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PRODUCING A BIBLICAL ATLAS

By

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Bachelors of Science, The University of Montana, Missoula, MT, 2004

Thesis
presented in partial fulfillment of the requirements
for the degree of

Masters of Arts
in Geography, GIS and Cartography

The University of Montana
Missoula, MT

Spring 2008

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ABSTRACT

Hertz, Elizabeth, M.A., May 2008

Geography/GIS Cartography

Producing a Biblical Atlas

Chairperson: Paul Wilson

The purpose of this thesis was to develop a procedure for simplifying the production of a biblical atlas. The atlas was to be designed specifically for those people interested in the geography of the Bible, and looking at the themes and events in the Bible in a spatial way. The procedures used in developing the contents involved the use of interviews with different experts and reviewing different biblical atlases. Telephone and email interviews were given to twelve experts to gain information about producing a biblical atlas. The participants in the interviews were selected based upon their knowledge of the specific topics, including history, theology, and cartography. By answering the interview questions, the experts helped aid in finding the information for producing a biblical atlas.

Once the preliminary contents were formulated, the creation of the atlas had to be tested to see if the page layout, contents, and maps would all work together. Biblical atlas production requires a complicated set of steps to create a refined product. Producing a general atlas also requires many steps to complete. Reviews of the methods developed by Jim Anderson and Thomas Sullivan on general atlas production lead to the steps in this atlas for biblical atlas production.

The author succeeded in producing a series of steps: a table of contents, a template for pages, as well as an example of what the atlas should look like. The author did not produce all of the contents for a biblical atlas. After the preliminary work has been done, the person producing the atlas still needs to gather a team to research all of the historical, biblical, and cartographic data that they will need in producing the atlas. After the data has been gathered, it has to be put together and a publisher needs to be found. The recommendation of this thesis is not to produce an atlas unless it is profitable enough to warrant a publisher taking ownership of it.

ACKNOWLEDGEMENTS

To the following professors and scholars who gave their time to interview for this thesis, supplying their knowledge in biblical history, theology, and cartography, which expectantly will lead to a biblical atlas:

Emmett Dosier	Jeremy Crampton	Gale Heide
Curtis Privett	Patrick Kennelly	Michael Danielson
Mitch Jones	Jim Anderson	Nat Levtow
Rich Perry	Paul Wilson	Chuck McCoy

Also to the members of this thesis committee for their wealth of knowledge and patience:

Paul Wilson
Jeffrey Gritzner
James W. Burfeind

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CHAPTER 1

Introduction

Producing a biblical atlas is a complicated process involving many contributors and researchers. Several biblical atlases have been produced, but the logic and conceptual framework for building one has never been created. This thesis is about creating a process that could be followed to produce other biblical atlases in the future. Atlases are a time tested, worthy form of cartographic research. The definition of an atlas according to The UC Atlas of Global Inequality is:

A collection of maps. The name is derived from frontispiece of early atlases, including that of Mercator in 1636, showing the god Atlas supporting the world. Maps show spatial distribution. Global maps influence people's image of the world. In the latter half of C20th atlases began to be widely used to present social, historical and economic data as well as geographic data.¹

According to Rhodes University Library Information Sources:

Atlases are books featuring maps, charts, tables, statistics, etc. They provide information pertaining to populations and place locations. There are many types of atlases besides those containing maps, for example: special subject atlases on history, religion, archaeology, the environment, astronomy, fishes, the human body, etc.²

There are many different types of atlases including world, regional, religious, and political atlases. Thomas Sullivan categorizes atlases into four categories, "1) world atlases, 2) regional atlases, 3) general atlases, and 4) special subject atlases that cover a restricted topic."³ A biblical atlas falls under the category of a special subject atlas owing to the restricted set of themes and topics that are associated with it.

¹ UC Atlas of Global Inequality, "Glossary 2003" <http://ucatlas.ucsc.edu/glossary.html> (accessed 1 January 2008)

² Rhodes University, "Atlases: Information Sources. 2005" <http://www.ru.ac.za/library/infolit/atlas.htm> (accessed January 4, 2008).

³ T.J. Sullivan, "Developing Contents for a Special Topic Regional Atlas." Masters Thesis, The University of Montana, 1995. 12.

Biblica, *The Bible Atlas* states that, “It is quite common for modern Westerners to fail to ask the question of “Where?” when reading or studying the Bible. This is unfortunate, since biblical narratives are often driven by the notion of space.”⁴ Aharoni, Avi-Yonah, Raniey, Safri, in *The Macmillan Bible Atlas*, states that the purpose for a biblical atlas is to show the historical processes in the lands of the Bible, and to show the Bible within the context of the surrounding lands.

The purpose of the atlas is to show, as far as possible through maps of each event, the changes and historical processes in the lands of the Bible...Focus of the Atlas is the Holy Land, and one of our aims was to place it within its proper relation to the surrounding lands, most of which played an important part in history.⁵

The relevance of a biblical atlas is that it helps link the ancient world with the world today. The biblical atlas created by Readers Digest, *The Atlas of the Bible*, states that “the narrow land bridge between Asia and Africa—historic Palestine, today a region divided between Israel and its Arab neighbors is among the most important geographic areas on Earth.”⁶ Aharoni, Avi-Yonah, Raniey, and Safri, authors of *The Macmillan Bible Atlas*, establish that the lands and people of the Bible shaped the world and studying these lands is still relevant to understanding the Middle Eastern Lands.

The land of Canaan, Israel, Palestine is still a focal point for millions of Bible lovers, Jewish and Christian. The history of that geographical entity cannot be divorced from the wider context of the Ancient Near East and the Greco-Roman world. Historical Geography, putting the Bible on the map, is an attempt to understand the biblical events in their ecological and socio-cultural context.⁷

This area through time has been wrought with political and religious warfare that continues today. It is the focus of three major religions in the world; 1) Christianity, 2)

⁴ Barry Beitzel, ed., *Biblica: The Bible Atlas* (Australia: Global Book Publishing. 2006) 13.

⁵ Aharoni, Avi-Yonah, Raniey, Safri. ed. Carta Jerusalem. *The Macmillan Bible Atlas*. 3rd ed. (New York: Macmillan Publishing Company 1993) Preface

⁶ Readers Digest, *Atlas of the Bible: An Illustrated Guide to the Holy Land* (New York: The Reader's Digest Association, Inc., 1981) 1

⁷ Aharoni, et al., ed. Carta Jerusalem. *The Macmillan Bible Atlas*. Preface

Judaism, and 3) Islam. Biblical atlases are produced to better understand the historical and geographical context of the Bible. This in turn helps us to understand why the area is the way it is today.

A biblical atlas is an excellent source for students of the Bible. It provides many useful resources when studying the history and culture of the people in biblical texts. A biblical atlas also provides an exceptional way to view the events and stories written in the text of the Bible in their spatial context.

Literature Review

Research on biblical atlas design and construction showed that the logic and conceptual framework on how to produce one has not been developed. The goal of this thesis is to develop that conceptual framework. Since the logic and conceptual framework has not been developed for a biblical atlas, the research focused on looking at the trends that other biblical atlases show. The literature review also references sources on general atlas construction. The sources included authors who have written on general construction of an atlas, to authors who have written biblical atlases, to the group of scholars who completed the interviewing process for this thesis.

Thomas J Sullivan wrote his Master's thesis, *Developing Contents for a Special Topic Regional Atlas*,⁸ which proved to be very instrumental in researching atlas construction methods. Sullivan's thesis focused on developing contents for an atlas to be used in an Irish History course. He wanted the atlas to be used in conjunction with the other texts of the course to help spatially define the history of Ireland. His research methods involved sending out a survey to Irish History Professors and doing a literature review on relevant material. His thesis showed that the survey did not have a good return

⁸ T.J. Sullivan, "Developing Contents for a Special Topic Regional Atlas."

rate, he sent out fifty-four and only twenty-seven professors answered the questions and returned the survey. However, the information he received from the professors who returned the survey was very good. These conclusions lead the author of this thesis to use interviews instead of surveys, to increase the probability of response. People are more likely to answer questions in person as apposed to a survey where no one is prompting them to answer the questions. Sullivan also did a textbook and syllabus review to help him come up with a preliminary list of contents. One can conclude from this statement that a preliminary list of contents for a biblical atlas can come from a biblical atlas review that will be described in greater detail below.

Biblical atlases are different then other types of atlases in many ways. William Blaikie stated in his book *Bible History*:

In entering on the study of Bible History we ought to bear in mind that its object is not the same as that of other histories. Ordinary histories record the achievements and progress of particular races or nations, telling how they arose, what territories they occupied, in what manner they were covered, what battles they fought...and how they felt.⁹

Blaikie's book defines the history of the Bible and how it related to other histories of people from the same time period. From the references, it can be inferred that Bible history looks at the same things that other historian's do, but it does so in conjunction with the progression of religious events throughout the Bible. An atlas of the Bible needs to be a source book to the Bible, providing archeological findings and literature, drawings, narrative, and scientific findings that all concern the Bible. Dennis Baly states in his book the *Geographical Companion to the Bible*,

⁹ William Blaikie, *A Manual of Bible History: In Connection With The General History of the World*. (London: T. Nelson and Sons, Paternoster Row, 1904) 1

One of the major problems for the Bible reader of today, whether he be a theological student or an ordinary layman anxious to understand the scriptures is that of pinning the biblical events down in time and space.¹⁰

In his book, Baly defines the Bible geographically by separating each of the stories by the area where they occurred. The areas included were the North Country and the South Land with information about the climate and geographical features of each area. A biblical atlas is intended to do just that; it strives to pin down the events and findings in the Bible to help the reader better understand the Bible. Rand McNally's, *Bible Atlas*, states this of a biblical atlas,

It enhances the value of the written word by clarifying the dimensions of time and place and is particularly helpful because it adds pictures and commentary to the maps illustrating the several periods of biblical history.¹¹

This atlas described everything spatially. The main goal of this atlas was to show the stories of the Bible in their geographic places and how they relate to the world around them.

The biblical atlas review involved studying the layout and content of many different atlases. *Historical Atlas of the Jewish People*, written by Aharoni, Avi-Yonah, Safrai Rainey, Safrai, Beinart, Friesel, and Dellapergola, was the first atlas reviewed. The focus of this atlas was to show migration movements, ideas, formations of institutions and more about the Jewish people. This atlas's focus wasn't completely concerned with the Bible, but it drew from some parts of it to help support their findings. The topics and events the authors of this book focused on started with the Ancient Times and Abraham, a Patriarch of the Jewish faith. This section was organized with maps supporting each of the topics and events. The main topics that followed were "The United Monarchy",

¹⁰ Dennis Baly, *The Geography of the Bible*, new and rev. ed. (New York: Harper and Row, Publishers, 1974) 1

¹¹Readers Digest, *Atlas of the Bible*. 3.

“Israel and Judah”, “The Kingdom of Judah”, “The Hellenistic Period”, “The Maccabees”, “The Roman Conquest”, and “The Talmudic Stages” which includes the Middle Ages, and Modern Times”. The layout of this atlas was organized around each of the sections above, followed by subheadings within each main section, with maps in black and white supporting each of the topics.

The next atlas that was reviewed was *The Macmillan Bible Atlas, Completely Revised Third Edition* written by Aharoni, Avi-Yonah, Raniey, and Safri. “The purpose of the atlas was to show, as far as possible through maps of each event, the changes and historical processes that occurred in the lands of the Bible”.¹² The maps they put in the atlas were based on ancient written sources and archeological findings. The topics of the atlas were laid out geographically following the stories within the Bible. Each of the maps was based on archeological digs and ancient texts. They also showed the different climates, economic aspects, and routes that the people took.

The focus of the *New Bible Atlas* organized and edited by DRW Wood as follows: “This atlas aims to provide the Bible reader, student and teacher with maps and plans, photographs and text, arranged for the most part chronologically.”¹³ The writers held true to following the Bible chronologically starting out with an overall geography of the Bible, followed by the Old Testament arranged historically. Next to appear was the historical arrangement of the New Testament and after that, maps featuring the major empires and people described in the Bible. Lastly, the author discussed the historical development of Jerusalem, followed by a brief overview of the holy land today.

¹² Aharoni, et al., ed. Carta Jerusalem. *The Macmillan Bible Atlas*. 3rd ed. Preface

¹³ DRW Wood, ed. *New Bible Atlas*. (Downers Grove: Lion Publishing. 1994)

The Historical Atlas of the Bible, written by Ian Barnes not only focused on the Bible but also gave relevant histories of things that are important to understanding the Bible. These different histories included the history on the different types of paper used and how it related to the Bible, the history of different translations of the Bible, and different mistakes that have been found within different Bibles that have been printed throughout history. The atlas started out showing the ancient Near East with maps that included maps of climate change and agriculture, maps of the different winds, a map of the natural vegetation, a map of rainfall, a map of the ancient near east in the third millennium, and a map of the many different civilizations that have lived in that area through time. The main topics of the atlas included archeology of the Bible, the Patriarch's and their world, the journeys of Abraham, Isaac, Jacob and Joseph, the exodus, invasion and conquest, and so on. The layout of this atlas had a major heading with text and one or two maps supporting each subject. On the maps the author included discrepancies in the different routes or places between different archeologists.

Biblica the Bible Atlas, the Chief consultant of which was Professor Barry J. Beitzel, was a very large and extremely meticulous atlas of the Bible. There were many professors and scholars involved in the making of this atlas. The atlas also included an interactive DVD ROM to view the information on a computer. The focus of that atlas was that it "bridges the conceptual, cultural, chronological, and geographic gap that separates the modern reader from the biblical world."¹⁴ This atlas also included many different histories that helped to support the topics within the atlas including the development of the Bible, spread of the Bible and Christianity around the globe, archeology of the Bible, and the geography of the Bible lands. The main topics of this atlas were; Genesis and the

¹⁴ Barry Beitzel, ed. *Biblica: The Bible Atlas*. Foreword

Patriarchal period, the judges, the kings, the prophets and the righteous, the conquest of the kingdoms, the life of Jesus of Nazareth, the spreading of the word, followed by different Bible references. The layout of the atlas included many maps, archeological findings, pictures, paintings, and other art to help support the topics being described.

All of these atlases helped contribute to this thesis by forming a preliminary basis of how different biblical atlases are organized and what topics are covered in each. The topics from these atlases went into the final table of contents that is included in Chapter 4 Biblical Atlas Production.¹⁵ The layouts of each of these atlases was taken into consideration and helped to define how the layout of a biblical atlas should be. The above reviews also helped define the interview questions for each of the interviewing groups.

Sources used for defining the interviewing questions came from the above atlas reviews. The main topics from, *The Bible as History*, written by Werner and Keller were used as an overview to help prompt the theologians to go into more depth about the different subjects in the Bible. It contained a clear outline of the Bible, and helped define each of the topics, so that anyone could understand what they were describing. Another source in defining the questions for the interviews came from the way the Bible is traditionally divided. One of the questions asked how the interviewees would prefer the atlas to be laid out, either chronologically or by the traditional literary division of the books.

Due to the discrepancies between the atlases above, there is a great need for a publication on how to produce a biblical atlas. The atlases above show that there is a need for producing a biblical atlas that is catered to the layman, someone who is not an expert

¹⁵ See Chapter 4, Biblical Atlas Production, Final Table of Contents 64

on biblical geography. This will provide the world with a greater knowledge about the Bible and the geography of the Bible. Writing a publication on how to produce a biblical atlas would create efficiency for those trying to produce one. It would also save them time and money. If the authors wanted to create another edition to the biblical atlas they would have the format already laid out for them; they would just have to research new materials to insert in the atlas.

The last source for research of this thesis was the interviewees themselves. The information gained from this section will be weighed heavily in the conclusions for this thesis. There were three groups of interviewees: theologians/biblical scholars, historians, and geographers, with four people in each group. The interviewing process is described in greater detail in Chapter 2, Research Design and Methodology. The theologians/biblical scholars were the first group to be interviewed. The interviewer tried to find different denominations in hopes to get a diverse range of answers.

The first interview in the theologian/biblical scholar group was done with Reverend Curtis Privette from First Baptist Church in Missoula. Reverend Privette started his preaching career at First Baptist Church Missoula in September 2003. He graduated from Carson-Newman College in Jefferson City, TN, and Campbell University Divinity School at Bruies Creek, NC. Curtis Privette was not as experienced as the other biblical scholars, but he had a fresh outlook on the geography of the Bible and could still remember quite a few lessons learned from Divinity School.

The Second Interview was with Pastor Rev. Rich Perry, SJ from St. Francis Xavier Catholic Church in Missoula, MT. He grew up in the Spokane area and entered seminary right out of high school. For thirty-three years he was a teacher in secondary

schools. He taught in Spokane, at Gonzaga Preparatory School, and at Seattle Preparatory School, he taught a combination of Religion, English, and Social Studies in an interdisciplinary class. Perry had a lot of insightful things to contribute to the research of this thesis. He drew upon his past knowledge of teaching for the last thirty-three years and being the Priest of a large Catholic Parish.

The Third Interview was with Pastor Mitch Jones from Atonement Lutheran Church in Missoula, MT. Jones did his seminary training at Pacific Lutheran Theological Union at Berkley. He then attended the University of Oregon for graduate work in Asian and Japanese Studies, base history language and literature. His undergraduate work was done at Pennsylvania. He also has a little background in anthropology and archeology and has been apart of some archeological digs. He is fascinated by the use of ground-piercing radar to find subsoil archeology that was unknown. Mitch Jones was very influential in defining how a biblical atlas should be produced. He also felt that more emphasis should be given to the meaning of words and how they can be mistranslated into English, also loosing the main context of the words. He feels that the Bible and the peoples of the Bible were very geographical and that our society today has been separated from the geography of the earth.

The fourth and final interview in the theologians/biblical scholars group was done with Emmett Dosier, retired American Baptist Minister. He went to one year of high school in West VA, and then decided to join the Civilian Conservation Corp (CCC) in Idaho. After three years with the CCC he tested for his high school diploma in Salt Lake City, UT. He then joined the Marines during WWII. After his time in the Marines he went to Northwestern School in Minneapolis MN, and received his BS in Religious

Science. He then started work as a Pastor and received his Doctor of Divinity through correspondents from Clarksville Seminary in Clarksville TN. With his vast knowledge and many experiences as a theologian, interviewing Pastor Dosier provided vital information and in-depth answers to the interview questions.

The next set of interviews was with Historical Scholars. The first of these interviews was done with Professor Nathaniel Levtow who teaches Liberal Studies at the University of Montana. Levtow strongly emphasized that everything needs to be looked at critically, and that the sources for each story in the Bible need to be defined and defended.

The second interview of the historical scholars group was with Gale Heide from the Montana Bible College Academic Dean, Professor of Theology and Biblical Languages. He received his B.S. in Business Marketing and Management from Montana State University; Master's of Divinity in Biblical Languages and Systematic Theology, at the Western Conservative Baptist Seminary, Portland, OR; Theology Masters in Theological Ethics from Duke University, Durham, NC. He then received his Ph.D. in Systematic Theology from Marquette University, Milwaukee WI. Gale served as College pastor at Laurelwood Baptist Church in Vancouver, WA. He also taught at Western Seminary and Marquette University, Milwaukee, WI. Gale's articles have appeared in Grace Theological Journal, Modern Theology, Journal of the Evangelical Theological Society and Target Earth. His recent book is entitled, "This Is My Father's World." He preferred to answer the questions on history of the Bible to demonstrate an importance of theology in dealing with the history of the Bible.

The third interview was done with Chuck McCoy who teaches Bible classes at Boise Bible College. He received his B.S. at Western Michigan University; B.R.E. at Great Lakes Bible College; M.A. from Eastern New Mexico University; Lincoln Christian Seminary; eight years in located ministry (Michigan, Indiana, Maryland); five years professor of Bible and church history at Dakota Bible College; and thirteen years professor of Bible, Theology, and Church History at Nebraska Christian College. He taught in the Link Up program at Lincoln Christian College and was monthly writer for the *Restoration Herald*. McCoy gave a great interview on history because of his vast experience in teaching theology and different histories.

The fourth and final history interview was with Michael Danielson who teaches Religion at Seattle Preparatory School. He was recommended by Priest Rich Perry who completed an interview for the theologian/biblical scholar group. Professor Danielson gave an informative interview on the history of the Bible since he integrates history into his religion classes at Seattle Preparatory.

The next set of interviews was with geographers/cartographers. Most of the cartographers had little experience or knowledge about the Bible, but their interviews were very instrumental in finding information on cartography and producing the actual atlas. Jim Anderson is the Director of Florida Resources and Environmental Analysis Center (FREAC). He has been with FREAC since 1974. He started working with the Florida Department of Transportation on a series of urban area transportation maps that led to involvement in cartographic projects. These projects have included the production of several atlases about the geography of Florida. He currently maintains projects utilizing geographic information systems, internet map development, and the

development of map related educational materials. Jim Anderson has worked on so many atlas projects that he sent a complete outline of how to produce an atlas, which is used extensively in the following chapters.

The second cartographic interview was with Patrick Kennelly, Assistant Professor of Geography in the Department of Earth and Environmental Science at Long Island University. He teaches graduate level courses in Geographic Information Systems (GIS), as well as introductory courses in physical geography (earth science). He also teaches some undergraduate and graduate classes in geology. Patrick Kennelly has a good history in developing maps and was able to provide high-quality insight in developing an atlas.

Jeremy Crampton, the third cartographic interviewee is the Associate Professor & Graduate Director, Geography Editor, at the Cartographic Department of Geosciences at Georgia State University Atlanta, Ga. He received his Ph.D. from Pennsylvania State University, in 1994. Some of his recent publications include articles in *Progress in Human Geography*, *Environment and Planning D*, *Social and Cultural Geography*, and chapters in *Multimedia Cartography* (Springer-Verlag, edited by Cartwright, Peterson & Gartner) and *Ethics in Geography* (Routledge, Edited by Proctor & Smith). His book *The Political Mapping of Cyberspace*, was published by the University of Chicago Press in 2004. His latest book is *Space, Knowledge and Power: Foucault and Geography* (Ashgate Press, 2007) co-edited with Stuart Elden. In July 2007, he accepted the position of Editor of *Cartographica: The International Journal of Geographic Information and Visualization*.¹⁶ He also, gave good information on cartography and building an atlas.

¹⁶ Georgia State University. "Home page Dr. Jeremy Crampton." 2008. <http://www.monarch.gsu.edu> (accessed 7 January 2008)

The last interview for the geographers/cartographers was Professor Paul Wilson from the University of Montana. He received his Ph.D. from the University of Nebraska, 1972 with emphasis in: historical geography, cultural geography, economic geography, and cartography. His M.A. was also from the University of Nebraska 1967 in geography with an emphasis in historical geography. He received his B.A. in urban geography from the University of Wyoming in 1964 with emphasis in human geography and cartography. His current areas of specialization are in cartography, geographic information systems, historical geography, and urban geography. Wilson produced an atlas in 1978 *Atlas of Montana Elections, 1889-1976*, 335 pages of approximately 350 maps and diagrams, with Ellis Waldron.¹⁷ His interview lead to a great discussion on producing a biblical atlas.

In conclusion, I drew many great ideas from all of the above resources including ideas for a final table of contents, ideas on how to produce a general atlas, how to produce a biblical atlas, and what content should go in a biblical atlas, as well as what the layout should look like for a Biblical atlas. The great extent of research that went into this thesis on how to produce a Biblical atlas should reduce the effort a person would put into building the atlas, because the logic and conceptual framework has already been done.

The Problem of Developing the Contents of a Biblical Atlas

In general, atlas development can come from a group of learned individuals on the desired subject. Learned individuals for a biblical atlas might include theologians, historians, and cartographers. How would you create the content for an atlas without a group of learned individuals? There are two ways that have been suggested to retrieve the

¹⁷ Ellis Waldron and Paul B Wilson. *Atlas of Montana Elections, 1889-1976*. Missoula: University of Montana, 1978.

same information that you would get from a group of individuals; one is to send out a survey, and the other is to do personal interviews. As noted above, the method employed in this thesis is to interview a group of twelve experts on theology, history, and cartography, specifically in reference to the production of atlases.

The interviews are used in a progressive manner in order to develop the list of contents. The reasons for choosing interviews in the case of this thesis was to increase the response numbers that are usually lost when doing a survey, and gain as much information as possible. The disadvantage to surveys is that there is always a chance that not everyone will respond. Interviews are conducted in a one-on-one setting thus ensuring the interviewee will respond since they are being asked the questions in a more personal environment. The interviewer can also prompt the interviewee into giving a more detailed answer than if the interviewee were only answering the questions through a survey. Another advantage to giving interviews over doing surveys is that the interviewees can help to cut down on confusion about the questions asked. If the interviewee does not understand a question, he can ask the interviewer to be more specific. This cannot be done with a survey.

The Problem of Producing a Biblical Atlas

Once the contents of a biblical atlas have been derived, the problem of producing one is very similar to that of producing any special topic atlas. A good place to start is by adapting the steps developed by Thomas Sullivan in his thesis *Developing Contents for a Special Topic Regional Atlas*¹⁸, (Table 1).

¹⁸ Thomas Sullivan, "Developing Contents for a Special Topic Regional Atlas." 7

Table 1. Steps for Developing an Atlas

1	Topic Must Be Chosen
2	Preliminary List of Contents – Atlas Appearance
3	Map Subject Must Be Researched and Evaluated
4	Prototype of Atlas Must be Developed
5	Evaluation and Changes Must Be Made
6	Final Product Produced.

According to Sullivan, the first step in developing an atlas is to pick the topic. With a biblical atlas, the topic is already chosen; it is the themes and events within the Bible that determine the subject of the atlas.

Sullivan's second step in constructing an atlas is the development of atlas content and appearance. Sullivan states in his thesis:

Before the maps for an atlas can be produced, the map topics must first be chosen, data for them compiled, and then they must be arranged in a sequence which is understandable for the user and which also satisfy the goals of the author and or cartographer.¹⁹

The method used by Sullivan was to create a questionnaire that was mailed to experts in the area of atlas design. The responses were used to develop the list of steps that appear in Table 1.

The main problem that Sullivan encountered in his work was that the response rate to his questionnaire was very low. The current study will attempt to overcome this disadvantage by conducting interviews rather than by mailing out questionnaires. The

¹⁹ Thomas Sullivan, "Developing Contents for a Special Topic Regional Atlas." 1

objective will be to not only determine the contents of a biblical atlas but to learn if there are any special circumstances involved in the production of one.

The third step, map subjects must be researched and evaluated, comes after the initial content and method of production has been determined. If there is a team of people involved, each member must research his or her subject and then edit and proof the work they have completed. Evaluation can also take place by an overall editor. This is especially helpful if a team, and not just one person, is involved in atlas production. Each person will have his or her own writing style, and an overall copy editor can help to maintain the same writing style throughout the whole atlas helping to maintain cohesion.

The last step, which some might argue should be the first step, is to produce a prototype or “dummy book”. The dummy book is done for a number of different purposes. One reason is to produce a facsimile so that it can be taken to a publisher to aid in the decision of whether to fund and publish the work or not. This way you know that your work is being funded from the start and that the publisher is covering the costs. Another reason for building a dummy book is for editing purposes. The dummy book can be used to decide what the layout and appearance of the atlases are going to look like.²⁰ After the prototype or dummy book is built, the atlas must be evaluated and edited before being sent off to the printers. After this, a marketing strategy must be implemented and carried out.

The current study will attempt to overcome the disadvantages of Sullivan’s method, by conducting interviews and reviewing other processes for developing atlases. After reviewing Sullivan’s steps for producing an atlas and evaluating multiple biblical atlases, the below purpose statement and objectives were formed.

²⁰ Ibid.,9

Purpose Statement

The purpose of this thesis is to generate the conceptual framework, the ingredients, and the methodology needed to produce a biblical atlas with the intention of formalizing the process of its creation. In the process, examples of maps, biblical texts, and page layouts will be created to illustrate design concepts.

The scope of this research is the vast knowledge connected to developing a biblical atlas, as well as the entire geography of the Bible. The proposed study area is the east end of the Mediterranean Basin i.e. Historical Palestine. However in other instances, the study area may be extended to cover any areas encountered in biblical texts. Although the focus of this thesis will concern how a biblical atlas is built, it will also consider which maps might be included and which topics might be considered. Below is a satellite image of Europe, the Middle East, and Northern Africa. This area is part of the geography included in the Bible (Figure 1).



Figure 1 Mediterranean Basin

Objectives

The following objective questions form the framework structure for the methodology of this thesis. The differing objective questions will be covered more extensively in the Research and Methodologies section that follows.

1. How is a general atlas produced?
2. How is the production of a biblical atlas different from a general atlas?
3. What are the concepts and procedures that are to be used in producing a biblical atlas?

Summary

The atlas production methods that will be laid out in the following chapters are for a biblical atlas. Some of the methods suggested can be applied to any type of atlas but the main structure of the thesis is towards biblical atlas production. The uses for a biblical atlas vary greatly from a devotional use, to use as an educational tool for theology students. It can also be of use by students who would like to learn more about the history of Historical Palestine and the Mediterranean basin area and how that history might shape the future. The only way to be absolutely certain that using interviews and the production methods laid out in this thesis will actually save time and money, is to build a biblical atlas the way this thesis suggests. Due to time and monetary constraints, the author of this thesis will not be able to build the entire biblical atlas.

CHAPTER 2

Research Design and Methodology

The research design and methodology of this thesis is centered on answering the questions described in the objectives. The questions focus on themes relating to producing a general atlas, producing a biblical atlas, and the difference between the two. The thesis objectives and methodologies were discussed briefly in Chapter 1 of this thesis and they will be described in detail in the following chapter.

The Objectives

How is a general atlas produced?

Atlases may focus on a region, a topic or both. As indicated previously, the topic chosen here is an atlas comprised of maps that illuminate the historical texts of the Bible. The region is the eastern end of the Mediterranean Basin.

Once the topics and region of the atlas are chosen, the next step is to learn its contents. The method employed in this thesis is to interview a selected group of experts on theology, biblical history, and on the creation and production of atlases. It is anticipated that the interviews will be used in a progressive manner in order to develop the list of contents. The interviews started with the theologians, followed by the historians, and then ending with the experts on atlas creation and production. Beginning with a short list of ingredients, the entire list of contents grew and was redefined as interviewees were allowed to examine it, comment on it, and add to it.

Other contents were chosen based on what tends to be selected for other biblical atlases. A thorough review of biblical atlases took place. From this review, the questions for the interviews were written and part of the Table of Contents for the atlas was

developed.²¹ Lastly, content was chosen based on different historical events that have been predominate throughout history and relevant to the topics is the Bible.

When building a general atlas, numerous scholars need to be brought together in order to learn what the contents of the atlas should be. In the case of a historical atlas, historians and cartographers must work together.²² As discussed previously, the most efficient way to access the knowledge of these experts is through a series of interviews. Such a series could solicit information from the group thus saving time and money.²³

After a specific group was identified and interviewed, the next step was to design the atlas. First each subject in the list of contents had to be researched and defined. After all of this has taken place, a prototype of the atlas must be built. Once everything is in place, atlas construction can begin. Steps in atlas design patented after the suggestions made in Tom Sullivan's Thesis, *Developing Contents for a Special Topic Regional Atlas*, are shown below in Table 1²⁴. These will be used as the beginning point for identifying the steps involved in building an atlas of the Bible. While the actual atlas will not be built as part of this thesis, prototype maps and pages with text and supporting information will be included.

How is the production of a Biblical Atlas different from a General Atlas?

Throughout the study, the second column in Table 2 will be filled out to represent how a biblical atlas can be created and how it is different from a general atlas. This work is important to help distinguish the differences between a biblical atlas and a general

²¹ Table of Contents "Biblical Atlas Production Chapter 4, 5-7

²² Barbara Petchenik. "Cartography and the Making of an Historical Atlas: A Memoir." (The America Cartographer 4, no. 1, 1977) 4

²³ T.J. Sullivan, "Developing Contents for a Special Topic Regional Atlas." 3

²⁴ Chapter 1, Table 1. 5

atlas, and to show why it is important to develop a thesis about producing a biblical atlas instead of merely following the methods for producing a general atlas.

Table 2. Differences between a Biblical and General Atlas

	Steps For Developing a General Atlas	Steps For Developing A Biblical Atlas
1.	Topic Must Be Chosen	
2.	Preliminary List of Contents – Atlas Appearance	
3.	Map Subject Must Be Researched and Evaluated	
4.	Prototype of Atlas Must be Developed	
5.	Evaluation and Changes Must Be Made	
6.	Final Product Produced.	

The information gained from the process just described, will be used to learn the steps taken in building a biblical atlas that are different from a general atlas. The information will be integrated in Chapter 4 Biblical Atlas Production and used to draw conclusions regarding the method for creating a biblical atlas.

What are the concepts, procedures and methods that are to be used in producing a Biblical Atlas?

In the case of a biblical atlas, theologians, historians, and cartographers must work together. The method used in producing a biblical atlas involves extensive historical research on the Bible and the geography of the Bible. The content of a biblical atlas is chosen based on the different concepts of the Bible and the biblical texts attached to the

different concepts. The different concepts and procedures are identified as the contents of the atlas are learned. Researching theology by means of interviews with experts in this area are intended to reveal those concepts the theologians say are of importance to the Bible. Tables and or graphs can be created in a biblical atlas to show these different concepts and why theologians think they are of importance.

Researching the history and geography of the region by means of interviewing experts in these areas will reveal those concepts they say are important. As concepts and procedures are learned, they will be recorded and reported in the interviewing results chapters of the thesis.

Biblical Text

Biblical texts that will be studied and chosen to support the different themes and events in the biblical atlas are to be determined by their different attributes. Other biblical text will be derived from the interviews given to the biblical scholars. When the texts of the Bible are being put into the atlas for support of the different themes and topics, particular attributes will be taken into consideration. The particular attributes will include any text that describes the event that has taken place, or refers to that event or topic in the Bible that will be included in the atlas.

The Interview Design

As described earlier, the primary goal of the thesis was to develop contents for a biblical atlas by interviewing experts in the fields of theology, history, and cartography. Pursing such a methodology should not only make the atlas more useful to those who utilize it as a teaching tool, but also for those who use it as a tool to study the information that the Bible holds.

The initial experts chosen were first based on proximity to the interviewer and driving time. When the experts to be interviewed were not located within one day driving distance, the experts were then selected by those who expressed interest in participating in the interview and were known to be experts in the designated field. If the procedures for producing a biblical atlas could be created by using only nearby sources to save time, money, and resources, it would more easily allow those who wish to create a biblical atlas a framework from which to develop that atlas. Once the interviews were finished, they would be organized, transcribed, tabulated, and analyzed so the results could be used to determine a potential list for the contents of a biblical atlas.

The interviews were designed as follows:

1. Interview questions were developed based on biblical knowledge and what should be included in a biblical atlas.

- a. Four biblical scholars were selected based on interest in doing the interview, denomination, and distance to interviewer, within one days driving distance.
- b. Interviews were administered in person to each of the interviewees.
- c. The answers from the interviews were then compiled and put into a chart.²⁵

From these answers, questions were then developed for the historical scholar interviews.

2. Four historical scholars were then selected based on their interest in doing the interview and the distance to the interviewer.

- a. Interviews were then administered in person or over the telephone and internet to each of the interviewees.

²⁵ Charts developed from interview questions have been reproduced in Appendix 1.

b. The answers from the interviews were then compiled and put into a chart.

From these answers, questions were then developed for the cartographer interviews.

3. Four cartographers were then selected based on interest in doing the interview, and distance to the interviewer.

a. Interviews were then administered in person or over the phone and internet to each of the interviewees.

b. The answers from the interviews were then compiled and put into a chart.

Interview Question Design

The interview questions were designed to satisfy a number of different objectives, the most important being, how to retrieve information about biblical atlases from experts in the differing fields. The questions were first designed based on what the author of the thesis found in biblical atlas research. Five different biblical atlases were reviewed for content and appearance.²⁶ The questions developed for the interviews were from a summary developed from the atlas review.

By finding the interviewee's preferences for theme and map content that could be included in the biblical atlas, it may be possible to begin the formulation of the atlas contents. The interview questions were designed into different parts to answer the objective questions outlined above: 1) How is a general atlas produced? 2) What are the concepts and procedures that are to be used in producing a biblical atlas? 3) What content should be included in a biblical atlas?

²⁶ For a description of those atlases, see the section on Literature Review that appears on page 3 of Chapter 1.

The first set of questions was designed for the biblical experts. The questions were designed to have the interviewee explain what contents should be included and what the appearance should be. The first question was designed to have the interviewee decide which theme they would prefer to see a biblical atlas designed like. The themes were laid out as chronologically or as traditional literary version, with an outline below each theme to help them to understand the question better.

1. *Students of the Bible have divided the text up in various parts that display some similarity. Here are two plans that have been used. Which theme would you use and why?*
 - a. *Chronological*
 - i. *Ancestral Period – Genesis*
 - ii. *Egypt and Exodus – Exodus*
 - iii. *Conquest and Settlement – Joshua and Judges*
 - iv. *United Kingdom – 1, 2 Samuel, 1 Kings*
 - v. *Divided Kingdoms 1 – 2 Kings*
 - vi. *Judah Alone – 2 Kings*
 - vii. *New Testament*
 1. *Babylonian Exile*
 2. *Persian Period*
 3. *Hellenistic/Roman Period*
 - b. *Traditional Literary Division of Books*
 - i. *The Old Testament:*
 1. *The Pentateuch*
 2. *The Historical Books*
 3. *The Poetic and Wisdom Books*
 4. *The Prophetic Books*
 - ii. *The New Testament*
 1. *The Gospels*
 2. *Acts*
 3. *The Epistles of Paul*
 4. *The General Epistles*

The second question was a follow up to the first question. The question was asked to prompt the interviewee to look at the list he chose and then identify any major events, or topics that he thought should be included in the atlas.

2. *I would like to go through this list with you to identify the major events, and geographical topics that should be included in a biblical atlas.*

The third question built on the last question but provided a different view to the topics in the Bible to prompt the interviewees to think of different themes and events that where in the Bible.

3. *The following list of topics is a list I comprised doing research on existing biblical atlases. From this list, what topics should be included in a biblical atlas?*
- a. *The Bible as History, Werner Keller*
 - i. *The Coming of the Patriarchs: From Abraham to Jacob.*
 - ii. *In the Realm of the Pharaohs: From Joseph to Moses*
 - iii. *Forty Year sin the Wilderness: From the Nile to the Jordan*
 - iv. *When Israel Was an Empire: From David to Solomon*
 - v. *Two Kings – Two Kingdoms: From Rehobaom to Johoiachin*
 - vi. *From the Exile to the Maccabean Kingdom: From Ezekiel to John Hyrancanus*
 - vii. *Jesus of Nazareth*
 - viii. *In the Day of the Apostles*
 - ix. *Let There be Light*
 - b. *Bible Overview*
 - i. *The Law*
 - ii. *The History*
 - iii. *Poetry and Wisdom*
 - iv. *Major Prophets*
 - v. *Minor Prophets*
 - vi. *General Epistles*
 - vii. *Revelation*

The fourth question was asked to allow the interviewee to add anything else that he might have thought of but that he hadn't said before.

4. *Now which other topics, not on the list do you think should be included in a biblical atlas?*

Question five was formulated to discover what texts from the Bible the interviewee felt would support the topics and events he had previously mentioned.

5. *From the topics and events mentioned earlier, what specific texts from the Bible do you think would help describe the topics?*

Question six sought to discover what the biblical scholars thought would be the most important to include in a biblical atlas. This question was to determine what maps would be the most useful in supporting the topics and themes described by the interviewees in previous questions.

6. *From the topics, events, and text above what maps do you think would be best to include?*

Question seven was asked to find out if how the interviewees would organize the layout of all the information that would go into the biblical atlas.

7. *From the topics and events that you have mentioned previously, how would you organize the content? Why?*

Question eight referenced archeology that could be used as a tool to help explain what happened in certain areas in the past. Archeology was also used to support scripture, such an example being the Dead Sea Scrolls.

8. *Have you read or heard of any archeological or scientific findings that would help support the topics and events chosen above? If so, what are they? Which of these additional topics should be included in the atlas?*

Question nine was used to determine which Bible the scholars would use when working with geographic information.

9. *When choosing a Bible to reference with the atlas, which one would, you chose?*

The tenth question was asked to find out if the interviewees felt that there needed to be special considerations taken because of the sensitive nature of the Bible. The sensitive nature being that it is about a specific religion.

10. *What special considerations do you think should be taken when producing a biblical atlas?*

Question eleven was one of the last questions to allow for additional comments they might have wanted to add.

11. Is there anything else you'd like to mention that we haven't already discussed?

Question twelve was asking for permission from the interviewees to be contacted again for additional questions.

12. May I contact you for clarification if needed during my transcription/analysis phase?

The following explanation of questions is only about the questions that changed from the first set of questions with the biblical scholars. The historian interviews were built on the theologian interviews with only a few changes. Most of the questions stayed the same except for a few that were built upon with the answers the biblical scholars gave. Question two below is an example of how Question two of the theological questions was built on. The answers that the biblical scholars gave were compiled and listed below.

- 2. A list has been compiled based on the recommendations from the biblical scholars previously interviewed on what topics should be included in a biblical atlas. I would like to go through this list with you to identify the major events, and geographical topics that should be included in a biblical atlas. Anything that you would like to add to the list?*
- a. The atlas should be comprehensive going through all the major events of the Bible.*
 - b. Garden of Eden*
 - c. The Exodus*
 - d. The Judges*
 - e. The Kings*
 - f. The Prophets*
 - g. Big cities and towns (Jerusalem, Bethlehem)*
 - h. Christ's journey from Birth to the cross*
 - i. Paul's journey – to see how far the word spread*

Question three was another question that was different from the biblical scholars, because the questions were being directed towards historians. The question was asked to find out if the historians knew of any historical documents that support biblical texts besides the Bible itself.

3. *From the topics and events you just mentioned, what specific Historical documentation do you think would help support the different topics?*

The last group interviewed was the cartographers. These questions remained basically the same as the theologians and the historians; however a few were built upon from each of the previous interview groups. Other questions that differed from the other two groups were the first three questions, which dealt specifically with building a general atlas. These questions were asked to help determine the differences between building a topical atlas and building a biblical atlas.

1. *What major topics do you think should be included in atlas, in general?*
2. *How would you organize the topics of an atlas?*
3. *What special considerations should be taken in producing an atlas?*
4. *Here is a list compiled based on the recommendations from four biblical scholars and four historians on what topics should be included in a biblical atlas. I would like to go through this list with you to identify the topics that should be included in a biblical atlas. Any other topics to add?*
 - a. *Chronological*
 - i. *Ancestral Period – Genesis*
 - ii. *Egypt and Exodus – Exodus*
 - iii. *Conquest and Settlement – Joshua and Judges*
 - iv. *United Kingdom – 1, 2 Samuel, 1 Kings*
 - v. *Divided Kingdoms 1 – 2 Kings*
 - vi. *Judah Alone – 2 Kings*
 - vii. *New Testament*
 1. *Babylonian Exile*
 2. *Persian Period*
 3. *Hellenistic/Roman Period*
 - b. *Traditional Literary Division of Books*
 - i. *The Old Testament:*
 1. *The Pentateuch*
 2. *The Historical Books*
 3. *The Poetic and Wisdom Books*
 4. *The Prophetic Books*
 - ii. *The New Testament*
 1. *The Gospels*
 2. *Acts*
 3. *The Epistles of Paul*

4. *The General Epistles*

5. *Here is a list composed by four biblical scholars and four historians on what major events and geographical topics they think should be included in a biblical atlas. From this list what major events and geographical topics should be included in a biblical atlas? Why? Are there any other major events or geographical topics to add?*

- c. *The atlas should be comprehensive going through all the major events of the Bible.*
- d. *Garden of Eden*
- e. *The Exodus*
- f. *The Judges*
- g. *The Kings*
- h. *The Prophets*
- i. *Big cities and towns (Jerusalem, Bethlehem)*
- j. *Christ's journey from Birth to the cross*
- k. *Paul's journey – to see how far the word spread*

Assemblage of Interviewees

The assemblage of Interviewees was based on knowledge in their designated fields including theology, history, cartography, and the distance to the interviewer. For the purpose of locating experts in designated fields, the most useful sources were searching the Internet and recommendations based from the interviewees themselves. The biblical scholars were chosen based on different denominations Catholic, Lutheran, American Baptist. The historians were all professors from different Universities and Schools chosen from different recommendations by faculty and the biblical scholars. The cartographers were all chosen based on if they had worked on an atlas. The first search done for cartographers was based on if they had worked on a biblical atlas. When they were difficult to locate, the next search was based on if they had worked on an atlas of any kind. The interviewees were also chosen because they expressed interest in being interviewed.

Administering the Interviews

Emails were sent to the participants first. These were followed by a phone call to determine an appropriate time to administer the interview in person. If the interview was conducted over the telephone, the time was determined by email. The questions were emailed to the participants first to give them a chance to look them over. During the interviews, copies were given to the participants and the interviews were also recorded with a digital recorder for transcription at a later time.

The duration of interviews ranged from twenty minutes to two hours in length. After each interview, the interviews were transcribed and then put into a chart based on the answers given. After the charts were filled out for each category, new questions were added to the history group and then to the cartography group of interviews based on the responses of the proceeding group of interviews. After all twelve interviews had been given and the charts filled out for each group of interviews, the results were compiled and analyzed to determine a potential list for the contents of a biblical atlas.

Review of Methodology

The principle design of the interviews was to obtain answers to the questions based on the objectives for this thesis. The preliminary content list for the atlas was developed in part by reviewing the contents of the different biblical atlases and by the content assembled from the interviews. A list of topics and the order in which these topics were to be organized was acquired by reviewing different atlases and the content from the interviews. The next chapter will discuss the interpretation of the results of the information acquired from the interviews and the review of biblical atlases. The results will lead to a preliminary list of topics and maps to be included.

CHAPTER 3

Interview Results and Interpretations

When building a general atlas, many different scholars need to be brought together in order to learn what the contexts of the atlas might be. In the case of a historical atlas, historians and cartographers must work together.²⁷ Therefore in the case of a biblical atlas, historians, cartographers, and theologians or Bible experts need to work together to form the contents of a biblical atlas. As noted previously, the most efficient way to access the knowledge of these experts is through a series of interviews. Such a series could solicit information from the group thus saving time and resources.²⁸

As discussed in the previous chapter, in-person, and phone/email interviews were given to twelve experts to gain information about producing a biblical atlas. Three groups of experts were chosen with knowledge of the Bible, history, and cartography. This chapter will discuss the results produced by the interviews, and in the following chapter the results will be used as an aid in determining what contents will go best in a biblical atlas and how to produce the atlas.

The interpretation of the interviews consisted of the following steps: 1) the responses to each question were put into a table, 2) the results of each question were evaluated and then recorded, 3) the interviews were summarized and an initial list for atlas content was created.²⁹

²⁷ Barbara Petchenik. "Cartography and the Making of an Historical Atlas: A Memoir." *The American Cartographer* 4, no. 1, 1977

²⁸ T.J. Sullivan, "Developing Contents for a Special Topic Regional Atlas." 3

²⁹ *Ibid.*, 43

Interview Results

Of the twelve interviews, five were in person and seven were conducted over the phone. The interviews were designed for three different groups: cartographers, historians, and biblical scholars. The questions were then broken into different parts to develop the contents for a biblical atlas, and to determine how to construct and produce the atlas, including layout.

Below, the questions from the interviews are organized according to the respective groups: theologians/biblical scholars, historians, and cartographers. Before the interviewee's answers were discussed they were laid out into answer charts, which are included in the appendix.³⁰ In order to present the interview results in an accurate and logical way, each group's results are separated and discussed by each question. The results from each question are discussed to determine content for a biblical atlas. Answers from the biblical scholars are discussed first followed by the historians and ending with the cartographers. This is done because the questions for the last two groups were contingent upon the answers from the group before. Each group of questions is broken out into atlas content and atlas appearance.

Theologians/Biblical Scholars

The following twelve questions pertain to content and atlas design based upon the knowledge from biblical scholars. Each question is given below exactly as it appeared in the interview questionnaire emailed to each participant in the theologian/biblical scholar group before the interview.

³⁰ Appendix Answer charts

Atlas Content

1. *Students of the Bible have divided the text up in various parts that display some similarity. Here two plans that have been used. Which theme would you use and why?*

a. Chronological

- i. *Ancestral Period – Genesis*
- ii. *Egypt and Exodus – Exodus*
- iii. *Conquest and Settlement – Joshua and Judges*
- iv. *United Kingdom – 1, 2 Samuel, 1 Kings*
- v. *Divided Kingdoms 1 – 2 Kings*
- vi. *Judah Alone – 2 Kings*
- vii. *New Testament*
 1. *Babylonian Exile*
 2. *Persian Period*
 3. *Hellenistic/Roman Period*

b. Traditional Literary Division of Books

- i. *The Old Testament:*
 1. *The Pentateuch*
 2. *The Historical Books*
 3. *The Poetic and Wisdom Books*
 4. *The Prophetic Books*
- ii. *The New Testament*
 1. *The Gospels*
 2. *Acts*
 3. *The Epistles of Paul*
 4. *The General Epistles*

The first question asked the biblical scholars which theme they would use to put a biblical atlas together. The question was asked to determine whether the biblical scholar would stick with the traditional literary way that most Bibles are laid out or if they would go with a more chronological way and skip between the different books of the Bible. The four people interviewed were split into two equal groups. Two of the scholars thought that the literary division would be the best, and two of them thought that the chronological division would be more engaging. One example in favor of the

chronological division comes from Priest Rich Perry from St. Joseph's church in Missoula Montana,³¹

I would prefer the chronological. Because I think when you build an atlas with the literary division of books you end up going back and forth across places. For instance when you do the Historical books it keeps cutting back and forth across places. And then when you get into the Prophetic books some of the prophets go back into some of the Historical books and then the Psalms go back into the historical books.

An example in favor of the literary division of the books for the biblical atlas comes from Retired American Baptist Minister Emmett Dosier, who proposes that the "Traditional Literary Division is more often chosen for flow, research, and representation of the text from the Bible."³²

Mitch Jones from Atonement Lutheran Church in Missoula MT suggests that,

Literary division is a library's organizational structure not necessarily a theological or an historical structure. So if you're teaching biblical classes, I (Mitch) think a biblical atlas is more helpful if it's laid out in a more historical (chronological) way, just because of how it operates.³³

2. *I would like to go through this list with you to identify the major events, and geographical topics that should be included in a biblical atlas.*

The concept behind this question was to prompt the biblical scholars to recommend which events, or geographical topics they thought would be best to mention in the atlas from the above list of subjects. Priest Rich Perry suggested including Noah, the Patriarchs, the Ancestral Period, Jacob through the Exodus, Samuel, Saul, David, and Solomon, Elijah, Elisha, The Prophets, and John while on the Greek Islands.³⁴ Mitch Jones from Atonement Lutheran suggested that the atlas start with the Exodus, while

³¹ Rich Perry. Catholic Priest. Interviewed by author 10 September 2007. Missoula Montana.

³² Emmett Dosier, Retired American Baptist Minister. Interviewed by author, 12 December 2007, Missoula Montana.

³³ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007. Missoula Montana.

³⁴ Rich Perry. Catholic Priest. Interviewed by author 10 September 2007.

reflecting back on Genesis and the Patriarchs and then jump forward to Judges. Next he would talk about the monarchy period, followed by the Babylonian break up, Ezekiel Valley of the Dry Bones to the Greeks conquest of Alexander the Great, followed by the Maccabean Period, then the Gospels, and Ending Post 70 AD – Helena.³⁵ All four of them did suggest being as comprehensive as possible using as many main topics from the Bible as could reasonably fit in the atlas.

3. *The following list of topics is a list I comprised doing research on existing biblical atlases. From this list what topics should be included in a biblical atlas?*

a. *The Bible as History, written by Werner Keller*³⁶

- i. *The Coming of the Patriarchs: From Abraham to Jacob.*
- ii. *In the Realm of the Pharaohs: From Joseph to Moses*
- iii. *Forty Year sin the Wilderness: From the Nile to the Jordan*
- iv. *When Israel Was an Empire: From David to Solomon*
- v. *Two Kings – Two Kingdoms: From Rehobaom to Johoiachin*
- vi. *From the Exile to the Maccabean Kingdom: From Ezekiel to John Hyrancanus*
- vii. *Jesus of Nazareth*
- viii. *In the Day of the Apostles*
- ix. *Let There be Light*

b. *Bible Overview*

- i. *The Law*
- ii. *The History*
- iii. *Poetry and Wisdom*
- iv. *Major Prophets*
- v. *Minor Prophets*
- vi. *General Epistles*
- vii. *Revelation*

This question was similar to the last question, but emphasized different themes to encourage the scholars to think of different topics. All the scholars, except for one, kept their same answers from the previous question and again stating that being as comprehensive as possible would be the best way of going about things. Mitch Jones did

³⁵ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

³⁶ Werner Keller, *The Bible as History: A Confirmation of The Book of Books*, trans. William Neil. (New York: William morrow and Company, 1964)

add that he would like to see a chapter on the importance of the use of geography when studying the Bible. “That would be a major play helping people understand the names, helping people understand that use of geography as part of the teaching and revelation of scripture. It’s not just casually mentioned, it’s there for a purpose.”³⁷

4. *Now which other topics not on the list do you think should be included in a biblical atlas?*

This question was written to allow the scholars to mention anything else that might not come up in conversation from the last few questions. Curtis Privette from First Baptist Church in Missoula suggested that Paul’s travels be given a greater emphasis as well as the general epistles to stress where Christianity spread from the time after Jesus.³⁸ Priest Rich Perry recommended that the other cultures and people who lived during those times should be mentioned. He also thought that Israel’s time in the desert of Sinai should be mapped and that the Judges should be added in as well.³⁹

5. *From the topics and events mentioned earlier what specific texts from the Bible do you think would help describe the topics?*

This question was formulated to discover what biblical texts the scholar’s thought would support the topics to be put in the atlas. The question was attempting to retrieve from the scholars any biblical text that related to geography, history, war, politics and any sort of text that could be used as reference for the atlas. Priest Rich Perry suggested using movement texts, any text that described how and where the people moved. Mitch Jones suggested that anything from Luke, Acts, Isaiah 49:6, Mark 8, the book of John, Ruth, and Psalm 104. He would also add any text from the book of Psalms or that was written by John, “John is the only one that speaks about three trips of Jesus. If we didn’t have

³⁷ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

³⁸ Privette, Curtis. First Baptist Minister. Interviewed by author 2 August 2007. Missoula Montana.

³⁹ Rich Perry. Catholic Priest. Interviewed by author 10 September 2007.

John, we wouldn't have a three year chronology for Jesus because there is only one Passover mentioned in Mark, Mathew, and Luke."⁴⁰ Another book Mitch Jones stressed upon was Luke:

A good geographic book is Luke. I would do a lot with Luke because geography has a theological significance in Luke beyond what you would find in some of the others. It starts in the Galilee goes to Jerusalem, center of the religious world, and then it spreads to Rome, the center of the rest of the worlds.⁴¹

6. *From the topics, events, and text above what maps do you think would be best to include?*

The important maps that the scholars thought should be added stemmed from many of the topics that are discussed above. Curtis Privette suggests building maps of the Garden of Eden, most big cities i.e. Jerusalem and Bethlehem, the Exodus, journey of where the Hebrew people went over time and why, Christ's journey from birth to the cross, Paul's Journey, and the Spread of Christianity.⁴² To add to those topics that Curtis Privette thought should be produced into maps, Priest Rich Perry recommended making maps of Nazareth, the Sea of Galilee, the Jordan River, and also to include a map of where Esau went.⁴³ To finish off the map topics, Mitch Jones advised a map of strictly John's accounts of Jesus.⁴⁴ In conclusion, all of the interviewees suggested including a map for each topic starting with Exodus and ending with the present day spread of Christianity.

One question that came up while interviewing the cartographers was, "Should different paths be shown on the maps?" This question was asked due to the high number of atlases that list discrepancies in different routes taken by the Hebrew people in the

⁴⁰ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

⁴¹ Ibid

⁴² Curtis Privette, First Baptist Minister. Interviewed by author 2 August 2007.

⁴³ Rich Perry. Catholic Priest. Interviewed by author 10 September 2007.

⁴⁴ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

Bible. They all thought that the different routes should be included with a reference to the source of that route. Curtis Privette suggested strictly using the New Revised Standards version of routes and then putting less emphasis on the other routes, merely mentioning them in passing.⁴⁵ Priest Rich Perry thought that the different paths would be interesting to people who were serious about studying the Bible.⁴⁶

Atlas Appearance

7. *From the topics and events that you have mentioned previously, how would you organize the content? Why?*

The scholars all consider the themes from question one to be a way of organizing the biblical atlas for production. Curtis Privette thought the atlas should be organized Chronological and referenced with the relevant scripture starting with Genesis and then skipping forward to the prophets and so on.⁴⁷ Priest Rich Perry felt that there should be a synopsis of each book, focusing on major stories like Abraham.⁴⁸ Mitch Jones felt there should be more than one edition to the biblical atlas, the first one containing biblical times, and the second edition showing just the spread of Christianity and Judaism.⁴⁹ Emmett Dosier felt the atlas should be organized just the way the Bible is set up for ease of referencing the two to each other.⁵⁰

Atlas Content

8. *Have you read or heard of any archeological or scientific findings that would help support the topics and events chosen above? If so, what are they? Which of these additional topics should be included in the atlas?*

⁴⁵ Curtis Privette, First Baptist Minister. Interviewed by author 2 August 2007.

⁴⁶ Rich Perry, Catholic Priest. Interviewed by author 10 September 2007.

⁴⁷ Curtis Privette, First Baptist Minister. Interviewed by author 2 August 2007.

⁴⁸ Rich Perry, Catholic Priest. Interviewed by author 10 September 2007.

⁴⁹ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

⁵⁰ Emmett Dosier, Retired American Baptist Minister. Interviewed by author, 12 December 2007.

In many of the biblical atlas referenced before the interviews were given, archeology was used as a tool to help explain where something was and what has happened to that place after years have gone by. Archeology was also used to support scripture, such as the Dead Sea Scrolls, showing that there is documentation of the books before the Bible was put together.

Mitch Jones found ground-piercing radar and aerial photography to be excellent technologies for discovering and finding new sites.

Until five or six years ago we didn't know where Bethsaida was. We could find no place on the Sea of Galilee that corresponded to the description of where Bethsaida would be until Ground Piercing Radar. GPR discovered that the shore line of the Sea of Galilee 2000 years ago at the northern end was about four miles further north. We've known that there was this little Wade, this little Tel, that's been up there and didn't know what the town was but suddenly by the GPR you could tell that that was a sea port town. And that could've been Bethsaida and they went in and start the archeology and they found a city gate they found all that stuff.⁵¹

Priest Rich Perry talked about the Chapel where Moses was buried, the Garrison Demoniac, Jacob's Well, plus he also mentions others,

The one that just popped into my mind would be Qumran (archeological site near the place the Dead Sea Scrolls were found) that's significant just in terms of the prophets, a lot of work has been done on that, scientific dating the manuscripts and right near there is Masada which is after Jesus. I think some of the research that has been done on the temple site in Jerusalem the church of the Holy Sepulcher presumably where Jesus was buried, right in the heart of the city. We've mentioned Noah and Noah's ark there's some speculation and all kinds of different evidence.⁵²

Emmett Dosier mentioned three authors he has read that talk about archeological findings, Dr. Carl Baugh, Grant Jeffery, and Hal Lindsay.⁵³

9. *When choosing a Bible to reference with the atlas, which one would, you chose?*

⁵¹ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

⁵² Rich Perry, Catholic Priest. Interviewed by author 10 September 2007.

⁵³ Emmett Dosier, Retired American Baptist Minister. Interviewed by author, 12 December 2007.

Three of the scholars picked the New Revised Standard (NRS) because of the balance of literal meaning in a language that's understandable⁵⁴ and because of the retention of the original syntax.⁵⁵ Emmett Dosier thought the new King James Version would be nice because of the rich language used.⁵⁶ Priest Rich Perry, because he's Catholic, liked the NRS but also suggested the New American Bible because it included the Apocryphal books.⁵⁷ This led to another question "Should the Apocryphal books be included?" They all said yes because by leaving out those books some information from Daniel, Ruth, Esther, and the Maccabean period would be left out. However, the three protestant pastors suggested just mentioning these books and sticking with the protestant organization of the Bible.

10. What special considerations do you think should be taken when producing a biblical atlas?

Priest Rich Perry wanted the atlas to not be dry. He felt that there is a lot of humor in the Bible and so it should be added into the atlas somehow. He also felt that equal voices should be given to the Jewish faith as well as the Christian faith,

I wonder if in producing a biblical atlas if there needs to be something in there about alternate interpretations in a sense about giving equal voice to the Jewish, I mean in Judaism where are these places, and are they in the same places that they are in Christianity. Each one is a little bit different because it's not as heavily involved in the Bible itself. I guess it's basically Jerusalem, that's sacred to all three.⁵⁸

Mitch Jones felt that an index or an appendix with Hebrew words and meanings of specific geography and people would make an excellent addition to the atlas providing greater understanding to the geography if the meaning of the words were fully

⁵⁴ Curtis Privette, First Baptist Minister. Interviewed by author 2 August 2007.

⁵⁵ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

⁵⁶ Emmett Dosier, Retired American Baptist Minister. Interviewed by author, 12 December 2007.

⁵⁷ Rich Perry, Catholic Priest. Interviewed by author 10 September 2007.

⁵⁸ Ibid

understood. He also felt that in an introduction there needed to be a disclaimer making the distinction between the atlas being an educational tool or a devotional tool,

Systematic theology for example makes a very clear point that theology is not faith. Your biblical atlas is a research and study tool you could have some appendixes and things like that that could help you use it in different ways, and I personally think that your study is enhanced when you know the context better. I think it's just marvelous to see how God had used space and language and things like that, it provides strength in my faith.⁵⁹

11. Is there anything else you'd like to mention that we haven't already discussed?

This question was asked to allow the interviewees a chance to sum up anything they forgot to add in the interviews. Mitch Jones suggested that an atlas be made that was referenced to a daily devotional book for people to view things spatially.⁶⁰ Priest Rich Perry just wanted to add that the Bible doesn't give directions or have GPS coordinates and that putting routes and places down accurately is hard to do and that sometimes changes need to be made.⁶¹

12. May I contact you for clarification if needed during my transcription/analysis phase?

All of the Scholars replied in kind by giving permission to use the interviews in this thesis as well as contacting them in the future for clarifications.

Historical Scholars

The following nine questions pertain to content and atlas design based upon the knowledge from historical scholars. Each question is given below exactly as it appeared in the interview questionnaire emailed to each participant before the interview.

⁵⁹ Mitch Jones, Lutheran Minister. Interviewed by author, 27 September 2007.

⁶⁰ Ibid

⁶¹ Rich Perry. Catholic Priest. Interviewed by author 10 September 2007.

Atlas Content

1. *Biblical Scholars previously interviewed divided the text up into two different themes. Which would you choose and why?*

- c. Chronological
 - i. *Ancestral Period – Genesis*
 - ii. *Egypt and Exodus – Exodus*
 - iii. *Conquest and Settlement – Joshua and Judges*
 - iv. *United Kingdom – 1, 2 Samuel, 1 Kings*
 - v. *Divided Kingdoms 1 – 2 Kings*
 - vi. *Judah Alone – 2 Kings*
 - vii. *New Testament*
 - 1. *Babylonian Exile*
 - 2. *Persian Period*
 - 3. *Hellenistic/Roman Period*
- d. Traditional Literary Division of Books
 - i. *The Old Testament:*
 - 1. *The Pentateuch*
 - 2. *The Historical Books*
 - 3. *The Poetic and Wisdom Books*
 - 4. *The Prophetic Books*
 - ii. *The New Testament*
 - 1. *The Gospels*
 - 2. *Acts*
 - 3. *The Epistles of Paul*
 - 4. *The General Epistles*

This question was asked of the historians to see if they agreed or disagreed with the theologians. The historians ended up being split into two groups just like the theologians. Gale Heide professor from Montana Bible College said that it would depend upon the audience. If the atlas was being used for historical purposes he would use the Chronological approach, if it was being used for theology he would use the literary approach.⁶² Michael Danielson from Seattle Preparatory suggested using the Traditional literary division because it is familiar to most people and then also leads to the abstract.⁶³ Chuck McCoy proposed using chronological with two added sections “vii. Babylonian

⁶² Gale Heide, Professor Montana Bible College. Interviewed with author 15 September 2007. Telephone. Missoula Montana

⁶³ Michael Danielson, Religion Teacher Seattle Prep. Interviewed by author 7 October 2007. Telephone. Missoula Montana

Exile & Restoration (606-400BC) viii. Intertestamental Era (400-30 AD) 1. Persian (400-30 AD) 2. Greek (330-142 BC) 3. Hasmonean (142-63 BC) 4. Rome in Control (63BC on).”⁶⁴

2. *A list has been compiled based on the recommendations from the biblical scholars previously interviewed on what topics should be included in a biblical atlas. I would like to go through this list with you to identify the major events, and geographical topics that should be included in a biblical atlas. Anything that you would like to add to the list?*

- e. *The atlas should be comprehensive going through all the major events of the Bible.*
- f. *Garden of Eden*
- g. *The Exodus*
- h. *The Judges*
- i. *The Kings*
- j. *The Prophets*
- k. *Big cities and towns (Jerusalem, Bethlehem)*
- l. *Christ’s journey from Birth to the cross*
- m. *Paul’s journey – to see how far the word spread*

Gale Heide wanted to add in the creation account, rise and spread of the church in the first century but all in all he felt the divisions were sufficient.⁶⁵ Michael Danielson wanted to add in the Tower of Babel and Noah and the flood.⁶⁶ Nat Levtow wanted to note that he would start the atlas at the historical books.⁶⁷ Chuck McCoy wanted to make sure that the Patriarchs (2200-1800 BC) would be kept in the biblical atlas.⁶⁸

3. *From the topics and events you just mentioned, what specific Historical documentation do you think would help support the different topics?*

This question was asked to find out if the historians could think of any other documentation from History that would support the Bible or the accounts from the Bible.

⁶⁴ Chuck McCoy, Professor Boise Bible College. Interviewed by author 21 October 2007. Telephone. Missoula Montana.

⁶⁵ Gale Heide, Professor Montana Bible College. Interviewed with author 15 September 2007.

⁶⁶ Michael Danielson, Religion Teacher Seattle Prep. Interviewed by author 7 October 2007.

⁶⁷ Nat Levtow, Assistant Professor University of Montana. Interviewed 10 June 2007. Missoula Montana

⁶⁸ Chuck McCoy, Professor Boise Bible College. Interviewed by author 21 October 2007.

Gale Heide suggested using demographic data as a reference to the stories in the Bible.⁶⁹

Chuck McCoy said,

I would note Patriarchal era (Nuzi & Ebla Tablets), Joshua (Tel Amarna letters, ca. 1400 B.C.), Judges Era (Merneptah Stela, ca. 1231 B.C.); Kingdom Era (Moabite Stone; black obelisk of Shalmaneser III; Taylor Prism noting Sennacherib's failed siege of Jerusalem; Cyrus Cylinder).⁷⁰

4. *From the topics, events, and documentation described above what maps do you think would be best to include?*

Gale Heide proposed adding maps that demonstrate borders i.e. political, topographical, also maps that show the movements of people, and then adding in a map of the modern day area for reference.⁷¹ Michael Danielson suggested adding maps of pre-Exodus, Exodus, and post Exodus, as well as maps of the different religions during the time of Christ, the middle ages, and current time (0 / 500 / 1000 / 1500 / 2000 AD).⁷² Nat Levtow wanted maps of the Patriarchal Age and then of the different Empires and cultures over time.⁷³

Lastly Chuck McCoy suggested,

Having maps of the arrangement of tribes in Canaan after allotment of land; Where Israel's various close neighbors were (Phoenicia, Ammon, Moab, Edom, etc.); extent of David's kingdom; large area map showing Fertile Crescent for perspective on Israel and their conqueror's.⁷⁴

5. *Have you read or heard of any archeological or scientific findings that would help support the topics and events chosen above?*

All of the historians felt that there were multiple archeological sites that would help support the topics. Nat Levtow did stress that there is a difference between good

⁶⁹ Gale Heide, Professor Montana Bible College. Interviewed with author 15 September 2007.

⁷⁰ Chuck McCoy, Professor Boise Bible College. Interviewed by author 21 October 2007.

⁷¹ Gale Heide, Professor Montana Bible College. Interviewed with author 15 September 2007.

⁷² Michael Danielson, Religion Teacher Seattle Prep. Interviewed by author 7 October 2007.

⁷³ Nat Levtow, Assistant Professor University of Montana. Interviewed 10 June 2007.

⁷⁴ Chuck McCoy, Professor Boise Bible College. Interviewed by author 21 October 2007.

and bad archeology. According to him, bad archeology is done by someone who looks for a certain place finds one and calls it that place. Good archeology is where someone finds a site does research on the site discovers pottery from a certain date and can point to that date in time and have other documented sources saying a certain place was here around that time and then says this is that place.⁷⁵

Atlas Appearance

6. How would you best organize the contents of a biblical atlas?

All of the historians said chronologically, they would design the atlas by date and go through time to present day. Gale Heide mentioned one overall map to show every big event that happened. He also would organize the atlas chronologically with a series of maps that demonstrates the big events through their history.⁷⁶ Chuck McCoy did stress his favorite atlas was the Hammond's Bible Atlas organized chronologically around Israel's history.⁷⁷

7. What special considerations do you think should be taken when producing a biblical atlas?

Gale Heide wanted to stress the importance of theology when creating a biblical atlas and how it should be integrated into the text,

Theology and belief played as important a role in biblical events as anything else. An atlas should demonstrate an awareness of the import of certain events in order to be able to explain their significance from a theological point of view. In other words, do your best to interact with the biblical interpretation of the events, at least as much as the biblical accounting of the specifics of the occurrence of each event.⁷⁸

⁷⁵ Nat Levtow, Assistant Professor University of Montana. Interviewed 10 June 2007.

⁷⁶ Gale Heide, Professor Montana Bible College. Interviewed with author 15 September 2007.

⁷⁷ Chuck McCoy, Professor Boise Bible College. Interviewed by author 21 October 2007.

⁷⁸ Gale Heide, Professor Montana Bible College. Interviewed with author 15 September 2007.

Michael Danielson felt that making the atlas graphically clear (colors, and text) was just as important as getting the facts correct.⁷⁹ He felt that a graphically clear atlas would aid people in understanding the facts that were presented. Lastly Nat Levtow wanted there to be a disclaimer in the atlas on the evidence that was being included and how it was interpreted.⁸⁰ He felt it was important to show where the facts came from and how they were interpreted.

8. *Is there anything else you'd like to mention that we haven't already discussed?*

Michael Danielson suggested adding a timeline to show the actual chronological dynamics of the Bible.⁸¹ Nat Levtow stressed showing the difference between Israelite history and biblical history.⁸²

9. *May I contact you for clarification if needed during my transcription/analysis phase?*

All of the historians replied in kind by giving permission to use the interviews in this thesis as well as contacting them in the future for clarifications.

Cartographers/Geographers

The following eleven questions pertain to content and atlas design. Each question is given below exactly as it appeared in the interview questionnaire emailed to each participant before the interview. Four cartographers were interviewed; one was in person and three were over the phone, with one of the three phone interviews emailing a paper on atlas production to the interviewer. Most of the Cartographers did not feel fully qualified with answering the biblical questions so many of the answers were minimal.

⁷⁹ Michael Danielson, Religion Teacher Seattle Prep. Interviewed by author 7 October 2007.

⁸⁰ Nat Levtow, Assistant Professor University of Montana. Interviewed 10 June 2007.

⁸¹ Michael Danielson, Religion Teacher Seattle Prep. Interviewed by author 7 October 2007.

⁸² Nat Levtow, Assistant Professor University of Montana. Interviewed 10 June 2007.

The important part of the questioning was to develop a sense of how to produce the atlas itself. Jim Anderson Director, Florida Resources and Environmental Analysis Center did not feel he was qualified to answer the questions specifically about biblical atlas production so he chose instead to email a paper on general atlas production.⁸³ The paper he provided is an excellent resource in atlas production including a step-by-step process of creating an atlas.

Atlas Content

1. What major topics do you think should be included in atlas, in general?

Patrick Kennelly, Professor from Long Island University said,

The major topics would of course depend on the type of atlas. All topics should have some sort of geospatial component. This, however, could range from location to migration to change with time.⁸⁴

2. How would you organize the topics of an atlas?

Patrick Kennelly would organize an atlas either geographically or historically.⁸⁵

Jeremy Crampton Assoc. Prof. & Graduate Director, Geography Editor, Cartographica Department of Geosciences, Georgia State University Atlanta, Ga. felt that it was typical to begin with the physical landscape then go to the cultural landscape of the area.⁸⁶

Paul Wilson Geography Professor, University of Montana gave a very extensive overview of how he would produce an atlas. He would start by producing the prefix material and table of contents, followed by detailed materials starting with base maps.

He would develop specific symbology for the maps included in one legend to be used on

⁸³ Jim Anderson. Director of Florida Resources and Environmental Analysis Center. Interviewed by author 17 October 2007. Email. Missoula Montana

⁸⁴ Patrick Kennelly. Assistant Professor Long Island University. Interviewed by author 20 October 2007. Telephone. Missoula Montana

⁸⁵ Ibid

⁸⁶ Jeremy Crampton, Jeremy. Professor Georgia State University. Interviewed by author 10 October 2007. Telephone. Missoula Montana

all of the maps. He would also include basic location maps and tabular information on populations of towns, etc. General atlas pages would include pictures and geographical coordinates referenced to the gazetteer with topographic maps. The gazetteer would be referenced in terms of longitude and latitude. The atlas would end with an index of terms used in the work. Special information or items would be included as inset maps or text boxes and would follow main points as the general structure format. Before production could begin he would create mock up pages of the work taken to a publisher. The publisher would then lay out funds for the project.⁸⁷

3. *What special considerations should be taken in producing an atlas?*

Jeremy Crampton pointed out that it was key in recognizing who your audience will be and to design it with them in mind.⁸⁸ Patrick Kennelly felt the “authors should give strong consideration about what the objectives of the atlas are. They should also consider what will set their atlas aside from all of the other similar atlases covering the same or similar topics.”⁸⁹ Paul Wilson felt that each atlas had a different function and should be designed for the particular functions. He would design a biblical atlas chronologically because he felt that would help the readers follow the atlas more than using a traditional literary division.⁹⁰

4. *Here is a list compiled based on the recommendations from four biblical scholars and four historians on what topics should be included in a biblical atlas. I would like to go through this list with you to identify the topics that should be included in a biblical atlas. Any other topics to add?*

a. *Chronological*

- i. *Ancestral Period – Genesis*
- ii. *Egypt and Exodus – Exodus*

⁸⁷ Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008. Missoula Montana

⁸⁸ Jeremy Crampton, Jeremy. Professor Georgia State University. Interviewed by author 10 October 2007.

⁸⁹ Patrick Kennelly. Assistant Professor Long Island University. Interviewed by author 20 October 2007.

⁹⁰ Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008.

- iii. *Conquest and Settlement – Joshua and Judges*
- iv. *United Kingdom – 1, 2 Samuel, 1 Kings*
- v. *Divided Kingdoms 1 – 2 Kings*
- vi. *Judah Alone – 2 Kings*
- vii. *New Testament*
 - 1. *Babylonian Exile*
 - 2. *Persian Period*
 - 3. *Hellenistic/Roman Period*
- b. *Traditional Literary Division of Books*
 - i. *The Old Testament:*
 - 1. *The Pentateuch*
 - 2. *The Historical Books*
 - 3. *The Poetic and Wisdom Books*
 - 4. *The Prophetic Books*
 - ii. *The New Testament*
 - 1. *The Gospels*
 - 2. *Acts*
 - 3. *The Epistles of Paul*
 - 4. *The General Epistles*

This is one question that most of the Cartographers chose not to answer due to their lack of knowledge of the Bible. Patrick Kennelly stated that he was not a biblical scholar so he chose the literary list to make it easier to follow along with the Bible.⁹¹ Paul Wilson suggested adding in side trips or special things on side pages. He would also include Ruth in the topics.⁹²

5. *Here is a list comprised by four biblical scholars and four historians on what major events and geographical topics they think should be included in a biblical atlas. From this list what major events and geographical topics should be included in a biblical atlas? Why? Are there any other major events or geographical topics to add?*
- c. *The atlas should be comprehensive going through all the major events of the Bible.*
 - d. *Garden of Eden*
 - e. *The Exodus*
 - f. *The Judges*
 - g. *The Kings*
 - h. *The Prophets*
 - i. *Big cities and towns (Jerusalem, Bethlehem)*
 - j. *Christ's journey from Birth to the cross*

⁹¹ Patrick Kennelly. Assistant Professor Long Island University. Interviewed by author 20 October 2007.

⁹² Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008.

k. Paul's journey – to see how far the word spread

This is also a question that the cartographers did not have a lot of information to add. Jeremy Crampton did want to make a distinction between real and metaphorical places such as the Garden of Eden vs. Jerusalem.⁹³ Patrick Kennelly would want to add Noah's flood but wouldn't know how to map it or get accurate information.⁹⁴ Paul Wilson would add in Abraham's wanderings and Sodom and Gomorrah as inset pieces. He felt that going book by book would be too confining and would follow major topics instead. Lastly, he would list the discrepancies where there is a disagreement. He would refer to all sides of the disagreement.⁹⁵

6. From the topics, events, and text you've mentioned what maps do you think would be best to include in a biblical atlas?

Patrick Kennelly would include,

The Garden of Eden, Jerusalem, including maps putting in at the center of the world, might receive special attention. Maps of heaven and hell including Dante's hell, Noah's flood and maps showing current scientific research on what area may have been affected, Jesus' life and movements, the spread of Christianity and the church, archaeological locations of Dead Sea scrolls and other gospels.⁹⁶

Paul Wilson would include Paul's travels, the Apostles, and principle places.⁹⁷

7. From the topics and events that we have decided on going into the biblical atlas how would you organize the content?

Most of the cartographers felt this question was a repeat of the earlier questions and didn't have anything to add. Paul Wilson replied that he would divide the content by the literary division of the Bible and then by major topics.

⁹³ Jeremy Crampton, Jeremy. Professor Georgia State University. Interviewed by author 10 October 2007.

⁹⁴ Patrick Kennelly. Assistant Professor Long Island University. Interviewed by author 20 October 2007.

⁹⁵ Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008.

⁹⁶ Patrick Kennelly. Assistant Professor Long Island University. Interviewed by author 20 October 2007.

⁹⁷ Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008.

8. *Have you read or heard of any archeological or scientific findings that would help support the topics and events chosen above? Which of these additional topics should be included in the atlas?*

Patrick Kennelly referred to a recent book on Noah's flood by a group of geologists.⁹⁸ Paul Wilson mentioned the Dead Sea Scrolls; he also noted that he would add the archeology in an end section to support the facts and stories in the atlas.⁹⁹

Atlas Appearance

9. *What special considerations do you think should be taken when producing a biblical atlas?*

Paul Wilson indicated that the format of an atlas, and finishing the book, printing costs, publication and funding, are all very important aspects that need to be taken into consideration before the atlas production can begin. "The atlas has to be approved by a publisher before you start building the atlas. These considerations need to be taken into account before atlas production can begin. The atlas format has to be decided on and all the funding received before the actual atlas can be built."¹⁰⁰

Patrick Kennelly felt that, "It seems it will be important to clearly differentiate maps based on supportable 'facts' and maps that are based more on conjecture. Perhaps the atlas could even be laid out to show such contrasting views in parallel."¹⁰¹

10. *Is there anything else you'd like to mention that we haven't already discussed?*

Jeremy Crampton felt that there needed to be a section on *mappae mundi* because they were heavily influenced by biblical narratives and would draw the journey of Moses etc. on their maps (ex. The Hereford *mappae mundi*).¹⁰²

⁹⁸ Patrick Kennelly. Assistant Professor Long Island University. Interviewed by author 20 October 2007.

⁹⁹ Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008.

¹⁰⁰ Ibid.

¹⁰¹ Patrick Kennelly. Assistant Professor Long Island University. Interviewed by author 20 October 2007.

11. May I contact you for clarification if needed during my transcription/analysis phase?

All of the Cartographers replied in kind by giving permission to use the interviews in this thesis as well as contacting them in the future for clarifications.

Preliminary List of Atlas Content

The following is a preliminary table of contents that can be used in a biblical atlas. The preliminary list was developed from the above interviews. The final table of contents will be outlined in the following chapter including the information gained from the literature review.

Atlas Contents

- I. Prefix Materials
- II. Table of Contents
- III. Introduction
 - a. Importance of Geography and the Bible
 - b. Disclaimer making the distinction stating the atlas is an educational tool not a devotional tool.
 - c. Reference Bible for text and maps
 - i. New Revised Standard – because of the retention of the original syntax.
 - ii. Overview of other Bibles
 - iii. Overview of Bibles with mistakes in them through history (meant for humorous purposes)

¹⁰² Jeremy Crampton, Jeremy. Professor Georgia State University. Interviewed by author 10 October 2007.

- d. Disclaimer telling how each piece will be supported through other documentation or referenced to the Bible with out supporting documentation.

IV. Gazetteer

- a. Present day maps including
 - i. Major cities
 - ii. Population
 - iii. Major roads
 - iv. Topographical information
 - v. Major water ways
- b. Map of Archeology Sites

V. Overview of Apocryphal books

VI. Organized Chronologically

- a. Ancestral Period – Noah
- b. Patriarchs – Abraham to Jacob
- c. Joseph to Moses
 - i. Exodus – including 40 years in the Sinai Desert
- d. Judges
- e. Kings – Samuel, Saul, David, Solomon
- f. Prophets
 - i. Including Elijah and Elisha
- g. Christ – Birth to Death
- h. Paul

- i. Apostles
- VII. Present Day Maps
 - a. Spread of Christianity through time
 - i. Tabular information on number of Christians today
 - b. Spread of Judaism through time
 - i. Tabular information on number of Jewish People today.
- VIII. Other Maps influenced by the Bible
 - a. Mappae Mundi
- IX. List of spatial and other relevant Hebrew terms and their meanings
- X. Glossary of different terms
- XI. Index of places, people, and other important terms
- XII. Bibliography

Summary

The above interviews were extremely informative. Using interviews instead of surveys allowed the interviewer to gain more information from each participant because he could be prompted into giving a more involved answer. The results of the interview evaluation and preliminary list of atlas content will be used in the following chapter of atlas production.

CHAPTER 4

Biblical Atlas Production

Biblical atlas production requires a complicated set of steps to create a refined product. Producing a general atlas also requires many steps to complete. Jim Anderson Director of Florida Resources and Environmental Analysis Center gave quite a detailed interview on atlas production. He chose to have the questions emailed to him so that he could write down detailed answers and email them back.¹⁰³ Below each step will be discussed in reference to biblical atlas production. Thomas Sullivan also suggests a series of steps for producing a general atlas.

Throughout this chapter the steps in the table below will be discussed in reference to general atlas production and how that relates to biblical atlas production. The table below shows the steps designed by Sullivan and Anderson relating to biblical atlas production. The table helps to show the differences and similarities between the two authors. The analysis following the table helps to define what the differences are between the two and how they relate, as well as what specific steps are needed to create a biblical atlas. The steps will be broken into three categories pre-production, production, and post-production.

Table 3. Differences between Sullivan's Methods and Anderson's Methods.

	Steps For Developing an Atlas - Sullivan	Steps For Developing an Atlas - Anderson
1. Pre-Production	The development of the atlas contents and the formation of an atlas staff	An idea or the subject for your project needs to be developed.
2.	The compilation of data or maps to be included in	Develop a table of contents and identify potential contributors.

¹⁰³ Jim Anderson. Director of Florida Resources and Environmental Analysis Center. Interviewed by author 17 October 2007.

	the atlas	
3.	The design of the physical parameters of the atlas (the design of the book itself, including size, color, page layout, scale of maps, addition of graphs, tables, text, etc.	Determine several production issues. Based on your table of contents how many pages will the atlas require? This number than needs to be weighed against potential printing costs which are affected by number of copies, number of pages, color versus black and white, type of paper, type of binding, and page size.
4.	The process of producing individual maps including the procedures involved in map printing and publication.	What are your funding sources? Based on the issues raised in number three what are the costs of printing and production?
5. Atlas Production		Basic philosophical decision needs to be made concerning text versus maps?
6.		Page templates need to be designed that all of the potential graphic elements can be placed within. This would start with the size of the book and could include some basic elements such as the placement of headers and footers, page numbers, color schemes, font styles, font sizes, general rules for the placement of maps, text, photos, tables, graphs, illustrations, etc.
7.		Content Development; Cartographers cannot begin work until content has been developed.
8.		Page Construction. Before this happens the production methods need to be defined. In this step, I include a basic philosophical decision. Are the maps going to be generated through some type of GIS software or are they going to have a polished cartographic look obtained by using programs such as Illustrator and Photoshop.
9. Post-		Review procedures need to be established. This can involve several steps and multiple individuals.

Production		
10.		If you are using photos and other material that may be copyrighted, you need to have a person designated to obtain all of the necessary copyright permissions.
11.		Identify a printer at some point and determine how they want material delivered to them and what proofing options you need.
12.		You need to have in place a marketing and distribution plan. You need to be aware of the pricing that bookstores or other distributors will want to sell your book. This could be 50 to 60% off the list price.

Differences from the two methods include; Thomas Sullivan uses fewer steps to produce an atlas, and Jim Anderson uses a very detailed breakdown to produce an atlas. Thomas Sullivan steps combine some of Jim Anderson's steps into one category; such as step one for Sullivan equals steps one and two for Anderson. Both their breakdowns for building atlas content take you to the same conclusion. But the main difference between the two is that Anderson suggests finding a publisher before you build the atlas and Sullivan lists finding a publisher at the very end of the process of building an atlas. To finish defining the differences between a biblical atlas and a general atlas Table 4 has filled out the rest of Table 2.

Table 4. Differences between a Biblical Atlas and a General Atlas.

	Steps For Developing a General Atlas	Steps For Developing A Biblical Atlas
1.	Topic Must Be Chosen	1. Topic has already been chosen – Biblical studies.
2.	Preliminary List of Contents – Atlas Appearance	2. Preliminary list developed by theologians, historians, and cartographers.
3.	Map Subject Must Be Researched and Evaluated	3. Research done on Table of Contents produced from interviews.

4.	Prototype of Atlas Must be Developed	4. Prototype of Atlas should be produced before project is presented to a publisher.
5.	Evaluation and Changes Must Be Made	5. Editing and Proofing must be finished before copy editor looks it over.
6.	Final Product Produced.	6. Final Product Printed and sent to Publisher for review – marketing strategies must be developed.

The differences above are few but important. The first difference is that the topic has already been chosen. A biblical atlas is about the Bible and the people and events portrayed in the Bible. A general atlas can be about whatever topic you desire. The second difference is that the preliminary list of contents and atlas appearance has no specifications of where it is to come from. However, but with a biblical atlas it is critical to have experts in the fields of theology, history, and cartography. The rest of the topics are similar but the differences are the additional specific details. Table 2 is a shortened version of the steps taken above utilizing Jim Anderson's suggestions. Overall a biblical atlas is a time consuming process, but with the help of the methods within this thesis the process should become more refined.

Pre-Production

Before atlas production can begin certain things need to be done. Jim Anderson specified some of these things in his interview,

Before beginning an atlas project there are several things that must be considered beyond the idea that I want to do a biblical atlas. These include funding, audience, marketing, format, design, authors, organization, review, and production methods. In many ways, the easiest part of an atlas project is the actual production.¹⁰⁴

¹⁰⁴ Jim Anderson. Director of Florida Resources and Environmental Analysis Center. Interviewed by author 17 October 2007.

1. *One, an idea or the subject for your project needs to be developed. This should include research into what has already been produced, what niche your project will fill that has not been covered in existing publications, and what is the potential market or audience for your atlas.*

The subject for a biblical atlas is inherent within the topic. A biblical atlas is about the Bible. Some atlases of the Bible choose different ways of relating the topics within the Bible, but they are all about the topics in the Bible. Biblical atlases can be produced to better understand the historical and geographical context of the Bible that in turn helps us to understand why the area is the way it is today. A biblical atlas will also provide an exceptional way to view the events and stories written in the text of the Bible in their spatial context. The audience for a biblical atlas is for those people who wish to further educate themselves on the spatial context of the stories, and themes in the Bible.

2. *Two, develop a table of contents and identify potential contributors.*

A table of contents must be developed for two purposes; one to keep the team on track and distribute different responsibilities, and two; be able to show a publisher what it is you want to construct to make sure they are interested in the project before time and resources is put into it. Paul Wilson Geography Professor states that he would create mock up pages of the work to be taken to a publisher so the publisher could lay out funds for the project.¹⁰⁵

Below is the Final List of Atlas Content as developed in the previous chapter, combined with atlas content from research done on other biblical atlases to form an extensive list of contents that can be used as a guideline for any biblical atlas.

Biblical List of Atlas Content

I. Prefix Materials

¹⁰⁵ Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008.

- II. Table of Contents
- III. Introduction
 - a. Importance of Geography and the Bible
 - b. Disclaimer making the distinction stating the atlas is an educational tool not a devotional tool.
 - c. History of the Bible
 - d. Reference Bible for text and maps
 - i. New Revised Standard – because of the retention of the original syntax.
 - ii. Overview of other Bibles
 - iii. Overview of Bibles with mistakes in them through history (meant for humorous purposes)
 - e. Disclaimer telling how each piece will be supported through other documentation or referenced to the Bible with out supporting documentation.
- IV. Gazetteer
 - f. Present day maps including
 - i. Major cities
 - ii. Population
 - iii. Major roads
 - iv. Topographical information
 - v. Major water ways
 - g. Map of Archeology Sites
- V. Overview of Apocryphal books
- VI. Organized Chronologically
 - h. Ancestral Period – Noah
 - i. Patriarchs – Abraham to Jacob
 - i. Map of Abraham
 - ii. Map of Isaac
 - iii. Map of Jacob and his sons
 - j. Joseph to Moses

- i. Exodus – including 40 years in the Sinai Desert
 - k. Conquest of the Land of Canaan
 - i. Map of twelve tribes
 - l. Judges
 - i. Map of Judges according to their tribes.
 - m. Kings – Samuel, Saul, David, Solomon
 - i. Maps of each kingdom
 - n. Israel and Judah
 - i. Map of wars and land distribution through time.
 - o. Prophets
 - i. Including Elijah and Elisha
 - p. Christ – Birth to Death
 - i. Herod’s Kingdom
 - ii. The first census – Bethlehem
 - iii. Map of Jesus’ journey’s
 - q. Paul
 - i. Map of Paul’s journey’s
 - r. Apostles
 - i. Map of where the other apostles went
- VII. Present Day Maps
 - s. Spread of Christianity through time
 - i. Tabular information on number of Christians today
 - t. Spread of Judaism through time
 - i. Tabular information on number of Jewish People today.
- VIII. Other Maps influenced by the Bible
 - u. Mappae Mundi
- IX. List of spatial and other relevant Hebrew terms and their meanings
- X. Glossary of different terms
- XI. Index of places, people, and other important terms
- XII. Bibliography

3. *Determine several production issues. Based on your table of contents how many pages will the atlas require? This number then needs to be weighed against potential printing costs which are affected by number of copies, number of pages, color versus black and white, type of paper, type of binding, and page size.*

There will need to be a minimum of ninety-six pages at 8.5 x 11 inches, #80 gloss color in hard back. Art Craft Printers in Bozeman on February 28th, 2008, gave this estimate to the author of the thesis. The entire estimate has been included in the appendix with the bottom line for the project at \$15,205.00.¹⁰⁶

4. *What are your funding sources? Based on the issues raised in number three what are the costs of printing and production?*

Funding sources will ideally come from the publisher. Fund raising might have to be done to raise the initial costs of printing before a publisher accepts the atlas. Initial costs could include a prototype or dummy book, as well as presentation materials to be shown to a publisher.

According to Sheri Wyrick of Art Craft Printers in Bozeman, printing costs depend on the size of the document and how many pages it is. It also depends on if the atlas is going to be paper back or hard cover. Depending on how many pages are in the book, they would either use a saddle stitch or a perfect bind. A perfect bind is used for paperback books. As for page size, she said that it wouldn't matter what the page size was because they start with a parent sheet of paper which is normally 23 by 25 inches and then fold it down to signature size. The cost would also depend on if it was black and white or color. Ms. Wyrick suggested to use an 80# gloss or matte book stock with the cover being heavier, such as a hard back. In regards to quantity when printing the finished product, she said to print no less than 100 books the price per unit goes down the more you have printed. In the end Wyrick suggested giving the printers a printing

¹⁰⁶ Appendix B Cost Estimate

timeline of at least ten to fifteen days for a paperback atlas and four to six weeks for a hardback atlas.¹⁰⁷

Atlas Production

5. Basic philosophical decisions need to be made concerning text versus maps.

Jim Anderson offered quite a bit of insight into the question of text versus maps,¹⁰⁸

Since this is being called an atlas you would think that it would contain a large number of maps. However, many of your topics do not lend themselves to maps. I would suggest that you keep text to a minimum and on pages where maps appear use the text to supplement what is shown on the maps. Where a topic such as the “Garden of Eden” is discussed for which there is no definitive source for mapping purposes you might want to add some of the hypothetical illustrations that exist just to break up the text. I will also suggest that you make topics page specific or confined to two page spreads. This makes it easier for the user and also makes the cartographic production more manageable.

Paul Wilson also made suggestions that the atlas follows the main points of the Bible with special stories or interests put on the sides of the pages as insets, keeping the pages for each subject to a minimum.¹⁰⁹ From all of the interviews and research done text should be used as a support to the maps for each relevant subject. The amount of text should be used to strengthen the topics and themes the maps are showing.

For a biblical atlas, each topic and theme should be supported not only by biblical texts but also by other historical texts and archeological findings. Text in a biblical atlas differs from the text in a general atlas because it is supporting and reinforcing the topics and themes in the Bible. The text supporting the topics and themes from the Bible also has to come from reliable proven sources. There is a lot of controversy surrounding the

¹⁰⁷ Sheri Wyrick. Art Craft Printers. Interviewed by Author 28 February 2008. Quotation Missoula Montana

¹⁰⁸ Jim Anderson. Director of Florida Resources and Environmental Analysis Center. Interviewed by author 17 October 2007.

¹⁰⁹ Paul Wilson, Professor University of Montana. Interviewed by author 12 January 2008.

Bible and the topics and themes within it. The text within the atlas cannot leave anything to the possibility that the facts are false.¹¹⁰

6. *Page templates need to be designed so all of the potential graphic elements can be placed within. This would start with the size of the book and could include some basic elements such as the placement of headers and footers, page numbers, color schemes, font styles, font sizes, general rules for the placement of maps, text, photos, tables, graphs, illustrations, etc.*

Figure 2 Page Template for a biblical atlas shows a basic template for anyone to follow. The page template incorporates the general rules for margins, headers, and footers; it also addresses how to show maps and different graphics relating to the subject of the atlas.

7. *Content Development; Cartographers cannot begin work until content has been developed.*

Jim Anderson stated in his interview that several steps and contributors can be involved in producing an atlas,

We are currently working on an atlas that has multiple authors. We have established a process by which an overall editor has developed a table of contents in consultation with several experts. He has then recruited contributors for the various topics.¹¹¹

Following the above suggestion, use an overall editor to be the overseer of each group that is working on the different topics assigned to them. Another benefit to an overall editor is that they will help produce the same voice throughout the whole atlas.

¹¹⁰ Nat Levtow, Assistant Professor University of Montana. Interviewed 10 June 2007.

¹¹¹ Jim Anderson. Director of Florida Resources and Environmental Analysis Center. Interviewed by author 17 October 2007.

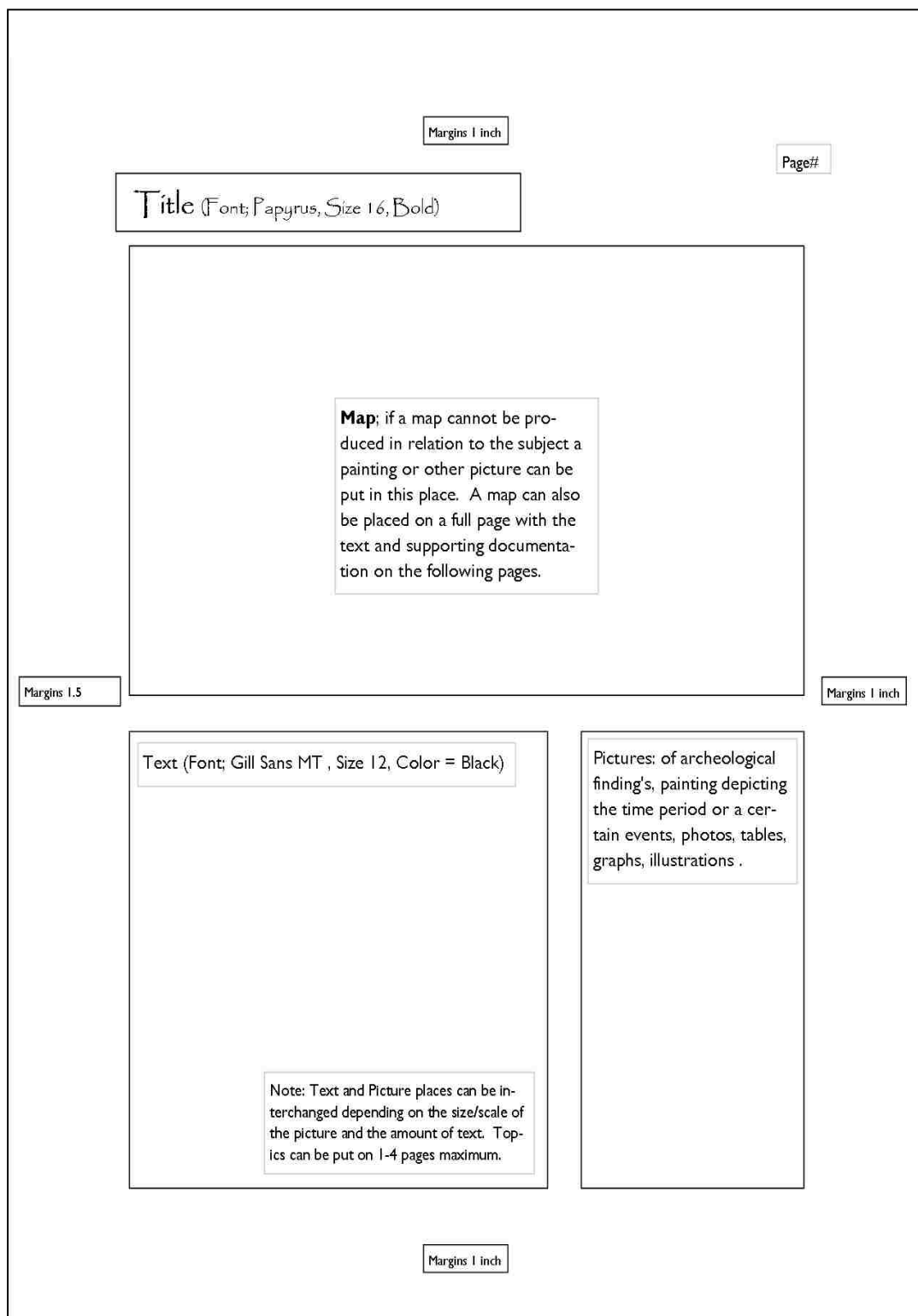


Figure 2 Page Template for a Biblical Atlas

As discussed earlier in the introduction historians, theologians, and cartographers all need to work together to produce a biblical atlas. Thomas Sullivan also stressed the importance of different groups of people working together to produce an atlas,

Once the data are retrieved, the historian and cartographer must work together in the development of the map work. It would be the historian's responsibility to compile the appropriate data, while the cartographer would be responsible for determining the mappability of the data. It may be found that certain subjects would only be accurately depicted through text, charts, or graphs, rather than maps.¹¹²

The rewarding thing about producing a biblical atlas is that the basic source for all topics is found in the Bible. The discrepancies will come from the sources outside the Bible being used to support the text within the Bible. Bias is inherent within each person, depending on their views of the Bible and the events and topics within it. Utilizing people with different backgrounds on each topic will help to provide different views. Utilizing people with different backgrounds will also produce a well-rounded biblical atlas.

Assembling the data is the next step after establishing the table of contents and creating page templates. Historians and theologians will research data related to the topics in the table of contents that they are experts in. The data could come from a wide variety of sources, universities, churches, government databases, old historical documents, or other scholars who have done similar work. Historians can obtain data concerning the historical topics and the biblical topics that can be addressed using different historical documents.

Theologians would be needed to reference important text from the Bible that will support the themes and events outlined in the atlas. Theologians can also be used for the

¹¹² Sullivan, T.J. "Developing Contents for a Special Topic Regional Atlas."1995

history of the Bible and organization as well as making sure the religious tone matches the Bible.

After all of the data has been collected, the different teams need to go through and separate the usable from the unusable data. Using good data provides a good resource; using bad data provides a bad resource, “garbage in, garbage out”. Once the atlas content and data has been decided upon, the cartographers can start to build the maps following the guidelines provided in the table of contents and the templates that were developed before the data was collected. Having a table of contents and page templates ready before work begins, helps to provide guidelines for the historians, theologians, and cartographers to help save time and resources.¹¹³

Producing content for a biblical atlas is different from a general atlas because the topics and events within the Bible look at historical events but it does so in conjunction with the development of religious events throughout the Bible. A biblical atlas takes the events and themes within the Bible and provides a spatial context for them. An atlas of the Bible would also be used as a source book to the Bible providing archeological findings, other historical documentation, maps, drawings, narrative, and scientific findings that all concern the Bible. General atlases and other atlases only look at their topics and events and not in conjunction with the religious affiliation that a biblical atlas does.

8. *Page Construction. Before this happens the production methods need to be defined. In this step, I include a basic philosophical decision. Are the maps going to be generated through some type of GIS software or are they going to have a polished cartographic look obtained by using programs such as Illustrator and Photoshop.*

¹¹³ Jim Anderson. Director of Florida Resources and Environmental Analysis Center. Interviewed by author 17 October 2007.

The cartographers must first compile all of the data that has been gathered. Then they must assemble the data into maps, graphs, and or tables. The data that can be represented spatially will be put into maps. In some cases the cartographers could use maps that have already been produced as long as they compile the necessary publications rights to the maps. After the data has been compiled and organized the next step is to build the maps that will most clearly represent the topics. The program that is recommended to build the maps for this thesis is the most common and up to date program used for map-making today, ARC GIS 9.2.¹¹⁴ There are many other programs in use but the one used to design the example maps at the end of this chapter was ARC GIS 9.2. This program has a publishing extension that can be purchased for use with the program, ARC Publisher. To get a quality professional look, Adobe Photoshop also has an extension to the program Illustrator that works with maps and vector data to create a refined cartographically designed map.

Post-Production

- 9. Review procedures need to be established. This can involve several steps and multiple individuals.*

When constructing an atlas, proofing and editing are very important processes. Having an overall editor is a good idea to help keep the same voice throughout the atlas with multiple authors. Editors also help prevent the publishers from having to take a long time to edit the atlas after it has been submitted. Jim Anderson states that,

Things to be considered include copy editing (this is extremely important if you are using multiple authors and you want the text to be similar in style and written to the same audience), proofreading (this includes text as well as maps), and content (this could be the responsibility of the editor or outside reviewers). With

¹¹⁴ Map program designed by ESRI

an atlas with such a specific theme as this one, I would suggest a proofreader who has familiarity with biblical content and locations.¹¹⁵

Each person should proof read and edit their work. Cartographers should check and edit their maps throughout each step of the process; making sure the data is accurate and checking that everything is labeled correctly. When the map is almost finished the cartographer can edit their maps by printing a copy and checking for accuracy, legibility, and appearance before sending their work to the printers.¹¹⁶ When everything has been put together and everyone has edited their work, the copy editor can come in and edit the entire atlas.

10. If you are using photos and other material that may be copyrighted, you need to have a person designated to obtain all of the necessary copyright permissions.

The Copy Right Management Center has an easy four-step process for obtaining permissions to copy right someone else's work.

- I. Select the work to be used.
- II. Is permission required in order to use the work? Securing permission is unnecessary if you determine a work is not protected by copyright.
 1. Is the work to be used protected by copyright law?
 2. Is your use of the work a fair use?
 3. Are there any other statutory exceptions that negate the need for permission for the use of the work?
- III. Obtaining permission to use a copyrighted work. Securing permission can be made less problematic by following this detailed approach:
 1. Identify the copyright owner(s).
 2. Contact the copyright owner(s).
 3. Securing permission.
 4. Keep a detailed record of your question for obtaining permission.
- IV. What can you do if you come to a "dead end" in your quest for obtaining permission for the use of a particular work?

¹¹⁵ Jim Anderson. Director of Florida Resources and Environmental Analysis Center. Interviewed by author 17 October 2007.

¹¹⁶ Sullivan, T.J. "Developing Contents for a Special Topic Regional Atlas."1995. 95

1. Return to fair use.
2. Replace the materials with alternative works.
3. Alter your planned use of the copyrighted works.
4. Conduct a risk benefit analysis.¹¹⁷

11. Identify a printer at some point and determine how they want material delivered to them and what proofing options you need.

12. You need to have in place a marketing and distribution plan. You need to be aware of the pricing that bookstores or other distributors will want to sell your book. This could be 50 to 60% off the list price.

These two sections were lumped together because if a publisher was obtained these two questions will be answered by the publisher. The publisher should offset the cost of printing and marketing as long as the atlas can be profitable. If the atlas is not profitable a printer will need to be sought out and a marketing strategy will need to be formulated.

13. Optional Step: Electronic Atlas Production

Another beneficial step to add would be producing the biblical atlas in electronic format. Today's computer age has increased the need of having data accessible on the computer. The down side to the electronic form is that it costs more time and resources. The easiest way of accomplishing this process would be to purchase Adobe Acrobat 7.0 professional and convert the atlas into Portable Document Finder (PDF) format. After the atlas has been converted to PDF it can then be burned on to a Digital Versatile Disc (DVD) and an envelope can be attached to the inside of the back page for easy access. Another way to accomplish electronic format would be to hire a programmer (or learn to program yourself) and create an interactive electronic format that people could install on

¹¹⁷ Copyright Management Center. "How to Secure Permission to Use Copyrighted Works." Indiana University. <http://www.copyright.iupui.edu/permsec.htm> (accessed 6 January 2008)

their computers and access the data in a different format than the book. Creating an interactive electronic form of the atlas, would be ideal.

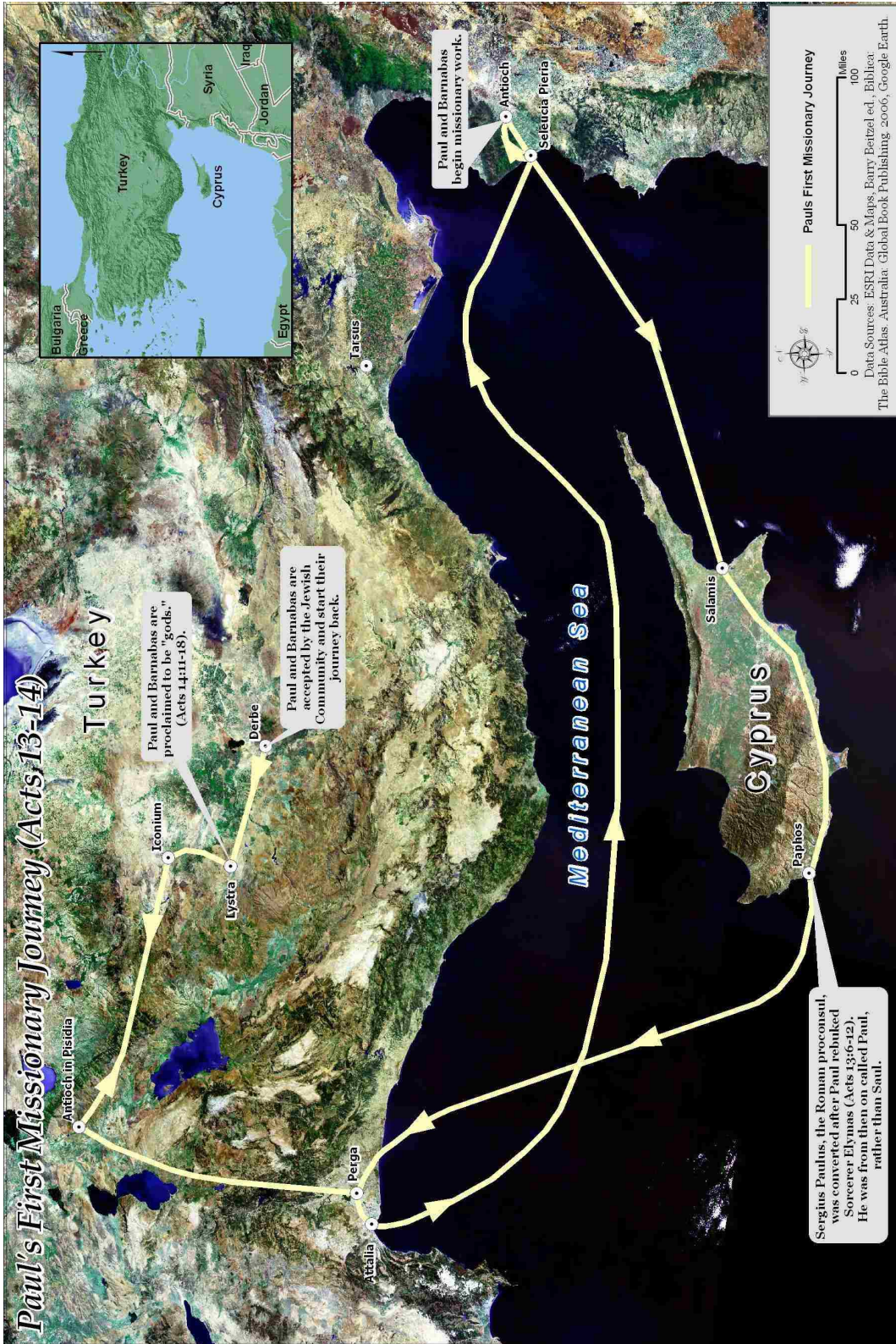
Biblical Atlas Example Maps

The following maps are examples that would be included in the section on the Apostle Paul. The maps include his first three missionary journeys. It does not include the map of Paul's journey to Rome.

Summary

The biblical atlas section of this chapter represents the final product of the study. It is a small portion of what can be accomplished. Once the preliminary contents are formulated, the creation of the atlas has to be tested to see if the page layout, contents, and maps will all work together. The map quality comes from a laser printer, so being sent to a printer will provide a higher quality print. Thomas Sullivan states "For the purpose of attracting a publisher for the project, a few examples of maps could persuade the publisher to fund the project."¹¹⁸ The topic produced above would be taken to the publisher along with the Table of contents in order to persuade publication of the biblical atlas.

¹¹⁸ Sullivan, T.J. "Developing Contents for a Special Topic Regional Atlas."1995. 108



Map 1 Paul's First Missionary Journey.

CHAPTER 5

Summary and Conclusions

The purpose of this thesis was to develop a procedure for simplifying the production of a biblical atlas. The study revolved around the prospective construction of a biblical atlas. The atlas was to be designed specifically for those people interested in the geography of the Bible; and looking at the themes and events in the Bible in a spatial way. The procedures used in developing the table of contents involved the use of interviews with different experts and reviewing biblical atlases. The participants in the interviews were selected based on their knowledge of the specific topics including history, theology, and geography/cartography. By answering the interview questions, the experts helped aid in finding the information for producing a biblical atlas.

Summary

Interview Design

Chapter 2, Research Design and Methodologies, of this thesis, described the development and administration of the interviews. Individuals or a group of individuals who are experts in certain subjects usually develop atlas content. For the purpose of a biblical atlas, historians, theologians, and geographers/cartographers are the experts who lend their knowledge to developing the content. The interviews were beneficial in a number of ways: one, they allowed a large number of experts to give their advice on the topic; and two, if a biblical atlas was going to be produced by an individual the individual does not need to be an expert in all three categories. Because the information from a group of experts has already been compiled and stated in this thesis, a person developing

a biblical atlas does not need to assemble a group of experts to decide what topics should be included in a biblical atlas.

Twelve interviews were given to three different groups of people; historians, theologians, and cartographers. The interview questions were designed into different parts to answer the objective questions outlined in Chapter 1, Objectives: 1) How is a general atlas produced? 2) How is the production of a biblical atlas different from a general atlas? 3) What are the concepts and procedures that are to be used in producing a biblical atlas? Another part of the interview questions was based specifically on what content should be included in a biblical atlas. These questions led to a better understanding of what content should be included in a biblical atlas and how the contents should be portrayed. When using multiple experts to design an atlas, conflicting opinions can develop.¹¹⁹ The interviews with each expert allowed the author of this thesis to organize all of the contents to eliminate any problems that could arise from having multiple experts on one project.¹²⁰ Multiple experts can be used to develop atlas content with the use of a copy editor to help keep the same voice throughout the whole atlas and keep the experts on task. The contents developed from the interviews can be used in place of a large group of experts, thereby saving time and resources.

Interview Results

Chapter 3, of this thesis covered the results of the interviews. The interpretation of the interviews consisted of the following steps: 1) the responses to each questions were put into a table. 2) The results of each question were evaluated and then recorded. 3) The

¹¹⁹ Sullivan, T.J. "Developing Contents for a Special Topic Regional Atlas."1995. 111

¹²⁰ Ibid

interviews were then summarized and an initial list for atlas content was created.¹²¹

Overall, the interviews were a huge success. The interviews were beneficial because the interviewer could prompt the interviewee to give a more detailed answer than if they had chosen to use a survey. A total of twelve interviews were given, five were given in person and six were given over the phone and email, and one given strictly over email. The Interviews were designed for three different groups: cartographers, historians, and theologians. The questions were then broken into different parts to develop atlas content and atlas appearance for a biblical atlas. Detailed answers were acquired from each interview participant.

The first set of interviews was given to the theologians or biblical experts group. This was done to gain a greater understanding of the content of the atlas from the theological side. The first question was to find out if the theologians would prefer seeing the atlas in a traditional literary form or if they would prefer the atlas in a more chronological way. The theologians were evenly divided, two of them preferred the traditional literary form and two of them preferred the chronological form. Questions 2 through 4 dealt with content. All of them agreed that a biblical atlas should be as comprehensive as possible. Question 5 was intended to prompt them to provide specific examples of text from the Bible that supported the themes that would go in the biblical atlas. This question was a little harder for them to answer. For the most part they supplied a more generalized answer by saying to look for text that dealt with war, politics, and movement then providing specific verses to support certain topics. Question 6 asked the participants which maps they wanted to include and they all suggested including maps that would support each topic. Most of them also thought that including

¹²¹ Ibid., 43

discrepancies or different paths would be beneficial to the reader of the atlas. Question 7 dealt with organizing the atlas and they all differed. Questions 8 through 11 dealt with atlas content including archeological findings, what Bible should be used in reference to the atlas, and if there was anything else they wanted to mention.

The next set of interviews was with the historians. The answers that were gained from the theologians were then put to use in the next set of questions. The atlas content portion of the questions dealt with questions 1 through 5. Each of them had similar answers to the theologians but because the answers from the theologians were provided, they could build off of those answers and provide the interviewer with more information. The next set of questions dealt with atlas appearance. All of the historians decided that chronological would be the best way to organize the atlas so that it would be in tune with other historical events and documentation. They also suggested that this would be the most beneficial way so that each topic could be supported. If the topic wasn't supportable they suggested making sure to note that this is Bible story and hasn't been proven with other historical documentation.

The next and last set of interviews was with the cartographers. The questions were broken down into the same categories as the above two, atlas appearance, and atlas content but with the questions having the responses from the two previous groups added in. Most of the cartographers felt that they didn't have enough knowledge to answer the atlas content questions. They did however have a lot of good feed back on how to produce the atlas and how the atlas should look. One of the interviews from Jim Anderson provided the basis on how to produce an atlas in the next section on biblical atlas construction.

The Interview portion of this thesis was very significant and its success or failure was the foundation in determining the continuation of the study.¹²² The success of the interviews was very high as opposed to a questionnaire because each interviewee was contacted in person and over the phone or email; therefore the return rate of information was 100% of those who agreed to do the interviews. Finding people to interview for the theology portion was not difficult. There are many different denominations and faiths in and around Missoula MT and so it was easy to contact four interviewees within driving distance. There are few people in the state of Montana who have developed an atlas.

Biblical Atlas Construction

In Chapter 4, the results above were used as an aid to determine what contents will go best in a biblical atlas and how to produce the atlas. This chapter outlined each step when producing a biblical atlas. It also outlined how to produce a general atlas and what the differences were between the two. ARC GIS 9.2 was used in developing the example portion of the atlas and is recommended for others to use. This program is recommended because it is the most common program to use for mapping at this time. Other programs suggested to use after the initial mapping was complete were ARC Publisher and Adobe Illustrator mapping extension. The example portion of this thesis contained the Apostle Paul's journeys with maps, pictures, and text.

In the following conclusions sections, each portion of this thesis will be examined with their strengths and weaknesses with the overall importance to producing a biblical atlas.

¹²² Ibid., 114

Conclusions

Research Methods

The conclusions of this thesis will be discussed with the strengths and weaknesses of the methodology and how it relates to producing a biblical atlas. After this portion a discussion on future studies will commence.

Developing contents of a biblical atlas is a time consuming project. There are many different factors involved in producing the contents of a biblical atlas. The contents deal with history and a certain span of time. The contents also deal with a certain group of people and their religion. A biblical atlas tells the story of these people in a spatial way. It illustrates the time period with maps of their travels and pictures depicting the way they lived. A biblical atlas is also special in the fact that most of the stories can be proven with historical evidence including other historical texts, and archeological findings.

Within these findings there are many discrepancies and some stories have not been proven at all. These things will need to be shown and discussed in order to make the atlas a credible piece of work. Due to the extraordinary circumstances within a biblical atlas many different groups of experts need to be involved including historians, theologians, and cartographers. The method in this thesis was to attempt to simplify the process of bringing together a large group of experts, which could cause a variety of problems including; disagreements, time, and money. This method utilized studying biblical atlases that had already been produced, to find their similarities and discrepancies. From the study of biblical atlases questions, were formed to ask the experts.

The reason for interviewing the experts instead of bringing them all together for a focus group was to save on time, resources, and money. A disadvantage of conducting interviews is that the person producing the atlas has to do all of the legwork and organize all the materials that come in. However, interviews save on resources, money, and in the end it saved on the time of other people, but not the time of the atlas producer. Another advantage of doing interviews is that if there is a lack of understanding on a question, the interviewee could explain the question better to receive a more detailed answer. The other disadvantage to doing interviews is that the experts don't have a chance to get together in a focus group forum to discuss the topics with each other resulting in more ideas. The advantage of not having a focus group is that it takes away the opportunity for disagreements, prolonging the time of coming up with contents for the biblical atlas.

Interview Results

A careful review of each interview determined that each interviewee understood the questions and gave a thoughtful answer. Those that did not understand the question or didn't want to answer it simply did not and that could be noted in the results chapter of this thesis. Another problem that the interviewer ran into was that most of the cartographers did not have an educated background on biblical studies, so the content portion of those questions was left out. This was compensated by the fact that the theologians and historians had answered those questions. However, it would have been interesting to see the views of the cartographers that had an education in biblical studies.

Other problems that arose, dealt with other aspects of the studies, not just the interviews. One example of a problem was the fact that most biblical atlases are different. Some of the atlases had similarities, but each author or authors had their own views and

ideas. This made it harder to categorize the atlases used in developing the questions for the interviews.

In the end, the author of this thesis hoped to produce a simple method that others could follow when producing a biblical atlas. The author succeeded in producing a series of steps to follow, a table of contents, a template for pages, as well as an example of what the atlas should look like. The author did not produce all of the contents for a biblical atlas. After all of the preliminary work has been done, the person producing the atlas still needs to gather a team together to research all of the historical, biblical, and cartographic data that they will need in producing the atlas. After the data has been gathered it has to be put together and a publisher needs to be found. The recommendation of this thesis is not to produce an atlas unless it is profitable enough to warrant a publisher taking ownership of it.

Future Study

This study provided the necessary tools for producing a biblical atlas and can be used as the first steps in reaching that goal. From this point forward, the team of experts needs to be assembled to continue the work the author of this thesis has already done. Future study for the team of experts could be done on what archeological sites have been discovered and what are the results from current findings at the archeological sites. What are the different Bible translations and how could they be of benefit to the biblical atlas? How could they detract from the biblical atlas? What exactly did the reformation do to the Bible? How has it changed our views of the peoples and lands of Bible times? How are the Catholic books of the Bible different and why were the Catholic books left out of the Protestant Bible? These questions that the author did not answer in this study could

contribute to the content and the reliability of the atlas and its use for biblical students and anyone who wants to learn more about the Bible in a spatial/geographical way. After all of these things have been considered; following the template laid out by this thesis, finding a publisher, and bringing together a team of people, should lead future authors to the creation of a successful biblical atlas.

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APPENDIX A

Price Quote**ARTCRAFTPRINTERS**
QUOTATION

February 28, 2008

Elizabeth Hertz

Description: Atlas**Quantity:** 100 300 500**Trim Size:** 8 1/2 x 11 finished**Number of Pages:** 96 pages**Pre-Press:** PDF Files furnished on disk - Digital color and Blueline proofs provided**Stock:** 80# Gloss Book**Press:** 4 color process throughout**Bindery:** Case Bound with foil stamped cover and spine**Packaging:** Boxed**Delivery:** FOB Billings**Price:**

100 = \$ 12,675.00 300 = \$ 13,940.00 500 = \$ 15,205.00

Addl. cost for a 4 color dust jacket

100 = \$ 521.00 300 = 573.00 500 = \$ 625.00

Comments:

Time line approx. 6 - 8 weeks

sheri@artcraftprinters.com

V. 800 816 2001

V. 406 248 1000

F. 406 248 2006

2001 First Avenue North

Billings, Montana 59101

APPENDIX B

Interview Charts

Biblical Scholar Interviews				
	Curtis Privette	Rich Perry	Mitch Jones	Emmett Dosier
1. Chronological vs. Literary Division	* Literary Division * For ease of using scripture	* Chronological * With Literary you go back and forth through scripture i.e. Historical and Prophetic Books	* Chronological - easier with ministerial work. * Bible is a library of books with a specific intent when organized/not chronological	*Literary Division More often chosen for flow, research, & representation
2. Major events and themes picked from list	* All topics	* Noah, Patriarchs, Ancestral Period, Jacob - Exodus Samuel, Saul, David, and Solomon, Elijah, Elisha *Divided Kingdom - Assyrians taking one * The Prophets * John - Greek Islands	* Start with the Exodus * Reflect back on Genesis and Patriarchs jump forward to the Judges * Monarchy - Babylonian break up of that * Ezekiel Valley of the Dry Bones * Greeks - Conquest of Alexander the Great * Maccabean Period * Gospels * Post 70 AD - Helena	* All topics - be comprehensive
3. Research of Atlases what should be included	* All the topics should be included. * Bible Atlas should be comprehensive	* All topics	* Include a chapter on the importance of knowing the Geography of the Bible	* All major categories
4. What other topics should be included?	* The general epistles stress where Paul went.	* List the peoples who lived in the area during that time. * Israeli's in the desert of Sinai for 40 years * The Judges	NA	* Previous topics mentioned sums it up

5. Specific Texts from the Bible	* Can't think of any	* Movement Texts * Psalms * John	* Luke / Luke Acts * Isaiah 49:6 * Mark 8 * Book of John * Ruth * Psalm 104	* NA
6. What maps should be included?	* Garden of Eden * Big cities i.e. Jerusalem, Bethlehem * The Exodus * Where the Hebrew People went over time and why * Christ's Journey from Birth to the Cross * Paul's Journey * Spread of Christianity	* Nazareth, Bethlehem Jerusalem, Sea of Galilee, Jordan River * Show spread of Christianity through time. * Maybe included Esau	* John's accounts of Jesus' 3 years of travels * Start with the Exodus	* NA
7. Should Different Paths be shown on the maps? (Discrepancies)	* Put paths that relate to NRS * Would be interesting to see other paths.	* Think it would be interesting for people who are serious	* Yes because of different translations.	* Yes
8. How should the atlas be organized?	* Chronological - referenced with relevant scripture. * Genesis then skip forward to the prophets. * Genesis & Exodus in several maps	* Do a synopsis of each book then focus on major stories like Abraham	* Do more than one edition 1st - Biblical Times 2nd - Spread of Christianity and Judaism * Start with Exodus * Provide an Introduction	* Should be organized like the Bible is set up
9. Any archeological or scientific findings?	* From New Testament look how the people lived.	* Chapel where Moses was buried	* Use of Ground Piercing Radar found Bethsaida	* Dr. Carl Baugh * Grant Jeffery

	* Can't speak intelligently about archeology	* The Garrison Démoniac * Jacobs well * Qumran (Dead Sea Scrolls) * Masada * Church of the Holy Sepulcher	*	* Hal Lindsay
10. Which Bible to use when referencing?	* New Revised Standard * Balances literal meaning in a language that's understandable. (NRS)	* New American Bible * Because he's Catholic * Or the New Standard Revised	* New Revised Standard as the key Bible - because of the retention of the original syntax	* New King James
11. Should the Apocryphal be included?	NA	* Yes, it leaves out Daniel & the women (Ruth, Esther)	* Yes particularly the Maccabean period * Would maintain the protestant organization	* Yes
12. What special Considerations should be taken?	NA	* Don't make it dry! * There is humor in the Bible put it in there, don't make it racy * Maybe give equal voice to the Jewish People and where they think things are located.	* Index or an appendix with Hebrew words and meanings of specific geography, and people. * Make a distinction of it being a technical tool of research not devotional	* Add in present day findings
13. Anything else?	NA	* There are no directions in the Bible * The Bible doesn't have a GPS	* Have an Atlas keyed off a devotional book	* No
14. May I contact	Yes	Of Course	Please do	Yes

Historical Scholar Interviews				
	Gale	Michael Danielson	Nat Levtow	Chuck McCoy
1. Biblical Scholars divided the text up into two themes. Which would you choose and why?	<ul style="list-style-type: none"> * Depends on the audience * Old Testament History use the Chronological * Old Testament Theology use the Literary 	<ul style="list-style-type: none"> * Traditional Literary Division because it familiar and leads to abstract. 	<ul style="list-style-type: none"> * Literary Division best with Scripture 	<ul style="list-style-type: none"> * Chronological + 2 Sec. vii. Babylonian Exile & Restoration (606-400BC) viii. Intertestamental Era (400-30 AD) 1. Persian (400-30 AD) 2. Greek (330-142 BC) 3. Hasmonean (142-63 BC) 4. Rome in Control (63BC on)
2. A list has been compiled based on recommendations from the Biblical Scholars previously interviewed. Anything that you would add?	<ul style="list-style-type: none"> * Creation Account * Rise and Spread of the church in the 1st century * All in all divisions are sufficient 	<ul style="list-style-type: none"> * Tower of Babel * Noah and the flood 	<ul style="list-style-type: none"> * Would start at the Historical Books 	<ul style="list-style-type: none"> c. World of the Patriarchs (2200-1800 BC)
3. What specific Historical documentation do you think would help support the different topics?	<ul style="list-style-type: none"> * Use other peoples accounts of History not just the Jewish. * Spread of Church - use demographic data. 	<ul style="list-style-type: none"> * Very little Historical documentation on the flood. 	<ul style="list-style-type: none"> * Madaba Map - Jordan 	<ul style="list-style-type: none"> *Nuzi & Ebla Tablets Patriarchal era *Tel Amarna Letters 1400 BC - Joshua * Merneptah Stela ca. 1231 BC - Judges * Moabite Stone black obelisk of Shalmaneser III; Taylor Prism noting Sennacherib's tailed siege of Jerusalem; Cyrus Cylinder
4. What maps do you would you add?	<ul style="list-style-type: none"> * Maps that demonstrate borders; political, 	<ul style="list-style-type: none"> * Region Maps of Pre-Exodus, Exodus, Post Exodus 	<ul style="list-style-type: none"> * Patriarchal Age * Empires / Cultures 	<ul style="list-style-type: none"> * Arrangement of tribes in Canaan after allotment of

	<p>topographical</p> <ul style="list-style-type: none"> * Movement of people * Modern day map for reference 	<ul style="list-style-type: none"> * Region Maps during the time of Christ, Middle ages, and current time. 0 / 500 / 1000 / 1500 / 2000 AD 		<p>land</p> <ul style="list-style-type: none"> * Map of close neighbors Phoenicia, Ammon, Moab, Edom, etc * Extent of David's Kingdom * Large area map showing Fertile Crescent - for overview * Maps in Hammond Bible
5. Archeological or Scientific findings?	<ul style="list-style-type: none"> * Too many to mention 	<ul style="list-style-type: none"> * No but all the events have significant culture movements which can be supported through some archeology/ scientific findings. 	<ul style="list-style-type: none"> * Good vs Bad Good find a spot Bad looks for a place finds one and calls it that place. 	<ul style="list-style-type: none"> * Josephus * 1 Maccabees * Bible
6. How would you organize a biblical Atlas?	<ul style="list-style-type: none"> * One overall map to show every big event that happened. * A Chronological series of maps that demonstrates the big events through their history. 	<ul style="list-style-type: none"> * Chronologically 	<ul style="list-style-type: none"> * Chronological 	<ul style="list-style-type: none"> * Hammond's Bible Atlas organizes Chronologically around Israel's history.
7. Special Considerations?	<ul style="list-style-type: none"> * Theology and Beliefs played a big role - interact with the way the Bible explains the events and how the world explains them. (The flood/Exodus) 	<ul style="list-style-type: none"> * Graphically clear (colors, text) 	<ul style="list-style-type: none"> * Should contain how they decided to put what where. * what evidence you're including and how you're interpreting it. 	<ul style="list-style-type: none"> * NA
8. Anything else you'd like to mention?	<ul style="list-style-type: none"> * Nothing else 	<ul style="list-style-type: none"> * Add a timeline to show the actual chronological dynamics of the Bible. 	<ul style="list-style-type: none"> * Israelite History vs. Bible History 	<ul style="list-style-type: none"> * NA
9. May I contact you	Yes	Sure	Yes	Yes

Cartography Scholar Interviews				
	Jeremy Crampton	Kennelly	Jim Anderson	Paul Wilson
1. What major topics do you think should be included in a general Atlas?		* Depends on the type of Atlas * Must have some sort of geographical component * Range from location to migration to change with time.	See Paper Below Jim_Anderson	
2. How would you organize the topics of an Atlas?	* Begin with the Physical landscape and then go to the cultural landscape	* Organize either geographical or historical * both of these ways are logical and helps for finding maps easily		*prefix materials *table of contents *base maps *Inset maps
3. What special considerations should be taken in producing a Biblical Atlas?	* The key is to recognize who your audience will be and design with them in mind	* Authors should give strong consideration to what the objectives are * Should also consider what will set their Atlases apart from all other Atlases covering similar topics		*List topics chronologically
4. List compiled by Historians, Biblical Scholars - what topics should be added?		* Not being a Biblical Scholar he chose the literary list to make it easier with following the Bible		* Include topics on the book of Ruth.
5. Major events and geographic topics by previous interviews	* Distinguish between real and metaphorical places (Garden of Eden vs Jerusalem)	* Would add Noah's flood but wouldn't know where to put it.		* Abraham's travels *Sodom and Gomorrah

6. What maps should be included?		<ul style="list-style-type: none"> * The Garden of Eden * Jerusalem including old maps where it was the focus/center of the maps * Noahs flood including maps of scientific research on what areas might have been affected *Jesus' life and movements * The spread of Christianity & the church * Archeological locations of Dead Sea Scrolls and other Gospels 	<ul style="list-style-type: none"> * Paul's Travels *The Apostles *Principle Places
7. How would you organize the Atlas?			*Divide content by literary division/sub divisions
8. Archeological or scientific findings?		Recent book on Noah's flood by geologists	<ul style="list-style-type: none"> * Dead Sea Scrolls *Noted that archeology should be used as support
9. Special Considerations		<ul style="list-style-type: none"> *differentiate maps based on supportable "facts" and maps that are based more on conjecture * Maybe even lay the Atlas out to show contrasting views in parallel 	* Publication and Printing
10. Anything else you'd like to mention?	* Add a section on mappae mundi because they	*That should cover it.	*No

	were heavily influenced by Biblical narratives and would draw the journey of Moses etc. on their maps. The Hereford mappa mundi ex.			
11. May I contact you?	Yes	*Yes, feel free to contact me	Yes	Yes

Jim Anderson Interview

What special considerations should be taken in producing an Atlas?

Before beginning an atlas project there are several things that must be considered beyond the idea that I want to do a biblical atlas. These include funding, audience, marketing, format, design, authors, organization, review, and production methods.

In many ways, the easiest part of an atlas project is the actual production. But before production can begin several requirements must be met. I will try to list them in some type of order.

One, an idea or the subject for your project needs to be developed. This should include research into what has already been produced, what niche your project will fill that has not been covered in existing publications, and what is the potential market or audience for your atlas.

Two, develop a table of contents and identify potential contributors.

Three, determine several production issues. Based on your table of contents how many pages will the atlas require? This number then needs to be weighed against potential printing costs which are affected by number of copies, number of pages, color versus black and white, type of paper, type of binding, and page size.

Four, what are your funding sources? Based on the issues raised in number three what are the costs of printing and production? How many copies and at what price would you have to sell to fund the project. Do you have advance funding secured to pay for the production and printing? Will funds be required to market the book?

Five, a basic philosophical decision needs to be made concerning text versus maps. Since this is being called an atlas you would think that it would contain a large number of maps. However, many of your topics do not lend themselves to maps. I would suggest that you keep text to a minimum and on pages where maps appear use the text to supplement what is shown on the maps. Where a topic such as the "Garden of Eden" is discussed for which there is no definitive source for mapping purposes you might want to add some of the hypothetical illustrations that exist just to break up the text. I will also suggest that you make topics page specific or confined to two page spreads. This makes it easier for the user and also makes the cartographic production more manageable. Finally, with an atlas of this type how are you going to show historical boundaries and relate them to modern day reality. That has always been a complaint I have had with the maps you see in bibles.

Six, before cartographers can begin work page templates need to be designed that all of the potential graphic elements can be placed within. This would start with the size of the book and could include some basic elements such as the placement of headers and footers, page numbers, color schemes, font styles, font sizes, general rules for the

placement of maps, text, photos, tables, graphs, illustrations, etc. Each page does not have to be the same, but there should be some common design elements throughout the book. You may want to have different color headers for different sections of the atlas for example.

Seven, cartographers cannot begin work until content has been developed. This can involve several steps. We are currently working on an atlas that has multiple authors. We have established a process by which an overall editor has developed a table of contents in consultation with several experts. He has then recruited contributors for the various topics. A separate design team has created templates. We then hold what we call discovery meetings with the authors to adapt their content ideas to the page templates. A draft layout is prepared that includes proposed placement for the graphic elements and the text. The author then makes any comments and these are incorporated in a final page layout. The author then provides the data to the cartographer for the preparation of the maps and provides other graphic material such as photos.

Eight, the cartographer constructs the page. Before this happens the production methods need to be defined. In this step, I include a basic philosophical decision. Are the maps going to be generated through some type of GIS software or are they going to have a polished cartographic look obtained by using programs such as Illustrator and Photoshop. We are utilizing a combination of the two. In cases where we have GIS shape files, we will import the data into Adobe Illustrator using Map Publisher. We may also use Photoshop to enhance the maps. Also, the decision to produce in black and white or color will have already been made. From a production standpoint it doesn't really matter in terms of cost. It does matter in terms of the amount of detail that can be shown on the map and the printing costs.

Nine, review procedures need to be established. This can involve several steps and multiple individuals. Things to be considered include copy editing (this is extremely important if you are using multiple authors and you want the text to be similar in style and written to the same audience), proofreading (this includes text as well as maps), and content (this could be the responsibility of the editor or outside reviewers). With an atlas with such a specific theme as this one, I would suggest a proofreader who has familiarity with biblical content and locations.

Ten, if you are using photos and other material that may be copyrighted, you need to have a person designated to obtain all of the necessary copyright permissions.

Eleven, identify a printer at some point and determine how they want material delivered to them and what proofing options you need.

Twelve, you need to have in place a marketing and distribution plan. You need to be aware of the pricing that bookstores or other distributors will want to sell your book. This could be 50 to 60% off the list price.