education Journal* 3, no. 2 (2006): 274.

learning, and meaning come from within a person, while the Bible teaches they originate with God.

Perry: Personal meaning-making. A key philosophical foundation of the Perry Scheme is personal meaning-making, which is the notion that truth is found and learning happens through experience as individuals interact with their environments and "make meaning."[83] According to Perry, the purpose of students is to "find those forms through which they may best understand and confront with integrity the nature of the *human condition*."[84] The "forms" students are to find are "the structures which the students explicitly or implicitly impute to their world, especially those structures in which they construe the nature and origins of knowledge, value, and of responsibility."[85] Forms refer to the way students make sense of their world and environment, providing a framework ("armature or skeleton") to the way they interpret, categorize, and organize their experiences.[86] Perry argued there are two "pools" of forms, one internal and one external, upon which students draw in order to interpret any particular experience. The internal pool consists "of those forms or orderings a person brings with him to the moment as expectancies," while the external pool consists "of those forms humanly discernible as 'inherent in the environment' of the experience (physical, social, internal, etc.)."[87]

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[83]Although the term does not appear in Perry's writings, this concept has come to be called "constructivism," or more specifically, "psychological constructivism" (D. C. Phillips, "An Opinionated Account of the Constructivist Landscape," in *Constructivism in Education: Opinions and Second Opinions on Controversial Issues*, ed. D. C. Phillips [Chicago: The National Society for the Study of Education, 2000], 7).

[84]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 226 (emphasis added).

[85]Ibid., 1.

[86]Ibid., 45–46; Perry, "Different Worlds in the Same Classroom," 475.

[87]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 46.

Perry, drawing upon Piaget and Dewey, understood learning to take place as the student assimilates the external forms of the experience to the internal forms of expectancies and accommodates the internal forms of expectancies to the external forms of the experience.[88] Learning is, in this sense, experiential and constructive, as the student creates new cognitive forms in response to his environment. The crux of the Perry Scheme is when a student moves from multiplicity to relativism and becomes "a maker of meaning."[89] He explains,

> Here the correction from "*what* they want" to "the *way* they want you to think" signals the discovery of the articulation of the "concrete" with the "complex" in "weighing" relationships—a mode of thought that is the structural foundation of Relativism. The weighing of "more than one factor," or, as this student later explained, "more than one *approach* to a problem," forces a comparison of patterns of thought—that is, thinking about thinking. The person, previously a *holder* of meaning, has become a *maker* of meaning. . . . In their rebirth *they experience in themselves the origin of meanings, which they had previously expected to come to them from outside.*[90]

Therefore, learning for Perry is not a knowledge dump from an external source into the brain of the student, but a participatory experience whereby the student makes meaning and constructs knowledge through interaction with his environment.

Bible: Divine revelation. According to the Bible, knowledge of the truth comes not from within oneself, but from an external source—via divine revelation. If truth originates with God, we can only know it if he reveals it to us.[91] The word "revelation" is from the Latin *revelare*, meaning "to remove the veil," and denotes the

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[88]Ibid.; Perry, "Cognitive and Ethical Growth," 108.

[89]Note the title of Perry's 1981 article, "Cognitive and Ethical Growth: *The Making of Meaning*" (emphasis added); cf. William S. Moore, "The Learning Environment Preferences: Exploring the Construct Validity of an Objective Measure of the Perry Scheme of Intellectual Development," *Journal of College Student Development* 30, no. 6 (1989): 504; Moore, "Student and Faculty Epistemology in the College Classroom," 49.

[90]Perry, "Cognitive and Ethical Growth," 87, 92.

[91]Frame, *The Doctrine of the Knowledge of God*, loc. 614.

unveiling of something once hidden.[92] Theologically it refers to God uncovering, or making known, to mankind truths about himself, themselves, and the world.

The concept that knowledge of the truth comes from God is established in the Old Testament Wisdom literature. In the Psalms, David recognizes God alone can reveal the truth to him, and cries out, "Lead me in your truth and teach me" (Ps 25:5), "Send out your light and your truth; let them lead me" (Ps 43:3), "Teach me your way, O Lord, that I may walk in your truth" (Ps 86:11), and "I am your servant; give me understanding, that I may know your testimonies" (Ps 119:125). David also equates God's Word with truth: "The sum of your word is truth, and every one of your righteous rules endures forever" (Ps 119:160). In Proverbs, Lady Wisdom describes her origin in this way: "The Lord brought me forth as the first of his works" (Prov 8:22 NIV). O'Dowd writes concerning Lady Wisdom in Proverbs 8, "Because of her nearness to God and his creative acts, Wisdom is able to offer to humanity an unparalleled access to his view of reality and the knowledge that is true. The ultimate consequence of the interplay of these metaphors is that Yahweh is the Creator and sole source of true knowledge."[93]

The necessity of divine revelation for human knowledge of the truth is underscored in the New Testament. According to John, people exist in a state of epistemic darkness (blindness) which can only be overcome by the light of divine illumination and communication centered in the person of Jesus Christ, who is the Light of the World and the Word of God (1:1-18; 3:19-21; 8:12; 9:4-5; 11:9-10; 12:35-50).[94]

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[92]Thomas D. Sullivan and Sandra Menssen, "Revelation and Miracles," in *The Cambridge Companion to Christian Philosophical Theology*, ed. Charles Taliaferro and Chad V. Meister, Cambridge Companions to Religion (New York: Cambridge University Press, 2010), 201.

[93]Ryan P. O'Dowd, "A Chord of Three Strands: Epistemology in Job, Proverbs and Ecclesiastes," in *The Bible and Epistemology: Biblical Soundings on the Knowledge of God*, ed. Mary Healy and Robin Parry (Colorado Springs: Paternoster, 2007), 72.

[94]Chris Bennema, "Christ, the Spirit and the Knowledge of God: A Study in Johannine Epistemology," in *The Bible and Epistemology: Biblical Soundings on the Knowledge of God*, ed. Mary Healy and Robin Parry (Colorado Springs: Paternoster, 2007), 110–14.

Paul, receiving his message by divine revelation, also contended that the secret things of God cannot be understood by man in their natural state; they are only understood by those who have "received" God's Spirit, as He reveals and teaches these spiritual truths (1 Cor 2:6-16). Paul made clear that the Gospel message he preached and wrote was not his own, but one he had "received" (1 Cor 15:1-5).

By divine revelation it can be understood that true knowledge is centered on the knowledge of God that comes through a relationship with God. Knowledge of God is a key theme running throughout the Old Testament. God chose his covenant people Israel and performed his mighty acts before them so that they would know that he is Yahweh their God (Exod 6:7; 10:2; 16:12; 29:46; Deut 29:6; 1 Kgs 20:13, 28; Isa 49:23; Jer 24:7; Ezek 5:13; 6:7, 10, 13, 14; 7:4, 9, 27; 11:10, 12, 15, 16, 20; 13:9, 14, 21, 23; 14:8; 15:7; 16:62; 17:21, 24; 20:12, 20, 26, 38, 42, 44; 21:5; 22:16, 22; 23:49; 24:24, 27; 25:5, 7, 11, 17; 26:6; 28:24, 26; 29:16, 12; 33:29; 34:27, 30; 35:4, 9, 12, 15; 36:11, 23, 36, 38; 37:6, 13, 14, 28; 38:23; 39:6, 7, 22, 28; Joel 3:17). The Hebrew word "know," *yada*, "connotes concrete personal experience,"[95] and so the knowledge God desires is one of personal relationship.[96] This is why God was so offended that both his people and their leaders did not know him (Jer 2:8; 4:22; 9:3, 6; Hos 4:1)—he wanted them to know him more than he wanted their burnt offerings (Hos 6:6). Estes writes concerning the importance of the knowledge of God in Proverbs 1-9:

> Towering above all of the other goals of education in Proverbs 1-9 is the ultimate prize of the knowledge of God. The fear of Yahweh is the beginning of wisdom (Pr. 9:10), and it is also the consummate end of wisdom (2:5). Education, then, should produce in the learner more than just a sense of achievement; it should also cultivate reverence for Yahweh and an intimate personal fellowship with him.[97]

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[95]Mary Healy, "Knowledge of the Mystery: A Study of Pauline Epistemology," in *The Bible and Epistemology: Biblical Soundings on the Knowledge of God*, ed. Mary Healy and Robin Parry (Colorado Springs: Paternoster, 2007), 141.

[96]Heywood, *Divine Revelation and Human Learning*, 1.

[97]Estes, *Hear, My Son*, 84.

O'Dowd also underscores the importance of the knowledge of God based on a relationship with God in the Old Testament wisdom literature:

> Proverbial knowledge, therefore, is not a rationalistic or empiricist project of assembling scientific facts. Rather it is a theological search for meaning which reacts responsively or reflectively to a religious encounter with Yahweh. Wisdom acts after, and because of, a divine encounter—not before it.[98]

The importance of the knowledge of God that comes through a relationship with God is also seen in the New Testament. Jesus, in his high priestly prayer in the Garden of Gethsemane on the night before his death, said, "And this is eternal life: that they know you the only true God, and Jesus Christ whom you have sent" (John 17:3). This statement reveals that although there is a sense in which God is known to all (Rom 1:21), "in a more profound sense, only believers know God, only Christians have a knowledge of God that is the essence of eternal life."[99] Unbelievers suppress God's truth by their unrighteousness and exchange the truth for a lie (Rom 1:18-25). Martin says, "To move from an implicit knowledge of God to an interpersonal knowledge of him requires faith, an entrusting of oneself to him and an acceptance of what he says."[100] Therefore, biblical faith is the "necessary ingredient" of true knowledge,[101] as "without faith it is impossible to please him, for whoever would draw near to God must believe that he exists and that he rewards those who seek him" (Heb 11:6).

However, the faith required to know God is not innate to mankind, nor can it be produced by human effort. God not only wants us to know him, but also gives us the ability to know him.[102] This happens through the new birth, which, according to the

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[98]O'Dowd, "A Chord of Three Strands," 67.

[99]Frame, *The Doctrine of the Knowledge of God*, loc. 299.

[100]Martin, "The Word at Prayer," 50.

[101]Esther L. Meek, *Longing to Know*, Kindle e-book (Grand Rapids: Brazos Press, 2003), 173. I am indebted to Trentham for this reference.

[102]Schindler, "Mystery and Mastery," 185.

Gospel of John, is necessary for people to truly know God (John 3:1-15).[103] True knowledge involves more than assent to certain facts; it also involves a "knowing belief,"[104] and this belief must be in the personification of Truth, Jesus Christ. To believe in Jesus is to believe in the Truth, and to reject Jesus is to reject the Truth. Augustine emphasizes the priority of faith before reason with his oft-repeated dictum in his commentary on John 7:14-18: "Understanding is the reward of faith. Therefore do not seek to understand in order to believe, but believe that thou mayest understand."[105] Calvin famously begins his *Institutes of the Christian Religion* with the statement, "Wisdom, in so far as it ought to be deemed true and solid Wisdom, consists almost entirely of two parts: the knowledge of God and of ourselves. But as these are connected together by many ties, it is not easy to determine which of the two precedes and gives birth to the other."[106] Although he argues these two parts "are bound together by a mutual tie,"[107] he also says, "It is evident that man never attains to a true self-knowledge until he has previously contemplated the face of God, and come down after such contemplation to look into himself."[108] In the same vein, Vanhoozer reminds us that God's revelation as contained in His Word is not only propositional, but also personal.[109] The importance of understanding true knowledge as theocentric and relational is concisely summarized by

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[103]Bennema, "Christ, the Spirit and the Knowledge of God," 119.

[104]Ibid., 122.

[105]Augustine, *Homilies on John, Soliliquies*, ed. Philip Schaff, PC Study Bible electronic database, vol. 7 of *A Select Library of the Nicene and Post-Nicene Fathers of the Christian Church* (Seattle: Biblesoft, 2006), Tractate XXIX, 6.

[106]John Calvin, *Institutes of the Christian Religion*, PC Study Bible electronic database (Seattle: Biblesoft, 2006), Book I, Ch. i, sec. 1.

[107]Ibid., Book I, Ch. i, sec. 3.

[108]Ibid., Book I, Ch. 1, sec. 2.

[109]Kevin J. Vanhoozer, "Lost in Interpretation? Truth, Scripture, and Hermeneutics," in *Whatever Happened to Truth?*, ed. Andreas J. Köstenberger (Wheaton, IL: Crossway, 2005), 124.

Rae: "The biblical writers universally presume that personal relationship with God is the indispensable condition of knowledge."[110]

It is apparent, then, that in contrast to theologians like Peter Lampe, who assert that "the concept of revelation cannot serve as an epistemological starting point,"[111] the Bible indicates just the opposite: human knowledge of the truth is responsive to and reflexive of God's initiatory work. Arthur F. Holmes says as much when he writes, "If a man is to know God for himself, it will be in response to God's personal disclosure which goes beyond the communication and attestation of truth to the application of divine grace to mankind's deepest need."[112] Mary Healy concurs, "Knowing is the human act that follows, and corresponds to, God's act of revealing. . . . For Paul (as for the New Testament in general, deriving from the Old Testament), in human knowledge of God, it is always God who takes the initiative by revealing himself."[113]

In sum, an appropriate rebuttal to the Perryan view that the origin of meaning lies within oneself is provided by the words of Aquinas and Rae: "We know all things in God,"[114] and "Knowledge of God is always revealed knowledge."[115]

The Goal of Epistemological Development

Vitality important to any developmental theory or scheme is its ultimate goal, or *telos*, especially if it is intended to be a prescriptive scheme that describes how development *ought* to happen.[116] Perry himself indicates teleology is perhaps the most

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[110]Rae, "'Incline Your Ear So That You May Live,'" 166.

[111]Lampe, *New Testament Theology in a Secular World*, 133.

[112]Arthur Frank Holmes, *Faith Seeks Understanding: A Christian Approach to Knowledge* (Grand Rapids: Eerdmans, 1971), 161–62.

[113]Healy, "Knowledge of the Mystery," 137.

[114]Aquinas, *The Summa Theologiae*, 1, Q. 12, Art. 11, ad. 3.

[115]Rae, "'Incline Your Ear So That You May Live,'" 162.

[116]Perry, "Different Worlds in the Same Classroom," 480. Balswick, King, and Reimer note

important lens through which to analyze his Scheme when he writes that the "assumptions of modern contextualistic pragmatism" are "most evident in the priority given to purpose."[117] The divergence between the Perry Scheme, which is anthropotelic, and a biblical view of epistemological development, which is Christotelic, is sharpest at this point.

Perry: Anthropotelic. According to Perry, the later positions of his Scheme are better in the sense that they "express an optimally congruent and responsible address to the present state of *man's predicament*."[118] In other words, "The students' ultimate purpose is postulated to be to find those forms through which they may best understand and confront with integrity the nature of *the human condition*."[119] Students who were rated in the highest positions of the Perry Scheme expressed commitment to self-identity and fulfillment, to being "the kind of person I am."[120] In the "rebirth" from dualism to relativism, students "experience in themselves the origin of meanings, which they had previously expected to come to them from outside."[121] One student in his junior year put it this way,

> Is there any way to tell when one career is better than another? You can state it in different ways, but it finally comes down to the fact that what you finally decide, you will have to decide independently of any absolute merit that some career has. You have to decide solely *in terms of your own interest*. *(Pause, speaks very softly)* But you accept that.[122]

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the difficulty developmental psychology has in addressing issues of teleology, or optimal development (Jack O. Balswick, Pamela Ebstyne King, and Kevin S. Reimer, *The Reciprocating Self: Human Development in Theological Perspective* [Downers Grove, IL: InterVarsity Press, 2005], 29).

[117]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 226.

[118]Ibid., 50 (emphasis added).

[119]Ibid., 226 (emphasis added).

[120]Ibid., 171.

[121]Perry, "Cognitive and Ethical Growth," 92.

[122]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 189.

The same student in his senior year said this,

> I used to think that you could evaluate decisions in terms of a right and a wrong. The right thing to do was associated with the more difficult path, and the wrong was associated with the easy way out. And I think lately I've been somehow rejecting this. I don't know. Not specifically, but more or less discarding the idea that, that you can make right and wrong decisions. You simply make decisions, and whichever way you go there's not going to be any violent repercussion. . . . If there is no clear right and wrong, then I think what you have to do is to reject the idea of right and wrong, and find out what *you* want. You have to be introspective, in the sense that you try to establish the way *you* want to live, carefully. . . . Once you find out where you stand, if you ever can find out where you stand, then you just have to say, if you're confronted with a person who doesn't do things like you do, "Well, *he* has decided to do things like this—*I wouldn't*. I don't think it's *right*." And yet you have to come back and say, "But this is only *subjective*—this is only my own way of looking at things. I can't say, in absolute terms, that this is immoral. . . . All that there is left of the idea is a kind of vague feeling that maybe this is a better way to do things; that this is for *me* really *the* way to do things."[123]

Thus for Perry, mankind's highest goals and aspirations are not "thinking God's thoughts after him," in the words of German astronomer Johannes Kepler, but rather thinking mankind's thoughts of himself. Perry sees the world, and the goal of epistemological growth, from an anthropotelic perspective.

Bible: Christotelic. The Word of God calls Christians not to anthropotelic, but to Christotelic epistemological development—growth that finds its *telos* in Christ.[124] As mentioned above, Christians are to follow Christ's example by growing in wisdom (Luke 2:52). They are commanded to renew their minds (Rom 12:2; Eph 4:23), which refers to a complete change of the mind in order to bring it in conformity to the mind of Christ (cf. Phil 2:5). They are instructed to "grow in the grace and knowledge of our Lord and Savior Jesus Christ" (2 Pet 3:18). This Christotelic focus stands in contrast to ancient,

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[123]Ibid., 192–93, 195.

[124]For the term "Christotelic," see Peter Enns, *Inspiration and Incarnation: Evangelicals and the Problem of the Old Testament*, Kindle e-book (Grand Rapids: Baker Academic, 2005), loc. 3033; G. K. Beale, *The Erosion of Inerrancy in Evangelicalism: Responding to New Challenges to Biblical Authority*, Kindle e-book (Wheaton, IL: Crossway, 2008), 86; David Stephen Schrock, "A Biblical-Theological Investigation of Christ's Priesthood and Covenant Mediation with Respect to the Extent of the Atonement" (Ph.D. diss, The Southern Baptist Theological Seminary, 2013), 50.

modern, and postmodern notions, including those of the Perry Scheme, in which the goal of epistemological growth is self-improvement, self-realization, and self-actualization.[125] The foundational presupposition of Christotelic growth is stated by Rae:

> Central too to the biblical epistemology is the irreducible link between knowing and personal formation. The knowing process does not leave us intact but moulds us toward a greater conformity with what is the case. We are works in progress. Our minds and hearts are being shaped by the Spirit of God to a true conformity with Jesus Christ in and through whom all things are created, and who will in due time present the completed creation to the Father. Wherever the truth is learned, therefore, those who learn are being gathered, provisionally and partially as yet, into the life of Christ.[126]

This Christotelic focus of epistemological growth can be found in the earliest printed rules of the oldest institution of higher learning in the United States: "Let every Student be plainly instructed, and earnestly pressed to consider well, the maine end of his life and studies is, to know God and Jesus Christ which is eternal life."[127] Notably, the school that printed this rule in 1646 is the same school at which Perry conducted his research—Harvard University. Over the course of three hundred years, epistemological development at Harvard has shifted from being Christotelic to being anthropotelic.

The Path of Epistemological Development

A developmental scheme must not only describe its ultimate goal, but also the path one must undertake to reach that goal. For Perry, it is the path of contextualized meta-thinking, whereas in Scripture, it is the path of Word- and Spirit-guided wisdom.

Perry: Contextualized meta-thinking. It has already been noted that Perry was fond of describing his scheme as "an epistemological Pilgrim's Progress."[128] He

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[125]Schindler, "Mystery and Mastery," 193; John Dewey, *A Common Faith* (New Haven, CT: Yale University Press, 1934), 19; Perry, *Forms of Intellectual and Ethical Development in the College Years*, 171.

[126]Rae, "'Incline Your Ear So That You May Live,'" 179.

[127]Bernard C. Ewer, *College Study and College Life* (Boston: Richard C. Badger, 1917), 18.

[128]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 49; cf. 41; Perry,

defines the path, or bridge, to lifelong epistemological development in this way, "By whatever means it is discovered, the bridge to the new world of comparative thought lies in the distinction between *an* opinion (however well "expressed") and a *supported* opinion."[129] This kind of thinking can be characterized as contextualized meta-thinking.

The commitment to relativism for which the higher positions of the Perry Scheme call is "an act in an examined, not in an unexamined, life."[130] The progression is from thinking to thinking-about-thinking, which is referred to as meta-reason, meta-cognition, or meta-thinking.[131] The importance placed on meta-thinking can be readily seen from the following quotations:

> Perhaps the most critical point in most of the records comes at the moment where the student has indeed discovered *how to think further, how to think relatively and contingently, and how to think about thinking*. For here it is up to him in what crucial spirit he is to employ this discovery.[132]
>
> The liberally educated man, be he a graduate of college or not, is one who has learned to think about even his own thoughts, to examine the way he orders his data and the assumptions he is making, and to compare these with other thoughts that other men might have. If he has gone the whole way, as most of our students have done, he has realized that he thinks this way not because his teachers ask him to but because this is how the world "really is," this is man's present relation to the universe. From this position he can take responsibility for his own stand and negotiate—with respect—with other men.[133]
>
> The capacity for *meta*-thought . . . is perhaps the most critical moment in the whole adventure for both student and teacher.[134]

"Cognitive and Ethical Growth," 77, 97.

[129]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 110.

[130]Ibid., 151.

[131]Ibid., 37, 79, 111; Perry, "Cognitive and Ethical Growth," 88.

[132]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 41 (emphasis added).

[133]Ibid., 44 (emphasis added).

[134]Perry, "Cognitive and Ethical Growth," 855.

Moreover, the kind of meta-thinking necessary in Perry's worldview is characterized as contextualistic. It is essential to note that Perry describes his foundational philosophy as "*contextualistic* pragmatism," not relativistic pragmatism.[135] Many people misunderstood Perry's use of the term "relativism," believing it to refer to the common connotation that all truth, morals, and opinions are relative to one's own opinion.[136] However, Perry used the word "multiplicity" to refer to this common understanding of relativism.[137] Knefelkamp asserts that Perry was "vexed" by this misunderstanding, and would explain that "relativism means relative to *what—to something—it implies comparison, criteria, and judgment*!"[138] In later years, when this confusion persisted, Perry would refer to the later positions as "*contextual* relativism." He did this, according to Knefelkamp, "to make the point that contextual relativism, far from being anchorless, was in fact a position that required a great deal of cognitive complexity and intellectual moral courage to investigate and compare things and to make judgments about adequacy or inadequacy, appropriateness or inappropriateness."[139]

Perry's Pilgrim's Progress, then, is along a pathway of contextualistic meta-thinking—judgment based on careful consideration of contingency, context, and consequences.[140]

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[135]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 226.

[136]For this connotation of relativism, see Allan David Bloom, *The Closing of the American Mind: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students* (New York: Simon and Schuster, 1987), 25.

[137]Perry, "Cognitive and Ethical Growth," 85.

[138]Knefelkamp, "Introduction," xix–xx.

[139]Ibid., xx.

[140]Moore, "The Learning Environment Preferences," 504. The dependence on Deweyan philosophy is clearly seen here. Dewey encouraged "reflective thought" in order to "transform a situation in which there is experienced obscurity, doubt, conflict, disturbance of some sort, into a situation that is clear, coherent, settled, harmonious" (John Dewey, *How We Think* [1933], in vol. 8 of *The Later Works of John Dewey, 1925-1953*, ed. Jo Ann Boydston [Carbondale: Southern Illinois University Press, 2008], 195). Dewey used thirty different terms to describe this kind of "discriminating judgment" and "careful appraisal" (Carol Rodgers, "Defining Reflection: Another Look at John Dewey and Reflective Thinking,"

Bible: Word- and Spirit-guided wisdom. The Bible, though, maps out a different path to lifelong epistemological development—Word- and Spirit-guided wisdom. True knowledge is closely aligned in the Old Testament Wisdom literature with the concept of wisdom, which is right knowledge that leads to right living.[141] Wisdom (understanding, insight, etc.) is to be sought after because it both stems from and leads to the fear and knowledge of God (Prov 1:7, 29; 2:1-5; 9:10; 15:33).[142] The biblical concept of wisdom overlaps significantly with Perry's concept of contextualistic metathinking, as wisdom also involves making judgments based on careful consideration of contingency, context, and consequences.[143] Scripture tells us to live according to wisdom, and such judgments are certainly part of wisdom. However, Perry's concept of contextualistic metathinking lacks the means by which to make ultimately wise and proper judgments—the Word of God and the Spirit of God. In this section, first the Word of God and then the Spirit of God are examined as means of growth in wisdom.

Once more the Old Testament Wisdom literature proves instructive, this time regarding the importance of the Word of God as the means of epistemological growth. The Book of Psalms begins with a picturesque description of the kind of man who, like a tree planted by streams of water, is rooted, fruitful, and prosperous. How can a person order his life so that he is spiritually healthy and growing in this way? By delighting in

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Teachers College Record 104, no. 4 [June 2002]: 849; Dewey, *Experience and Nature*, 398). Dewey defined reflective thought (which he also called "criticism") as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further considerations to which it tends" (Dewey, *How We Think*, 118; cf. Dewey, *Experience and Nature*, 430, 432).

[141]W. Jay Wood, *Epistemology: Becoming Intellectually Virtuous*, Kindle e-book, Contours of Christian Philosophy (Downers Grove, IL: InterVarsity Press, 1998), 68; Frame, *The Doctrine of the Knowledge of God*, loc. 700.

[142]Michael V. Fox, "The Pedagogy of Proverbs 2," *Journal of Biblical Literature* 113, no. 2 (July 1994): 238.

[143]Frame, *The Doctrine of the Knowledge of God*, loc. 1812.

the law of the Lord and meditating upon it day and night (Ps 1:1-3). Returning to the analogy of the path, David describes the Word as a lamp that lights the way, guiding him down the road of life (Ps 119:105). According to Proverbs, God's words prove true (Prov 30:5), and whoever despises them will bring destruction on himself (Prov 13:13).

In the New Testament, John records Jesus' emphasis on the Word of God as the means of growth. In Jesus' prayer on the night of his betrayal, he said, "Sanctify them in the truth; your word is truth" (John 17:17). By asking the Father to sanctify the disciples, Jesus is asking Him to "consecrate them entirely to himself,"[144] and the means by which he says this will happen is by God's Word, which is Truth (cf. 2 Tim 2:15). Christians should follow Jesus in upholding God's Word as full and complete truth, free from error,[145] even in the face of those, both Christians and unbelievers, who reject this concept.[146] The role of God's Word in the sanctification process is clearly stated by Peter: "Like newborn infants, long for the pure spiritual milk [of the Word], that by it you may grow up to salvation" (1 Pet 2:2).

Certain theologians, such as David Heywood, argue that because God's revelation must accommodate itself to human understanding and learning, Christians must first look to philosophy and the social sciences to understand "human need and constitution" and to guide epistemological growth before turning to Scripture and theology.[147] However, Calvin taught that because the knowledge of God is suppressed by ignorance (Rom 1:22),[148] God gave us "the light of his Word in order that he might make

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[144]John Calvin, *Calvin's Commentaries*, PC Study Bible electronic database (Seattle: Biblesoft, 2005).

[145]Osborne, "Christianity Challenges Postmodernism," 113.

[146]Andrew Linzey, "On Theology," in *Theology, the University and the Modern World*, ed. Paul A. B. Clarke and Andrew Linzey (London: Lester Crook Academic, 1988), 36–38.

[147]Heywood, *Divine Revelation and Human Learning*, 11, 169–71.

[148]Calvin, *Institutes of the Christian Religion*, Book I, Ch. iv, sec. 1.

himself known unto salvation." Therefore, the Word is like a pair of glasses that "shows us the true God clearly."[149] Christians who want to know God and grow in true knowledge must read, study, and obey the Bible, which has been rightly called the Book of the Knowledge of God.[150] Christians must "listen to" God by reading his Word, because "knowledge of God is not, first of all, the fruit of human industry, but rather of attentiveness."[151] Esther Lightcap Meek writes, "When it comes to knowing God, God's words in Scripture guide and norm my experience."[152] John Frame agrees:

> The truth (and to some extent the content) of Scripture must be regarded as the most certain knowledge that we have. If this knowledge is to be the criterion for all other knowledge, if it is to govern our acceptance or rejection of other propositions, then there is no proposition that can call it into question. Thus when we know God, we know Him more certainly, more surely than we know anything else. When He speaks to us, our understanding of His Word must govern our understanding of everything else.[153]

Christians also come to grow in wisdom not only by means of God's Word, but also by means of the guidance of the Holy Spirit. The Spirit of God appears as a means of sanctifying growth in the Old Testament Wisdom literature in the Book of Job, which teaches the vital role of God's Spirit in obtaining true knowledge: "It is the spirit in man, the breath of the Almighty, that makes him understand"(Job 32:8).[154] In the Psalms, David pleaded with God, "Teach me to do your will, for you are my God! Let your good Spirit lead me on level ground!" (Ps 143:10).

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[149]Ibid., Book I, Ch. vi, sec. 1; David Powlinson, "Cure of Souls (and the Modern Psychotherapies)," in *Care for the Soul: Exploring the Intersection of Psychology and Theology*, ed. Mark R. McMinn and Timothy R. Phillips (Downers Grove, IL: InterVarsity Press, 2001), 35.

[150]R. B. Y. Scott, "Priesthood, Prophecy, Wisdom, and the Knowledge of God," *Journal of Biblical Literature* 80, no. 1 (March 1, 1961): 1.

[151]Rae, "'Incline Your Ear So That You May Live,'" 161.

[152]Meek, *Longing to Know*, 105.

[153]Frame, *The Doctrine of the Knowledge of God*, loc. 651–54.

[154]Francis I. Andersen, *Job: An Introduction and Commentary*, Tyndale Old Testament Commentaries 13 (Downers Grove, IL: Inter-Varsity Press, 1976), 246; John Calvin et al., *Geneva Notes*, PC Study Bible electronic database (Seattle: Biblesoft, 2006).

Likewise in the New Testament, the Gospel of John places a heavy emphasis on the promise, coming, and role of the Holy Spirit in the life of the believer as a means of growth in the knowledge of the truth. Now that the Holy Spirit has come, he guides believers into all truth (John 16:13), testifying to Christ and to the truth of God's Word and the Gospel (John 14:26; 15:26; 16:9-10, 13-15; 1 Cor 2:6-16; 1 Thess 1:5).[155] The Holy Spirit also renews God's children from the inside out, bringing them into conformity to Christ (Rom 8:9-13; 1 Cor 12:13; Titus 3:5). Healy describes the work of the Spirit in the life of the believer in this way,

> Revelation thus involves an ongoing activity of the Spirit within each believer, beyond the initial proclamation and acceptance of the gospel. Whenever the gospel is announced, the Spirit is present, imparting understanding and bringing the truth to life. Following the initial act of conversion, the Spirit brings about a progressively more profound interior enlightenment, within both the individual and the community, as to the reality of the risen Lord and the love of the Father revealed through him (cf. 2 Cor 3:18; Col 1:27-2:3; Eph 1:15-19).[156]

The Holy Spirit convicts Christians of sin and brings them to repentance, helping them change their mind, heart, and actions so that they become more like Christ.[157]

The problem with Perry's contextualistic meta-thinking as the path to epistemological development is not necessarily that it is incorrect, but that it is insufficient. Christians should give careful thought to their ways, but that thought must be Word- and Spirit-guided. The necessity of both the Word and the Spirit in epistemological growth is captured by Meek:

> God meets us in the Word: Scripture is God's authoritatively guiding us to truth about himself, ourselves, and his world. God meets us in the world: not only does the world offer glimpses of his glory and of his mind, but Jesus came into space and time, inaugurating restoration through his life, death, and resurrection. And God meets us within ourselves, as God the Holy Spirit is the one who can and must open our eyes for us to be able to grasp truth.[158]

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[155]Frame, *The Doctrine of the Knowledge of God*, loc. 2086.

[156]Healy, "Knowledge of the Mystery," 139.

[157]Heywood, *Divine Revelation and Human Learning*, 140.

[158]Meek, *Longing to Know*, 195–96.

Summary of the Perry Scheme

From this biblical analysis of the Perry Scheme, it is clear that although there are areas of commonality between the foundational assumptions of the Perry Scheme and biblical teachings, there are also areas of distinct dissimilarity regarding the nature, source, means, and ends of truth, knowledge, and epistemological development. Should these areas of dissimilarity lead Bible college administrators to use caution in incorporating the Perry Scheme to guide Bible college educational philosophy? To begin to answer this question, the unique features, characteristics, and beliefs of Bible colleges must be examined.

Contextual Features of a Bible College Education

Every organization, whether educational or otherwise, can be said to have its own unique culture. Schein defines culture as

> a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.[159]

Another, more succinct, way of defining organizational culture is "the way we do things around here based on our underlying thoughts, values, beliefs, assumptions, and history."

Institutions of higher education, as organizations, each have their own unique culture. However, are there similarities among Bible colleges, aspects of culture that they hold in common with one another, that distinguish them from other institutional contexts? Would these distinctive characteristics uniquely impact the epistemological development of college students attending Bible colleges? These questions require a description of Bible colleges, an examination of the defining characteristics of Bible colleges, and summary of the literature regarding epistemological development in Bible colleges.

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[159]Edgar H. Schein, *Organizational Culture and Leadership*, 4th ed., Kindle e-book, The Jossey-Bass Business & Management Series 2 (San Francisco: Jossey-Bass, 2010), 18.

Description of Bible Colleges

The purpose of Bible colleges has historically been to train young men and women for vocational Christian ministry.[160] This has distinguished them from Christian liberal arts colleges, which emphasize a liberal arts education and "prepare students for a wider variety of vocations than the Bible college."[161] That some contemporary Bible colleges are still guided by this purpose is confirmed by the mission statements published on their web sites.[162] Originally Bible institutes and colleges confined themselves to training men for pastoral and missionary work, but many have since expanded to include the training of both men and women in teacher education, missionary aviation, Christian media, and other fields.[163]

Characteristics of Bible Colleges

In general, Bible colleges are characterized by a bibliocentric and Christotelic focus. From the beginning of the Bible school movement, "the heart of the Bible school curriculum was, naturally enough, study of the Bible."[164] According to Witmer, "Bible

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[160]S. A. Witmer, *The Bible College Story: Education with Dimension* (Manhasset, NY: Channel Press, 1962), 25; David S. Dockery, *Renewing Minds: Serving Church and Society through Christian Higher Education*, rev. and updated ed., Kindle e-book (Nashville: B&H Academic, 2008), 7; C. B. Eavey, *History of Christian Education* (Chicago: Moody Press, 1964), 348; Virginia Lieson Brereton, "The Bible Schools and Conservative Evangelical Higher Education, 1880-1940," in *Making Higher Education Christian: The History and Mission of Evangelical Colleges in America*, ed. Joel A. Carpenter and Kenneth W. Shipps (Grand Rapids: Christian University Press, 1987), 130.

[161]Larry J. McKinney, *Equipping for Service: A Historical Account of the Bible College Movement in North America* (Fayetteville, AR: Accrediting Association of Bible Colleges, 1997), 18.

[162]Faith Baptist Bible College and Theological Seminary, "College and Seminary Mission Statements," 2011, http://www.faith.edu/about-faith/position-statements/college-and-seminary-mission-statements (accessed September 13, 2013); Baptist Bible College and Seminary, "About BBC&S," http://www.bbc.edu/about.asp (accessed September 13, 2013); Boyce College, "History," 2013, http://www.boycecollege.com/discover-boyce/history/ (accessed September 13, 2013).

[163]James E. Watson, "Integrating a Biblical Worldview into Bible College Teacher Education Programs.," *Christian Higher Education* 6, no. 5 (October 2007): 358; McKinney, *Equipping for Service*, 194–95.

[164]Brereton, "The Bible Schools and Conservative Evangelical Higher Education, 1880-1940," 116; McKinney, *Equipping for Service*, 105; John L. Patten, *For the Truth's Sake: A History of Faith Baptist Bible College* (Ankeny, IA: Faith Baptist Bible College, 1979), 62.

institutes-colleges have at least one characteristic in common—they give the Bible the central place in their curricula. A Bible major is required in practically all schools of this type."[165] Bible colleges champion bibliocentric education because they believe the Bible to be the inspired, inerrant Word of God that is the unifying center of all truth and knowledge.[166] For example, the Definition and Direction statement of Faith Baptist Bible College in Ankeny, Iowa, states,

> As a Bible college, Faith purposes that its students evidence a comprehensive working knowledge of the Bible and of the great systematic truths of Scripture. We insist that all of our four-year graduates complete a Bible major. At Faith, we firmly believe that this Bible major is at the heart of the college curriculum and that it should be taught by the core of the college faculty.[167]

Additionally, Bible colleges are characterized by a Christotelic focus. Witmer says well, "Supremely, therefore, the aim of Bible colleges is to bring students into conformity with the image of Christ."[168] Again, the Definition and Direction statement of Faith Baptist Bible College says, "We not only want to fill the minds of our students with knowledge, we want them to follow Christ."[169]

Epistemological Development in Bible Colleges

Witmer states, "Bible college education is concerned with the total development of the student," including his "spiritual, social, and intellectual growth."[170] In spite of this focus, there is little research analyzing how effective Bible colleges are in

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[165]Witmer, *The Bible College Story*, 89; McKinney, *Equipping for Service*, 17.

[166]Witmer, *The Bible College Story*, 89, 94; Eavey, *History of Christian Education*, 348.

[167]Faith Baptist Bible College and Theological Seminary, "Definition and Direction Statement," 2011, http://www.faith.edu/about-faith/position-statements/definition-and-direction-statement (accessed September 17, 2012).

[168]Witmer, *The Bible College Story*, 167.

[169]Faith Baptist Bible College and Theological Seminary, "Definition and Direction Statement."

[170]Witmer, *The Bible College Story*, 139.

personal development in general, and epistemological development in particular. Humphrey studied the influence of educational context on Christian students' personal epistemology by interviewing students at a Bible college and at a public university using a modified version of Schommer's Educational Beliefs Questionnaire based on Hofer and Pintrich's epistemological categories of knowledge.[171] However, the fact that Humphrey's research did not address epistemological *development*, and that the students he interviewed were education rather than pre-ministry majors, diminishes its relevance for the present study. Trentham's study was the first to explore epistemological development among pre-ministry undergraduates, and this present study built upon that research by focusing exclusively on the epistemological development of pre-ministry undergraduates in Bible colleges.

Possible Interactions with the Perry Scheme for Bible Colleges

The above summary of the contextual features of Bible colleges reveals that because they are bibliocentric and Christotelic, their foundational beliefs and educational philosophy are antithetical to those of the Perry Scheme. For example, the first statement of one Bible college's philosophy of education is, "Faith Baptist Bible College recognizes truth as absolute."[172] If it is true that the educational philosophy of many Christian institutions of higher learning is diametrically opposed to the philosophical foundations of the Perry Scheme, how should Christian educators view the appropriation of the Perry Scheme in their educational philosophy and pedagogy? Three primary

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[171]Dennis R. Humphrey, "Influence of Educational Context on Students' Personal Epistemology: A Study of Christ Following Students in a Bible College and a State University" (Ph.D. diss, Trinity International University, 2010), 52, 56.

[172]Faith Baptist Bible College and Theological Seminary, "Philosophy of Education," 2011, http://www.faith.edu/about-faith/position-statements/philosophy-of-education (accessed March 15, 2013); Baptist Bible College and Seminary, "Confession of Faith," http://www.bbc.edu/confession.asp (accessed March 15, 2013); Boyce College, "Beliefs," 2013, http://www.boycecollege.com/discover-boyce/beliefs/ (accessed March 15, 2013).

approaches for Christian interaction with the Perry Scheme can be described: Integration, Wise Appropriation, and Inverse Consistency.

Integration

A common model for the use of secular social science research in Christian education is that of integration. Integrationism affirms the findings from both sources of divine revelation—general revelation as found in creation and special revelation as found in Scripture.[173] Both of these sources must be integrated into any model of human development in order to "develop a complete portrait of formation in Christ."[174] From this perspective, because the Scriptures provide little information regarding the cognitive development of college students, the findings of Perry should be given priority over the teachings of Scripture in constructing appropriate educational philosophy.[175]

An example of this approach is that taken by Butman and Moore, who offer little biblical evaluation—other than including Bible verses that seem to substantiate Perry's findings—before suggesting ways to incorporate these findings into Christian college education.[176]

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[173]James Riley Estep, "Developmental Theories: Foe, Friend, or Folly?" in *Christian Formation: Integrating Theology & Human Development*, Kindle e-book (Nashville: B & H Academic, 2010), loc. 723.

[174]Ibid., 47.

[175]Ibid.

[176]Richard E. Butman and David R. Moore, "The Power of Perry and Belenky," in *Nurture That Is Christian*, Kindle e-book (Wheaton, IL: Victor Books, 1995), loc. 1808–1900. Their suggestions include seeing adult learners' potential for constructing knowledge rather than simply receiving it, encouraging the application of personal values and commitments, and giving students opportunities to articulate their questions and doubts.

Wise Appropriation

Another approach might be termed wise appropriation, as demonstrated by Henze's examination of the Perry Scheme from a Christian perspective.[177] Although Henze does not object to the developmental nature of the Scheme, he finds that its foundational assumptions regarding truth and epistemology do not comport with Scripture. In addition, the *telos* of the Perry Scheme, "a commitment within a worldview of relativism," finds no Scriptural support.

According to Henze, there are at least two implications that Christian educators can glean from Perry. The first is the importance of worldview in a student's epistemological development and the need to promote a biblical worldview commitment. Secondly, a key step in epistemological development is the recognition of the limitations of one's own cognition. In other words, "We need to use humility rather than relativism as a tool in the continuing quest for critical thought and commitment—not as a platform on which to plan our retreat."[178]

Inverse Consistency

Trentham, based on a commitment to the authority and sufficiency of Scripture, provides an evaluation of the Perry Scheme built upon biblical and theoretical principles of cognitive development. He notes that while both biblical and secular developmental theories prescribe a trajectory of positive growth, there is a stark contrast between the teleological focus of biblical human development and that of the Perry Scheme. The goal of Christian maturity according to the Bible is Christlikeness, while the goal of epistemological maturity according to the Perry Scheme is self-actualization.[179]

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[177]Henze, "Re-Examining and Refining Perry."

[178]Ibid., 273.

[179]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 121–24.

Trentham posits the idea of "Inverse Consistency" as a way to interact with the Perry Scheme: although secular social science researchers are able to observe and accurately identify human developmental patterns and behaviors because of God's common grace and the inherent order of God's creation, their ability to correctly interpret those patterns and behaviors is "radically limited" by the noetic effects of sin. "Thus, what is put forth as positive or 'natural' development according to secular research is often a description of a 'pattern of fallenness.'"[180] Because of this, Christian educators must critically interact with rather than wholly integrate Perry's Scheme.[181] Figure 3 pictures Inverse Consistency as it relates to the Perry Scheme, while table 1 details Trentham's application of Inverse Consistency to individual aspects of the scheme.[182]

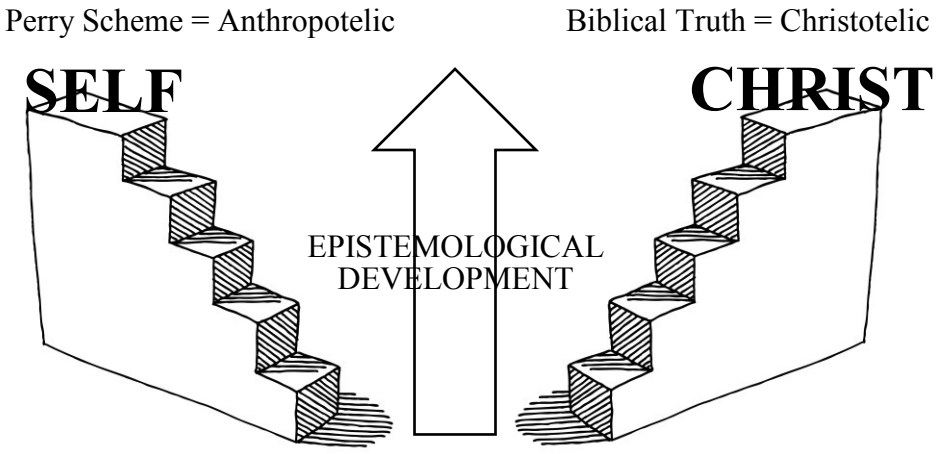

Figure 3. Trentham's principle of Inverse Consistency

[180]Ibid., 121. The term "pattern of fallenness" comes from an unpublished paper by Timothy Paul Jones, "Journey Toward a Biblical Basis for Lifespan Development."

[181]Ibid., 127.

[182]Ibid., 128–29.

Table 1. Applying the principle of Inverse Consistency to the Perry Scheme

Regarding the limits of formal logic and reason . . .	
Perry: Human beings cannot ascertain Truth (capital T), only truth—since absolute Truth is illusory.	Scripture: Human beings cannot ascertain Truth (capital T), only truth—since absolute Truth is solely determined by an almighty, infinite Creator.
There are limits to formal logic and reason, thus *faith commitments are required for knowledge*; belief is basic to knowledge—knowledge is impossible apart from the adoption of an (ungrounded) starting point; faith (conviction) activates belief. [Ref. Polanyi (*Personal Epistemology*), Mavrodes (*Belief in God*) "proved-premise principle" and "termination rule"]	
Perry: Faith commitment requires "arbitrary faith" and represents the "willing suspension of disbelief."	Scripture: Faith commitment requires "revelatory faith" and represents "the assurance of things hoped for; the conviction of things not seen" (Heb 11:1).
Regarding the objectivity of knowledge . . .	
Perry: All knowledge is mediated by context and no truth claim is objectively justifiable; individuals must therefore "make meaning" for themselves.	Scripture (Reformed Epistemology): All knowledge is mediated by general and special revelation and no knowledge is objectively justifiable; individuals must therefore aim to "think God's thoughts after him" (ref. Bavinck).
Regarding contextual knowledge . . .	
Perry: Knowledge is contingent on the unique contexts brought to bear in a naturalistic universe, devoid of ultimate purpose and without a foundational metanarrative—thus knowledge must be continually pursued and "created" by human beings according to internally-based processes of substantiation	Scripture: knowledge is contingent on the unique contexts brought to bear in a God-initiated, God-designed, God-ruled universe, infused with purpose and grounded by the overarching biblical metanarrative—thus knowledge must be continually pursued and "discerned" by human beings according to revelation-based processes of substantiation.
Regarding positive maturation . . .	
Perry: Given naturalistic reality, successful cognitive growth entails increasing, convictional commitment to one's own values and assumptions—formed on the basis of a critical and reflective criteria of assessment—while remaining open to revision of one's worldview through continual testing and discernment in light of alternate, potentially valid truth claims.	Scripture: Given theistic, Christocentric reality, successful cognitive growth entails increasing, convictional commitment to biblical values and assumptions—formed on the basis of a critical and reflective criteria of assessment—while remaining open to revision of one's worldview through continual testing and discernment in light of alternate, potentially valid truth (not Truth) claims.

Table 1—*Continued*. Applying the principle of inverse consistency to the Perry Scheme

Regarding commitment . . .	
Perry: Commitment involves maintaining one's worldview "with universal intent"—i.e., exercising steadfast, convictional faith, acknowledging that one's commitment is the only means by which to genuinely fulfill one's longing for purposeful identity, albeit through commitments that are arbitrary, groundless, and personally beneficial (ref. Polanyi).	Scripture: Commitment involves maintaining one's worldview "with universal intent"—i.e., exercising steadfast, convictional faith, acknowledging that one's commitment is the only means by which to genuinely fulfill one's longing for purposeful identity, through commitments that enable one to "draw near" to God, seek his will, and serve the benefit of his Kingdom (Heb 11:6).
Regarding the "cost" or "risk" of commitment . . .	
Perry: The cost of commitment involves abandoning numerous potentialities by wholeheartedly pursuing one's chosen path, so that one may "find his life" and forge his own unique identity in the world.	Scripture: The cost of commitment involves abandoning numerous potentialities by denying oneself, taking up one's cross, and following Christ, so that one may "find his life" by losing it—and pursue his shared identity with Jesus (Matt 16:24).

Definitions

In order to accord with Trentham's research, this study borrows his definitions for key terms and concepts.[183]

Bible college: Educational institution that entails a Christian environment with regard to curriculum and community, guided and governed by a Protestant-evangelical statement of faith. Curricular offerings solely include ministry-based courses, emphasizing biblical and theological studies. Profession of Christian faith and active church membership are required for admission.

Biblical wisdom: Application of God's revealed truth through the practice of one's daily life, or living skillfully within God's embedded structure.

[183]Ibid., 17–20.

Commitment (uppercase C): A personal affirmation, choice, or decision made—even while acknowledging the contextual nature of knowledge and truth—as a means of defining one's identity and worldview.

Dualism: Form of thinking which conceives of all knowledge and meaning as divided into two realms or absolute categories, e.g., good versus bad, right versus wrong, we versus they; all knowledge is regarded as quantitative.

Evangelical: This study relies on George Marsden's definition of evangelicals and evangelicalism:

> Evangelicals . . . are Christians who typically emphasize 1) the Reformation doctrine of the final authority of Scripture; 2) the real, historical character of God's saving work recorded in Scripture; 3) eternal salvation only through personal trust in Christ; 4) the importance of evangelism and missions; and 5) the importance of a spiritually transformed life.[184]

Inverse consistency: Principle which maintains that secular and biblical models of development observe and prescribe similar patterns, but are inversely oriented with regard to telos (self-identification versus Christlikeness). Secular models observe and prescribe "patterns of fallenness" rather than patterns commensurate with biblical norms.

Metathinking: The formal-operational process of reflectively examining thought, including one's own.

Multiplicity: Personalistic form of thinking which recognizes the existence of a plurality of viewpoints about a particular issue, and assumes that judgments cannot be made among opinions; characterized by the statement, "Anyone has a right to his own opinion."

Perry Scheme: Most common reference to William G. Perry, Jr.'s model of epistemological development.

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[184]George Marsden, "Introduction: The Evangelical Denomination," in *Evangelicalism and Modern America*, ed. George Marsden (Grand Rapids: Eerdmans, 1984), ix–x.

Positions: Stages of development in the Perry Scheme (1-9), representing a continuum of perspectives regarding knowledge, truth, and authority.

Relativism: Form of thinking in which all knowledge and truth is regarded as qualitative and dependent on context for meaning.

Theologically conservative: Theologically conservative Bible colleges are those whose doctrinal statement holds to traditional orthodox doctrines such as the inerrancy of Scripture, the depravity of man, the virgin birth, the bodily resurrection of Christ, and the imminent, bodily return of Christ.

Research Hypothesis

As stated in chapter 1 above, Trentham's research indicated that the average epistemological positioning along the Perry Scheme among these pre-ministry undergraduates was generally consistent with those of typical college students.[185] The fact that Bible college and Christian liberal arts students progressed along Perry's path towards a commitment to relativism, even in the midst of a college environment with a commitment to absolute truth as revealed in Scripture, raises questions about the true nature of Perry's epistemological progress.

It is notable that Perry's research was conducted during a time of transition in American culture in the late 1950s and early 1960s, as Baby Boomers entered a period of growing unrest and increasing relativism on university campuses. According to Perry, "The majority of the faculty [at Harvard] has gone beyond differences of absolutist opinion into teachings which are deliberately founded in a relativistic epistemology."[186]

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[185]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 150. This seems to be consistent with the findings of Pierre Meyer, "Intellectual Development: Analysis of Religious Content," *Counseling Psychologist* 6, no. 4 (1977): 47–50, cited in Patricia M. King, "William Perry's Theory of Intellectual and Ethical Development," in *Applying New Developmental Findings*, ed. Lee Knefelkamp, Carole Widick, and Clyde A. Parker, New Directions for Student Services 4 (San Francisco: Jossey-Bass, 1978), 41–42.

[186]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 80.

By all accounts, this is no less true at modern-day Harvard University than it was in Perry's day.[187] Elsewhere Perry emphasizes the importance of the cultural context upon the students studied: "The course of cognitive and ethical development outlined in our scheme appears to be a constant phenomenon of a pluralistic culture."[188]

Although his research was preliminary and further study is needed, one possible implication of Trentham's research is that at the heart of the Perry Scheme is growth in critical thinking. Trentham's independent analysis revealed development in his structured framework of epistemological priorities and competencies was consistent overall with epistemological development along the Perry Scheme.[189] The most significant correlation was seen when Trentham looked for "a preference for higher-level forms of thinking according to Bloom's Taxonomy."[190] His research indicated students who were rated at higher positions in the Perry Scheme evidenced a preference for higher-level thinking.[191]

Trentham's research may indicate the essential discovery of the Perry Scheme is growth in critical thinking that is manifestly different according to a person's closely held beliefs and according to the environment in which the growth in critical thinking is fostered. In other words, a student without a strong prior commitment to biblical truth and with no connection to a community of like-minded Christians, entering a public university in which "relativism . . . permeates the intellectual and social atmosphere,"[192]

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[187]Ari L. Goldman, *The Search for God at Harvard* (New York: Ballantine Books, 2008), 43; Kelly K. Monroe, "Introduction," in *Finding God at Harvard: Spiritual Journeys of Thinking Christians*, ed. Kelly Monroe Kullberg, rev. ed. (Downers Grove, IL: InterVarsity Press, 2007), 18.

[188]Perry, "Cognitive and Ethical Growth," 98.

[189]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 167.

[190]Chap. 4 will describe Bloom's taxonomy and explore the relationship between it and Perry's concept of contextual relativism.

[191]Ibid., 172–73, 212–13.

[192]Perry, *Forms of Intellectual and Ethical Development in the College Years*, 4.

will come to a "radical reperception of all knowledge as contextualistic and relativistic"[193] that results in "personal commitment [to self-identity and self-fulfillment] in a relative world."[194] However, a student with a strong prior commitment to biblical truth and with a connection to a community of like-minded Christians,[195] entering either the same public university or a Christian liberal arts university or Bible college in which a commitment to absolute truth as revealed in Scripture permeates the intellectual and social atmosphere, will grow in critical thinking that allows him to strengthen his or her personal commitment to biblical truth.

It was hypothesized that this research would find that the average epistemological positioning along the Perry Scheme among the pre-ministry Bible college students interviewed would be generally consistent with those of typical college students.

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[193]Ibid., 121.

[194]Ibid., 38, 64.

[195]See Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 183.

CHAPTER 3
METHODOLOGY

The current study explored the epistemological development of pre-ministry undergraduates attending Bible colleges, using the Perry Scheme as a template and Trentham's dissertation as a foundation. In this chapter, the methodology of the research project is detailed, including explanations of the research question, research purpose statement, research design, population, sample, delimitations, limitations of generalization, instrumentation, and procedures. Because this study was intended to augment Trentham's preliminary research, it duplicated his methodology. Therefore, this chapter relies heavily on the descriptions of the methodology he appropriated in his research project.[1]

Research Question Synopsis

What is the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual and ethical maturity according to the Perry Scheme?

Research Purpose Statement

The purpose of this qualitative, cognitive research study was to explore the relationship between pre-ministry undergraduates' attendance at selected Bible colleges

[1]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 130–39.

and progression through the positions of intellectual and ethical maturity according to the Perry Scheme.

Design Overview

To answer the research question, a qualitative, cognitive study research design was employed. Qualitative research, "a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem,"[2] is useful when a research topic "has never been addressed with a certain sample or group of people,"[3] and so this approach was chosen because little research has been done on the process of epistemological development in pre-ministry undergraduates. Qualitative research uses an inductive approach and focuses on "real-world" phenomena in an attempt to understand the complexity and meaning of those phenomena.[4]

Cognitive studies, a form of qualitative research, involve "the study of the structures and processes involved in mental activity, and of how these structures and processes are learned or how they develop with maturation."[5] The goal of these studies is to "discover how the individual (as representative of a class of similar individuals) represents and solves [a] particular problem"[6] or gives meaning to his or her experiences. In this case, the experience being studied was undergoing undergraduate studies at a Bible college in order to prepare for vocational ministry.

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[2]John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 3rd ed., Kindle e-book (Los Angeles: Sage, 2009), loc. 405–6.

[3]Ibid., loc. 700–701.

[4]Ibid., loc. 409; Paul D. Leedy and Jeanne Ellis Ormrod, *Practical Research: Planning and Design*, 10th ed., Kindle e-book (Boston: Pearson, 2012), 139.

[5]Meredith D. Gall, Walter R. Borg, and Joyce P. Gall, *Educational Research: An Introduction*, 6th ed. (White Plains, NY: Longman, 1996), 595.

[6]David F. Lancy, *Qualitative Research in Education: An Introduction to the Major Traditions* (New York: Longman, 1993), 5.

In order to gain access to the population sample, I accessed the directory of the Association for Biblical Higher Education (ABHE) to find web sites for member Bible colleges.[7] College web sites were explored as to the suitability of the school for the research study and to find the appropriate administrator names and contact information. Administration officials in each of the suitable schools were contacted first by telephone and then with a follow-up email. They were provided with the research profile information and given a request to provide me with names and contact information of potential subjects. In a few cases, the administrators were willing to provide this information, and so I sent an invitation directly to the college's seniors to participate in the study. In most cases, the administrators preferred instead to serve as the gatekeeper for the study participation request, and so I sent an email invitation to the administrator, who passed it along to seniors at the college.

The primary method for data collection was the use of semi-structured interviews "revolving around a few central questions."[8] Interviews can serve to provide both depth and detail to qualitative research by allowing the interviewees to tell their stories.[9] Interviews were conducted using Trentham's customized adaptation of the Perry Interview Protocol.[10] The open-ended questions in this protocol are designed to draw out the recollections of the participants' college experiences as well as the meanings they have attached to their experiences.[11] These open-ended questions were "followed by

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[7]Association of Biblical Higher Education, "ABHE Membership Directory," http://www.abhe.org/pages/NAV-Directory.html (accessed September 15, 2014).

[8]Leedy and Ormrod, *Practical Research*, 154.

[9]Robert Stuart Weiss, *Learning from Strangers: The Art and Method of Qualitative Interview Studies* (New York: Free Press, 1994), 7–11; Robert E. Slavin, *Research Methods in Education*, 2nd ed. (Boston: Allyn and Bacon, 1992), 69.

[10]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 132.

[11]Creswell, *Research Design*, loc. 3957–59; Weiss, *Learning from Strangers*, 1.

more specific 'probes,' which served to focus the interviewees' responses such that they articulated their own perspectives on matters relevant to their epistemological positions and values."[12] Interviews were conducted by telephone with each individual in the sample one-on-one and were electronically recorded for subsequent transcription.

After the interviews were conducted and transcribed, they were submitted to William S. Moore, Director of the CSID, for formal coding and rating.

Population

The population for this study consisted of pre-ministry undergraduates studying at a Bible college. In order to coincide with Trentham's research design, "pre-ministry" undergraduates were those who were active members in a local church and who expressed an intention to pursue vocational Christian ministry.[13]

Sample

In order to generalize from a smaller subset to the larger population of pre-ministry undergraduates at Bible colleges, a purposeful sampling technique was utilized. According to Creswell and Clark, "Purposeful sampling means that researchers intentionally select (or recruit) participants who have experienced the central phenomenon or the key concept being explored in the study."[14] The "purpose" represented by the sample selection is the identification of pre-ministry undergraduate students at selected Bible colleges who indicate their intention to enter vocational Christian ministry.

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[12]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 132.

[13]Ibid.

[14]John W. Creswell and Vicki L. Plano Clark, *Designing and Conducting Mixed Methods Research*, 2nd ed. (Los Angeles: Sage, 2010), 173.

To accomplish this purpose, I contacted colleges that met certain inclusion criteria. First, each college was a Bible college. A Bible college provides a "biblical, vocational, and general education on the college level with the goal of preparing students to minister effectively in Christian service."[15] This criterion was necessary to understand the impact of this specific institutional context on the epistemological development of pre-ministry undergraduate students, as opposed to Christian liberal arts colleges/universities or secular colleges/universities.

Second, each college was evangelical and theologically conservative. In its use of "evangelical," this study appropriated Marsden's definition:

> Evangelicals . . . are Christians who typically emphasize 1) the Reformation doctrine of the final authority of Scripture; 2) the real, historical character of God's saving work recorded in Scripture; 3) eternal salvation only through personal trust in Christ; 4) the importance of evangelism and missions; and 5) the importance of a spiritually transformed life.[16]

Additionally, a theologically conservative Bible college was defined as one whose doctrinal statement holds to traditional orthodox doctrines such as the inerrancy of Scripture, the depravity of man, the virgin birth, the bodily resurrection of Christ, and the imminent, bodily return of Christ.

Multiple Bible colleges were chosen rather than only one in order to sample for range, ensuring increased variation due to differing geography and institutional culture.[17]

The recommended sample size for qualitative studies depends on a variety of factors. Creswell suggests including twenty to thirty individuals for an interview-based grounded theory study to be "well-saturated."[18] Saturation refers to the point at which

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[15]Faith Baptist Bible College and Theological Seminary, "Definition and Direction Statement," http://www.faith.edu/about-faith/position-statements/definition-and-direction-statement (accessed September 17, 2012).

[16]George Marsden, "Introduction: The Evangelical Denomination," in *Evangelicalism and Modern America*, ed. George Marsden (Grand Rapids: Eerdmans, 1984), ix–x.

[17]Weiss, *Learning from Strangers*, 23.

[18]John W. Creswell, *Qualitative Inquiry and Research Design: Choosing among Five*

researchers are unable to observe new themes from the data. Although this was not a grounded theory study, it was interview-based. In light of this, I interviewed thirty students from the selected Bible colleges.

Delimitations

1. This study was delimited to undergraduate students currently enrolled in, or who just recently graduated from, a bachelor's degree program.

2. This study was delimited to undergraduate students at evangelical and theologically conservative, four-year Bible colleges.

3. This study was delimited to undergraduate students at evangelical and theologically conservative Bible colleges who have indicated their intention to enter vocational Christian ministry. For the purpose of this study, students intending to enter vocational Christian ministry refers to students who intend to be pastors, missionaries, church planters, or Christian educators.

4. In accordance with Trentham's research design, this study was delimited "to the observation of college students during their final academic year before graduation, or during the immediate months following graduation. This study thus did not trace epistemological development throughout students' college careers. The interviews did, however, capture students' reflections concerning their undergraduate experiences."[19]

5. This study was delimited to seniors twenty-four years old or younger.

Limitations of Generalization

There were limitations to this research study that may prevent generalization in the following ways.

1. Perry noted that his original research was limited to the specific institutional context in which it was conducted.[20] In a similar way, this research was limited to the specific institutional contexts in which it was conducted.

2. Because this study was delimited to undergraduate students at Bible colleges, the research findings may not apply to students who are not undergraduates or who do not attend Bible colleges.

Approaches, 3rd ed. (Los Angeles: Sage, 2013), 157; Gall, Borg, and Gall, *Educational Research*, 229.

[19]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 133.

[20]William G. Perry, *Forms of Intellectual and Ethical Development in the College Years: A Scheme*, Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1999), 15.

3. Because this study was delimited to undergraduate students at Bible colleges who have indicated their intention to enter vocational Christian ministry, the research findings may not be generalizable to students who do not intend to enter vocational Christian ministry.

4. Because this study was delimited to pre-ministry undergraduate students at evangelical and theologically conservative Bible colleges, this study may not necessarily generalize to students who attend Bible colleges which are not evangelical and theologically conservative.

Instrumentation

The primary means of data gathering for this research study was semi-structured interviews. In order to accord with Trentham's design, there were two research phases, each phase using a specific research instrument.

Dissertation Study Participation Form

In the first phase of the research, a modified version of Trentham's Dissertation Study Participation Form was used in order to confirm potential participants' willingness to participate, ensure their qualification for inclusion in the study, and provide basic information about the interviewee.[21] The first section of the form explained the purpose of the study and asked for the interviewee to affirm his or her agreement to participate in the study. The second section of the form gathered information related to the participants institutional context, vocational intentions, and church affiliation. See appendix 1 for the content of this form.

Interview Protocol

In the second phase of the research, semi-structured interviews were conducted using a modified version of the Structured Perry Interview Format created by William S. Moore and the CSID, Olympia, Washington.[22] This protocol was modified by Trentham

[21]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 134.

[22]Center for the Study of Intellectual Development, "Measure of Intellectual Development," 2003, http://www.perrynetwork.org/interviewprotocols.html (accessed September 18, 2012).

to reflect the nature of the data being collected.[23] Each interview lasted approximately one hour or less and consisted of "predetermined, open-ended questions that were general in nature, followed by more specific 'probes' designed to elicit responses that articulate the interviewee's epistemological positions and values."[24] Appendices 2-4 contain the CSID's standardized Perry Interview Protocol, the CSID's Alternative Perry Interview Protocol, and Trentham's customized interview protocol.

Procedures

Following Trentham's research design and data collection procedures, I conducted the research study through five steps. These steps included: (1) contacting potential participants for the study and confirming their participation by means of the Dissertation Study Participation Form, (2) conducting a pilot study, (3) conducting and transcribing the research interviews and submitting transcriptions to the CSID for scoring, (4) performing an independent content analysis using Trentham's categories for assessing epistemological priorities and competencies, and (5) evaluating the CSID's ratings and content analysis results together, along with Trentham's prior research, in order to formulate findings and draw implications.[25]

Contact Participants and Confirm Their Participation

In order to locate potential participants, I accessed the directory of the ABHE to find web sites for member Bible colleges.[26] College web sites were explored as to the suitability of the school for the research study and to find the appropriate administrator

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[23]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 135–36.

[24]Ibid., 134–35.

[25]Ibid., 135.

[26]Association of Biblical Higher Education, "ABHE Membership Directory."

names and contact information. Administration officials in each of the schools were contacted first by telephone and then with a follow-up email. They were provided with the research profile information and given a request to provide me with names and contact information of potential subjects. In a few cases, the administrators were willing to provide this information, and so I sent an invitation directly to the college's seniors to participate in the study. In most cases, the administrators preferred instead to serve as the gatekeeper for the study participation request, and so I sent an email invitation to the administrator, who passed it along to seniors at the college. Students who responded to this initial invitation were then sent an electronic version of the Dissertation Study Participation Form. Students completed and returned the form, confirming their willingness and qualification to participate in the research study.

Conduct a Pilot Study

A pilot study was conducted with three participants for two reasons. First, the pilot study allowed me to rehearse and improve my interviewing methods and techniques. Second, the pilot study allowed me to send initial transcripts to the CSID and to my doctoral advisor in order to confirm that they were suitable for scoring purposes. Both Moore and Trentham suggested ways to hone my techniques and questions.

Conduct, Transcribe, and Submit the Interviews

The "sina qua non . . . of Cognitive Studies . . . is the use of relatively open-ended, lengthy interviews."[27] This research sought to understand cognitive functions but in relation to an existing cognitive theory, the Perry Scheme. Therefore, research was conducted via semi-structured telephone interviews using the version of the Perry Interview Protocol customized by Trentham in consultation with William S. Moore,

[27]Lancy, *Qualitative Research in Education*, 5.

Director of the CSID.[28] Once students' participation were confirmed via the Dissertation Study Participation Form, I scheduled a specific date and time to conduct the interview with them. Interviews lasted approximately 35-60 minutes in length and were audio recorded. I then transcribed them verbatim. Once the interviews were transcribed, they were sent to the CSID for scoring.

Perform an Independent Content Analysis

After the interviews were transcribed, I conducted an independent content analysis using Trentham's categories of epistemological priorities and competencies:

> (1) a recognition of the God of the Bible as metaphysically ultimate, and of revelation as the source and most basic component for knowledge and development; (2) a clear articulation of the relationship between faith and rationality; (3) a preference for higher-level forms of thinking according to Bloom's Taxonomy; (4) a prioritization of wisdom-oriented modes of learning and living; (5) a reflective criteria of assessing one's own beliefs and values, as well as divergent beliefs and values; (6) a recognition of social-environmental influences on one's learning and maturation; (7) a pursuit of personal development that results from mutual interdependence and reciprocity in one's relationships with authority figures and peers; (8) a sense of personal responsibility for gaining, maintaining, and progressing in knowledge; (9) a preference for active involvement in the teaching and learning process; and (10) a convictional commitment to one's own worldview—maintained with critical awareness of personal contexts, ways of thinking, and challenges brought to bear by alternative worldviews—through testing and discernment. These ten elements may be classified in three categories: Biblically-founded presuppositions for knowledge and development (1); metacognition, critical reflection, and contextualistic orientation (2-5); and personal responsibility for knowledge acquisition and maintenance—within community (6-9).[29]

Table 2 illustrates the scope and structure of Trentham's epistemological priorities and competencies.[30]

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[28]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 136.

[29]Ibid., 137.

[30]Ibid., 138.

Table 2. Trentham's categorical chart for assessing epistemological priorities and competences

I. Biblically-founded presuppositions for knowledge and development	II. Metacognition, critical reflection, and contextualistic orientation	III. Personal responsibility for knowledge acquisition and maintenance—within community
A recognition of the God of the Bible as metaphysically ultimate, and of revelation as the source and most basic component for knowledge and development	A preference for higher-level forms of thinking according to Bloom's taxonomy.	A pursuit of personal development that results from mutual interdependence and reciprocity in one's relationships with authority figures and peers
	A prioritization of wisdom-oriented modes of learning and living	
	A reflective criteria of assessing one's own beliefs and values, as well as divergent beliefs and values	A sense of personal responsibility for gaining, maintaining, and progressing in knowledge
A clear articulation of the relationship between faith and rationality	A recognition of social-environmental influences on one's learning and maturation	A preference for active involvement in the teaching and learning process
		A convictional commitment to one's own worldview—maintained with critical awareness of personal contexts, ways of thinking, and challenges brought to bear by alternative worldviews—through testing and discernment.

Once I conducted my own content analysis using Trentham's epistemological priorities and competencies, my analysis was sent to Trentham for evaluation, correction, and confirmation.

Evaluate Findings and Draw Conclusions

Upon receiving the transcribed interviews, the CSID scored them according to its own established rating procedure, the Measure of Intellectual Development (MID).

Each participant was assigned an overall score "which reflects the dominant and (if necessary) the subdominant position/s" of the participant on the Perry Scheme based on the interview.[31] The CSID also provided notations regarding the specific statements that formed the basis for the assigned score. These scores and notations were sent to me, who then analyzed them in conjunction with my independent content analysis based on Trentham's categories. This analysis was then used to formulate findings and draw conclusions based on the research study's guiding research question.

[31]Ibid., 234.

CHAPTER 4
ANALYSIS OF FINDINGS

The focus of this research study was the epistemological development of Bible college students who intend to enter vocational Christian ministry. I used the Perry Scheme as a model and research by John David Trentham as a theoretical lens to examine the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual maturity according to the Perry Scheme. A qualitative, cognitive study research design was utilized, employing purposeful sampling to locate interview subjects, who were then interviewed using the Trentham Interview Protocol.

This chapter presents an analysis of the research findings of the study. It includes a description of the compilation of data, a detailed examination and explanation of collected data, and an evaluation of the strengths and weaknesses of the research design.

Compilation Protocol

I used semi-structured telephone interviews with members of the population sample as the primary method for data collection. Before being interviewed, participants completed and returned the Dissertation Study Participation Form to help me gauge their suitability for the study and collect data about their field of study, church involvement, and ministry intentions. Telephone interviews were then conducted using Trentham's customized adaptation of the Perry Interview Protocol. The Dissertation Study Participation Form and the Trentham Interview Protocol are included in appendices 1 and 4.

I used Skype™ to make telephone calls to the subjects' cellular telephones, and digitally recorded the telephone conversation using Athtek Skype Recorder software. The resulting audio file was then transcribed with the assistance of Express Scribe software. The transcription documents were then sent to William S. Moore, Director of the CSID, for formal coding and rating. Moore evaluated the transcribed interviews and used the MID to score them in order to identify each participant's epistemological position according to the Perry Scheme. In the meantime, I conducted my own independent content analysis using Trentham's ten epistemological priorities and competencies.

Participation Form Data

Once a Bible college student expressed interest in participating in the research study, a Dissertation Study Participation Form was sent to him or her to complete and return. The purpose of the Dissertation Study Participation Form was fourfold. First, the form briefly explained the purpose of the study. Second, it included a section for the participant to formally affirm his or her willingness to participate in the study. Third, certain questions were designed to confirm each participant's qualification for inclusion in the study based on criteria such as age, year of study in college, and intention to enter vocational ministry. Fourth, the form provided basic information about the participant, including institutional context, vocational intentions, and church involvement, which contextualized the makeup of the sample population. This section details observations gained from the Dissertation Study Participation Form.

Gender

This study focused on the epistemological development of pre-ministry undergraduates at theologically conservative Bible colleges. Given that many theological conservative Christians believe the Bible restricts certain ministry vocations to men, it is not surprising that a higher number of male than of female Bible college students

expressed interest in participating in this study. In fact, only 6 of the 30 participants were female. It should be noted that this gender imbalance reflects the original research conducted by Perry, who interviewed primarily male college students at Harvard.[1]

Institutional Context

The study's sample population included students and recent graduates from 14 different Bible colleges. The high number of institutions did not allow for comparative analysis among the Bible colleges due to the small sample size of each institution. However, the variety of institutional contexts provided helpful breadth to the study by providing diversity based on several factors. First, there was diversity of geographical location, as institutions were located in the Northwestern, Southwestern, Midwestern, Southern, and Northeastern regions of the United States. Eleven different states were represented by the Bible colleges in this study. Second, there was diversity of denominational affiliation, which included Southern Baptist, Independent Baptist, Foursquare, Pentecostal, Plymouth Brethren, Conservative Holiness, and Christian Churches/Churches of Christ, as well as nondenominational and/or unaffiliated. Third, there was diversity of institutional size, as institutions ranged in size from less than 100 to almost 1000. Fourth, there was diversity of institutional culture, by the very fact that each institution of higher learning develops its own cultural milieu. Table 3 indicates the specific institutions represented in the study, along with location, denomination, and number of participants.

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[1]William G. Perry, *Forms of Intellectual and Ethical Development in the College Years: A Scheme*, Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1999), 17; Mary Field Belenky et al., *Women's Ways of Knowing: The Development of Self, Voice, and Mind*, 10th anniversary ed. (New York: BasicBooks, 1997), 9.

Table 3. Institutional characteristics

Institution	*Region*	*State*	*Denominational Affiliation/Background*	*Participants*
Baptist Bible College	Northeast	PA	Independent Baptist, background in the General Association of Regular Baptist Churches	2
Boise Bible College	Northwest	ID	Christian Churches/ Churches of Christ	1
Boyce College	South	KY	Southern Baptist Convention	2
Calvary Bible College	Midwest	MO	Nondenominational	1
Davis College	Northeast	NY	Baptist	1
Emmaus Bible College	Midwest	IA	Plymouth Brethren	3
Faith Baptist Bible College	Midwest	IA	Independent Baptist, background in the General Association of Regular Baptist Churches	5
God's Bible School & College	Midwest	OH	Nondenominational, background in the Conservative Holiness movement	2
Kuyper College	Midwest	MI	Nondenominational, Reformed perspective	1
Lancaster Bible College	Midwest/ Northeast	PA	Independent	3
Life Pacific College	Southwest	CA	International Church of the Foursquare Gospel	5
Nebraska Christian College	Midwest	NE	Christian Churches/ Churches of Christ	2
New England Bible College	Northeast	ME	Independent	1
SUM Bible College	Southwest	CA	Pentecostal	1

Degree and Program of Study

The Dissertation Study Participation Form inquired as to each participant's degree and program of study. The sample provided a reasonable balance between those participants earning Bachelor of Arts and those earning Bachelor of Science degrees—16 B.A. students and 13 B.S. students, along with 1 B.R.E. student.[2] Table 4 indicates the programs of study pursued by the study participants. The total number of study programs adds up to more than the number of participants, because 3 participants were pursuing a double-major.

Table 4. Participants' program of study

Program of Study	*Number*
Biblical and/or Theological Studies	11
Pastoral Ministry	4
Youth Ministry	3
Pre-Seminary	3
Elementary Education	3
Christian Education	2
Transformational Ministry	2
Biblical Counseling/Counseling	2
Worship Ministry	1
Music Education	1

Local Church Involvement

This study focused on students preparing for vocational ministry. Vocational Christian ministry is most often centered in a local church context, and therefore it would

[2]This was almost identical to the mix of degrees in Trentham's sample (John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" [Ph.D. diss, The Southern Baptist Theological Seminary, 2012], 143).

seem reasonable to assume that pre-ministry undergraduates would be actively involved in a local church during their college experience. This was indeed the case with the sample population, as all thirty participants listed responded that they were involved in a local church while in college, listing the church by name.

The participation form also inquired as to whether participants were involved in service and ministry at the church they attended. This was true of all the participants with only one exception. It should be noted that several participants mentioned during the interview that the college they attended required some kind of local church ministry; nonetheless, it would appear that local church ministry involvement is an important component in the Bible college experience of pre-ministry undergraduates. James articulated how local church involvement helped him discover, use, and sharpen his ministerial skills:

> Also, my church was paramount to my experience at college. . . . Having the ministerial outlet to serve in the church was really important to me, and I think should be to any person going to a school in which you wanting to better understand and articulate God's Word; a church would be really important. . . . Once I started articulating [my call to vocational ministry] to my friends and family and pastors and things like that, they really affirmed that. So then church and community affirmation is a huge thing for me, because I think about Ephesians 4 where Paul pretty much tells us that we have to be using our gifts in the body of Christ in order to call ourselves Christians. And he says that the church is what's going to encourage that. The church is what's going to help you understand that.

For others, like Ricky, it was the encouragement of the local church body that helped him push through discouragement:

> I guess, honestly the thing that stands out to me the most is the importance of—this is just for me personally—the local church. That has been vital to me, because I don't think I would have made it through without their encouragement and their aid. I've done an internship and a practicum at the church I'm at. I almost left after my first year of Bible school due to the fact that I was very disappointed with what I saw in a lot of the students when I first went, so I actually don't think I would have made it through without the local church keeping me going and keeping me on the academic path, I guess you could say.

Para-church or Humanitarian Ministry Involvement

In addition to local church ministry involvement, involvement in para-church or humanitarian organizations plays an important role for many Christian students in college. Para-church organizations are organizations that come "alongside" the institutional or local church to provide service or outreach that many churches cannot. These organizations include Christian camps, "campus-based Christian ministries, interdenominational outreach organizations, local community ministries, or humanitarian organizations."[3] Additionally, students may be involved in humanitarian and/or community service organizations. Because of this involvement, the Participation Form inquired as to students' involvement in para-church and/or humanitarian organizations. Overall, 14 participants reported involvement in these types of organizations. This number, almost half of the sample, reflects the number reported in Trentham's Bible college sample.[4]

Timing of Decision to Pursue Vocational Ministry

Also included on the Participation Form was a question regarding when the participant decided to pursue vocational Christian ministry—whether before or during college, and if during college, whether it was earlier or later in their college experience. Trentham's research indicated that Bible college and Christian college pre-ministry undergraduates were more likely than secular college pre-ministry undergraduates to have decided to pursue vocational ministry either before college or earlier in their college experience rather than later in college.[5] This was borne out by the current study, in which 18 participants decided to pursue vocational Christian ministry before college, 10 early in

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[3]Ibid., 144.

[4]Ibid., 144–45.

[5]Ibid.

their college career (freshman year), and only 2 in the middle or later years of college (sophomore, junior, or senior).. This data would support the suggestion "that students who commit to pursuing vocational ministry prior to college or early in college most often determine that Christian institutions are most ideally suited to offer them the most beneficial college experience and training in light of their career intentions."[6] Figure 4 indicates the general time periods in which study participants indicated they made a decision to enter vocational Christian ministry.

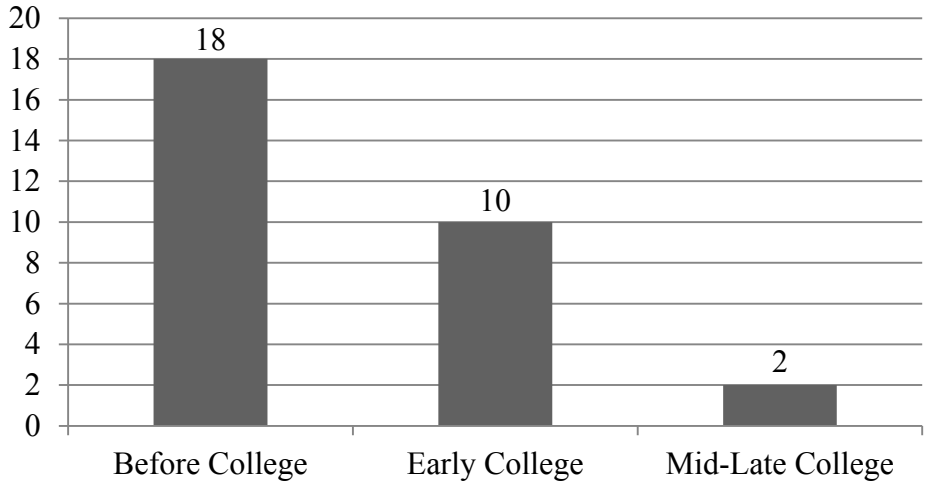

Figure 4. General time periods in which students made commitments to vocational ministry

Research Question Synopsis

The study's research question served to guide the analysis of the data. The research question was as follows: What is the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual and ethical maturity according to the Perry Scheme?

[6]Ibid., 145.

Summary of Findings

The Perry Scheme ratings reported by William S. Moore of the CSID informed my analysis of the study's research question. This section includes an explanation of the CSID's rating procedure and a presentation of my generalized findings, followed by more detailed analysis.

CSID Ratings and Reporting

The Perry Scheme contains a total of nine positions.[7] Interview transcripts were sent to the CSID for the purpose of evaluating the epistemological positioning of each participant on the Perry Scheme. For this research study, all interview transcripts were examined and Perry positional ratings assigned by William S. Moore, Director of the CSID. The rater looked for certain statement cues that would reveal common patterns of thinking related to Perry positions. This was accomplished as the rater noted specific statements by participants that would indicate thinking patterns, reasoning processes, and interpretive frameworks according to the positions set forth in the Perry Scheme.

The procedure for rating the interview transcripts involved three readings. In the first reading, the rater made an initial reading of the transcript for the purpose of first impression and general familiarization. In the second reading, the rater marked specific statements and passages of text, within the context of the discussion, that would indicate the Perry positioning of the respondent. In the third reading, the rater confirmed the assigned rating and provided a thorough explanation of the rating.

Positions were assigned in an expanded version of the Perry Scheme ratings used by the MID, which was designed in 1974 by L. Lee Knefelkamp and Carole Widick for the purpose of scoring essays according to the Perry Scheme. The scoring system used by the MID is also used to rate interview transcripts, and was used to rate the

[7]See chap. 2 above for a description of each of the Perry Scheme positions.

interviews generated in this study, allowing for both identification of participants' dominant epistemological position as well as any subdominant/transitional positions. Moore describes the significance of the 3-digit number assigned when using the MID,

> Individual ratings on the MID are represented by a 3-digit number which reflects the dominant and (if necessary) the subdominant position/s rated in the essay. This system extends the Perry scheme continuum from 4 steps--that is, positions 2, 3, 4, and 5--to 10 steps: 222, 223, 233, 333, 334, 344, 444, 445, 455, & 555. Solid ratings (like 333) reflect a "stable position" perspective; the two steps between each stable position indicate transitional essays. As examples, 223 represents "dominant position 2 opening to position 3," while 233 indicates "dominant position 3 with trailing position 2." The ratings thus reflect an assessment of the cognitive complexity displayed by the essay with respect to classroom learning along a linear, simple stage model continuum.[8]

Therefore, positions progress in one-third position increments—222 to 223 to 233 to 333, and so on. Additionally, each rating score can be converted to a number for the purpose of statistical manipulation. Using this rating system, only 2 respondents in this study were given solid positional ratings (e.g., "222") that indicated a stable position perspective, while 2 additional respondents were given solid positional ratings with an additional hint of the subsequent position (e.g., "222(3)"). The other 26 participants were assigned ratings that indicated a transitional position—a middle number describing their dominant position, and two other numbers detailing either an "opening" (e.g., "223") or a "trailing" (e.g., "233") position. See appendix 5 for a listing of Perry Scheme positional ratings and numerical equivalents for the participants in this study.

Generalized Findings

In regard to the research question guiding this study, the ratings provided by the CSID would seem to indicate that pre-ministry Bible college undergraduates progress through the positions of intellectual maturity according to the Perry Scheme in a similar

[8]William S. Moore, "Interpreting MID Ratings" (Olympia, WA: Center for the Study of Intellectual Development, 2004), 1.

manner as typical college students.[9] According to Moore, "In general, traditionally-aged students enter college in the position 2-position 3 transition and exit college 4 (or so!) years later in the position 3-position 4 transition."[10] The numerical average of scores of the seniors in this study was 3.456, indicating a position 3-position 4 transition, similar to the Perry scores of traditionally-ages college students in general. The average score of the students in this study is also nearly identical to the average score of the Bible college students in Trentham's study, who averaged 3.466.[11]

Nine students (30 percent) were rated below the typical range (position 3 or below), 14 (47 percent) were rated within the typical range (between positions 3 and 4), and 7 (24 percent) were rated above the typical range (position 4 or above). These percentages are very similar to the percentage of Bible college students in each position in Trentham's study: 30 percent (3) below, 40 percent (4) within, and 30 percent (3) above.[12] Figure 5 indicates the percentage of students in each range.

As it relates to gender, according to Moore "there seems to be no consistent difference [in average Perry Scheme positioning] by gender."[13] There was only a slight difference in the average score of the men and the women in this study, as the men averaged 3.486 while the women averaged 3.333. However, the sample size of women was not large enough to draw any conclusions from this small difference.

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[9]Their ethical maturity was not examined, as traditional college students rarely progress beyond the "intellectual" ranges of the Perry Scheme (positions 2-5) into the "ethical" ranges of the Perry Scheme (positions 6-9). According to Moore, "Because the instrument is designed to assess the part of the Perry scheme that we believe to be primarily cognitive/intellectual in focus, MID ratings range along a theoretical continuum from position one through position five. In practice, position one perspectives are not found (it was a hypothetical and conceptual extension of the model even in the original study), and thus the actual MID ratings will range from positions two through five" (ibid.).

[10]Ibid., 3. This is based on MID evaluations, but as noted above, the MID rating system is used as the basis of evaluation for the interview transcriptions rated in this study.

[11]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 152.

[12]Ibid., 238.

[13]Moore, "Interpreting MID Ratings," 3.

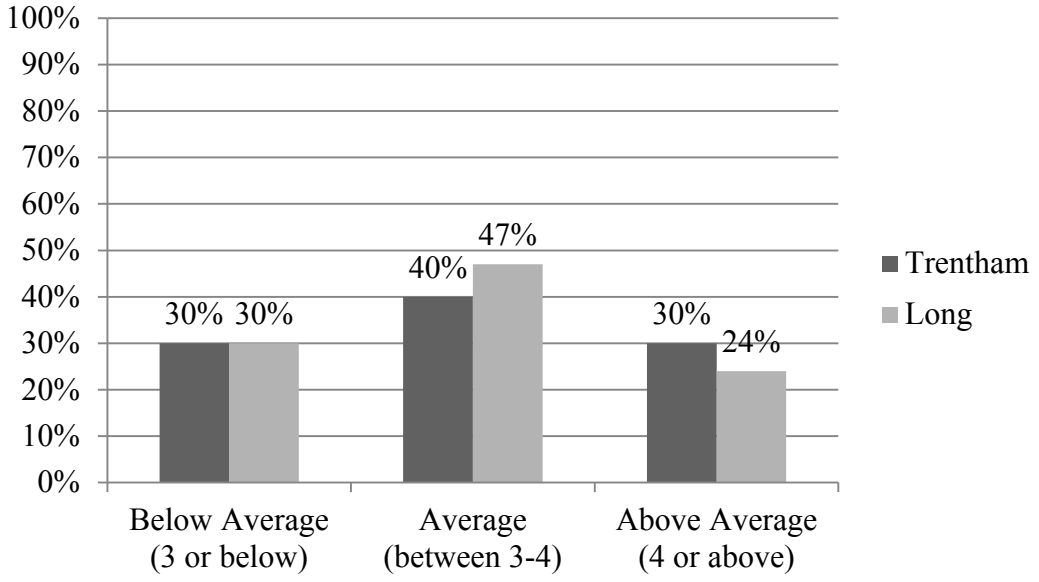

Figure 5. Percentage of students in each range

In the case of age, Moore reports there may be a "modest but statistically significant effect" of age in Perry positioning. This study, however, did not observe any pattern of Perry rating according to participants' age.

In his research, Trentham calculated the mean of positions and transitions "by assigning a whole number to stable ratings (e.g., 3 for a 333 rating), and applying a '.5' numerical value to all transitional ratings (e.g., 3.5 for 334 or 344)."[14] Using this calculation, the mean of positions and transitions for the Bible college seniors in this study was 3.45, reflecting a point of transition essentially midway between Position 3 and Position 4. This mirrors the mean of positions and transitions calculated by Trentham for the Bible college sample in his study.[15] Figure 6 indicates the mean and the range of scores of the seniors in this study.

[14]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 151.

[15]Ibid.

Figure 6. Range and mean of scores

Positional Examples

Each interview transcript was rated by the CSID according to its rating procedure by looking for positional cues that would indicate the appropriate Perry position. Specific examples serve to illustrate statements that were marked according to the various Perry positions. Table 5 presents sample statements for the one student who was given a Position 2-dominant rating. This student's interview included both Position 2 and Position 3 statements, but overall the student was assigned the rating of 223+.

Table 6 presents sample statements for the students who were given a Position 3-dominant rating. These students' interviews included statements that ranged from Position 2 to Position 5, but the preponderance of statements were Position 3 statements.

Table 7 presents sample statements for the students who were given a Position 4-dominant rating. These students' interviews contained almost no Position 2 statements, ranging primarily from Position 3 to Position 5 statements.

Table 8 presents sample statements for the students who were given a Position 5-dominant rating. These students' interviews contained no Position 2 statements and only one Position 3 statement, instead containing almost exclusively Position 4 and Position 5 statements.

Table 5. Position 2-dominant sample statements

Position	*Sample Statement*	*Primary Cue*
2	Titus[16]: . . . I know that sermons and a lecture, they're definitely different, but at the same time, the material that we're learning from, it is the Bible, and I think it's totally appropriate that you almost preach in class what you're trying to teach people.	Learning as information exchange
3	Titus: . . . This last year I experienced a connect [sic] between what I was learning academically and the practicalness [sic] of what I was learning, I think they finally met. So I was learning all this great knowledge, and I was learning how to do things, but I think in my last year all of that really connected to my life all at once. . . . And so it made what I was doing much more valuable, much more exciting; I felt very equipped and I felt like what I was doing was more effective, just ministering to people in just the various ways that I could be doing that. . . . The first couple years it was hard because I was trying so hard to not see the Bible as a textbook, but trying to see my homework and my papers as kind of a devotion as much as I could, but sometimes there was that disconnect, but I really feel like my last year I was really able to not see it as a textbook and really able to connect everything I was learning to life. . . . My ideal educational experience is being able to learn it and then put in into practice.	Focus on practicality / relevance
3	Titus: . . . [Name of college] has been great in a sense that there's godly professors and they lead us well and they're definitely vulnerable and they share their lives, so I've appreciated that.	Learning a function of teacher/ student relationship

[16]All names and personal references have been changed to avoid identification.

Table 6. Position 3-dominant sample statements

Position	*Sample Statement*	*Primary Cue*
2	Darren: . . . I think a good class would ask you those questions that keep you thinking and keep you running back to Scripture for your answers.	Use of absolutes and/or dichotomies in language
2	Zachery: . . . [Classes should be] taught different ways in the American style on banking methods, where the teacher is the banker and . . . he is putting money into us, depositing money, so he's depositing his knowledge to us.	Learning as information exchange
2	Ricky: . . . I think that [we should] become more submissive to our leaders. . . . It's important to really listen and learn throughout your time, and basically just submit to those who have earned the right to teach you.	"Teacher (Authority) is all" (T-centered)
3	Kelsey: . . . It's really easy to sit in a classroom and study the material for tests and get good grades, but if you don't know how to apply it to life, if you don't actually use the knowledge that you're learning in class, then it doesn't benefit you or society.	Focus on practicality/ relevance
3	Elsie: . . . I would say that the ideal college education would be really just being pushed to your fullest potential. So I would say the classes should be something where you do have to work hard, but the work that you do is very meaningful and practical.	Focus on challenge/ hard work = good grades
3	Margaret: . . . [What stands out to me is] the level of involvement that the teachers have in the students' lives, and their influence is definitely a lot bigger than I've seen at community college or in high school. It's very obvious that they . . . are definitely willing to invest in us on a personal level and not just in our education or our grades and stuff.	Learning a function of teacher/student relationship
3	Clayton: . . . I learn the most through practical applications, actually doing something, writing something out and getting up and presenting it so that you're practically living what you're doing, because you have to not only read about it but also write about and present it.	Concern w/ process/ methods—*how* to learn
4	Frank: . . . I don't think a good college course is just about listening, memorizing, regurgitating. So I guess the opposite of that would be, I think a really good college course engages you and sees that you are getting the basic concepts through multiple means.	Rejects grading and/or memorizing ("regurgitation")

Table 7. Position-4 dominant sample statements

Position	*Sample Statement*	*Primary Cue*
3	Anthony: . . . I personally love to do oral presentations. . . . I write very well, but I do not like to write necessarily. I like to research, but I don't like to document that research necessarily; I just kind of like to look at it and highlight in a book and discuss that concept. That's really how I learn.	Concern w/ process/ methods—*how* to learn
4	Sabrina: . . . Coming to [name of college], [they] had to teach the freshmen how to think. The first year here is very much introducing people to making decisions, and I'd already been making those decisions for a while.	Focus on ways of thinking—how to think
4	Curtis: . . . I would get into research papers and put more effort into them than any other, than the typical exegesis project or a test, [and] I think I would learn the most from them.	Student more active, taking more responsibility for learning
4	Jeffrey: . . . . I think I actually understand why I believe what I believe now. . . . [My beliefs when] I came in [were because I was] a Christian growing up, and just kind of being taught that. But coming here, the process of the last four years has been to completely shatter everything I thought I believed, and then start to relearn, but also develop my own theology and really get a good picture of the different teachings out there and what the different perspectives are, and be able to come to my own conclusions.	Concern w/ independent thinking, freedom of expression; comfort w/ multiplicity
4	John: . . . [College has] given me a greater appreciation for knowing about multiple subjects. Even if I don't necessarily see a direct relevance to my life at this point in time, there's a lot more crossover of knowledge than might initially appear.	Comfort w/ multiplicity, connections across disciplines
5	Tyler: . . . Professors [should] present multiple perspectives, not just one viewpoint. And I think they need to teach people to think for themselves and figure out what they believe rather than . . . only trying to get them to accept the professor's viewpoint or the institution's viewpoint, I think.	Understanding of different frames of reference
5	Tyson: . . . I like to think through things . . . and process things on a very complete level, look at all the ramifications of things. Because I found that rarely the problem is with the immediate decision, it's with the dominoes that fall six steps down the road. . . . You know, there are two options that are both equally viable now, but six steps down the road what does it look like?	Focus on qualitative evidence—how to judge in context

Table 8. Position 5-dominant sample statements

Position	*Sample Statement*	*Primary Cue*
5	Shawn: . . . [Bible college has helped] me to think more critically about things. I've always been a critical thinker, but back at home, it wasn't really a challenge where I had to think critically about a lot of things, but here at college there's a lot more exposure to different things, and so there's a lot more stimulus to think critically about things. So that has strengthened that mental muscle, so to speak.	Reflection on own thinking ("meta-thought")
5	James: . . . I feel like I'm able to argue both sides of an issue a lot better than when I was younger and less developed. I couldn't really argue and think through issues as well.	Understanding of different frames of reference
5	James: . . . [Name of college] does a good job helping you see issues within the context, within the realms of a biblical theology, and then in relation to everything that's involved. Maybe when you first get here you're very short-sighted, especially people who've grown up in church, which I didn't, but people can't really see every side of everything. They can't really process the different complexities of situations, and I think [name of college] does an exceptional job of helping students look through the layers of debate, of situations, of circumstances, through a biblical worldview so that we can really apply the Word to every area of our lives. And then we can interact with some of the issues that are happening in the mainstream culture as well.	Focus on qualitative evidence—how to judge in context
5	Shawn: . . . I have actively worked, particularly the last two years, . . . to adapt and change my view of classes and professors and even other students so that it's not a negative view but it is more mercy-centered—you know, I don't like this person or this class because I don't fully understand it, therefore to have a better opinion of the person or class I need to understand them more.	Appreciation for other perspectives (empathy)

Trentham's Epistemological Priorities and Competencies

At the same time as the interview transcripts were being examined and rated by the CSID, I examined them for examples of Trentham's ten epistemological priorities and competencies. Trentham found that, "generally speaking, higher [Perry] positional ratings

among participants coincided with more instances of priorities addressed by participants."[17]

Relevant statements for each of the ten priorities were coded and compiled and then sent to Trentham for verification. Some statements that were initially coded were rejected from inclusion as statements applicable to each category. The verified coding statements for each participant and for the sample as a whole were then compared to the scores and ratings from the CSID.

When Trentham analyzed his research participants according to his structured framework of epistemological priorities and competencies, his evaluation "yielded findings that were consistent overall with . . . the variations of levels of epistemological maturity within the sample population. That is to say, generally speaking, higher positional ratings among participants coincided with more instances of priorities addressed by participants."[18] In Trentham's study, those seniors who were rated as below-average in Perry Scheme positioning (Position 2-3 and Position 3) addressed an average of 1.2 priorities, those who were rated as average (Position 3-4) addressed an average of 2.3 priorities, and those who were above average (Position 4 and 4-5) addressed an average of 5.5 priorities.[19] The current study produced similar findings, as those seniors who were rated as below-average (Position 2-3 and Position 3) addressed an average of 2.6 priorities, those who were rated as average (Position 3-4) addressed an average of 3.4 priorities, and those who were above average (Position 4 and 4-5) addressed an average of 4.6 priorities. Figure 7 compares the average priorities expressed by each position grouping of respondents in both Trentham's study and the current study.

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[17]Ibid., 167.

[18]Ibid.

[19]Ibid., 168.

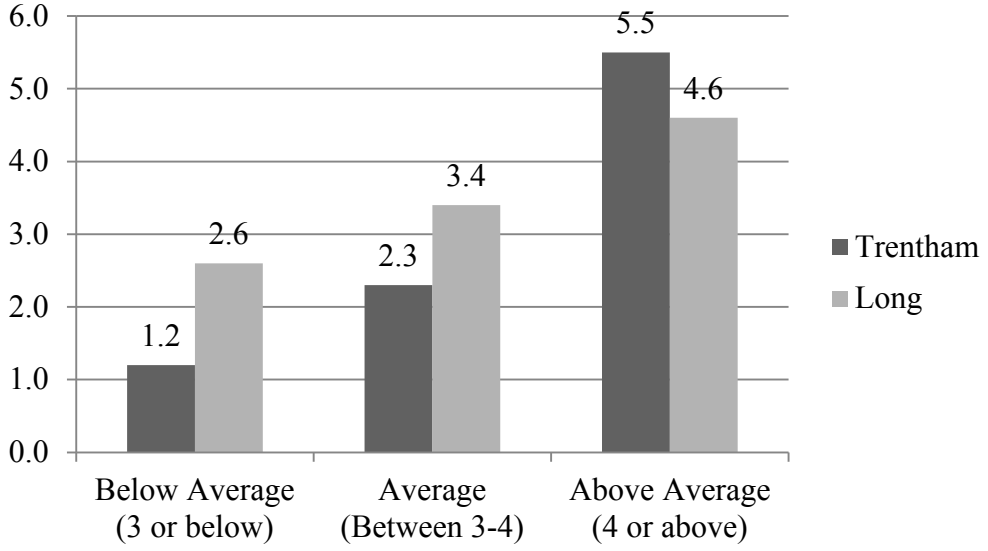

Figure 7. Average Trentham priorities expressed in each position grouping

Although there was evident consistency in Trentham's study between the overall number of the Trentham epistemological priorities addressed by each participant and his or her Perry Scheme positioning, the individual priorities, for the most part, yielded less discernible correlations with Perry Scheme positioning.[20] This was also true in the present study. In the following section, each of the Trentham priorities is described, and then a brief summary of findings related to each priority is provided, along with a specific example.

Presuppositions for Knowledge and Development

The first of Trentham's categories of epistemological priorities and competencies is "Biblically-founded presuppositions for knowledge and development." This category includes two priorities, "God and revelation" and "faith and rationality."

[20]Ibid.

God and revelation. The first priority, "God and revelation," is defined as "a recognition of the God of the Bible as metaphysically ultimate, and of revelation as the source and most basic component for knowledge and development."[21] Students who express this priority verbalize a realization that knowledge is based on presuppositions and is rooted in presuppositional faith claims, indicating a conscious awareness on an intellectual level that all knowledge is mediated by faith.[22] This priority was addressed by 9 students in Trentham's study, and 11 in the current study. Ricky gave a clear articulation of this priority when in response to the question, "How do you know that what you believe is true?," he responded,

> My presuppositional worldview is that the Word of God is truthful and authoritative in all things. So if [the Word of God] says it, and if whatever I believe lines up with that, then that does it for me, because I believe that God has revealed Himself through His Word and His Word alone, and I trust Him and I trust His Word for that reason. So I believe that if it lines up with Scripture it's true.

Faith and rationality. "Faith and rationality," the second Trentham priority, involves "a clear articulation of the relationship between faith and rationality."[23] Here there is a clear understanding of the necessity of both faith/belief and reason, that the Christian *faith* is supported by *reason*.[24] Only 6 interviewees in the Trentham study and 3 in the current study articulated this priority. All 3 were rated as above-average (Position 4 or above) in Perry Scheme positioning. One of them was Tyson, who said,

> So to some extent, I feel like you can't know in a definitive, 100% proof sense that what you believe is true, but what you can do is look at how what you believe influences things. You know, the distinguishing mark of a worldview is if it can be consistent. You know, it's tricky to be an atheist and hold to an objective moral standard because you have no grounds for where that came from. So those kinds of inconsistencies and things, and I think that Christianity's one of the few systems that

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[21]Ibid., 170.

[22]John David Trentham, telephone conversation with author, August 14, 2014.

[23]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 171.

[24]Trentham, telephone conversation with author, August 14, 2014.

> from where I sit is a very consistent way. I've looked at it and played it out, and I think that consistency is really where the rubber meets the road, because you can't necessarily "prove" those fundamental beliefs that you hold. You can back them up from the standpoint where you're at, but as far as proof goes, you know, proof's somewhat of a tricky term, because it means different things in different contexts. But as far as removing all doubt of any other possibilities 100% of the time, I don't think that you can really prove anything that you believe. There's always going to be that one thing that hasn't quite been thought through yet that could potentially upset the whole system. But a good worldview will have answers to all the questions that come to it.

Metacognition, Critical Reflection, and Contextual Orientation

The second Trentham category of epistemological priorities and competencies, involving four specific priorities, is "metacognition, critical reflection, and contextualistic orientation."

Forms of thinking. The first priority in this category, and the third overall, is "a preference for higher-level forms of thinking according to Bloom's Taxonomy."[25] Bloom's taxonomy was a revolutionary approach that proved foundational to contemporary educational philosophy and pedagogy in the area of instructional objectives.[26] Since the original taxonomy was formulated by Bloom and his colleagues, additional research and theory have resulted in a revised taxonomy of six levels of mental processing: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.[27]

Trentham found instances of the three highest levels, Analyzing, Evaluating, and Creating, in 14 participants in his study. In the current study, 19 students articulated

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[25]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 172.

[26]Robert J. Marzano and John S. Kendall, *Designing and Assessing Educational Objectives: Applying the New Taxonomy* (Thousand Oaks, CA: Corwin, 2008), 1; Lorin W. Anderson and Lauren A. Sosniak, eds., *Bloom's Taxonomy of Educational Objectives: A Forty-Year Retrospective* (Chicago: The National Society for the Study of Education, 1994), vii.

[27]David R. Krathwohl, "A Revision of Bloom's Taxonomy: An Overview," *Theory into Practice* 41, no. 4 (Autumn 2002): 214.

forms of thinking that involved analyzing, evaluating, and/or creating. Notably, at least one example of higher level forms of thinking was found in only 4 of the 9 below-average rated students (44 percent) and only 8 of the 14 average rated students (57 percent), but in all 7 of the above-average rated students (100 percent). Figure 8 compares the percentages of each category of students who expressed at least one instance of higher-level thinking.

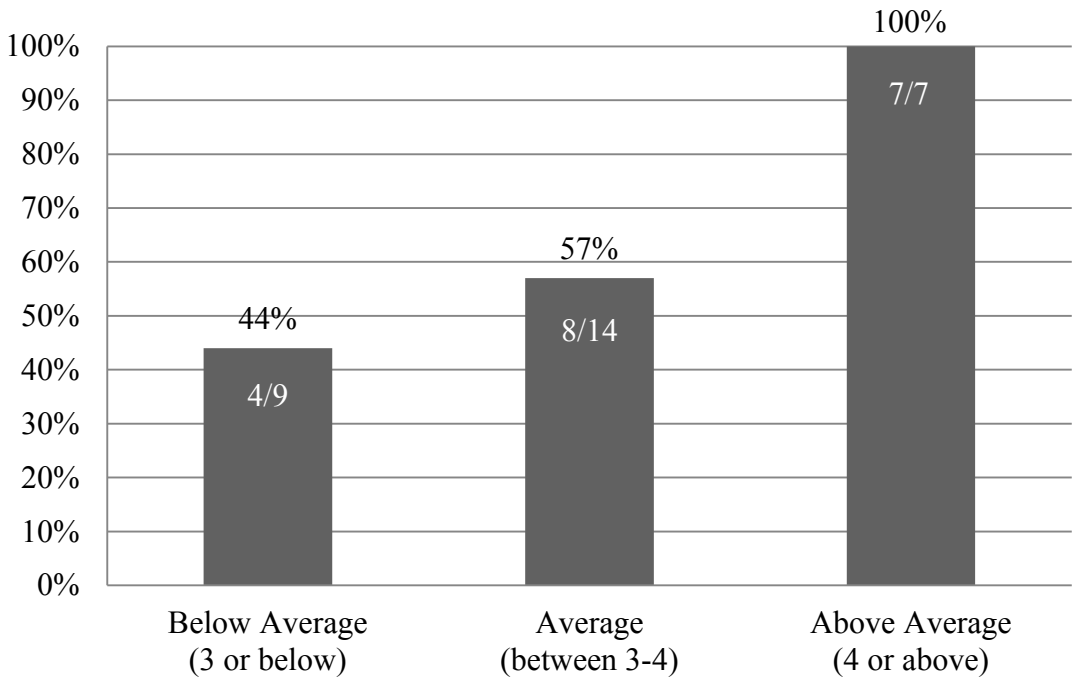

Figure 8. Higher forms of thinking—percentage of students articulating

Additionally, the below-average rated students articulated higher-level forms of thinking an average of 0.67 times per interview, the average students 1.07 times per interview, and the above-average students 2.60 times per interview. Figure 9 charts the average number of articulations for each category of student. Thus, the use of higher-level, critical forms of thinking appears to correspond to higher levels of intellectual maturity according to the Perry Scheme.

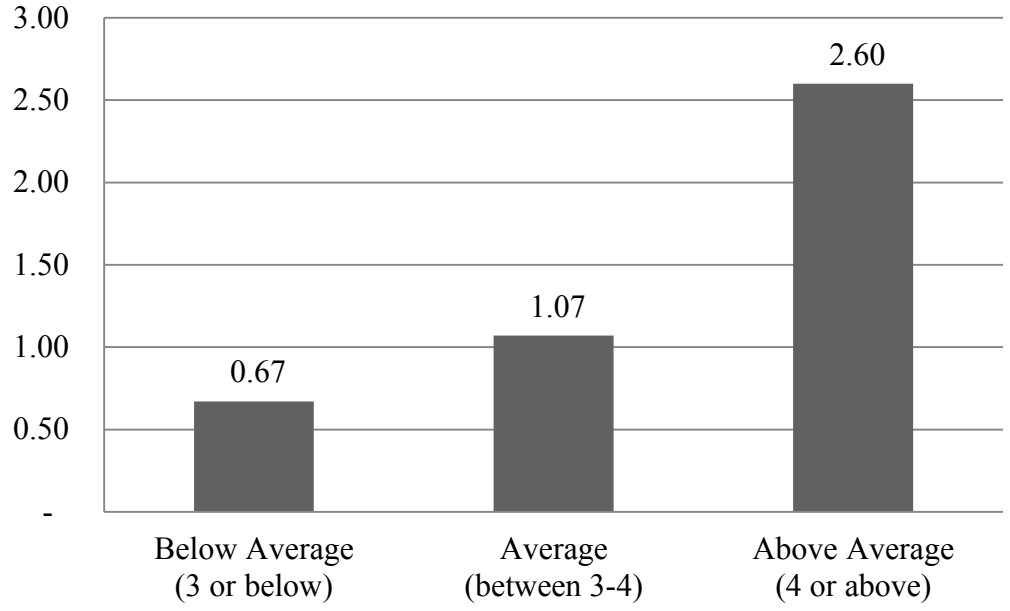

Figure 9. Higher forms of thinking—average number of articulations per interview

Margaret's description of how she makes difficult decisions exhibited analysis-oriented thinking (Bloom level 4):

> I think the first step is just sitting down and looking at the situation from every aspect I can think of, just making sure I've thought through everything thoroughly. And there's a lot of prayer involved in that too, just going to God and being like, "What am I not seeing here?" And making sure I'm seeing the issue clearly. And also consulting others and just going to friends that I trust and teachers, you know, that I know who are a lot wiser than myself, and just being able to talk through the situation and get different opinions, get different sides to the stories and things like that. And definitely making sure you see the big picture of things and consider things prayerfully.

William, who worked as a janitor in a local school district to pay for college, clearly used analysis and evaluation (Bloom levels 4 and 5) as he made observations about his work environment and related it to what he was learning in Bible college:

> As I look through the school district, they have lots of signs up that talk about, like, "Everybody's diversity is OK and it should be celebrated." But they don't really think through that, like what are the implications of that. I mean, there's diversity—some tribes in South America chop off people's heads and shrink them and then they keep them. That's diversity! It's not to be celebrated. They don't teach them to think through issues or the implications of that. I think [name of professor in his Bible college] has really done a good job of that. [Name of a different professor] gives you the material, but he doesn't show you how it applies to modern day. Like

> he gives you the material from the past, but he doesn't really apply it to modern day. So I think that's the difficulty that he has. I think [name of first professor] really has helped get people to actually think through material. It's not even what's going on, but just like, when you're reading a book to actually think through what are the implications of what's going on here.

Wisdom-oriented modes of thinking. In his second priority in this category and fourth overall, Trentham looked for specific articulations of a "prioritization of wisdom-oriented modes of learning and living."[28] Only 4 instances of this priority were found in Trentham's research, and only 7 in the current study. Frank, when asked how students should change over the course of the Bible college experience, said, "They should be changing in maturity and in knowledge, and hopefully in wisdom, so that when they get to certain places they're able to, and I'm able to, have a better grasp on what's going on and be able to speak into those situations that I might come across." In response to a question about the kinds of assignments and professors that make up a good college course, he said,

> Personally I seek wisdom. I want to be wise, I want to seek wisdom, I want to have a great amount of discernment. I feel like it's becoming more and more necessary. So for me, a really good college course is going to be a man who has wisdom, who I feel like has a very strong relationship with Jesus Christ himself, whose personal walk is consistent with what he's teaching, and who basically has wisdom, just to put it frankly. So a person like that, I think, is going to have the discernment to know if his class is picking it up or not, so he's going to be engaging, he's going to be saying things that are helpful, and he's not going to be coming down really strict and hard with testing as much as he is creating papers or topics or discussions that kind of facilitate thinking more than just memorizing.

When I pointed out that Frank had used the word "wisdom" several times throughout the interview and asked him to explain what he meant by that term, he responded,

> I'm trying to figure out a way to say it concisely—[wisdom is] the ability to discern truth from falsehood and the ability to apply knowledge well. A [wise] person is one who has been through life at its hardest and has not just sulked over that but has gained from that, has learned from that; it's a person who's made mistakes and taken knowledge and wisdom away from that. A wise person to me is a person who has learned from his past and seeks to apply that, who also knows Jesus really well, who's able to—like the Proverbs say "apples of gold in settings of silver"—is able

[28]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 174.

> to just say a timely word at the right time, who doesn't waste moments of life. I think of ancient wisdom literature like the Proverbs and even before that, which was always used and passed down for practical reasons, so I think of a wise person as a person who's able to continue to pass down how to live life well in ways that make sense. And a wise person who's really godly is able to take that wisdom and make that point to the Gospel every time.

Criteria for assessing beliefs and values. The third priority in the category of cognitive development, and the fifth overall, is "a reflective criteria of assessing one's own beliefs and values, as well as divergent beliefs and values."[29] Students expressing this priority mention specific criteria or a systematic and/or sequential protocol for making difficult decisions and for evaluating beliefs and belief systems.[30] Only 4 students in Trentham's study and 6 in the current study exhibited this epistemological criteria. In response to the question, "How do you know that what you believe is true?", Peter said,

> I'm going to answer that by saying, I believe something. It's circular reasoning, but I believe that the Holy Spirit will affirm in our hearts that what we believe is true, that He will not allow His children to wander off into faulty theology that would be considered unorthodox. So under that point alone, then saying He is going to guide us in interpretation of the Scriptures, that in those primary things, things like the Trinity, things like that I think come from the affirmation of the Spirit by what is true in the Scriptures. And then also, John Gresham Machen says "church history is the ladder to orthodoxy." You know, we're climbing up the side of our historical theology with church history. So what has the church thought for two thousand years? For two thousand years, we've said the Trinity is a really important thing, and anybody who challenges an orthodox articulation of the Trinity we kind of shun. So those are also helpful aids. Again, I'm Reformed, so I use confessions pretty rigorously—the Heidelberg Catechism, the Belgic Confession, the Canons of Dordt, so I always use those to assist me in my theological interpretation. But then also being critical—is this really what Scripture says? Are they taking it too far? Are they not taking it far enough?—those sorts of things. So that's how I know what I believe.

Social-environmental influences. The last priority in the category of cognitive development, and the sixth overall, is "a recognition of social-environmental influences on one's learning and maturation."[31] Only 3 students in Trentham's study were

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[29]Ibid., 175.

[30]Trentham, telephone conversation with author, August 14, 2014.

[31]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 175.

classified in this sub-category, while 11 were classified as such in the current study. Elsie was appreciate of the impact of the Bible college environment on her spiritual maturation:

> I'm really thankful for my college experience. I still keep in contact with a few of my high school friends, and [it helps me] to see the difference it makes to be in [this] environment that encourages spiritual growth. Not that you can't be a strong Christian in a secular college, but I think that it's just a huge blessing to have those four years be saturated with God's Word, and having people around you that will help you make the right choices.

Personal Responsibility for Knowledge—Within Community

The third and final category used by Trentham to evaluate epistemological development was "Personal responsibility for knowledge acquisition and maintenance—within community." According to Trentham, this category, which includes four priorities, "was designed to provide a means of discerning the nature of participants' expressions regarding self-motivation and personal commitment for epistemological growth, as well as their perspectives regarding development within community."[32]

Interdependence and reciprocity. The first priority within this category, and seventh overall, is "Interdependence and reciprocity," which is defined as "a pursuit of personal development that results from mutual independence and reciprocity in one's relationships with authority figures and peers."[33] These are students who understand the responsibility they have of not only gaining from the learning environment, but of reciprocating by giving back to the learning community themselves.[34] This priority was articulated by only 5 students in Trentham's study, and by 8 students in the current study.

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[32]Ibid., 177.

[33]Ibid.

[34]John David Trentham, telephone conversation with author, August 22, 2014.

Peter emphasized the importance of "working together" in the pursuit of knowledge and truth:

> I think there are two kinds of professors and two kinds of students. There are the professors who are so caught up in the ideas and they're energized by the ideas, or they're energized by the students. And the same goes for the student. I think the perfect—well, I don't like the word "perfect;" the ideal, like you said—the ideal classroom experience or course experience would be a healthy combination of understanding those two things. So having classroom work that is equally oriented to the information, but also the relational aspect between the students. Are we working together to organize and better understand the truth that we're seeking as people who are energized by the ideas and people who are energized by the people?

Clayton valued the impact the older students had on his life when he first came to college, and desired to have those same kinds of relationships with younger students now that he was a senior:

> I guess something else that has really impacted me while I was here, particularly me as a more introverted person that had a hard time really talking to people when I first got here, but God's really used my time here—and it may have been the same at any other college, but just using here as an example—but just you, say, go down to the gym and play a game of basketball. Just having opportunities like that, somebody says, "Hey, I saw you down playing basketball," and just strike up a conversation like that. And so now I am a senior, and I'll be down there, and a freshman or a sophomore or something will come down, and then I have the opportunity to walk over to them and introduce myself and really, really get to know them. So I guess it's just the whole idea of mentorship, or somebody who has been here who has seen a lot and somebody who is 18-year-old, probably a little bit scared, coming into an atmosphere like that.

Personal responsibility. The second priority within this category, and the eighth overall, is "Personal responsibility." This priority is seen through statements that express "a sense of personal responsibility for gaining, maintaining, and progressing in knowledge."[35] In Trentham's study, 14 interviewees articulated such a perspective; in the current study, only 7 did so. Ian's response to a question on how students should change through the college experience shows a clear sense of personal responsibility as he emphasized the importance of being a lifelong learner:

[35]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 178.

> Well, I think they should just come to love learning. A lot of freshmen come in and think that they're going to do the friends thing and get involved in things they want to do, but I think that by the time you're out of college you should enjoy learning even stuff that you wouldn't necessarily enjoy. It's stuff that you should pursue, you should realize that learning is a lifelong process. And I can't do without it—I go home for the summers now, and while my first summer at home was, "All right, I got to relax from this school thing, I'm just going to do nothing," that's just not good enough for me at this point. I have to keep studying, whether that's the Bible or whether that's books on philosophy and science, something that pushes my mind. It's just not good enough to sit around and relax anymore—there's time for that too, but—it's just a love for learning I think it instills in you.

Carl described his dismay at discovering that many others in Bible college did not share his sense of personal responsibility:

> I'd say the thing that probably stands out the most to me in my college experience as a whole, is probably the lack of real desire by a good number of college students to actually succeed, or motivation to do so. I felt that through my whole experience there was a good number of people that no matter what their desired degree was, that they seemed to want to coast as much as possible. They were simply there to get the degree and not the education. And that was probably the thing that surprised me the most, but was also very prevalent throughout much of my college experience. I guess one of the reasons it surprised me so much is because in high school, junior high and high school, I was homeschooled, and in the community I was kind of seen as like this kind of a brainy kid who always had his nose stuck in a book or something. And I figured that oh, when you go to college, that's where all the, you know, smarter people go, so the community will be different and it really wasn't.

Active and engaged learning. In the personal responsibility category, the third priority (and ninth overall) was "Active and engaged learning," which was defined as "a preference for active involvement in the teaching and learning process."[36] In Trentham's study 18 of the participants articulated this priority, while in the current study 22 students did so. Shawn described his idea of a great college course by saying,

> So for me, I'm very much a kinesthetic learner. I mean, I learn by doing something and then processing it as I do it. So it's both kind of an active kind of processing, as well as doing it, exercise. So the perfect college course for me is one that involves a lot of interaction between the class members and the professors as well. I'm able to sit and say, like, in a class that talks about certain methods and techniques, and then in the last half of that class, be able to use and exercise those techniques to kind of learn them and kind of get them cemented in my brain what it would look like for me personally to do it. It's being able to kind of bounce ideas off of the professor

[36]Ibid., 180.

> and other students in the class and kind of have those discussions. Those are the courses that I really thrive in.

Convictional commitment. The final priority in this category, and tenth overall, was "Convictional commitment," which entails "a convictional commitment to one's own worldview—maintained with critical awareness of personal contexts, ways of thinking, and challenges brought to bear by alternative worldviews—through testing and discernment."[37] Participants identified as exhibiting this priority express reflective commitment to their decisions—a devotion to their beliefs, but also a humble openness to listen to other perspectives and even reevaluate current beliefs in light of those perspectives. It is the spirit of *semper reformanda*—"always being reformed."[38] Five articulations of this priority were noted in Trentham's study, and 7 in the current study. For example, Victor said,

> I think mostly, you know, you have to look at what Scripture says, and if it's that kind of an issue, maybe like homosexuality—I know that's a big topic right now—so just kind of looking at that and saying, "What does the Scriptures say?" And you know, for me I feel like Scripture's pretty clear cut on that issue. So just saying, "I hold to this view, and this is where I stand on it." But also at that point, you also have to give yourself a bit of an open mind to what other people believe and hear what they have to say. You never want to be that person that says, "OK, this is what I believe wholeheartedly, I'm not even going to listen to what other people have to say."

However, an additional aspect of this priority from a Christian perspective is the distinction between certain core, essential, foundational Christian doctrines which must always be closely held, and other secondary or tertiary issues which must be more loosely held and open to reevaluation.[39] A student who expresses this priority understands this distinction and is able to evaluate beliefs according to this framework. Frank called these "uncompromiseable" and "compromiseable" issues:

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[37]Ibid., 179.

[38]Trentham, telephone conversation with author, August 22, 2014.

[39]Ibid.

> In a much bigger way, I was challenged with the idea that I can be around people who disagree about things and still be their friend, and they can still believe they're saved. And I know that sounds silly, but I came in there kind of black and white, hardnosed, hardheaded about a lot of things, and if you didn't fall within what I felt like what the category that I had made in my own mind of what the truth was, I wrote you off. And I know that sounds so immature and stupid, and that's the way I was. Bible college and professors and talking and debating with students made me realize there's some real believers out there who hold some different beliefs than mine who love Jesus and want to see the Gospel spread all over the world, and that's OK. It's OK that we disagree. There are high-level priority truths that are uncompromiseable, and there are other things that are compromiseable, that aren't top priority issues that I was making top priority issues.

Recurring Themes

The findings presented so far in this chapter have examined the research interview transcripts through two lenses: first, the CSID ratings, and second, Trentham's epistemological categorization. In addition to these two methods of analysis, Trentham also discussed "various identifiable common themes that emerged from interviewees' articulations."[40] These common themes included the primacy of relationships in general, the influence of mentors, the importance of relationships with teachers, the purpose of college, the impact of college, the perspective regarding seminary, and the Bible college "bubble." I examined the interview transcripts in this study to see if these common themes emerged among the Bible college students interviewed, and if so, in what fashion.

The primacy of relationships (in general). In Trentham's research, the primacy of relationships was found to be the "most prominent common theme that voluntarily emerged among participants in the study."[41] Both Trentham and I, following the pattern of the Perry Interview Protocol, began the interview with the question, "Thinking back through your college experience to this point, what would you say stands out the most to you?" In Trentham's study, the responses of 8 of the 10 (80 percent) Bible

[40]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 180.

[41]Ibid., 181.

college students focused on the primacy of relationships. In this study, 20 out of 30 (67 percent) responded to the question with an answer based on the primacy of relationships in their Bible college experience. Ten of those 20 specifically used the word "relationships," while the others simply described various relationships without necessarily using the word. Among the many who referenced relationships was Ian, who focused on the impact of peer relationships:

> You know, the schoolwork is good and the knowledge is good, but I think what stands out the most is probably the relationships that I've made. And you know, I've grown up hearing Bible college students come and speak, and they always say that, "The relationships are the best things," and they just really are. When my decision time came to go to seminary, I found that the friends that are still going to be around here that I have, you know, they're going to be around for a couple more years, and they were a big impact on the decision I made to stay in the area. So, just friendships, friendships that really dig into my life where I need them. I did not have very many of those growing up, even in a Christian school there just wasn't much of that for me, so to come here and find guys, especially, that were willing to be good friends and who would pour into my life, that was something new and something that has been extremely meaningful, and something that I think will last.

Cooper named several kinds of relationships that were helpful to him, including those he had formed with people in the community:

> And I guess coming here, twelve hours away from [home state], I think what really sticks out to me the last four years is the relationships—a lot of the close relationships I've gained not only with the students but also with the professors, and the community. [Name of college] is so well-known in this community that you go anywhere in the community with a [name of college] shirt, or say that you're from [name of college], it's like you're automatically looked at, like in a good way, like they ask advice, they're just really starving for the Gospel up here. It's like they know it, but they're hungry for it. And I guess it's the relationships, and it's how hungry for the Gospel they are up here, and they're so receptive of it that they always want it. I've used relationships and soul-winning together, and I've been quite fortunate a few times to be able to lead people to Christ up here because of the relationships I've formed with the professors here, and that opened up connections—professors bringing me other places, and me sharing my faith. So I guess in a nutshell, relationships have really, really taught me a lot about future ministry.

Trentham noted that although an emphasis on relationships was typical of all the students in his study, Bible college students were more likely than Christian liberal arts or secular university students to mention the impact of their relationships with their professors. In the current study, of the 20 who emphasized the primacy of relationships,

13 mentioned relationships with one or more professors as a vital aspect of their Bible college experience. For example, Peter responded,

> I guess probably the most profound component to my college experience was the interaction I had with my professors. So, like my New Testament professor, one of the church history professors, systematic professors on campus, they really spent a lot of time talking with me with the concepts that I was trying to learn, and [were] also interested in my personal well-being, so that was really significant.

The influence of mentors. Trentham also noted the preponderance of respondents who mentioned the influence of mentors upon their college experience and personal growth and development. When asked if they had a personal mentor during college, 26 out of Trentham's 30 interviewees responded affirmatively.[42] A similar response rate was recorded in this study, with 22 interviewees confirming a relationship with a mentor, with formally or informally, during their years in Bible college.

Seventeen of the 22 said their mentor was one or more professors. Rhonda, whose school required students to have a mentor relationships with a professor, said her mentoring relationship was "extremely" beneficial, for this reason, "They were the person that I could take just about anything to, whether that was academically, spiritually, anything on my heart or my mind. They were just kind of the person that was there and would drop anything to come help me out, whatever situation I was in."

The next most commonly cited kind of mentor was a pastor or youth pastor/leader, mentioned by 10 of the 22 (some mentioned more than one kind of mentor). Titus enthusiastically described three different mentors, two pastors and one parachurch ministry leader:

> One of great blessings that I've always been pretty excited about since high school is that I've had at least three mentors at once who've really just given of their time to be in my life and point me in the right direction. Right now I'm on staff at a church, and the pastor here is a young guy who's like thirty-two, and so he's kind of cool because he's closer—I mean, he's definitely older, but he's closer to my age

[42]Ibid., 183–84.

> and he's somewhat fresh out of seminary. So he's definitely a unique mentor to have, and then my previous pastor, he's an older guy, he's pastored at the same church for twenty-three years, and so it's really fun to hang out with him as well because he just has a whole different set of experiences and skills, and he speaks to me in a different way. And then I have another mentor who was the [name of parachurch ministry] director for [state], and he was instrumental in bringing me to Christ, and he and his wife did our marriage counseling. And so these three guys have been definitely in my life instrumental in helping me, shaping me to be who I am right now.

Other mentors mentioned included college administrators or staff members (5), older students (4), academic advisors (2), resident advisors (1), friends (2), and dorm parents (1).

The importance of relationships with teachers. In Trentham's study, the importance of relationships with teachers was found to be a distinction between institutional contexts, as Bible college and Christian liberal arts students "reported having relationships with one or more of their teachers that were personal, substantive, and dynamic," while no secular university students mentioned such a relationship.[43]

As mentioned above, 17 of the 30 interviewees described a mentoring relationship with one or more professors. In addition to those 17, 12 others mentioned the positive impact of their professors upon their college experience (in a general sense, apart from a specific mentoring relationship). For example, Ricky said,

> The thing I've most grown from, the thing I've most valued, is the relationships I've had with my professors. That is the thing I most value. I have a nice network of professors who have helped me get into good ministry situations and continue to do so, and it's also a network that I can go back to and I feel comfortable going back to anytime in the next couple years if I need to for references or support or even to just ask questions. So I greatly value the relationships available to me with my professors.

Zachery described a high level of personal involvement by the professors in his college:

> Yeah, you know, a communal sense, I think that's ideal. And also teachers that, faculty that are really involved in students' lives. One of the things that I really appreciated about [name of college] is that the professors do want to do life with you. So going over to their house for dinner isn't odd; it happens. You know, [name

[43]Ibid., 185.

> of college] is pretty big for a Bible college, but I can't even count on my fingers how many times I've been over to the professors' houses, and even dumb things like going on a double date with me and my wife with a professor and his wife (laughs). You know? It might seem weird, but it's just one of those things that I really, really loved and enjoyed about [name of college], and I think that's such a crucial piece because it's more than just doing it as a job. So genuine people, that's a huge piece.

The fact that all but one of the Bible college students specifically mentioned the positive impact their professors had on them, not just through their teaching but through personal relationships, indicates just how significantly Bible college professors can impact pre-ministry undergraduates for the good.

The purpose of college. Another differentiation observed by Trentham was the varying perspectives of students from different institutional contexts on the essential purpose of college. According to Christian liberal arts students, the purpose of college is primarily "to shape one's identity as a person, holistically—to establish a mature, authentic *lifestyle* and manner of thinking," or "to construct a coherent worldview."[44] Secular university students indicated the purpose of college is "to 'grow up' or mature in personal (self-identity) and practical (self-responsibility) ways; to increasingly exhibit a sense of personal responsibility regarding education and life."[45] Bible college students, though, described the purpose of college is "to gain knowledge that is *applicable*, in order to prepare for one's vocation."[46]

This distinction appears to be supported by the current study. In response to the question, "What is your view of an ideal college education?", over half (16) of the students responded that an ideal college education should prepare students for their chosen vocation (in this case, vocational Christian ministry). Curtis described an ideal college education this way, "I think an ideal college education would have a greater focus

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[44]Ibid., 186–87.

[45]Ibid., 188.

[46]Ibid., 187.

on the practical ends of things. And even when they teach you theology, a better perspective on the application of that theology and how that integrates to the ministry we're going to be doing." Clayton expressed the same perspective in the following statement, "My view of college education is that it should be preparation in training for a true vocation, or a true calling in life. Not just college to have a piece of paper, or college to say that you went. I think each degree should be full preparation for a vocation." Other responses included life skills (7), academics and/or biblical/theological knowledge (7), spiritual growth and development (6), community life and relationships (5), qualified, accessible professors (4), critical thinking skills/wisdom (3), biblical worldview training (2), making beliefs personal (2), and inculcating a love for life-long learning (2) (some interviewees mentioned more than one purpose for college in their responses).

The impact of college. Research has long noted the tremendous impact the college experience has upon students' personal growth and development.[47] Upon being asked the question, "How would you compare yourself as a college freshman with yourself now?," 14 of Trentham's 30 interviewees replied with some form of the answer that they became "a completely different person."[48] In the current study, 10 interviewees responded to the same question with a similar answer, whether referring to the "big difference" between who they are now versus who they were as freshmen, or some form of being "completely different" or being a "completely different individual" or being "two different people." In fact, 12 respondents actually laughed out loud when the question was posed to them, as thinking back to who they were as freshmen was

[47]Alexander W. Astin, *What Matters in College? Four Critical Years Revisited*, The Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1993), 396; Ernest T. Pascarella and Patrick T. Terenzini, *How College Affects Students: A Third Decade of Research*, The Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 2005), 2:577.

[48]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 189.

humorous to them. Frank referred to the life changes and personal growth he had undergone that changed who he was as a person:

> Well, [I'm] two different people in a lot of ways, and that's not just because of college. I mean, I've gotten married within there, I'm about to have my first child, I've learned a lot more, I've become an associate pastor in that time, so there's been a lot of life changes. But as far as just in schooling, I think I'm a much more mature believer than I was then, I'm not as naïve as I was then, I feel like my faith has been strengthened now compared to then, and that I have more answers for the people that I will be pastoring and that I do pastor now as compared to then.

As far as what specifically had changed about them, a variety of answers emerged (with some respondents giving more than one answer). The most common answer, given by 10 respondents, was that they gained practical ministry skills, and thereby gained confidence in their own abilities to serve in vocational ministry. Jeffrey was typical of this response:

> I really feel a lot more prepared for life in general, but also I want to preach and teach, and I really think that a lot of the exegetical and the science of interpreting Scripture, I've learned so much from that that I really do feel prepared for teaching and preaching, but also feeling confident that I am doing it correctly. And so I think that's something that is invaluable to me personally.

The fact that this was the most common answer would seem to be in harmony with the finding that over half of the students believed one of the primary purposes of college is to train students for their chosen vocation.

The second most common answer, given by 9 students, referenced the spiritual growth they had experienced through the college years. For example, Margaret said,

> Oh, wow (laughs). [There is] definitely a big difference. I know I've definitely grown a lot, and just general maturity I think, which I guess is to be expected four years later. I've definitely grown a lot in my walk with God through being at [name of college] and through the classes and everything. I think that's another thing—everyone is pretty good about encouraging you not to just take the work completely academically, but apply it to your life. And that's definitely been a big thing that has changed me throughout this, throughout my time here. Just not looking at things strictly academically, but just realizing how the academic work plays into your spiritual life, which plays into your emotional life and how everything is very connected like that.

The most common sub-theme Trentham found among the answers to the question regarding personal growth and development was that one-third of the students

came to understand how much they did not know.[49] A similar answer was given by 7 of the 30 students in this study, including Nick:

> Oh man, it's a big difference. As a freshman—and I came in when I was twenty, so I was a little older, but I came in when I was twenty, and I thought I knew it all. You know, I would say that I grew a ton, but it's like the opposite end—I grew a ton becoming more humble recognizing that I don't know anything. (laughs) Like being willing to be, "OK, you know what, I really don't have it all together." And now as a senior year where I recognize that I know more than I did my freshman year, but I also recognize that when you come to the place when you allow yourself to recognize that a lot of people know more than you, and you allow yourself to grow from other people, that's when you start to grow.

Although in Trentham's research "most students who provided statements that reflected this perspective received positional ratings in the higher ranges of the sample population,"[50] no such correlation was observed in the present study.

Each of the other sub-themes that Trentham noted were not observed in the present study in more than a handful of students.

The perspective regarding seminary. As Trentham asked students in his study about why they had decided to enter seminary and what factors influenced their decision of which seminary to attend, he observed two general categories of responses. A clear majority of his respondents, including all of the secular university students and 8 out of 10 of the Christian liberal arts university students, expressed an "idealistic" view of seminary—"the view that seminary is primarily necessary or beneficial for the knowledge and skills that are to be gained there, in preparation for vocational ministry." On the other hand, 5 students—including 4 Bible college students—expressed a "practical-utilitarian" view of seminary—the view "that seminary is primarily necessary

[49]Ibid., 190.

[50]Ibid.

because it is a prerequisite for obtaining employment in a career-type ministry position."[51]

In the current study, 20 students indicated their intention to enter seminary, while 8 did not intend to enter seminary and 2 were unsure. Of the 20 students who intended to enter seminary, 12 expressed an idealistic view of seminary, 2 expressed a practical-utilitarian view, and 6 mentioned both idealistic and practical-utilitarian reasons for entering seminary. William articulated the idealistic view of seminary, describing his desire for further preparation for ministry through a deeper knowledge of God:

> For me personally, I feel like I have a lot of information on how to think. I feel like the groundwork's been laid, but I don't feel like I fully am prepared for ministry, I guess. I feel like I've learned a lot about God, but I don't feel like I really know Him as well as I want to know Him before I actually go and try to lead people spiritually, I guess.

Sabrina, who desires to enter teach Hebrew and Old Testament at a Christian university, succinctly expressed the practical-utilitarian view when asked why she intended to enter seminary: "Uh, there's no way I'll be able to teach with just a bachelor's! (laughs) Unless it's like in a Christian school or something like that, like a high school, but there's not much call for Hebrew in high school." In his responses, Darren mentioned both idealistic (wanting to be better prepared for possible future ministry) and practical-utilitarian (a better chance of being "noticed," or of teaching in higher education with a master's degree) reasons:

> Oh, I think "why not?" That's honestly kind of my opinion: "why not?" Honestly it kind of comes down to, I really want to be good at what I do, and I really want to be noticed—technically, I want to be on someone's radar to help, to be able to have an M.Div. and be a worship leader, or to have higher training in case I felt like I needed to teach. I don't know, I think it was just "why not?" I don't want to say no to it, but I think I shouldn't discount it at least.

[51]Ibid., 194.

"The bubble." A final theme that Trentham discovered was the use of the term "the bubble" by nearly half of Bible college and Christian liberal arts university students to describe the insular and isolated nature of the Christian college environment. In the present study, only 3 interviewees used the term "bubble" to describe the Bible college environment, including Stuart, who said,

> [Bible college is] a weird environment, I would say. It's kind of an odd environment. I've found that other people—like I know a student that goes to [name of another Bible college] who's kind of said the same thing—there is a cultural bubble around schools like this. We're in a college town, there's like five other colleges in this town and it's not that big, but there's almost no interaction with the other schools. So I don't think that's a very good thing. I think there is like a really—at least at conservative Bible colleges—a really conservative little bubble around the school, which isn't great.

Although only a few students used the term "bubble," others compared and contrasted the Bible college environment with other institutional contexts in a variety of ways. Lucas offered a specific observation regarding the difference between Christian students who attend Bible colleges and those who attend secular universities:

> My dad has a college internship program where he's had close to a hundred students over the last ten years come to our church and work. . . . And Bible college, I think, attracts a very specific student, and I think when you put them all together in a Bible college setting, it can often be hard to maintain vitality in faith. And that's just something that this last year that I've been struggling through, like why exactly that is. So here's what I mean by that, is basically you've got this mecca of biblically-sound, conservative, Bible-saturated truth at [name of Bible college he attends], but yet, I've just struggled with sometimes some of the passion and vitality and childlike faith and excitement, almost just like how you think a college student would respond. And then you go to a school like [name of local secular university], or my brother goes to the [name of state university], and spending time with his believing friends there who are in campus ministries, it attracts a very different type of person, and it ends up in a very different type of campus ministry, like [name of Christian campus ministry] or something. And so I don't even know what I've made of all of it, but I think I've just been bothered by "OK, so we have all this knowledge, why are we not the most passionate, the most excited, the most—you know, in seeing even evangelistic projects that these other campus ministries are doing on secular campuses." I think part of it is that the campus as a whole is so ungodly at a secular school that it's easier to tell who the believers are, and you're either Christian or you're not. You know, your faith's being attacked, your friends are going out and partying every night, so you kind of have to draw a line in the sand really, really early on. Am I making sense? These are just things I've thought about in the last year as I've gotten to know my brother's friends at his secular school and my wife's friends at where she went to a secular college, and just seeing a huge different in the students.

Sabrina, on the other hand, offered a positive evaluation of the Bible college environment as compared with the secular college environment:

> I think that being in a Bible college is important. I think that there are many aspects that people forego when they go to a secular college. I mean, you can obviously be a believer and go to a state college, but I am very appreciative of the fact that I'm going to classes with people that care for me, that are praying for me, that are invested in my life and they're wanting to see me grow in my walk with the Lord. I think that's an aspect that you won't get at a secular college necessarily. If there are students that are going to a secular college, then they're going to need to have a strong church foundation to replace that identity and that support system. The Bible college, at least in my experience, has added to a church home. It's kind of like having your own church at school. You have people in the dorms that you know share a common faith with you. We might be different, but we all share the same foundation. And there are many nights that somebody's been going through something, and they come down to my room and we've prayed together, and you just talk it out, and you know that you have a similar foundation. I've got friends all around the world, and people preparing to go out around the world, that are working towards a common goal, and that is something that I don't think you can get at a school that doesn't have Christ as the focus. You can still do wonderful things, but it's a different focus.

It should also be noted that in the current study, nearly half (14) of the Bible college students studied at one or more other institutions of higher education (either online or residentially) prior to attending the one from which they planned to graduate. Of those 14, 9 took classes at a community college, 3 at a secular university, 1 at a Christian university, and 1 at another Bible college before transferring to his current Bible college. Some of these students spoke of the differences they experienced between the community college or secular university environment and the Bible college environment. Ricky transferred from a secular university to a Bible college, and expected that, unlike the secular university, everyone at the Bible college would be as excited about the Bible and theology as he was. He was disappointed that that was not the case:

> I came from [name of secular university] and I went there my first year, and I'd never really heard of theology in my life. I knew about the Gospel, I grew up in your common, Christian home you might say, but I'd never really been taught anything doctrinally sound or deep whatsoever. And then when I came in contact with [theology] when I first started going to the secular school, I fell in love with it, was studying it like seven or eight hours a day. Before I went to [name of Bible college], it took over my life basically. And I was really excited about doctrine, and when I went to [name of Bible college] and I was thinking every other Bible school student would be just as passionate about it as I was regarding theology, but most of them were actually no different [than the secular university students]—in fact, a lot

> of them I saw as worse lifestyles as some of the people I saw at the secular school. And their hearts weren't on ministering the Gospel, it was just get a degree and mom and dad will pay for me to go to Bible school. So it was frustrating to see that apathy.

Ian appreciated the way community college helped put the things he learned at Bible college in perspective:

> I'm very glad for the experience I had at community college. . . . I think it was important for me to even see that perspective before Bible college. I would have had less of an appreciation for the things I've learned in Bible college if I had just gone right from my good, godly Christian family into this good, godly Christian college. To be in the world and to work with them a little bit was good. It gave me a love for people, it gave me some compassion, and then to come to school at [name of Bible college] and learn how you care for those kinds of people. You know, all through my courses I've thought back to people that I met in community college, and I thought, "Man, I could have said this to them, and this would have really helped. This will really come in handy in a counseling situation." And as I interact with these people in everyday life, because they're people who sincerely believe what they believe, and it's my job to love them and share the stuff that I'm learning with them. So it was very important for me to have that experience at community college.

John, who attended community college for two years before transferring to Bible college, believes the failure of higher education in general to teach students how to think poses special dangers in a Bible college setting, because Christian students are not forced to wrestle with their beliefs as they might in a secular college environment:

> You get a much broader experience and influence from a secular direction [at a community college] than, at least this Bible college, provides. In several cases [here at Bible college], I wonder what happens to this person when they're really confronted with someone who knows what they're talking about and knows what they believe, but disagrees with this Bible college student who has really never been challenged with someone who thinks differently than them, and that puts them in a dangerous position, or simply limits their ability to interact with other people, and interact with their world. And at a school that is preparing people specifically, primarily for vocational ministry, that's a dangerous position to put them in. . . . I definitely, in light of that, see the value of . . . mainly just teaching people how to think, and how to think through their position so that we're not simply reproducing people who simply reiterate what they've been taught, but they've actually internalized it. And college education in general, I think that is an emphasis that I think we're missing. There's a lot of the perspective that we're just teaching you information, not necessarily trying to prepare you to function as a professional adult that can utilize this knowledge, and that has internalized and developed their perspective and understanding of the world to function in it. I guess as I've walked through this experience, that's probably one thing that really stands out to me, how important it is to be able to internalize and think for yourself, and that that's not necessarily emphasized in the way that we view education, at least in our educational system at large, but that presents some particular dangers as we enter the realm of Bible college as well.

Findings Related to Bible College Culture

Every educational institution has its own culture, which can simply be defined as "who we are and the way we do things here at this school."[52] Given that Bible colleges have historically had a unique purpose and focus, to train young men and women for vocational Christian ministry,[53] are there distinguishing characteristics of Bible college culture that affect pre-ministry undergraduates' epistemological development?

Trentham explored three particular social-environmental conditions in the three institutional contexts he examined, looking for ways in which these conditions might affect epistemological maturity: challenges to personal beliefs and values, interaction with ideological diversity, and exposure to multiple disciplines. Trentham did not discover significant, measureable differences among the varying institutional contexts in these three areas, but did note several differences that came to the fore in his research.[54]

Challenges to Personal Beliefs and Values

First, Trentham investigated possible challenges to personal beliefs and values among the pre-ministry undergraduates by asking the question, "Through college (in your classes, especially), did you encounter ideas which challenged your beliefs and values?" His research indicated that all of the secular university students reported challenges to their "core, fundamental" beliefs, while no Bible college or Christian liberal arts students

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[52]C. Donald Long, "Acculturation of Beginning Teachers: A Case Study of Two Christian Schools" (Ed.D. diss., University of Sarasota, 1997), 95.

[53]S. A. Witmer, *The Bible College Story: Education with Dimension* (Manhasset, NY: Channel Press, 1962), 25; David S. Dockery, *Renewing Minds: Serving Church and Society through Christian Higher Education*, rev. and updated ed., Kindle e-book (Nashville: B&H Academic, 2008), 7; C. B. Eavey, *History of Christian Education* (Chicago: Moody Press, 1964), 348; Virginia Lieson Brereton, "The Bible Schools and Conservative Evangelical Higher Education, 1880-1940," in *Making Higher Education Christian: The History and Mission of Evangelical Colleges in America*, ed. Joel A. Carpenter and Kenneth W. Shipps (Grand Rapids: Christian University Press, 1987), 130.

[54]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 196.

reported such challenges to their core, fundamental beliefs. The challenges mentioned by Bible college and Christian liberal arts students were to non-fundamental beliefs.[55]

The same question was posed to 29 of the 30 Bible college students in the current study. Of those 29 students, 24 responded in the affirmative, that they had been encountered by ideas that challenged their personal beliefs and values. However, with only one exception, the beliefs that they described were non-fundamental in nature. The exception was Carl, who was surprised by the challenges to fundamental Christian beliefs he experienced in the Bible college he attended:

> When I got to school, conservative Christianity was almost mocked to a degree by quite a good percentage of the student body, and also a decent percentage of the professors. So instead of being in the majority in the circles that I was used to, I was suddenly in the minority.

When asked to elaborate, Carl described how his Old Testament Survey professor questioned the authority of Scripture by denying virtually every supernatural aspect of the Old Testament, from divine creation to the Red Sea crossing. He summarized by saying,

> I mean, there's always Reformed vs. Baptist vs. whatever, or Reformed vs. Arminian vs. Open Theist vs. Roman Catholic or something if you want to divide it up. But it was more like fundamental Christian vs. non-fundamental Christian issues. You know, really breaking into more fundamental doctrines than say the difference between the Reformed and the Arminian, it was more things like, you know, the sufficiency of Scripture, what is salvation, can general revelation save somebody, all sorts of questions that were even probably more fundamental than the level that I was used to discussing.

When asked what got him through these challenges to his faith, Carl spoke of the mentoring relationship he had with his pastor:

> I guess my personal mentor would probably be my pastor from my church, and he was also my professor at [name of seminary], because he's actually a full-time professor there. And so talking with him and getting to know him more, and when I would hear things at [the Bible college] that I had never heard of before, as far as maybe some ways of framing some issues, then I would go talk with him and say, "Well, this is what I've heard, this is how they say they interpret this passage" or something like that, and then we'd discuss it.

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[55]Ibid.

The end result of these challenges was, "I was forced to find out where I really stood, and where my source of strength was, you know, being in God and His Word and the truth, and talking about things with a good background in the Bible instead of 'Well, this is what we've always believed' kind of thing."

It should not be unexpected, though, that there would be very few Bible college students who were challenged in their core beliefs through their Bible college experience, as most Bible colleges (with some exceptions, as Carl's experience proves) are confessional conservative-evangelical or fundamentalist, holding to the core truths of orthodox, conservative Christianity. The question remains as to whether it is better for pre-ministry undergraduates to choose a college environment where their core beliefs will be challenged and therefore strengthened, with the danger of completely turning from those beliefs, or a college environment that upholds and affirms those core beliefs, with the possible danger of never really having the opportunity to wrestle with challenges to their faith until they are out in the "real world."

Interaction with Ideological Diversity

Second, Trentham investigated "the nature and impact of participants' interaction with interfaith dialogue across varying institutional types." Trentham found that, similar to the first condition, Bible college and Christian liberal arts students experienced little if any such interactions, while secular university students did.[56]

The present research study, using the Trentham Interview Protocol, asked the students, "Through college, did you commonly interact with people who held different faiths or worldviews than your own?" Twenty-two of the 29 students who responded to this question answered in the affirmative, 4 responded "kind of," and 3 said "No." However, these encounters with diversity were still within the conservative Christian

[56]Ibid., 198.

framework—with other Christians of different denominations, doctrinal beliefs, and/or personal convictions. Victor responded,

> Yes, there's definitely people that go to our school that are from other denominations, or non-denoms, people that aren't necessarily with a denomination. I know one kid that goes to our school that doesn't believe in the Holy Spirit and His workings today, so, you know, talking with him, seeing why he believes that and stuff like that, definitely has happened.

When asked to describe the effect these encounters had on him, Victor said,

> I liked it personally for me, because it was nice to see, "OK, well, why do you believe this?" And kind of seeing other people's point of views, and then you get to bring that to classes. You know, you get to say, "Well, I heard this this week from another student. What do you think?"

When asked whether there were students with different faiths or worldviews than hers, Elsie responded,

> Yes, there was. I would say on the major doctrines no, but it was interesting interacting with different people as far as some of their personal convictions, maybe on music or dress or different things like that, and just to kind of take in some different perspectives and try to work through my own convictions on some other things. There were some people that had the opinion that these things are completely sinful and the Bible is against them, you know, certain kind of music or certain things like that that I didn't necessarily agree with, but I appreciated being able to interact with those people still, and kind of hear their opinions and try to think through that for myself too.

Exposure to Multiple Disciplines

Third, Trentham looked at the exposure of students to multiple disciplines of study. He did not ask this question of Bible college students because he did not think it applicable to them. The responses from Christian liberal arts and secular university students "did not reveal any relationship between encountering or valuing interdisciplinary studies and participants' epistemological positioning."[57]

In contrast to Trentham's study, this question was asked of the Bible college students in this study. Of the 29 students who responded, 11 answered "yes," 5 answered

[57]Ibid., 200.

"yes" but expressed dissatisfaction with the classes they took, 3 answered "some," 1 answered "no," and 9 said that they took most of these kinds of classes in another institutional setting before coming to Bible college. Most of the responses, though, were focused primarily on general education courses, rather than on actual fields of study, as students at Bible college major/minor in a combination of Bible, theology, and/or vocational ministry majors. Tyson detailed his positive experience with a non-Bible/theology/vocational ministry class:

> I took a lot of literature classes while I was here. The literature professor is one of my favorite professors here, and she has a really good way of through literature teaching you how to think about everything. So I took a lot of classes with her because those are the kind of classes that just kind of force you to think through things. . . . She teaches her hermeneutic on Shakespeare the same way she would teach a hermeneutic on Scripture. So you get to see applications of that Scriptural hermeneutic outside of Scripture, which is huge because in a sense you're almost seeing the ramifications of it because it's in a different context that isn't so theologically weighted. I remember one class in particular, the whole theme was looking at the positives of sin and salvation through secular literature, and how those themes pop up everywhere. You know, they pop up in Dante, they pop up in Faust, all over the place. You take those kinds of things and analyze them through a Scriptural worldview, you know, what is Marlow talking about here, how does that line up? Because literature and the arts is a reflection of how culture thinks, so classic literature is a reflection of how culture got where we are, so it's an easy way to look through—the philosophy of culture—through the lens of literature, so that was cool.

John, though, was dissatisfied with the extent of these kinds of classes:

> Yes, [I was exposed to multiple disciplines of study,] but not to the extent that I would have liked to see. I understand that there's a reason for that, and that in the particular context of [name of Bible college], part of that is they are purposefully narrow in the scope of what they're trying to do, in that they're primarily focused on ministry degrees, and so their scope of additional social sciences, global issues, liberal arts course is fairly narrow and that's on purpose. But at the same time I personally have a high value of a broader scope of education, and so I would have liked to see more expansion in some of those areas, especially math and science. I have probably a higher value on that in that I was originally pursuing an engineering degree, and that's an aspect of education that I particularly enjoy, and what's offered for us is the minimum requirement for general education, and so I would appreciate a broader sense and more expansive opportunities in those areas. But at the same time I understand why and the purpose for it—it wasn't just neglected.

Evaluation of the Research Design

In this section, an evaluation of this research study's design is provided, including both strengths and weaknesses. This study utilized a qualitative, cognitive research design to investigate the epistemological development of pre-ministry undergraduates at Bible colleges. Interview subjects were located by means of purposeful sampling, and then interviewed over the telephone using the Trentham Interview Protocol.

Strengths

Several strengths of the research design were observed. First, the qualitative interview approach, as opposed to other methods such as a quantitative survey approach, permitted me to explore in-depth the perspective of the subjects and the meaning they ascribed to their Bible college experience. The open-ended questions allowed me to hear the actual voices of the study participants as they shared their observations, experiences, perceptions, thoughts, feelings, frustrations, and joys concerning their college experience, providing a richness and quality that could not be obtained using survey data. I was also able to immediately follow up on any responses with clarifying questions.

Second, using a telephone interview data collection method made it possible for me to interview subjects from across the United States, in a way that would have been financially impossible to do in person. The distance created by telephone communication also avoided the somewhat intimidating nature of in-person interviews, instead creating a non-threatening and somewhat anonymous setting that allowed the subjects to share freely.

Third, the number and nature of institutions represented broadened the study through geographical, denominational, theological, and institutional diversity.

Fourth, using the Trentham Interview Protocol provided a data collection protocol that was tested by prior research, first by the Perry Interview Protocol upon which it was based, and then by Trentham in his initial study.

Fifth, the number of interviewees (thirty) was appropriate to a qualitative interview study. It was enough for the study to be "well-saturated," providing sufficient data and perspectival depth.[58] It was also not so many that the interviews could not be completed within the required time frame.

Sixth, the fact that I transcribed the interviews myself meant that I could relive the interview experience while listening to the interview recordings and transcribing what was said. This served to remind me of the interviewees' answers and reinforce, or in some cases correct, my impressions of the interview. Of course, the transcriptions themselves allowed me to go back multiple times to examine the interview data in detail.

Weaknesses

In addition to the strengths of the research design, several weaknesses were also observed.

Varying institutional contexts. The first weakness of the study was related to the varying institutional contexts of the study participants. Trentham noted that approximately 20 percent of the participants in his study had attended at least one other institution prior to the one from which they graduated or intended to graduate. In a few cases, participants "spent as much as half of their college careers in institutional contexts that varied significantly from their final school."[59] This variable was present in the current study to an even greater degree, as nearly half of participants (14) took college-level classes through another institution of higher learning prior to attending the college at which they planned to graduate. Some students took only a few online classes while still in high school before attending college, while others took one to two years at

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[58]John W. Creswell, *Qualitative Inquiry and Research Design: Choosing among Five Approaches*, 3rd ed. (Los Angeles: Sage, 2013), 157.

[59]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 202.

community college or secular university before transferring to Bible college (and in one case, three years). However, there did not appear to be any discernible relationship between this variable and Perry positioning. In fact, among those rated on each of the positions on the Perry scale, there was in each case an almost even distribution of those who had attended Bible college their entire college career and those who had attended at least one other institution.

Selection methodology and sample population. The second weakness of the research design that was observed was related to the selection methodology and sample population. Originally, I intended to interview five to ten students from each of three to five selected Bible colleges. The students were to be chosen at random from a list of qualified students obtained from Bible college administration.

However, I quickly discovered that gathering that many students from that few number of Bible colleges would be impossible for several reasons. First, the timing of my request, at the height of spring semester academic responsibilities, may have limited the number of Bible college administrators who were able to provide assistance in giving me access to seniors for my research study. I began by attempting to make a personal request via telephone and then following up on that conversation via email. I was able to actually speak with only a few administrators over the telephone and was forced to leave voice mail messages for most of them, and then follow up by sending an email. Still, of the fifty-seven Bible colleges contacted, I received thirty-nine initial responses.

Second, my initial desire was for Bible college administrators to provide a complete list of seniors with email contact information so that I could randomly select certain seniors to send a request to participate in the study. However, most administrators were hesitant to provide such a list because they viewed it as violation of the Family

Educational Rights and Privacy Act (FERPA).[60] Those administrators that did express willingness to allow access to students preferred that I send the administrator an invitation email, which the administrator then passed along to seniors, asking them to contact me if they were interested in being included in the study. This "extra step" (rather than an interested senior simply replying to an email sent directly from me), although understandable, appeared to reduce the number of seniors who responded.

Third, I received a limited number of responses from seniors contacted, possibly because of the timing of the request. I did not receive approval to begin contacting subjects until early February, and needed to complete the interviews by early May to allow time for transcription, CSID rating, analysis, and writing reports before the project completion deadline. This meant that students were contacted in February, March, and April with a request to undergo an hour-long telephone interview. This, of course, was the time when seniors were finishing up assignments, examinations, and projects in order to meet spring graduation requirements, and in spite of the incentive of a $10 amazon.com gift card, this may have reduced the number of students interested in participating in the study.

Fourth, because of their narrow focus, most Bible colleges are smaller than other colleges and universities. When factoring in inclusion criteria such as age and desire to enter vocational ministry, the pool of qualified seniors in each Bible college was quite small.

The result of these factors was that even at the institutions in which I was given some form of access by administrators to seniors, in some cases no qualified seniors responded and in other cases only a very few. This is why a total of fifty-seven Bible

[60]U.S. Department of Education, "FERPA for Students," 2011, http://www2.ed.gov/policy/gen/guid/fpco/ferpa/ students.html (accessed July 6, 2014).

colleges were contacted to obtain the thirty interviews necessary to complete the study, and that these thirty interviews were spread out over fourteen different institutions.

Additionally, I was unable to randomize the sample, and was forced to rely on voluntary responses to participation invitations. Research indicates that volunteers for research studies similar to the present study tend to be more sociable and extraverted, more willing to self-disclose, more conscientious, and more intelligent than non-volunteers.[61] One might surmise that seniors who had the time and interest to devote to an hour-long interview during the culmination of their required college coursework were the kind of seniors who had their schoolwork under control, rather than those who were overwhelmed by schoolwork left to be done before graduation. Perhaps they were also the kind of students who were attracted by a study on the "intellectual development of college students," and by one in which they could share their college experiences. Several students commented that the invitation had intrigued or interested them, and that they enjoyed discussing their own intellectual growth and development. It is possible, then, that the students in this study were above-average intellectually.

However, this possibility is mitigated by the fact that the average Perry positioning among seniors in this study was almost identical to that of the Bible college seniors in Trentham's study. The corroboration of this study and Trentham's study makes it more likely that the sample utilized by this study may, in fact, be representative of the population.[62]

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[61]Robert Rosenthal and Ralph L. Rosnow, *The Volunteer Subject* (New York: John Wiley & Sons, 1975), 30–33, 35–36, 66–68; Jan-Erik Lönnqvist et al., "Personality Characteristics of Research Volunteers," *European Journal of Personality* 21, no. 8 (December 2007): 1025–26.

[62]Robert Stuart Weiss, *Learning from Strangers: The Art and Method of Qualitative Interview Studies* (New York: Free Press, 1994), 28.

CHAPTER 5
CONCLUSIONS

This study was intended to investigate the impact of Bible colleges on the epistemological growth and development of young people who intend to enter vocational Christian ministry. It built upon the research of John David Trentham, who examined pre-ministry undergraduates in three different intuitional contexts, by focusing exclusively on the Bible college environment. I first reviewed the precedent literature related to the Perry Scheme, examined the theoretical underpinnings of the Perry Scheme according to a biblical and theological framework, and surveyed several possible interactions with the Perry Scheme from a Christian perspective. I then performed a qualitative, cognitive study by interviewing thirty Bible college seniors about their college experience. The interview transcripts were then evaluated by a rater trained in Perry Scheme analysis as well as by me. This chapter details conclusions that were drawn from that analysis, including research implications, applications, and limitations, in addition to suggestions for further research.

Research Purpose and Question

The purpose of this study was to explore the relationship between Bible college attendance and epistemological development of pre-ministry undergraduates. This purpose was guided by the following research question: What is the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual and ethical maturity according to the Perry Scheme?

Research Implications

This section lists and then details certain implications from the findings of this research study in relation to the guiding research question.

1. Local church ministry involvement is an important component in the Bible college experience of pre-ministry undergraduates.

2. Bible college students are more likely than not to have already decided to enter vocational ministry before they entered Bible college.

3. Pre-ministry Bible college undergraduates progress through the positions of intellectual maturity according to the Perry Scheme in a similar manner as typical college students.

4. A relationship seems to exist between higher positioning on the Perry Scheme and higher levels of critical thinking.

5. Just as is the case for Christian liberal arts and secular university pre-ministry undergraduates, for a majority of Bible college seniors "relational connections define the most significant aspect of the college experience."[1]

6. Bible college pre-ministry undergraduates perceive their professors to be exercising a high degree of positive impact upon them through personal relationships and interactions.

7. Bible college students view the primary purpose of college is to train them for vocational ministry.

8. Students who study at community college or secular college/university may have a different perspective of the Bible college environment than do students who attend Bible college for their entire college experience.

Implications Drawn from Form Data

Two research implications were drawn from the Dissertation Study Participation Form data. First, *local church ministry involvement is an important component in the Bible college experience of pre-ministry undergraduates*. All thirty participants were involved in a local church, listing on the form the name of the church at which they were involved while in college. With only one exception, all of the students

[1]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 205.

were actively involved in one or more areas of service or ministry in their local church. Additionally, nine students mentioned a mentoring relationship with one or more of their pastors, and eight students mentioned the importance of local church involvement in preparing them for ministry. Bible colleges should continue to foster, and perhaps even require, local church involvement as a part of the college experience.

Second, *Bible college students are more likely than not to have already decided to enter vocational ministry before they entered Bible college*. Trentham noted that pre-ministry undergraduates attending a secular university were more likely to have decided to enter vocational ministry during the middle or later years of their college experience, while pre-ministry undergraduates attending a Bible college or Christian liberal arts university were more likely to have decided to enter vocational ministry before attending college or early in their college experience.[2] In the current study, seventeen out of thirty Bible college students decided to enter vocational ministry before attending college, while an additional ten students decided to enter vocational ministry in their freshman year of college. This would support the notion that "students who commit to pursuing vocational ministry prior to college or early in college most often determine that confessional Christian institutions are most ideally suited to offer them the most beneficial college experience and training in light of their career intentions."[3]

Implications Drawn from the Research Question

Two implications were also drawn from the research question itself. First, *pre-ministry Bible college undergraduates progress through the positions of intellectual maturity according to the Perry Scheme in a similar manner as typical college students*. Typical college students graduate from college somewhere between positions three and

[2]Ibid., 207.

[3]Ibid.

four in the Perry Scheme.[4] The numerical average of scores of the seniors in this study was 3.456, indicating a position 3-position 4 transition. The fact that the average scores of the Bible college students in the current study was almost identical to the average score of the Bible college students in Trentham's study, 3.466, would seem to offer confirmation to this implication.[5]

Second, *a relationship seems to exist between higher positioning on the Perry Scheme and higher level of critical thinking*. The nine students who were rated below the typical expected range (position 3 or below) verbalized an average of 0.67 instances of critical thinking, the fourteen who were rated within the typical expected range (between positions 3 and 4) verbalized an average of 1.07 instances, and the seven who were rated above the typical expected range (position 4 or above) verbalized an average of 2.60 instances of critical thinking.

The current study appears to confirm Trentham's initial work, as he observed that preferences for critical thinking were more prevalent among those rated higher in the Perry Scheme. The implication he drew was that "among pre-ministry undergraduates, preferences for higher levels of cognitive functioning according to Bloom's taxonomy are generally indicative of higher epistemological positions within the range of the sample population."[6]

The fact that Bible college students—educated in institutions committed to absolute truth—were found to progress along the Perry Scheme towards "commitment in relativism" in much the same way as average, secular college students has raised questions about the true nature of Perry's discoveries. The combined research of

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[4]William S. Moore, "Interpreting MID Ratings" (Olympia, WA: Center for the Study of Intellectual Development, 2004), 3. This is based on MID evaluations, but as noted above, the MID rating system is used as the basis of evaluation for the interview transcriptions rated in this study.

[5]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 152.

[6]Ibid., 212.

Trentham's study and the current study seem to indicate that the essential discovery of the Perry Scheme is growth in critical thinking skills. This growth is manifestly different according to a person's closely held beliefs and according to the environment in which the growth in critical thinking is fostered. In other words, a student without a strong prior commitment to biblical truth and with no connection to a community of like-minded Christians, entering a public university in which "relativism . . . permeates the intellectual and social atmosphere,"[7] will come to a "radical reperception of all knowledge as contextualistic and relativistic"[8] that results in "personal commitment [to self-identity and self-fulfillment] in a relative world."[9] However, a student with a strong prior commitment to biblical truth and with a connection to a community of like-minded Christians,[10] entering either the same public university or a Christian liberal arts university or Bible college in which a commitment to absolute truth as revealed in Scripture permeates the intellectual and social atmosphere, will grow in critical thinking that allows him to strengthen his or her personal commitment to biblical truth.

This discovery about the essential nature of the Perry Scheme would seem to minimize its usefulness in the Bible college setting and lead away from wholehearted appropriation. Bible college educators can focus on teaching critical thinking skills without the pluralistic baggage that comes along with the philosophical foundations and assumptions of the Perry Scheme.[11]

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[7]William G. Perry, *Forms of Intellectual and Ethical Development in the College Years: A Scheme*, Jossey-Bass Higher and Adult Education Series (San Francisco: Jossey-Bass, 1999), 4.

[8]Ibid., 121.

[9]Ibid., 38, 64.

[10]See Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 183.

[11]See "A Biblical Analysis of the Perry Scheme" in chap. 2 above.

Implications Drawn from Trentham's Categories and Themes

Four implications were drawn from Trentham's epistemological categories and themes. First, *just as is the case for Christian liberal arts and secular university pre-ministry undergraduates, for a majority of Bible college seniors "relational connections define the most significant aspect of the college experience."*[12] In Trentham's research, 80 percent of Bible college seniors mentioned the primacy of relationships as the most significant aspect of their college experience.[13] In the current study, 67 percent of Bible college seniors responded in a similar fashion. When one considers that the purpose of Bible college is to impart biblical knowledge and train students for ministry, it is significant that two-thirds to three-fourths of Bible college students did not mention the knowledge they learned or the vocational skills they gained as most significant, but the relationships they formed with classmates and professors. Bible college administrators should invest time, resources, and attention towards fostering healthy relationships that will encourage students in their spiritual growth and ministry development.

Second, *Bible college pre-ministry undergraduates perceive their professors to be exercising a high degree of positive impact upon them through personal relationships and interactions*. In Trentham's study, Bible college students were more likely than Christian liberal arts or secular university students to report "having relationships with one or more of their teachers that were personal, substantive, and dynamic."[14] In the current study, all but one of the participants described the positive impact their professors had upon their college experience. This was not due to any specific, leading questions such as, "Tell me about your professors," but rather in response to more general questions about what stood out from their college experience, whether or not they had a mentor

[12]Ibid., 205.

[13]Ibid., 182.

[14]Ibid., 185.

during college, or other questions. The importance of the personal relationships of professors and students, and the powerful impact they can have upon the Bible college experience, cannot be overstated. Bible college administrators and professors should seek to cultivate these relationships and asses the effectiveness of their efforts to build and strengthen these relationships.

Third, *Bible college students view the primary purpose of college is to train them for vocational ministry*. Trentham noted that Bible college students primarily viewed the purpose of college is to prepare for vocational ministry.[15] This contrasted with Christian liberal arts students, who viewed the purpose of college is to shape one's identity, lifestyle, manner of thinking, and worldview, as well as with secular university students, who viewed the purpose of college is to grow in one's identity and personal responsibility.[16] In the current study, the most common answer to the question "What is your view of an ideal college education?", given by over half (16) of the students, was that an ideal college education should prepare students for their chosen vocation (in this case, vocational Christian ministry). The research did not investigate whether students enter Bible college with this expectation or gain it as they progress through their college experience. Regardless of when they come to this expectation, it would seem that many Bible college seniors agree with the historic purpose of Bible colleges to train young men and women for vocational Christian ministry.[17] The obvious question follows: how effective are Bible colleges at preparing students for vocational ministry? Although this

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[15]Ibid., 187.

[16]Ibid., 186–88.

[17]S. A. Witmer, *The Bible College Story: Education with Dimension* (Manhasset, NY: Channel Press, 1962), 25; David S. Dockery, *Renewing Minds: Serving Church and Society through Christian Higher Education*, rev. and updated ed., Kindle e-book (Nashville: B&H Academic, 2008), 7; C. B. Eavey, *History of Christian Education* (Chicago: Moody Press, 1964), 348; Virginia Lieson Brereton, "The Bible Schools and Conservative Evangelical Higher Education, 1880-1940," in *Making Higher Education Christian: The History and Mission of Evangelical Colleges in America*, ed. Joel A. Carpenter and Kenneth W. Shipps (Grand Rapids: Christian University Press, 1987), 130.

question is beyond the scope of the current study, perhaps knowing that many students view the purpose of Bible college in the same way administrators do will help administrators and students work together to assess institutional effectiveness in vocational ministry training.

Fourth, *students who study at community college or secular college/university may have a different perspective of the Bible college environment than do students who attend Bible college for their entire college experience*. Nearly half (14) of the Bible college students in this research project studied at one or more other institutions of higher education (either online or residentially) prior to attending the one from which they would graduate. Of those fourteen, nine took classes at a community college, three at a secular university, one at a Christian university, and one at another Bible college before transferring to their current Bible college. Several of these students spoke of the differences they experienced between the community college or secular university environment and the Bible college environment. In some cases, their previous experiences put their Bible college experience in a more positive light, while in other cases their previous experiences made them view Bible college more negatively.[18] Bible college administrators and professors should be aware that Bible college students' prior college experiences may affect their expectations of, perceptions about, and perspectives concerning their current Bible college experience.

Research Applications

This study investigated epistemological development of pre-ministry Bible college students and the appropriateness of using the Perry Scheme to measure such development in the Bible college setting. Guided by the research design, I was able to analyze the data generated by the study and interpret the findings concerning the

[18]See examples in chap. 4 above, p. 114-17.

epistemological development of Bible college students according to the Perry Scheme. Other themes were examined in light of Trentham's prior research that shed light on the influence of a Bible college education on pre-ministry students as well as the uniqueness of the Bible college environment. In view of these findings, the research implications can be applied to four groups.

First, the research applies to young people who desire to pursue vocational Christian ministry and who are current or soon-to-be Bible college students. As this study is unique in its sample and research design, it offers a unique perspective through the voices of the thirty Bible college students who were interviewed. Their perspectives and experiences can be used by students to consider their own sense of calling and choice of college. They can also evaluate their own college experiences and personal epistemological development through the lens of this study and the voices of its participants. For example, Bible college students may intentionally look for ways to sharpen their critical thinking skills, get connected with a local church in which they can use their ministry knowledge and skills, personally engage professors who can challenge them intellectually, and work at developing healthy relationships that will edify them spiritually and intellectually.

Second, this research applies to those who counsel, advise, and mentor students who intend to enter vocational Christian ministry, and specifically those students who are considering a Bible college education. These would include parents, local church senior pastors, youth pastors, or leaders, and Christian school educators and administrators, among others. For example, these advisors may inform students as to the advantages and disadvantages of the Bible college institutional context. They may also encourage students to find a doctrinally sound yet intellectually challenging Bible college, to join a local church, to view professors as more than merely classroom lecturers but also as personal mentors, and to build healthy and sharpening relationships.

Third, this research applies to Bible college administrators, student services professionals, and educators. Administrators and student services professionals may use this study to inform their educational philosophy, curriculum choices, faculty development, student support structures, and student interactions. They may also look for tools to evaluate the epistemological development of the students, tools that match their college educational philosophy and theological beliefs. Educators may use the findings of this study to evaluate and inform their pedagogy as they seek to develop critical thinking skills in their students. They may also be more intentional about developing relationships with their students since this has been found to be such an important aspect of their experience.

Fourth, this research applies to seminary administrators, admissions counselors, and educators who evaluate Bible college graduates as potential and forthcoming students. Bible college graduates, as a whole, can be seen to be similar in epistemological development to graduates from other institutional contexts. Moreover, this research can help seminary administrators and educators understand the unique perspective of Bible college graduates as compared with graduates from other institutional contexts, in areas such as the purpose and impact of college.

Research Limitations

In addition to the limits of generalization detailed in chapter 3, the following limitations should also be taken into consideration when evaluating the findings and conclusions of this research study:

1. Because this study utilized a small sample that was comprised of volunteers, the epistemological development of the participants in the study may not necessarily be reflective of all pre-ministry undergraduates at Bible colleges.
2. Although the study enlisted participants from a number of Bible colleges representing geographical, denominational, and institutional diversity, the findings may not necessarily be reflective of students at other Bible colleges due to the uniqueness of each institutional setting.

3. Because females comprised only 20 percent of the sample population, this study offers no conclusive observations regarding differences in intellectual maturity according to gender.

4. Nearly half of the participants in this study took courses from at least one other institution of higher learning before attending the school from which they planned to graduate. However, the impact of attendance at multiple institutions upon one's epistemological development is beyond the scope of this study.

5. The conclusions presented in this research study were based primarily on the content analyses performed by William S. Moore, John David Trentham, and myself. The findings and conclusions of the study should be considered in light of any possible influence from the subjectivity and biases of each individual. The existence, nature, and extent of any such influence could be exposed and confirmed by additional research.

Further Research

This qualitative interview study was the most comprehensive analysis in evangelical scholarship known to date of the epistemological development of pre-ministry Bible college students. I used the Perry Scheme as a model and research by John David Trentham as a theoretical lens to examine the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual maturity according to the Perry Scheme.

The findings and conclusions of this study, as well as the findings and conclusions of the study upon which it was based, have suggested possibilities for further research into the subject of the epistemological development of pre-ministry Bible college undergraduates. The following list presents ideas for research inquiries—both major studies and minor supplemental studies—that can build upon this study. Several of the ideas listed below reflect suggestions by Trentham for further research, modified to focus on the specifics of this study.[19]

1. A study may be undertaken to specifically explore the influence of gender on the epistemological development of pre-ministry Bible college students.

[19]Trentham, "Epistemological Development in Pre-Ministry Undergraduates," 220–22.

2. A study may be undertaken to investigate the significance of attendance at multiple institutions on the epistemological development of pre-ministry Bible college students.

3. A study may be undertaken to trace the epistemological development of pre-ministry Bible college students across the course of their college experience, utilizing a cross-sectional analysis through interviews with different students representing each academic year (freshman-senior). As Trentham notes, "This type of study would specifically explore the process of maturation as it occurs during the college experience, and may identify the point(s) at which the most decisive changes occur regarding evangelical students' personal formation and epistemological development."[20]

4. Similarly, a longitudinal study may be undertaken in which the same pre-ministry Bible college students are interviewed multiple times, once after each of their academic years. This study would more closely reflect the design used by Perry in his original research as well as by other follow-up studies.

5. A study may be undertaken to examine the perspectives of current vocational ministers regarding the impact of their Bible college experience upon their intellectual maturity and preparedness for ministry. This study could utilize either a survey-based quantitative design, or an interview-based qualitative design.

6. A study may be undertaken to evaluate the impact of mentoring on the epistemological development of Bible college pre-ministry undergraduates. Such a study may focus on either formal, institutionally-designed mentoring programs, on informal mentoring relationships, or on a comparison between the two approaches.

7. As the significance of teacher-student relationships has been noted in the current study, a study may be undertaken to further explore the impact of these relationships on the epistemological development of pre-ministry Bible college undergraduates. Such a study would provide additional guidance to Bible college administrators and professors as they seek to foster helpful teacher-student relationships.

8. A study may be undertaken to research the impact of seminary education on the epistemological development and ministry preparedness of pre-ministry Bible college graduates. This study would be especially significant in the Bible college context, as there is a significant difference of opinion among vocational Christian ministers as to the necessity of seminary education after completing a Bible college education.

9. A study could be undertaken to further explore the relationship between epistemological developmental models and concepts such as "commitment to relativism" in the Perry Scheme, critical thinking according to Bloom's taxonomy, "reflective judgment" and similar concepts, and the biblical concept of wisdom.

10. Although the Perry Scheme is widely influential in higher educational philosophy and pedagogy, its pragmatic and relativistic assumptions present problems in the Bible college setting. A study could be undertaken to develop and test to construct a

[20]Ibid., 221.

biblically-based, theologically-grounded, wisdom-centered evaluative model of epistemological college student development.

11. Once a biblically-based, theologically-grounded, wisdom-centered evaluative model of epistemological college student development has been developed and tested, a study could be undertaken to develop and test a standardized interview protocol for Bible college respondents.

12. Once such a standardized interview protocol has been developed and tested, a study could be undertaken to design and test an essay-based instrument to more easily evaluate the epistemological development of pre-ministry Bible college undergraduates.

13. Once such an essay-based instrument has been developed and tested, a study could be undertaken to design and test a forced-response survey instrument to evaluate larger sample groups of pre-ministry Bible college undergraduates.

APPENDIX 1

DISSERTATION STUDY PARTICIPATION FORM

This form has been modified from Trentham's Dissertation Study Participation Form.[1]

Instructions

1. In Section 1, read the "Agreement to Participate" statement and confirm your willingness to participate in this study by checking the appropriate box and entering the requested information.

2. In Section 2, provide responses to each of the prompts and questions by entering your information in the shaded boxes. Please enter responses for every box, even if "not applicable" is most appropriate. [Note: Since most participants have already graduated from college, most of the prompts and questions below are in past tense. If you have not yet graduated, simply consider the prompts and questions in present (or, in some cases, future) tense.]

Section 1

Agreement to Participate

The research in which you are about to participate is designed to explore the impact of the Bible college experience on the personal development of preministry undergraduates. This research is being conducted by Greg Long for purposes of doctoral research. In this research you will complete the form below and participate in a personal interview by telephone. Any information you provide will be held *strictly confidential*, and at no time will your name be reported, or your name identified with your responses. *Participation in this study is totally voluntary and you are free to withdraw from the study at any time*.

[1]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 224–25.

By your completion of this form and the subsequent personal interview, and by checking the appropriate box below and entering the requested information, you are giving informed consent for the use of your responses in this research.

☐ I agree to participate

☐ I do not agree to participate

Name: _____ Date: _____

Preferred name: _____ Gender: _____

E-mail: _____ Year of birth: _____

Section 2

Name and location of the college from which you graduated: _____

_____

Did you attend another college or university other than the school you graduated from? If so, please give the name the school(s) and the year(s) attended: _____

_____

Month/year of graduation: _____

Degree(s) awarded (e.g., BA/BS, major(s), minor(s)): _____

Do you plan to attend seminary (even if not immediately after graduation)? _____

At which church did you maintain active membership or involvement during college (name and location)? _____

What are some particular areas of ministry or service in which you were personally involved at your home church during college (e.g., youth ministry, social ministries, etc.)? _____

What other church, para-church or humanitarian ministries (if any) were you involved in during college (e.g., BCM, Campus Crusade, Habitat for Humanity, etc.)? _____

_____

When did you decide to pursue vocational ministry? (Before or during college?) _____

_____

During which year of college?) _____

APPENDIX 2

STANDARDIZED PERRY INTERVIEW PROTOCOL

1. What is your view of an ideal college education? How, if at all, should a student change as a result of that educational experience?

2. Have you encountered any significant differences in beliefs and values in your peers in college or other people you've met in your experiences here? What is your reaction to this diversity; how do you account for these differences? How do you go about evaluating the conflicting views or beliefs you encounter? How, if at all, do you interact with people who have views different from your own? [Note: The focus here is on the process of evaluating and/or interacting, not on specific beliefs or reactions per se]

3. Facing an uncertain situation in which you don't have as much information as you'd like and/or the information is not clearcut, how do you go about making a decision about what you believe? Is your decision in that situation the right decision? Why or why not? If so, how do you know? [Note: Try to get the student to describe the process of coming to a judgment in that kind of situation, which in many cases will involve generating a concrete example of some personal relevance but not too emotionally-charged—preferably an academic-related context, related if possible to their major field.]

4. How would you define "knowledge"? How is knowledge related to what we discussed earlier in terms of a college education? What is the relationship between knowledge and your idea of truth? What are the standards you use for evaluating the truth of your beliefs or values? Do your personal beliefs/values apply to other people—in other words, are you willing to apply your standards to their behavior? Why or why not?

Possible Follow-up Probes in Each Area

1. How have you arrived at this particular view of these issues? Can you remember a time when you didn’t think this way and recall how your view changed over time?

2. To what extent do you think the view you have expressed is a logical and coherent perspective you've defined for yourself? What, if any, alternative perspectives have you considered?

3. How likely is it that your view will change in the future? If you think it's likely to change, what kind of experiences or situations might produce such change?

APPENDIX 3

ALTERNATE PERRY INTERVIEW PROTOCOL

(This protocol is particularly useful for probing for post-position 5 reasoning.)[1]

1. Looking Backward (College Learning Experience)

We're interested in learning how you view your overall educational experience in college. Later I'll ask you some specific questions, but for now, I'd just like you to tell me what seems important to you as you think about it--what stands out to you as you think about your experience here?

Alternatives: What about your college experience has influenced you the most—what stands out in your mind that has really made an impression on you and influenced you? Or What overall sense do you make of your educational experience in college?

Probes (request examples, tie together threads of narrative, relate to earlier experiences):

- Who has been important to you in your learning? (peers, faculty/administrators, family, others)
- How have you changed in the way you approach learning since you've been in college?
- How would you describe yourself—in general, and specifically as a learner?
- Are there any ways in which you are different than before as a result of your experience in college? [Possible followup: If you could have your way, what kinds of changes in yourself would you have hoped to see as a result of your educational experience in college?]

2. Clarifying Convictions

Does it seem to you that usually there is only one opinion, idea or answer that is really right or true, or do you think there can usually be more than one? Explain.

Follow-up Probes (variable, depending on what seems appropriate with student):

- What makes an opinion right? Are all opinions right? Can you say some opinions are better than others? How do you know? In terms of what makes an opinion "right," what role do you think experts and authorities need to play?

[1]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 227–28.

- Is it important to obtain support for your opinions? What kind of support?
- Do you think your outlook on this diversity of opinions has changed in recent years?
- What/who led to this change?
- It seems that with all the various ways of looking at things and all of the different opinions that exist, there's a very confusing variety of choices to make. Do you have any strong convictions to help guide you in these choices? Could you describe an example?
- How did you come to hold this point of view? Can you describe how your thinking developed? What alternatives did you consider in this process, and why did you discard them?
- Do you feel or have you ever felt that you would like to convince others of your ideas?
- What do you think when others have strong convictions and try to convince you?
- If someone attacks your belief [about opinions], how do you defend yourself?

Optional questions:

React to each of these statements, describing how and to what extent they apply to you:

- "I never take anything someone says for granted. I just tend to see the contrary. I like to play the devil's advocate, arguing the opposite of what someone is saying, thinking of exceptions, or thinking of a different train of logic."
- "When I have an idea about something, and it differs from the way another person is thinking about it, I'll usually try to look at it from that person's point of view, see how they could say that, why they think that they are right, why it makes sense to them."

3. Looking Forward (Goals for future and career)

What are your educational or career goals at this point? How have your educational or career goals changed since you started--for instance, do you have any goals now that you didn't have before, or do some you started with seem less worthwhile or realistic?

In what ways has the college specifically contributed to the achievement of your goals up to this point?

How do you think your experiences or accomplishments in college will connect or relate to what you do after college?

*In each question set, explore for:

- Synthesis/integration—pulling threads of narrative together
- Connection-making—between ideas, between discipline and personal experience, etc.
- Self-reflection—e.g., understanding of self-as-learner, as person considering career choices, etc.
- Meta-thinking—analysis of own thinking over time (i.e., how it's changed/evolved)

APPENDIX 4

TRENTHAM INTERVIEW PROTOCOL

This is a version of the Perry Interview Protocol modified by Trentham.[1]

Questions regarding overall development through the college experience (RQs 1, 2)

1. Thinking back through your college experience overall (to this point), what would you say most stands out to you?

2. How would you compare yourself as a college freshman with yourself now? (Probes: . . . with regard to knowledge? learning? convictions? personal maturity? Personal faith? relationships?, etc. Also: Do you feel like you've "grown up" as a result of being in college? How so?)

3. In what ways, if any, has your college experience prepared you for life after college? (Probes: How has your specific major prepared you for the future?)

4. Have you had someone who has been a personal mentor to you during college (e.g., a teacher, advisor, older adult, or minister)? (If yes . . .) What was the impact or benefit of that relationship for you? (Probe: Do you think those types of relationships are important for college students?)

Questions regarding perspectives on knowledge and learning (RQ2)

5. What is your view of an ideal college education? How, if at all, should a student change through the college experience?

6. What is your idea of a great college course? (Probes: What do you gain from it? What is the role of the teacher? What is the role of the students? What type of assignments are most beneficial?)

   - Related (if necessary): What do you most value about the education you received in college? (Probes: What do you least value? What would you change if you could?)
   - Related (if necessary): Did you get to know many of your professors through college? How would you describe your relationship with the teacher(s) you got to know best? (Probe: What would you say are the top attributes of the best college teachers? What sort of relationship would you most like to have with your professors in seminary?)

[1]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 229–30.

7. Why do you feel it's necessary for you to go to seminary? (Probes: How did/will you choose the school? What's your purpose in obtaining a seminary degree? What do you hope to gain?)

Questions regarding the impact of encounters with diversity (RQ3)

8. Through college (in your classes, especially), did you encounter ideas which challenged your (Christian) beliefs and values? How did you (and how do you now) react to that sort of challenge? Is this something you value, looking back? Why? (Probes: Do you feel these types of challenging encounters are important? How so? How do you go about evaluating diverse and conflicting views when you encounter them?)

9. Through college, did you commonly interact with people who held different faiths or worldviews than your own? Did this sort of interaction occur in your classes? What impact did these types of interactions have on you, personally?

10. In your coursework, were you exposed to multiple disciplines of study (sciences, social sciences, humanities, etc.)? Do you feel this was a benefit to you, personally, and also in preparation for the future? How so?

Questions regarding personal commitment (RQs 1, 2)

11. When you face a situation where you have to make a decision about an uncertain or difficult issue, and you don't have as much information as you'd like or the information is not clearcut, how do you go about making a decision about what to believe or choose?

    - Related (if necessary): How do you go about arriving at your own positions on core issues and secondary issues, especially when it's hard or impossible to find definitive answers? (Probe: How do you decide on important-but-debatable issues when there are multiple opinions that seem equally valid (e.g., in matters of theology, practices in the church, etc.?))
    - Probe here about the relation of "proof" to personal knowledge/beliefs/faith.

12. Thinking about your Christian faith . . . were there times through college that you felt like you needed to "examine what you believe"? (Probes: Even core beliefs? What prompted that? Was this ultimately a positive or negative experience for you?)

13. Tell me about your "calling to ministry." (Probes: How did you make the decision to commit to vocational ministry? Did you ever consider a different career path? Were there times through college when you questioned or doubted your decision or your ministerial calling in general? How did you deal with that? Do you think about your commitment to ministry differently now than you did at first?)

Final question

14. To wrap this up, I've asked you questions about several different experiences and issues . . . but is there anything I haven't asked you about that you would say has been really significant or life changing through your time as a college student?

APPENDIX 5

SCORED POSITIONS AND RATER NOTES

Table A1 indicates the scored positions and rater notes for each participant in this study. It may be compared to the scored positions and rater notes for the Bible college students in Trentham's study.[1]

Table A1. Scored positions and rater notes

Participant	*Position*	*Description*	*Numerical*	*Position/ Transition*	*Rater Notes*
Titus	223+	dominant 2 opening to 3	2.33	2-3	
Ricky	233+	dominant 3 w/ trailing 2	2.67	2-3	
Zachery	233-	dominant 3 w/ trailing 2	2.67	2-3	
Darren	233	dominant 3 w/ trailing 2	2.67	2-3	
Rhonda	233+	dominant 3 w/ trailing 2	2.67	2-3	
Lucas	233+	dominant 3 w/ trailing 2	2.67	2-3	2/4 split
Clayton	333	stable 3	3	3	
Nick	333(4)	stable 3	3	3	glimpse 4
Jeffrey	333(4)-	stable 3	3	3	glimpse 4
Cooper	334	dominant 3 opening to 4	3.33	3-4	
Kelsey	334-	dominant 3 opening to 4	3.33	3-4	
Margaret	334	dominant 3 opening to 4	3.33	3-4	2/4 split
Frank	334+	dominant 3 opening to 4	3.33	3-4	
Victor	334-	dominant 3 opening to 4	3.33	3-4	
Stuart	334+	dominant 3 opening to 4	3.33	3-4	
Elsie	334	dominant 3 opening to 4	3.33	3-4	
Carl	334	dominant 3 opening to 4	3.33	3-4	2/4 split
Peter	344+	dominant 4 w/ trailing 3	3.67	3-4	

[1]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 238.

Table A1—*Continued*. Scored positions and rater notes

Ian	344-	dominant 4 w/ trailing 3	3.67	3-4	
Zane	344+	dominant 4 w/ trailing 3	3.67	3-4	
Curtis	344+	dominant 4 w/ trailing 3	3.67	3-4	
Sabrina	344-	dominant 4 w/ trailing 3	3.67	3-4	
Susan	344-	dominant 4 w/ trailing 3	3.67	3-4	
John	444-	stable 4	4	4	
William	444	stable 5	4	4	
Tyson	445+	dominant 4 opening to 5	4.33	4-5	
Tyler	445+	dominant 4 opening to 5	4.33	4-5	
Anthony	445-	dominant 4 opening to 5	4.33	4-5	
James	455+	dominant 5 w/ trailing 4	4.67	4-5	
Shawn	455+	dominant 5 w/ trailing 4	4.67	4-5	
n=30	*MODE: 334*		*MEAN: 3.456*	*MEAN: 3-4*	

APPENDIX 6

CATEGORIES OF TRENTHAM'S EPISTEMOLOGICAL PRIORITIES AND COMPETENCIES ADDRESSED

Table A2 indicates which of Trentham's epistemological priorities and competencies were identified as being addressed by each of the participants in this study. It may be compared to the similar table in Trentham's study.[1]

Table A2. Trentham's epistemological priorities and competencies addressed

Participant	*Categories Addressed*	*Position*
Titus	2a, 3c	223+
Ricky	1a, 2b, 3c, 3d	233+
Zachery	2a, 2c, 3c	233-
Darren	(none)	233
Rhonda	3c	233+
Lucas	1a, 2a, 2b, 2d	233+
Clayton	2d, 3a, 3c	333
Nick	1a, 2d, 3c, 3d	333(4)
Jeffrey	2a, 3c	333(4)-
Cooper	3c	334
Kelsey	1a, 2d, 3c	334-
Margaret	1a, 2a, 2d, 3b	334
Frank	2a, 2b, 3a, 3c, 3d	334+
Victor	3c, 3d	334-
Stuart	2a, 3c	334+
Elsie	2b, 2d	334
Carl	1a, 2a, 3b, 3d	334

[1]John David Trentham, "Epistemological Development in Pre-Ministry Undergraduates: A Cross-Institutional Application of the Perry Scheme" (Ph.D. diss, The Southern Baptist Theological Seminary, 2012), 239.

Table A2—*Continued*. Trentham's epistemological priorities and competencies addressed

Peter	2a, 2b, 2c, 3a, 3c	344+
Ian	2a, 2c, 3a, 3b, 3c, 3d	344-
Zane	2d, 3b, 3c	344+
Curtis	2d, 3c	344+
Sabrina	2a, 2c, 2d, 3a, 3c	344-
Susan	1a, 2a, 2b, 3c	344-
John	1a, 2a, 2c, 3b	444-
William	1a, 2a	444
Tyson	1a, 1b, 2a, 2c, 2d, 3b, 3c	445+
Tyler	2a, 2d, 3c	445+
Anthony	1b, 2a, 2b, 3a, 3c	445-
James	1a, 2a, 3b, 3c	455+
Shawn	1b, 2a, 3a, 3c	455+

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ABSTRACT

EVALUATING THE EPISTEMOLOGICAL DEVELOPMENT
OF PRE-MINISTRY UNDERGRADUATES AT BIBLE
COLLEGES ACCORDING TO THE PERRY SCHEME

Gregory Brock Long, Ed.D.
The Southern Baptist Theological Seminary, 2014
Chair: Dr. John David Trentham

Bible institutes and colleges were originally established to train men and women for vocational Christian ministry, and many contemporary Bible colleges continue with that focus. In addition to practical ministry training, they seek to help students grow just as Jesus did: intellectually, physical, spiritually, and socially (Luke 2:52). But how effective are they at doing so?

This qualitative interview study analyzed the epistemological development of Bible college students. I used the Perry Scheme as a model and research by John David Trentham as a theoretical lens to examine the relationship between pre-ministry undergraduates' attendance at selected Bible colleges and progression through the positions of intellectual maturity according to the Perry Scheme.

Although the Perry Scheme is widely influential in higher educational philosophy and pedagogy, its pragmatic and relativistic assumptions present problems in the Bible college setting. The findings of this study are intended to move towards an alternative to wholehearted incorporation or unqualified rejection of the Perry Scheme by building upon the essential discoveries of the Perry Scheme within a Christian framework to construct a biblically-based, theologically-grounded, wisdom-centered evaluative model of epistemological college student development.

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