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Toward a Prototypical Model of Culture For Bible Translation

Thomas G. Matthews

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Abstract

Bible translation is inherently a communication event originating in a historical language and culture. Recipients of translated Scriptures interpret this historical text through their language and cultural grid. They have cultural practices, material culture, beliefs, values, a worldview, image schemas, etc., that can assist or compromise their ability to properly understand the Bible. This work addresses the challenge to translators and translation consultants to more readily identify translation issues that are rooted in the target culture such that they may be further researched and treated as appropriate in the translation and helps. A prototypical model of culture is proposed to support these deliberations, which is comprised of a stratified network of observable cultural systems, beliefs, values, and deep structural components of worldview and image schemas. The cultural model is productively applied to a survey of translation issues rooted in the target cultures of several language teams in eastern Africa, and to three, in-depth analyses from Zinza and Digo Scriptures. The results suggest that Zinza prefer LINK and PATH image schemas over IN/OUT and FULL/EMPTY CONTAINER image schemas in metaphorical extensions such as "in Christ." In addition, the Digo people's limited knowledge of biblical construction practices, and the strong impact of the Lake Victoria ecosystem on Zinza culture, present translation challenges to the Digo New Testament and Zinza Genesis, respectively.

1. Introduction – The Motivation and Goals of this Research

In my experience as an SIL translator and translation consultant with teams in eastern Africa, I have observed a number of target language (TL) and culture issues that in measure compromised the accuracy and clarity of the TL translation. The translation issues that were rooted in the target culture (TC) were often unexpected by the consultant and translation teams alike, and their discovery often resulted in significant adjustments to the TL translation when appropriately treated. This occurred with all of the translation teams that I served, largely independent of their level of experience, which ranged from about one to eight years of translation work.

The example that follows concerns the Zinza people group located on the southwest shores and islands of Lake Victoria. I was the SIL translator and leader for a team of six Zinza translators. During the translation of Genesis 20:12, one of the translators with college-level education surprised me with his conclusion regarding Abraham. He had synthesized his ideas from the following passages:

> **NIV Genesis 11:27** This is the account of Terah. Terah became the father of Abram, Nahor and Haran. And Haran became the father of Lot. 28 While his father Terah was still alive, Haran died in Ur of the Chaldeans, in the land of his birth. 29 Abram and Nahor both married. **The name of Abram's wife was Sarai**, and the name of Nahor's wife was Milcah; she was the daughter of Haran, the father of both Milcah and Iscah. 30 Now Sarai was barren; she had no children.
>
> 31 **Terah took his son Abram, his grandson Lot son of Haran, and his daughter-in-law Sarai, the wife of his son Abram, and together they set out from Ur of the Chaldeans to go to Canaan**. But when they came to Haran, they settled there.
>
> **NIV Genesis 20:1** Now Abraham moved on from there into the region of the Negev and lived between Kadesh and Shur. For a while he stayed in Gerar, 2 and there Abraham said of his wife Sarah, "She is my sister." Then Abimelech king of Gerar sent for Sarah and took her. 3 But God came to Abimelech in a dream one night and said to him, "You are as good as dead because of the woman you have taken; she is a married woman." … 10 And Abimelech asked Abraham, "What was your reason for doing this?" 11 Abraham replied, "I said to myself, 'There is surely no fear of God in this place, and they will kill me because of my wife.' 12 **Besides, she really is my sister, the daughter of my father though not of my mother; and she became my wife.** 13 And when God had me wander from my father's household, I said to her, 'This is how you can show your love to me: Everywhere we go, say of me, "He is my brother." ' "

The Zinza translator deduced that Abraham and his family were forced to leave their people in Ur because of the great shame caused by Abraham's marrying of his sister Sarah. Likewise it was reasonable that Sarah was barren. In his view, Abraham's credibility, his faith in God, and his office before God as prophet were all compromised by this shameful deed. Much formal and informal discussion ultimately led to the disclosure over the dinner table that among the Zinza, the overall makeup of a child is considered to be at least 80-90% determined by the father. The fact that Sarah had a different mother and was therefore not Abraham's full sister was essentially immaterial. Sarah was Abraham's sister through Terah, so it was terribly shameful for Abraham to have sexual activity with her. In this case, there was nothing helpful that could be done to the translation; in fact the Zinza text appeared to be quite successful in communicating these historical truths. A footnote was added to suggest that this unusual behavior was in fact acceptable to the people and culture of that time period.

In my experience, these kinds of TC-rooted translation problems have been common, occurring on even a daily or every-other-day basis during intensive checking sessions. The mechanisms by which such translation issues were recognized were quite varied; e.g., a general comprehension question from the consultant, a clear lack of understanding on the part of a mother tongue translator (MTT), a particular insight of a team member or a visitor, or a negative reaction to a draft Scriptural text such as described above from the Zinza translator, etc. Because of their unexpected nature, these events often necessitated a hiatus in translation checking in order to re-group, i.e., to attempt to determine the source of the problem and the extent of its impact on the current draft and previously translated materials.

I suggest that these experiences as translator and translation consultant are consistent with those of other translators and consultants. As evidence I point to the numerous occasions on which veteran consultants have confided to me about similar experiences that they have had, or suggested to me that these problems were not new but reflected potential shortcomings in the cultural studies and experience of the translation teams involved.

I found it personally disturbing that most TC-rooted translation issues were quite predictable in hindsight. That is, when the investigation of a TC-rooted issue was completed, the problem often appeared to be a reasonable consequence of cultural matters that were well recognized in the TC. But the fact remains that the consultant and MTTs were often quite challenged in recognizing and dealing with these translation problems. In fact one could reasonably ask, how many other problems did we miss? But the more important issue is, what can be done to make these and other TC-rooted translation problems more recognizable and even predictable for translator and consultant alike such that the TL translation can be made to communicate more effectively.

This concern for the quality with which the TL translation communicates to the target audience has been voiced in a different manner by Rountree (2001:ii) in regards to the importance of testing Bible translations for communicative accuracy and clarity:

> Bible translation is a communication process. In any information transfer, there is always a risk of miscommunication. In Bible translation that risk is greatly compounded as the message is a message from God passed down through the ages to present day audiences. Translators' only assurance that their translations communicate God's Word accurately and clearly is to test their translations for comprehension. In spite of that, testing translations is one of the weakest links in the chain of the translation process. Formal training in testing translations is almost non-existent.[1]

The theoretical model for her thesis, "Testing Scripture Translations for Comprehension" is the concept of a "conceptual text," which is defined as follows:

> **Conceptual text**: As people hear or read a text, they form the incoming information into an organized "chunk of information," or discourse, in their minds. This mental text has main points and supporting information. Some of the information comes from the language cues of the incoming text. Other information comes from their own cognitive stores. The resulting text is a modification of the original. In a successful communication, the conceptual text and the original match in essential points. (Rountree 2001:6)

In the context of Bible translation and the checking of draft TL Scriptures, the conceptual text is the picture that the reader assembles in response to reading and discussing a particular portion of draft Scriptures. This process requires patience on the part of the consultant, especially in dealing with uninitiated speakers (UNS). Rountree cautions that the TL reader must be given ample opportunity to develop their "conceptual text" for a given passage of Scriptures. She recommends, that step-by-step, theme-line questions be processed first with the UNS in order to ensure that they understand the major elements in the progression of the text. Non-thematic questions querying core ideas that are more likely to elicit TC-rooted translation issues should await the development of this conceptual text because of the complex assimilation and analysis processes involved.

The concept of the "conceptual text" also provides an interesting frame from which to examine translation problems rooted in the TC. Provided that the TL text is clearly drafted, the cultural grid of the target audience—through which the TL text is interpreted—may be the cause for substantial departures of the conceptual text from the original. Follow-up questions would then help to provide an understanding of the implicit cultural information and rationale that caused those departures. This experience can then be applied in a proactive manner to identifying TC-rooted translation issues in other TL Scriptures.

The resolution of TC-rooted translation issues—i.e., specific modifications to the TL Scriptures and helps, and the translation principles underlying those modifications—is not the topic of research in this paper. Any resolution to TC-rooted translation problems will depend on the communication model and the translation style adopted by each translation team. Rather, the goal of this paper is to investigate real examples of translation issues rooted in the TC in order to develop models and strategies whereby these translation problems can be more effectively recognized and their occurrences more frequently predicted in the TL translation. To this end, the following three-fold approach is taken:

1. to develop a single prototypical model of culture to support Bible translation[2] by stratifying the cultural basis of translation problems rooted in the TC, moving from observable cultural systems, through beliefs and value structures, to underlying world view and image schemas;
2. to survey TC-rooted translation problems that I observed with a number of translation teams in East Africa, applying the prototypical model of culture to assist in their identification and characterization; and

[1] As a matter of background, the author has been a student of Rountree and was mentored as a translation consultant by her as well as several senior translation consultants in East Africa.

[2] Bible translation is inherently communication. The application of the prototypical model of culture to support selected communication models for Bible translation was first discussed in Matthews (2006) and will be addressed further in a future publication.

3. to examine in greater detail three TC-rooted translation issues of the Zinza and Digo, i.e., construction practices as part of the material culture of the Digo, Lake Victoria as part of the environmental culture of the Zinza, and constraints on the figurative use of CONTAINER image schema for the Zinza.

2. Building Blocks for a Prototypical Model of Culture[3] for Bible Translation

The challenge is to define a prototypical model of culture that will assist translation teams in identifying issues within the TC that impede the quality of their translation and the understanding of the TL Scriptures by the target audience. This is clearly a daunting task for at least two reasons. First, "hard core" cultural data to support the model are generally very difficult to acquire. Quantifiable facts about the TC are simply quite limited. Even "soft" data, e.g., the "study of worldview, oral traditions and religion that do not lend themselves easily to quantification" (McKinney 2000:2), are often limited to the opinions of members of translation teams and uninitiated speakers in testing sessions.

Second, all cultures are immensely complex. Each covers all aspects of life and is the means for integration around its worldview. Each is adaptive to environment and circumstances, and each makes sense to those within it (Kraft 2001:53-5).

For the researcher, the boundaries for any particular slice of cultural analysis are typically qualitative or even fuzzy. The categories of cultural information obtained are interactive with one another, and the results will vary with the perspectives of different observers. Culture has many sources of variation, both between ethnic groups and within an ethnic group. In the nation of Tanzania alone, there are four language families, i.e., Bantu, Khoisan, Nilotic, and Cushitic, comprising about 130 different languages, each representing in some manner a different culture (Lewis 2009:207–217). And these cultures do not exist in isolation. Kraft (2001:52) speaks of a variety of levels of "culture structuring" in which individuals are normally immersed:

1. Personal Culture
2. Family (or Clan) Culture (or subculture)
3. Community Culture (or subculture)
4. Regional Culture (or subculture)
5. National Culture
6. Multinational Culture

This analysis is easily applied to Bible translation. Consider, for example, an MTT from the Zinza people group on Lake Victoria with whom I served. He had his personal culture, developed from more than 50 years of personal experience. He esteemed himself as a member of the prestigious clan of the Zinza. He belonged to an island community of predominantly Zinza people. He, like most Zinza, was strongly influenced by the culture surrounding Lake Victoria, a major environmental fixture in East Africa. He was also a Tanzanian, having lived through independence in 1963 and the socialist government that ensued. He was educated outside of Tanzania and thereby influenced by the multinational culture of East Africa, as well as India. The impact of such multicultural exposure can be marked in Bible translation, minimally providing background knowledge as to varied social, political, economic and religious systems that would otherwise be unknown at the ethnic level in an isolated region.

Lest anyone think that getting a handle on the TC for the purposes of Bible translation is formidable, even impossible, three assumptions posited by Kluckhohn and Strodbeck (1961) in the development of their theory of societal values may lend some encouragement that the problem is at least bounded.

[3] Note that the term "prototypical," an adjectival form, as used here, correlates to the cognitive linguistic meaning of the term "prototype" in referring to the conceptual core of a model as opposed to the original form or archetype on which other models would be based.

1. There are a limited number of common human problems for which all peoples must at all times find some solution.
2. While there is variability in solutions of all the problems, it is neither limitless nor random but is definitely variable within a range of possible solutions.
3. All alternatives of all solutions are present in all societies at all times but are differentially preferred.

Thus, human problems are limited in number and the variability of their solutions is constrained.

2.1. Surface vs. Deep Structure

Kraft (2001:48), in his general model of culture, provides a useful framework of "surface structure" and "deep structure." He posits five subsystems of surface level culture that provide expressions of the deep structure, which in his treatment is limited to worldview assumptions. The surface subsystems include social (e.g., family, education, kinship, social control), language, religion, economics, and technology. Ashdown (2006:12) posits seven categories of (surface) cultural systems, including major examples from each category:

1. economic: redistribution, reciprocity, market
2. kinship: Sudanese, Eskimo, Hawaiian, etc.
3. political: bands, tribes, chiefdoms, states
4. social: egalitarian, ranked, stratified (class/caste)
5. marriage: exogamy/endogamy, bride wealth, residence system
6. production: foraging, slash and burn, horticulture, farming, pastoral
7. religious: individual, shamanistic, communist, ecclesiastical

Bruce (1992:21) expands the deep structure of culture to include values:

> Values might be designated as a person's treasured ideal, his commitments, and the loyalties which he chooses within the framework of his worldview. A person's worldview is his philosophy of the universe, his explanations for how it works the way it does, and the structure of the powers therein. His values form his decisions and choices in the light of that analysis and give him purpose for action and goals to attain. …Values could be seen to be built on worldview. Behavior, to a large extent, builds itself on values.

Following from Bruce, McKinney describes a hierarchy/system of three categories of values—prime, focal and specific. Prime values (value orientations) are the deepest value structure. They "tie values to the worldview of a culture.… [and deal] with an individual's primary allegiance, such as to God, gods, or self" (2000:216). Focal values, which include bundles of values, are built on these value orientations. From focal values emerge specific values that may be visible in behavior.

2.2. Focal Values

McKinney describes seven sample categories of focal values.

1. **Impersonal values** "concern events attributed to fate, God's will, … impersonal use of spiritual power…, and in general to phenomena over which the individual is powerless to influence…. Attributing events and actions to an impersonal category of value absolves an individual of responsibility for things that happen." (2000:217)
2. **Character values** "refer to virtues and vices of an individual. These are the qualities of an individual that are approved or disapproved of by members of the culture in focus. Virtues and vices reflect moral characteristics of a person." (2000:217)

3. **Directive values** "specify what a person should do; they are prescriptive values" (McKinney 2000:218), as well as prohibitions. Both include "laws, commandments, rules of conduct, taboos, obligations and duties, rights and privileges, and any other rules or standards which are intended to regulate conduct" (Albert 1956:226).
4. **Environmental values** "deal with our relationship with the physical environment" (McKinney 2000:218), our care and protection of our world or lack thereof, our consumption of natural resources, sanitation, etc.
5. **Ethical Values** are "moral principles … which govern our interpersonal relations" (McKinney 2000:218). These include notions of common decency towards one another and duties in fulfilling obligations to family, clan, country, etc.
6. **Spiritual Values** "deal with our relationship with the spiritual and supernatural realm" and "may also be termed PIETY VALUES. They concern rules or taboos that govern one's relationship with the supernatural realm" which would include, for example, the Ten Commandments in the Judeo-Christian context. (McKinney 2000:218)
7. **Other Values** – Several categories of values may be considered in this remaining category. Some values or value bundles "apply to different realms of the society, such as political, social, economic, family, aesthetic, educational, and military values" (McKinney 2000:218). There are also compartmentalized values that are contradictory under the light of direct comparison but thrive when selectively applied in specific environments, e.g., in the church versus in the world.

Focal values of truth, righteousness, purity, etc., may be evident in the Scriptures, e.g., in Philippians 4:8, which lists general ethical and spiritual principles as most desirable to occupy our thoughts.

> **NIV Philippians 4:8** Finally, brothers, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about such things.

2.3. Specific Values

In McKinney's hierarchy of values, specific values emerge from focal values. Thus they are reasonably expected to proceed from the same seven categories of values.

2.4. Prime Values / Value Orientations / Basic Values

Value orientations, the prime values that tie the value structure to worldview, have been investigated by several authors. Hofstede and Mayers represent one conceptual class of research that ties orientational values to a discussion of typically five or six value contrasts, each of which are assumed to operate on the basis of a continuum. In order to make sense of these value contrasts and to attempt to compare various value contrasts between authors, the nomenclature of these contrasts must be carefully defined. Hofstede (2002) postulates the following value contrasts:

1. Power-Distance (high vs. low) – "related to the different solutions to the basic problem of human inequality."
2. Uncertainty Avoidance (high vs. low) – "related to the level of stress in a society in the face of an unknown future."
3. Individualism vs. Collectivism – "related to the integration of individuals into primary groups."
4. Masculinity vs. Femininity – "related to the division of emotional roles between women and men."
5. Long Term vs. Short Term Orientation – "related to the choice of focus for people's efforts: the future or the present and past."

For each value contrast Hofstede lists ten differences between societies with strongly contrasting orientational values. Applying a personal analysis of my observations of eastern African culture (in which I

have served for more than a decade), two values, namely, large power-distance and collectivism, stood out decisively in the value contrasts, as seen in table 1.

Table 1. Evaluation (true +, false –, uncertain +/–) of Hofstede "Power-Distance" and "Collectivist vs. Individualist" value contrasts, based on personal observations of Eastern African culture.

Small Power-Distance		**Large Power-Distance**	
Use of power should be legitimate and is subject to criteria of good and evil.	–	Power is a basic fact of society antedating good or evil; its legitimacy is irrelevant.	+
Parents treat children as equals.	–	Parents teach children obedience.	+
Older people are neither respected nor feared.	–	Older people are both respected and feared.	+/–
Student-centered education.	–	Teacher-centered education.	+
Hierarchy means inequality of roles established for convenience.	–	Hierarchy means existential inequality.	+
Subordinates expect to be consulted.	–	Subordinates expect to be told what to do.	+
Pluralist governments based on majority vote and changed peacefully.	+/–	Autocratic governments based on co-optation and changed by revolution.	+/–
Corruption rare; scandals end political careers.	–	Corruption frequent; scandals are covered up.	+
Income distribution in society rather even.	–	Income distribution in society very uneven.	+
Religions stressing equality of believers.	–	Religions with a hierarchy of priests.	+
Individualist Society		**Collectivist Society**	
Everyone is supposed to take care of himself or herself and his or her immediate family only.	–	People are born into extended families or clans which protect them in exchange for loyalty.	+
"I" consciousness.	–	"We" consciousness.	+
Right of privacy.	–	Stress on belonging.	+
Speaking one's mind is healthy.	–	Harmony should always be maintained.	+
Personal opinion expected: one person one vote.	+/–	Opinions and votes predetermined by in-group.	+/–
Transgressions of norms lead to guilt feelings.	–	Transgressions of norms lead to shame feelings.	+
Languages in which the word "I" is indispensable.	–	Languages in which the word "I" is avoided.	+/–
Purpose of education is learning how to learn.	–	Purpose of education is learning how to do.	+
Task prevails over relationship.	–	Relationship prevails over task.	+

Although some studies have attempted to expand the number of dimensions/value contrasts, Hofstede believes that the number of statistically meaningful dimensions will be small. That is, from a statistical

perspective it will be difficult to justify the inclusion of other value contrasts because they will increasingly overlap with one another and not further explain the values data.[4]

This principle is evident in part by comparing Hofstede's current model comprising five value contrasts with his original model of four value contrasts (Hofstede 1980). The four-dimensional values framework was uncertainty avoidance, power-distance, individualism vs. collectivism, and ego vs. social orientation. Note that ego vs. social orientation has now been replaced by masculinity vs. femininity and short term vs. long term orientation. The less-than-intuitive nature of this replacement is supported by the following statement:

> Dimensions should not be reified [regarded as material or concrete]. They do not 'exist' in a tangible sense. They are constructs: if they exist, it is in our minds. They should help us in understanding and handling the complex reality of our social world. But human minds have a limited capacity for processing information, and therefore dimensional models that are too complex will not be experienced as useful. (Hofstede 2002:11-12)

Littlemore (2003) provides a more descriptive set of definitions for the Hofstede value contrasts from his 1980 model, taking work environments into consideration. The following list comes from Littlemore (2003:275-6, emphasis added):

> **Uncertainty avoidance** refers to the extent to which organizations and cultures (and the people within them) seek to protect themselves from the risks and uncertainties of life…. (275)
>
> **Power-distance** refers to how equal people are, or would like to be. In organizations and cultures where the power-distance is low, inequalities are minimized; everybody is involved in decision making; subordinates are consulted rather than just ordered; the boss is seen as a resourceful democrat; and the same rules apply to everyone. In organizations and cultures where the power-distance is high, inequalities among people are expected and accepted; some people make decisions, and others obey; subordinates expect to be told what to do…. (275)
>
> The **individualist or collectivist** dimension refers to the extent to which people see themselves primarily as individuals, or as members of bigger groups. In individualist organizations and cultures, people look after themselves; they want to be appreciated as individuals, and for the work that they themselves have done. (276)
>
> The **ego or social** dimension refers to the extent to which an organization promotes hard "ego-oriented" values or soft "society-oriented" values. (276)

The Basic Values model of Mayers (1982) fits within the same conceptual framework of value contrasts operating on a continuum. In contrast to Hofstede, which has been applied mostly to workplace and academic environments, this model has seen much application to cross-cultural missions. In applying this model Shaw (1988:161) states, "The basic values are considered to underlie many other values that, in turn, generate various types of behavior that are further affected by the surrounding cultural context."

Mayers' basic values feature six value contrasts reflecting opposing orientations of individuals or cultures. The following presentation of Mayers' material is adapted from Matlock (n.d.):

1. **time vs. event** – primary concern regards schedule, punctuality and the passage of time as opposed to a focus on the current event and the people involved therein.
2. **dichotomism vs. holism**[5] – tendency to categorize and to evaluate all of life in terms of a right/wrong, black/white polarity, as opposed to a focus on the whole, context, and the integration of parts in relation to the whole.

[4] However, from a purely descriptive perspective, I can see no adverse impact of the inclusion of additional value contrasts into a prototypical model of culture.

[5] An interesting trichotomistic worldview is reported by Bartle (1983) regarding the Akan culture of Ghana. The Twi people think in threefold paradigms: red/white/black (for color), mother-nature/God/deities (for personification), earth/air/water (for the cosmos), blood-female/semen-male/breath-from-God (for physical life), mother/God/father (for the origin of life), etc.

3. **crisis vs. non-crisis** – tendency to focus on a single alternative in a crisis (presumed to be correct), taken from the best authority who has learned from history and experience; as opposed to satisfaction in selecting from alternative options, each crisis being unique and requiring a new solution.
4. **task/goal vs. person/interaction** – primary concern regards the task and its timely completion, as opposed to valuing interaction with others while performing the task.
5. **prestige ascribed vs. prestige achieved** – considers prestige to be assigned to a social group or role where respect is expected on the basis of rank or formal credentials, as opposed to achieving prestige on the basis of performance or how one person impresses another, with or without formal credentials.
6. **vulnerability as weakness vs. vulnerability as strength** – tendency to conceal mistakes and to avoid any negative exposure as signs of weakness, as opposed to a willingness to talk freely about personal matters and to admit errors.

The components of overlap between the value orientations of the models of Hofstede and Mayers indicate substantial underlying agreement between the models (see table 2). Such overlap in dealing with uncertainty/change, stratification of human relations, temporal orientations, and individualist/collectivist factors would be expected, since they reflect strong connections to worldview universals of time, causality, person/group, and relationships, as presented in the next section.

Table 2. Analysis of overlap between value orientation models of Hofstede and Mayers.

Hofstede	Mayers	Component of Overlap
Uncertainty Avoidance	Crisis vs. Non-Crisis Orientation	Dealing with uncertainty/change
Power-Distance, Masculinity vs. Femininity	Prestige Ascribed vs. Prestige Achieved	Organization of human relations
Short vs. Long Term Orientation	Time vs. Event Orientation	Temporal orientations
Individualism vs. Collectivism	Task vs. Person as Goal	Individualist/collectivist factors
	Dichotomistic vs. Holistic Orientation	
	Vulnerability as Weakness or Strength	

Another conceptual class of research regarding prime values has been taken by Schwartz (2006). Rather than 5-6 value contrasts, each on a one-dimensional continuum, e.g., from Individualism to Collectivism, Schwartz considers ten values that are all mutually interactive in a two dimensional continuum or plane. However, these basic values correspond more to the focal values of Bruce than the value orientations of Hofstede and Mayers. (See Matthews 2007:71–74.) This is because the Schwartz model is designed primarily to test the connection of values to surface behavior, as opposed to the connection of values to the deeper structure of worldview. Nevertheless, drawing from the literature, Schwartz (n.d.chapter 1:2) does provide a useful summary of the features of basic values:

1. Values are beliefs. But they are beliefs tied inextricably to emotion, not objective, cold ideas.
2. Values are a motivational construct. They refer to the desirable goals which people strive to attain.
3. Values transcend specific actions and situations. They are abstract goals. The abstract nature of values distinguishes them from concepts like norms and attitudes, which usually refer to specific actions, objects or situations.
4. Values guide the selection or evaluation of actions, policies, people, and events. That is, values serve as standards or criteria.

5. Values are ordered by importance relative to one another. People's values form an ordered system of value priorities that characterize them as individuals. This hierarchal feature of values also distinguishes them from norms and attitudes.

Schwartz (n.d. chapter 3:2) also posits four mechanisms by which values influence observable behavior:

1. Values must be activated in order to affect behavior. The accessibility and importance of the value is crucial for activation.
2. Values motivate action. Actions that promote valued goals are attractive.
3. People define situations in light of the values they hold to be important; different values suggest different actions.
4. The higher priority given to a value, the more likely people will form action plans that can lead to its expression in behavior.

From the perspective of Bible translation, these descriptions put into perspective the value-driven desires or even agendas from which translators operate. Values are emotional; they are motivational; they are hierarchical, implying varying levels of strength; and they serve to set standards for behavior and to guide actions, e.g., on how to evaluate biblical teaching and events.

2.5. Worldview Universals

Worldview universals, in contrast to value orientations, are largely agreed upon, e.g., by Kearney (1984), Kraft (1996) and Ashdown (2006). Kraft posits six universals, i.e., the basic assumptions of life with which every known worldview must contend.

1. **Classification** – "All peoples classify the reality they perceive around them according to the categories laid down for them in their world view" (Kraft 1996:63-4). This includes all manner of things, ideas, natural and supernatural entities, etc.
2. **Person/Group**[6] – All members of society understand a reality of internal and external relationships with other people. This includes in-group vs. out-group classifications, whether we see other people as individuals or groups, our view of self and other, etc.
3. **Causality** – All people answer questions regarding the powers and causality evident in their universe, whether by human, natural, supernatural, luck, fate, chance, personal, or impersonal means.
4. **Time** – All people codify concepts of time, e.g., seconds to seasons, and the passage of time, including temporal vs. event orientations.
5. **Space** – All people have assumptions regarding space and the structuring of space, including personal space, geographic features, the universe, the arrangement of people and material goods, etc.
6. **Relationships** – All people define relationships between various components of worldview and culture, e.g., relating time to space, or causality to categories (e.g., natural vs. supernatural), or between categories, etc. Worldview enables these comparisons and associations.

Our worldview has traditionally been considered the deep structure or the very foundation of our culture. It comprises what we generally take for granted or assume in our existence. It provides patterns for our use of will, logic, emotions, and reason. It provides the framework for assignment of meaning, our predispositions, our means of interpretation and explanation. It underlies our patterns of relating to the world and others, our processes of adapting, and provides psychological reinforcement based on the order or assumed correctness of the world around us.

[6] In other treatments, e.g., by Ashdown (2006), Person/Group is divided into two categories of Self and Other.

2.6. Contrasting Beliefs, Values and Worldview – A Real-World Example

The precise characterization of beliefs, specific/focal/prime values, worldview, etc., that are associated with complex, real-world issues is of course challenging. Consider, for example, a list of "ten values, attitudes, or mind-sets that distinguish progressive cultures from static cultures" presented in table 3 as expressed by Harrison (2000:299). A more precise evaluation would suggest the presence of a combination of minimally beliefs, values and worldview. For example, some of the positive attributes of the progressive society are expressed as beliefs: education is the key to progress, and merit is central to advancement. Other attributes are expressed as specific values, e.g., work, frugality, justice and fair play. The ethical code, and secularism, may be focal values. Other attributes reflect deeper structures, e.g., authority structures, which reflect prime values (or value orientations); and time orientation, which originates in worldview. Thus Harrison's contrastive analysis of "progressive" and "static" cultures is in reality quite complex in terms of the range of cultural components involved, from beliefs to worldview.

Table 3. Contrastive worldview, values and beliefs in progressive and static cultures.

Parameter	Worldview, Values, Beliefs	Progressive Cultures	Static Cultures
1. Time orientation	Worldview	Emphasize the future	Emphasize the present or past
2. Work	Specific value	Central to the good life	Burden
3. Frugality	Specific value	Mother of investment and financial security	Threat to the egalitarian status quo
4. Education	Belief	Key to progress	Marginal importance except for the elite
5. Merit	Belief	Central to advancement	Connections and family are what count
6. Community	Worldview	Radius of identification and trust extends beyond the family to the broader society	Family circumscribes community
7. Ethical code	Focal value	More rigorous	More corrupt
8. Justice, fair play	Specific value	Universal impersonal expectations	Function of whom you know or how much you can pay
9. Authority	Prime value (Value orientation)	Tends towards dispersion and horizontality	Tends toward concentration and verticality
10. Secularism	Focal value	Influence of religious institutions on civic life is small	Religious influence is often substantial

2.7. Image Schemas

An additional component that is assigned to our cultural deep structure is image schemas, which are a development of cognitive linguistics.[7] According to Gibbs and Colston (1995:347), "Image schemas are different patterns of recurring bodily experiences that emerge throughout sensorimotor activity and from our perceptual understanding of actions and events in the world." They are "experiential gestalts… that emerge throughout sensorimotor activity as we manipulate objects, orient ourselves spatially and temporally, and direct our perceptual focus for various purposes."

They add that image schemas "are imaginative and non-propositional in nature and operate as organizing structures of experience at the level of bodily perception and movement" (1995:349).

[7] This work may contain the first association of image schemas with anthropological ideas of cultural deep structure.

Thus, some degree of inter-lingual commonality (or even universality) is expected for image schemas since they are based on sensorimotor actions that are common to the human body.

Common examples of image schemas include CONTAINER, BALANCE, SOURCE-PATH-GOAL, LINK, CENTER-PERIPHERY, and PATH. They may be considered literally/physically or metaphorically, e.g., the IN/OUT CONTAINER image schema, "the ball is **in the basket**," and "we as Christians are **in Christ**." Such image schemas are common in Scripture (see table 4).

Table 4. Selected Scriptural examples of image schemas (taken from Ashdown 2006:74-5).

Image Schema	Scripture (NIV)
BODY AS CONTAINER (IN/OUT)	Gen. 2:7, "Then the LORD God formed man…and **breathed into his nostrils the breath of life**."
BODY AS CONTAINER (FULL/EMPTY)	Luke 1:15, "… he will be **filled with the Holy Spirit** even from birth."
HEART as CONTAINER (IN/OUT)	Romans 9:2, "That I have great sorrow and unceasing grief **in my heart**."
GOD as CONTAINER (IN/OUT)	Acts 17:28, "For **in Him** we live and **in Him** we move, and **in Him** we have our being."
CHRIST as CONTAINER (IN/OUT)	Romans 8:1, "Therefore there is now no condemnation for those who are **in Christ Jesus**."
MORE is UP, LESS is DOWN	Psalms 103:11, "For **as high** as the heavens are above the earth, **so great** is His loving kindness toward those who fear Him."
POWER is UP, WEAKNESS is DOWN	Psalms 61:2, "From the end of the earth I call to You when **my heart is faint**; lead me to the **rock that is higher than I."**
AUTHORITY is UP, UNDER AUTHORITY is DOWN	Matthew 8:8-9, "But the centurion said, 'For I also am a man **under authority**, with soldiers **under me**.'"
HOLY is UP, EVIL is DOWN	Psalms 102:19, "For He looked down from His **holy height**."
HONOR is UP, DISHONOR is DOWN	Luke 14:10, "When you are invited, go and recline at the last place, so that when the one who has invited you comes, he may say to you, 'Friend, **move up higher**'; then you will have **honor** in the sight of all who are at the table with you."
SOURCE-PATH-GOAL	James 1:2-4, "Consider it pure joy, my brothers, whenever you face trials of many kinds, because you know that the testing of your faith **develops perseverance**. Perseverance must **finish its work** so that you may be **mature and complete**, not lacking anything."
CENTER-PERIPHERY	Genesis 2:9, "In the **middle of the garden** were the tree of life and the tree of the knowledge of good and evil."

Several taxonomies of a rapidly growing list of individual image schemas have been reviewed by Cervel. One example, posited by Clausner and Croft (1999) is given in table 5.

Table 5. Example taxonomy of image schemas by Clausner and Croft.

Category	Specific
SPACE	UP-DOWN, FRONT-BACK, LEFT-RIGHT, NEAR-FAR, CENTER-PERIPHERY, CONTACT
SCALE	PATH
CONTAINER	CONTAINMENT, IN-OUT, SURFACE, FULL-EMPTY, CONTENT
FORCE	BALANCE, COUNTERFORCE, COMPULSION, RESTRAINT, ENABLEMENT, BLOCKAGE, DIVERSION, ATTRACTION
UNITY/MULTIPLICITY	MERGING, COLLECTION, SPLITTING, ITERATION, PART-WHOLE, MASS-COUNT, LINK
IDENTITY	MATCHING, SUPERIMPOSITION
EXISTENCE	REMOVAL, BOUNDED SPACE, CYCLE, OBJECT, PROCESS

In contrast, Cervel's (2003) taxonomy has only three major categories: CONTAINER, PATH, and PART-WHOLE (see table 6). Clearly the taxonomy of—and the boundaries between—various image schemas are still a subject of much scholarly discussion.

Table 6. Taxonomy of Image Schemas by Cervel.

Major Category	Sub-Category	Specific Image Schema
CONTAINER		IN-OUT,[8] FULL-EMPTY, EXCESS
PATH	FORCE	COMPULSION, BLOCKAGE, COUNTERFORCE, REMOVAL OF RESTRAINT, ENABLEMENT
	CIRCLE	CYCLE, SPIRAL
	-other-	PROCESS, FRONT-BACK, NEAR-FAR, VERTICALITY
PART-WHOLE		MERGING, MATCHING, COLLECTION, CENTER-PERIPHERY, LINK

Of much greater interest to this paper are possible connections between image schemas and worldview universals. Some of the more obvious linkages are suggested in table 7. Note that the LEFT-RIGHT presentation of the data in the table is intended to suggest a SOURCE-PRODUCT, generational idea that the worldview universals are at least in part generated from image schemas.

Table 7. Suggested generational linkages between Image Schemas and Worldview Universals. (Names of image schemas are taken from Clausner and Croft [C&C] and Cervel [CL])

Image Schemas (literal/physical)	Image Schemas (metaphorical)	Worldview Universal
CONTAINER (C&C) SPACE (C&C)	---	Space
UNITY/MULTIPLICITY (C&C) PART-WHOLE (CL)	---	Person-Group
FORCE, SOURCE-PATH-GOAL (C&C)	---	Causality (power, causes)
PATH, LINK (C&C)	CONTAINER (IN-OUT, FULL-EMPTY) (C&C)	Relationships

[8] Cervel subdivides the CONTAINER category by types of CONTAINERS, e.g., ABSTRACT ENTITIES, EMOTIONS, PEOPLE, without specifying them more generally as IN-OUT.

UNITY/MULTIPLICITY (C&C) PART-WHOLE (CL)	---	Classification
PATH (C&C)	---	Time

3. Prototypical Model of Culture for Bible Translation

The development of a prototypical model is an attempt to conceptually clarify the core features of that which is inherently complex. Taylor (1989:59-60) says that "the prototype can be understood as a schematic representation of the conceptual core of a category…. Entities are assigned membership in a category by virtue of their similarity to the prototype; the closer an entity to the prototype, the more central its status with the category." Thus, the prototypical model of culture presented in this paper is an attempt to stake out the conceptual "cores" from surface to deep structures, representing the salient features that must be considered in the application of the model.

3.1. Prototypical Model of Culture and its Application

A primary goal of this paper is to develop a prototypical model of culture that will assist translation teams in identifying cultural issues of the target audience that impede their ability to understand TL Scriptures. If successful, TC-rooted translation issues should become more predictable through application of the model, and therefore easier to address at the translation desk.

The challenges are minimally the following:

1. to define a conceptual framework for the network of cultural systems, beliefs, attitudes, values, worldview, image schemas, etc., representing the TC, as a tool for Bible translation;
2. to develop this framework sufficiently that it may accept and appropriately categorize the diverse set of translation issues rooted in the TC; and
3. to constrain the level of complexity in the cultural model such that it may effectively assist the translation team in identifying translation issues rooted in their culture.[9]

It is constructive at this point to state clearly what is *not* being done. The goal is *not* to develop a model for comprehensive, anthropological study of the TC. The model is only intended for a subset of issues arising from the translation desk. Furthermore, in the analyses of example translation problems that follow, I am *not* attempting to fully characterize any aspect of any TC (even though this would clearly be very desirable).

Rather, we want to focus on the subset of cultural information that is pertinent to the translation and comprehension of the Scriptures for a particular target audience on a book-by-book basis.[10] For example, the Zinza, who live on the southwest shores and islands of Lake Victoria (see 4.4 Zinza–Environment–Lake Victoria Ecosystem), will have difficulties comprehending the worldview of the Jews living in an arid, Middle Eastern, environment in much of Genesis. In contrast, the influence of Lake Victoria may provide a contextual benefit in the translation of a Gospel, in particular relating to fishermen living near the Sea of Galilee. Similarly we want to focus on those aspects of the TC that are markedly different from the source/biblical culture, and are therefore more likely to cause comprehension problems with the Scriptures. For example, the Digo (see 4.5 Digo–Material Culture–Construction Terms) who live on the coast of Kenya have limited construction technologies in their traditional culture, so capstones, foundations, roofs, etc., and their metaphorical extensions to spiritual matters, are difficult to grasp.

[9] A fourth challenge is to adapt this prototypical model of culture to support selected communication models for Bible translation. This was first discussed in Matthews (2007).

[10] Note that TC-rooted translation issues are expected to apply to MTTs and lay people alike. It is also clearly recognized that translators and consultants from outside of the target culture will have constructive insights as well as their own cultural blind spots.

A cultural screening process is thus proposed for Bible translators and consultants alike. Initially, existing (likely limited) knowledge of a TC is plugged into the prototypical model of culture. The purpose may be multifold, e.g., to focus further cultural research, to investigate a translation issue rooted in the TC that has already been identified, and/or to flag particular Scriptures for enhanced scrutiny because they may not be properly understood. (Ideally such activities will apply across several TL translations, e.g., in a cluster project with TCs of similar characteristics.) If a particular Scripture is appropriately flagged as problematic due to TC-rooted translation issues, then the cultural model will help to focus further research to characterize the problem. If a Scripture is flagged in error, i.e., it turns out to be quite comprehensible, it can simply be set aside as a false positive. Normally mixed results would be expected, all of which would help to focus further investigation.

A prototypical model of culture is proposed in figure 1, in which several gross features are noteworthy.

1. The model spans from the stratum of image schemas (deep structure) to the stratum of cultural systems (surface structure), which are observable as behavior, objects, environment, etc. The operational definition of culture is thus expanded to include even pre-conceptual building blocks (i.e., image schemas).
2. The model represents a complex network of cultural elements that are all interconnected, i.e., image schemas, worldview, orientational values, focal values, specific values, beliefs and attitudes, and cultural systems and practices. There is no requirement that a cultural matter originate in some component of deep structure, e.g., image schemas, and progress through all of the individual "strata" of the model in order to produce an observable behavior.
3. Several strata may be active at the same time. For example, "Japanese punctuality culture" may demonstrate itself in practices, beliefs, values and possibly worldview.[11]
4. The cone shape of the model is intended to reflect the limited number of image schemas and worldview universals of the deep structure, in comparison to the essentially limitless number of behaviors, objects, environments, etc., of the surface structure.
5. The progression from deep to surface structure also reflects a change from very limited variability in image schemas across cultures (Kövecses 2005) to much larger variability across cultures in surface systems.
6. Language is considered intrinsic to all strata of the cultural model, i.e., being reflective of the deepest structures and observable as a cultural system. It is thus pulled to the side to emphasize its integrative characteristics and connection to the communication models of translation. (Matthews 2007:88-90)

The discussion that follows will focus by necessity on individual strata of the model, belying the reality that this is an integrated system.

3.2. Image Schemas

A developmental taxonomy of image schemas is presented in table 8 that has been adapted from Clausner and Croft (1999) and Ashdown (2006). This taxonomy is conceptualized in figure 2 as a stratum in the prototypical model of culture. Emphasis has been given to those categories of image schemas that have been observed in Scripture, in particular in the translation data of this paper (see shaded areas in figure 2), or are anticipated in future studies. In addition, two new categories are suggested. The first, ORIENTATION, is an attempt to collect all image schemas that conceptualize two equivalent locations

[11] In a report posted April 27, 2005, a train wreck was attributed to "Japanese punctuality culture" i.e., a driver's attempt to make up 90 seconds caused a major accident that, according to a reporter, "has… caused much soul searching over Japan's attention—some would say *obsession*—with punctuality and efficiency." It is Japanese *practice* that trains operate on time. A Japanese railway worker was reported as saying, "Japanese *believe* that if they board a train, they'll arrive on time. There is no flexibility in our society; people are not flexible, either…. This disaster was produced by *Japanese civilization* and Japanese people." (Retrieved online on January, 2007, from http://www.kanai.net/weblog/archive/2005/04/27/18h15m28s, emphasis added.)

separated in one-dimensional space, e.g., UP-DOWN, and LEFT-RIGHT. The second, DIRECTION, is an attempt to collect PATH-related image schemas that are inherently directional. PATH, as a specific image schema, suggests a single direction, i.e., a vector, without a specific source and destination.[12] SOURCE-PATH-GOAL suggests a starting point, a potential sequence of directions involving purpose, and an ultimate destination. The category "other" is merely a collection of other categories of image schemas for which there is no currently recognized application to Bible translation. This category will likely diminish with further study.

Table 8. Taxonomy of image schemas incorporated into prototypical model of culture.

Category	**Specific**
ORIENTATION	UP-DOWN, LEFT-RIGHT, NEAR-FAR, FRONT-BACK, etc.
DIRECTION	PATH, SOURCE-PATH-GOAL
CONTAINER	FULL-EMPTY, IN-OUT, EXCESS
UNITY-MULTIPLICTY	WHOLE-PART, LINK
CENTER-PERIPHERY	(involving an object or a path)
Other	IDENTITY, EXISTENCE, FORCE, etc.

3.3. Worldview

The prototypical model of worldview universals is adapted directly from Kraft (1996) and conceptualized in figure 3 as a stratum in the prototypical model of culture. As indicated in the shaded areas of the figure, all worldview universals are evidenced at least indirectly in the data of this paper. In order to distinguish worldview issues from values, beliefs, and practices in the analysis of TL translation problems, two sentence-level test frames are suggested for assumptions inherent in worldview[13]:

1. We unconsciously assume that ……
2. The world is naturally ……..

For example, in America, *we unconsciously assume that* our world has a four season climate with gradual (yet cumulatively substantial) shifts in the duration of daylight. For the Zinza (who live adjacent to Lake Victoria) *the world is naturally* lush with vegetation.

3.4. Value Orientations, Focal Values and Specific Values

The prototypical model for values is tentatively subdivided into three strata: value orientations, focal values, and specific values. These strata are supported from the literature and also from the analysis of TC-rooted translation issues observed in eastern Africa (see section D of table 10).

In order to facilitate the distinction between values and worldview, beliefs, practices, etc., the following two sentence-level test frames are suggested to focus on the emotional/motivational characteristics of values:

1. ……. is very important to me/us.
2. We are strongly motivated to/that ……..

[12] Alternatively, a PATH image schema may be viewed as an underspecified SOURCE-PATH-GOAL image schema in which the source and goal are left implicit (McElhanon, personal communication).

[13] These sentence frames as well as the frames that follow for values, beliefs and practices are suggestions that have proven useful in this paper but have not yet been field tested. They are intended to be used and further developed as practical, diagnostic tools. They are expected to demonstrate language and cultural dependencies in their precise form and content.

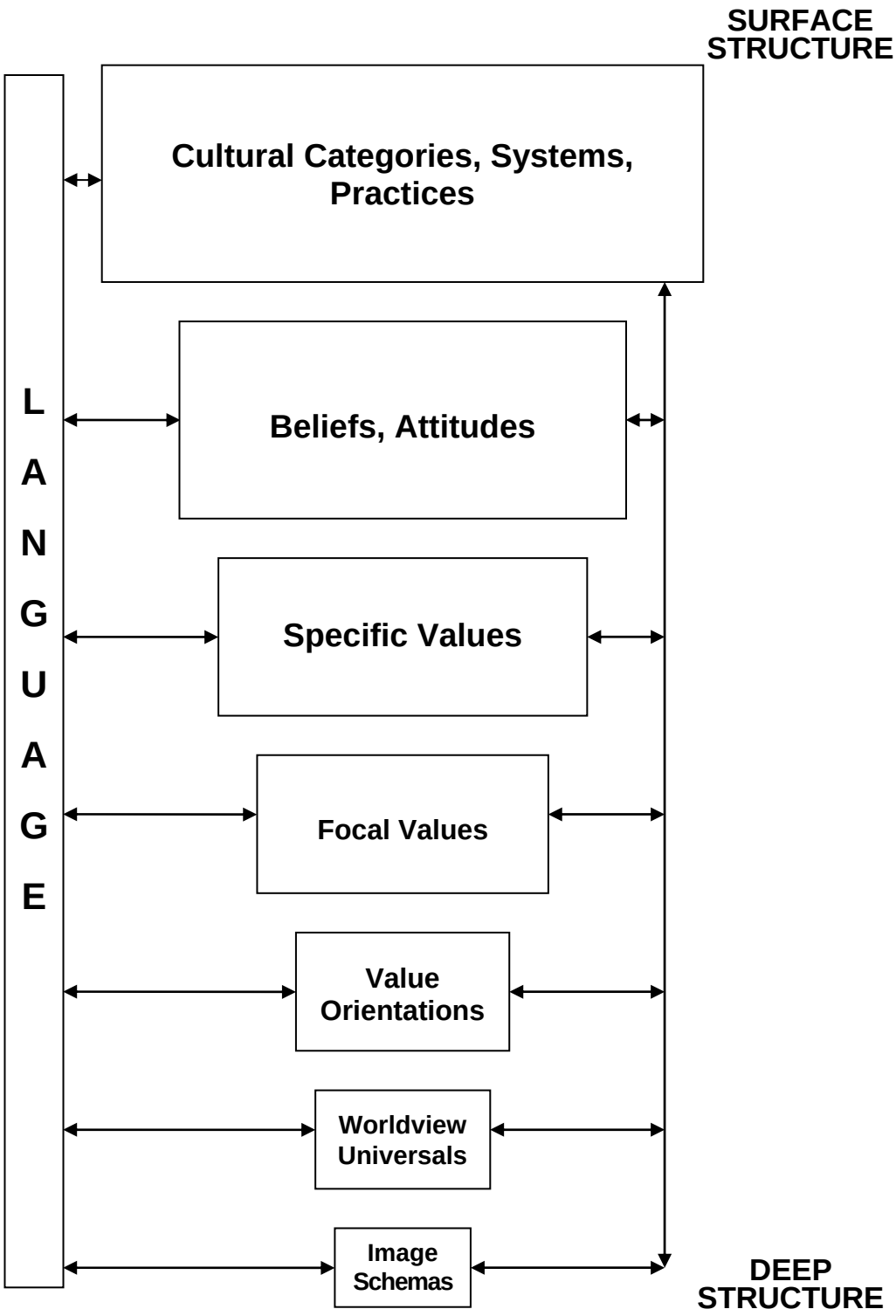

Figure 1. Prototypical model of culture: the network of image schemas, worldview, values, beliefs, cultural systems, environment, etc., from deep to surface structure.

The differences between value orientations, focal values, and specific values are primarily a function of "depth" in the general cultural model (see figure 1). Specific values are most easily conceptualized because

they are closest to observable cultural systems and because they motivate behavior. In contrast, value orientations most approximate implicit expectations because they are intrinsically tied to worldview and its assumptions. Consider the contrastive worldview, values and beliefs assigned by Harrison to progressive cultures presented in table 3. As stated by Harrison (2000), the discussion of authority aligns well with the Hofstede notion of power-distance. The values "Ethical Code" and "Secularism" are likely focal values because several specific values can be grouped within them. Although the boundaries between focal and specific values are likely to be fuzzy, "Frugality" and "Justice, Fair Play" would appear to behave more like specific values.

The prototypical model for **value orientations** is adapted from Hofstede and Mayers, representing workplace/academic and cross-cultural missions environments, respectively. Each model has something to contribute to TL translation problems, but neither was developed with Bible translation in mind. Therefore the two models have been combined into a qualitative, four-quadrant grid of value orientations, as outlined in the analysis of overlap between the models of Hofstede and Mayers given in table 2. The composite model is conceptualized in figure 4 as a stratum in the prototypical model of culture. As indicated in the shaded areas of the figure, only the "Organization of Human Relations" quadrant, specifically "Power-Distance" relationships, are represented in the translation data reported in this paper. Other quadrants, e.g., "Temporal Orientations," are evident in social interactions with MTTs.

The prototypical model for **focal values** is adapted directly from McKinney (2000) and conceptualized in figure 5 as a stratum in the prototypical model of culture. Since **specific values** are posited to occur within the same categorical framework as the focal values—i.e., focal values are generally bundles of specific values—the same prototypical model is also applied to specific values. As indicated in the shaded areas of figure 5, data reported in this paper are represented in most categories of specific values.

3.5. Beliefs & Attitudes and Cultural Systems & Practices

The prototypical models for (1) beliefs and attitudes, and (2) cultural systems and practices are both adapted in simplified form from Kraft (1996) and Ashdown (2006). They are conceptualized in figures 6 and 7, respectively, as strata in the prototypical model of culture. All examples mentioned in these figures represent translation data from this paper, which includes most of the categories of cultural systems and beliefs. The principal categories are social, economic, political, religious, and other. For beliefs and attitudes, a sixth translation-specific category is added to conveniently separate beliefs underlying translation practice, e.g., that translated Scriptures should be used to teach language, such as historically used vocabulary that currently is not widely used nor understood.

For cultural systems and practices, a sixth category of tangible/concrete objects is established to conveniently separate the physical environment, material culture, and the human body. (Material culture is defined by Triandis (2002:1) as objects such as "dress, food, houses, highways, tools, and machines.") These "tangibles" are often easily observable and reflect very influential components of the culture. They are also prolific sources of metaphors (e.g., the heart) in the Scriptures.

In order to facilitate the distinction between beliefs and values, worldview, cultural practices, etc., the following sentence-level test frame is suggested for beliefs and attitudes:

> I/We believe that ……..

For cultural systems and practices, the following test frame is suggested:

> It is our cultural system/practice to ……..

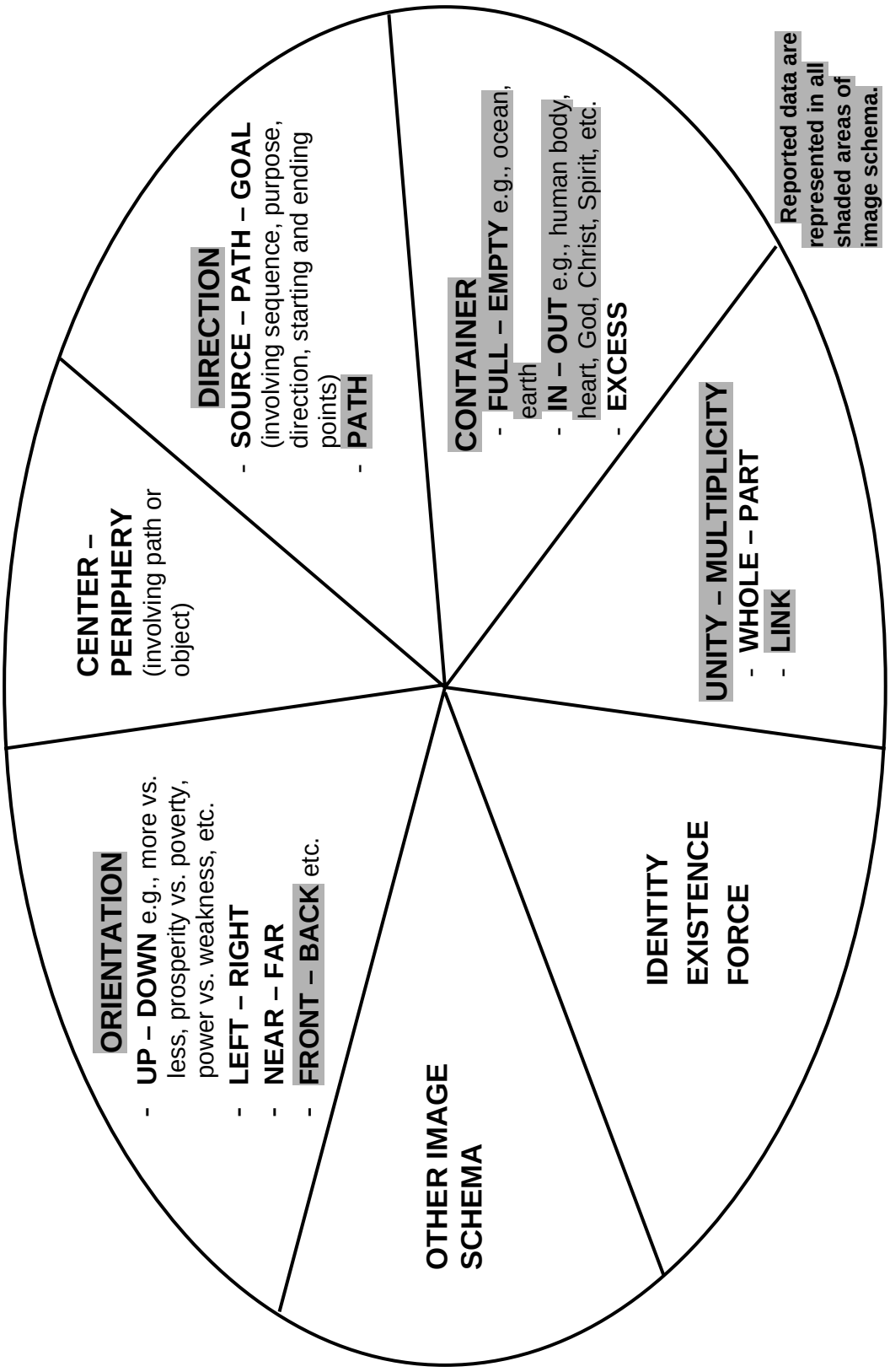

Figure 2. Prototypical model of image schemas, adapted from Clausner and Croft (1999) and Ashdown (2006).

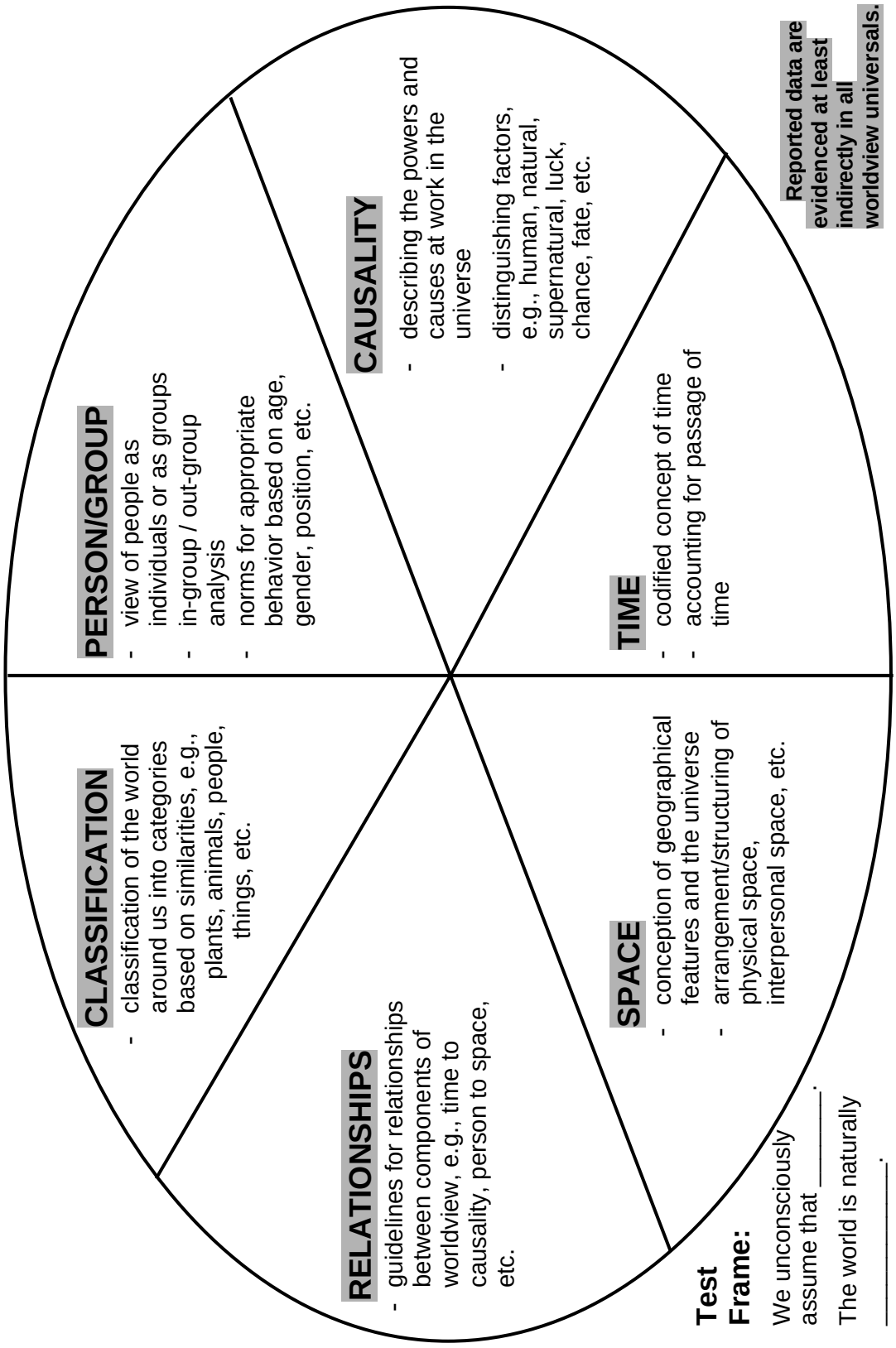

Figure 3. Prototypical model of worldview universals (assumptions), adapted from Kraft (2001).

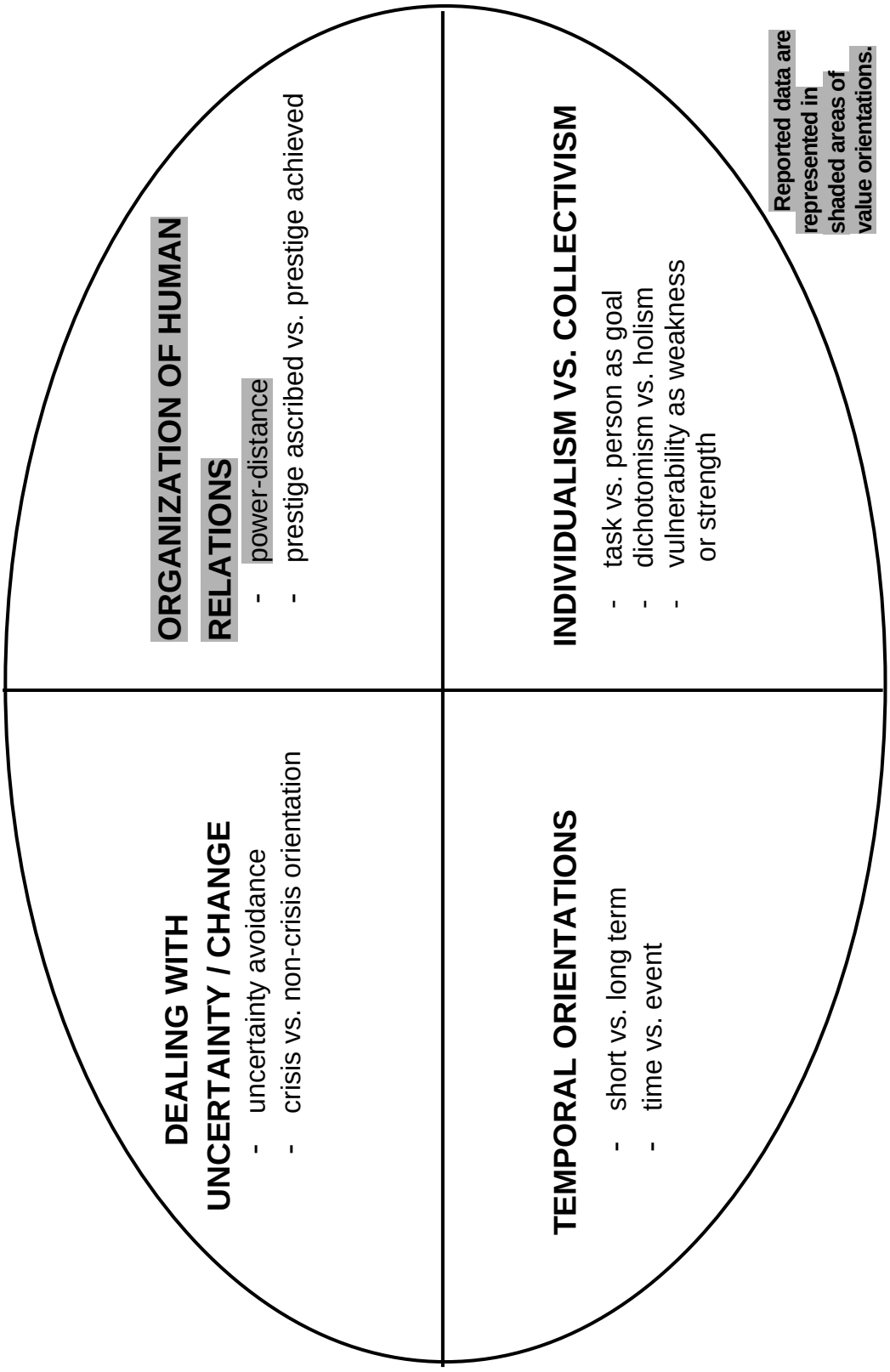

Figure 4. Prototypical model of value orientations (prime values), adapted from Hofstede (2006) and Mayers (1982).

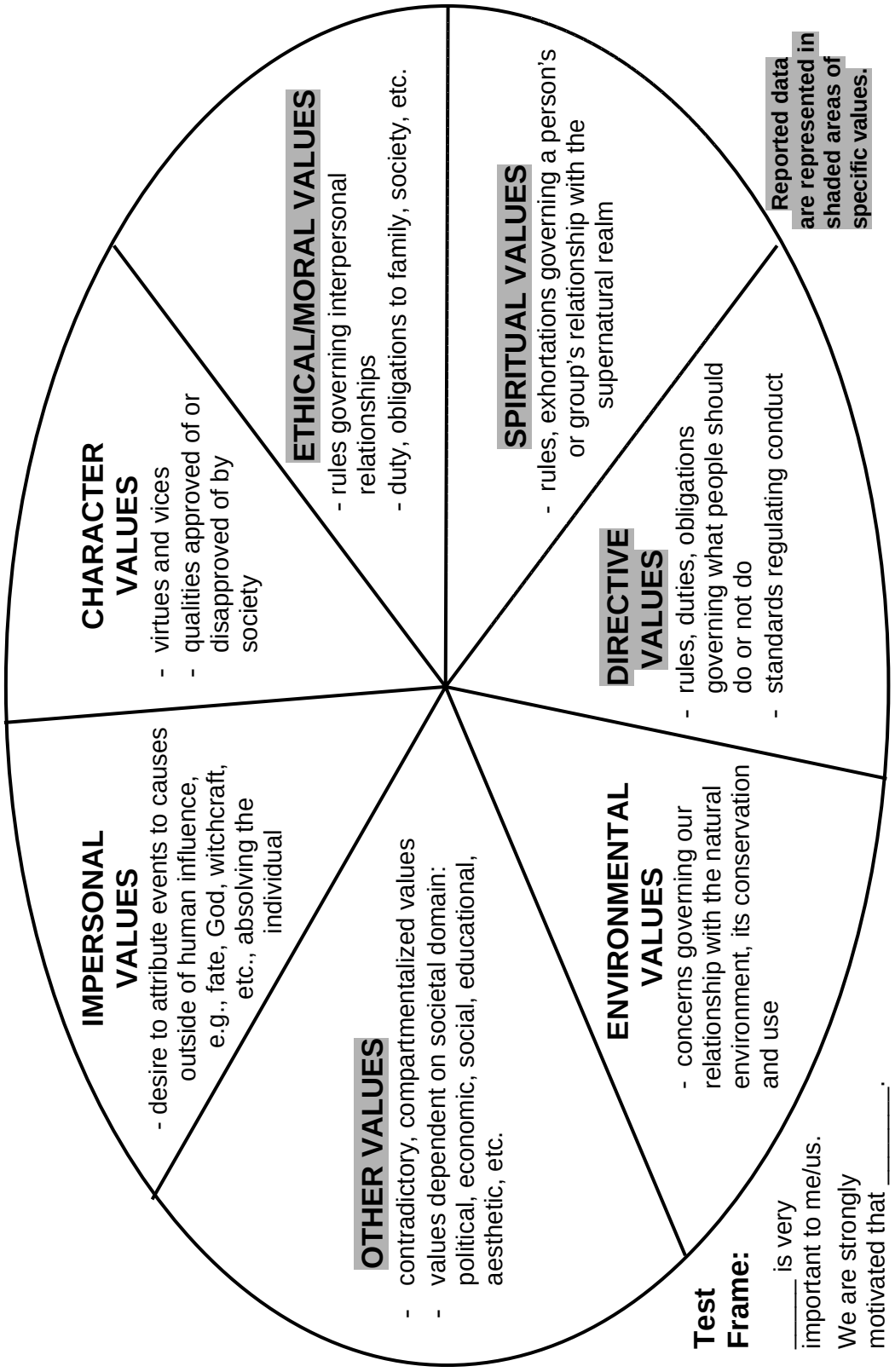

Figure 5. Prototypical model of focal and specific values, adapted from McKinney (2000).

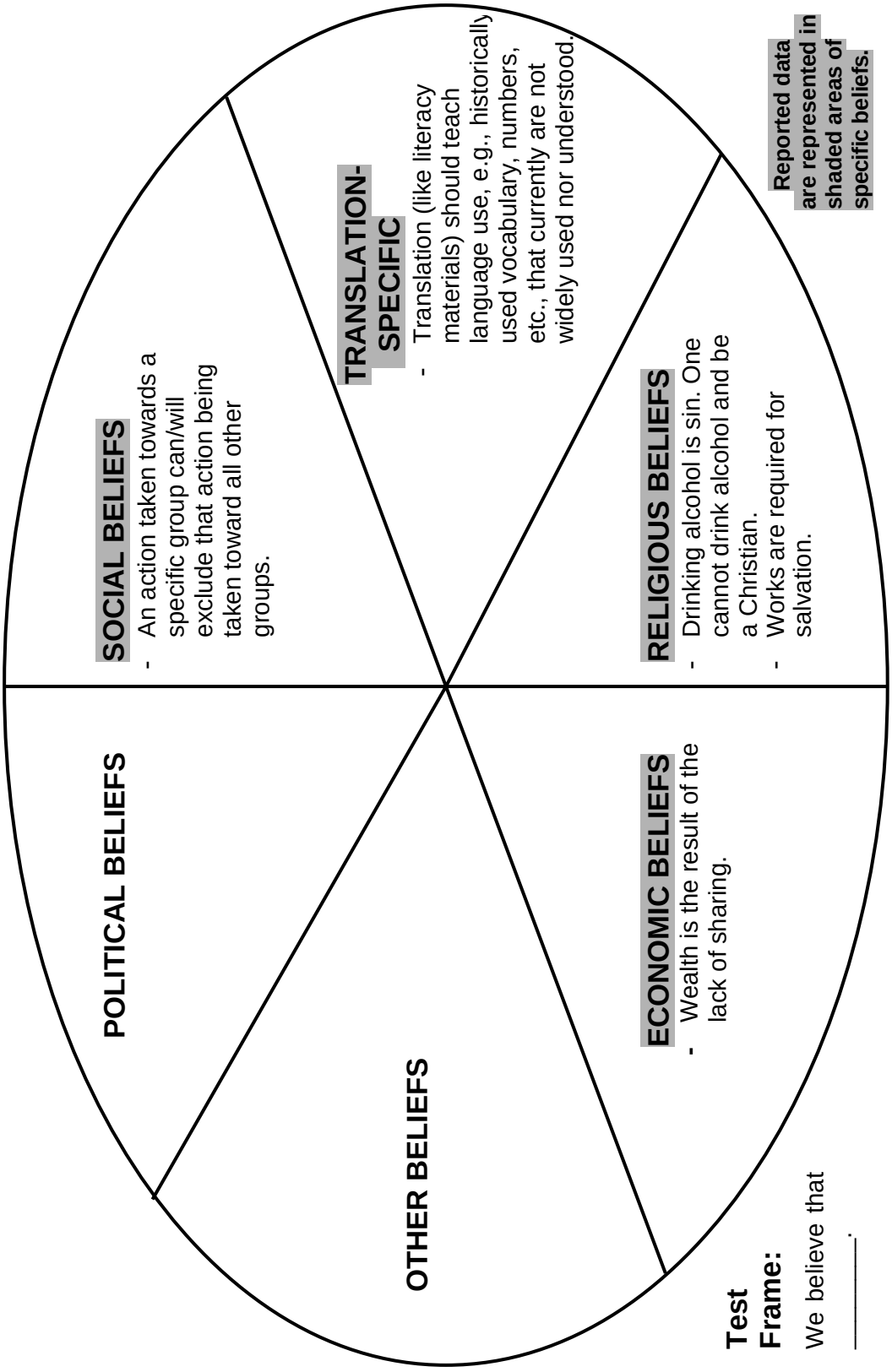

Figure 6. Prototypical model of beliefs and attitudes.

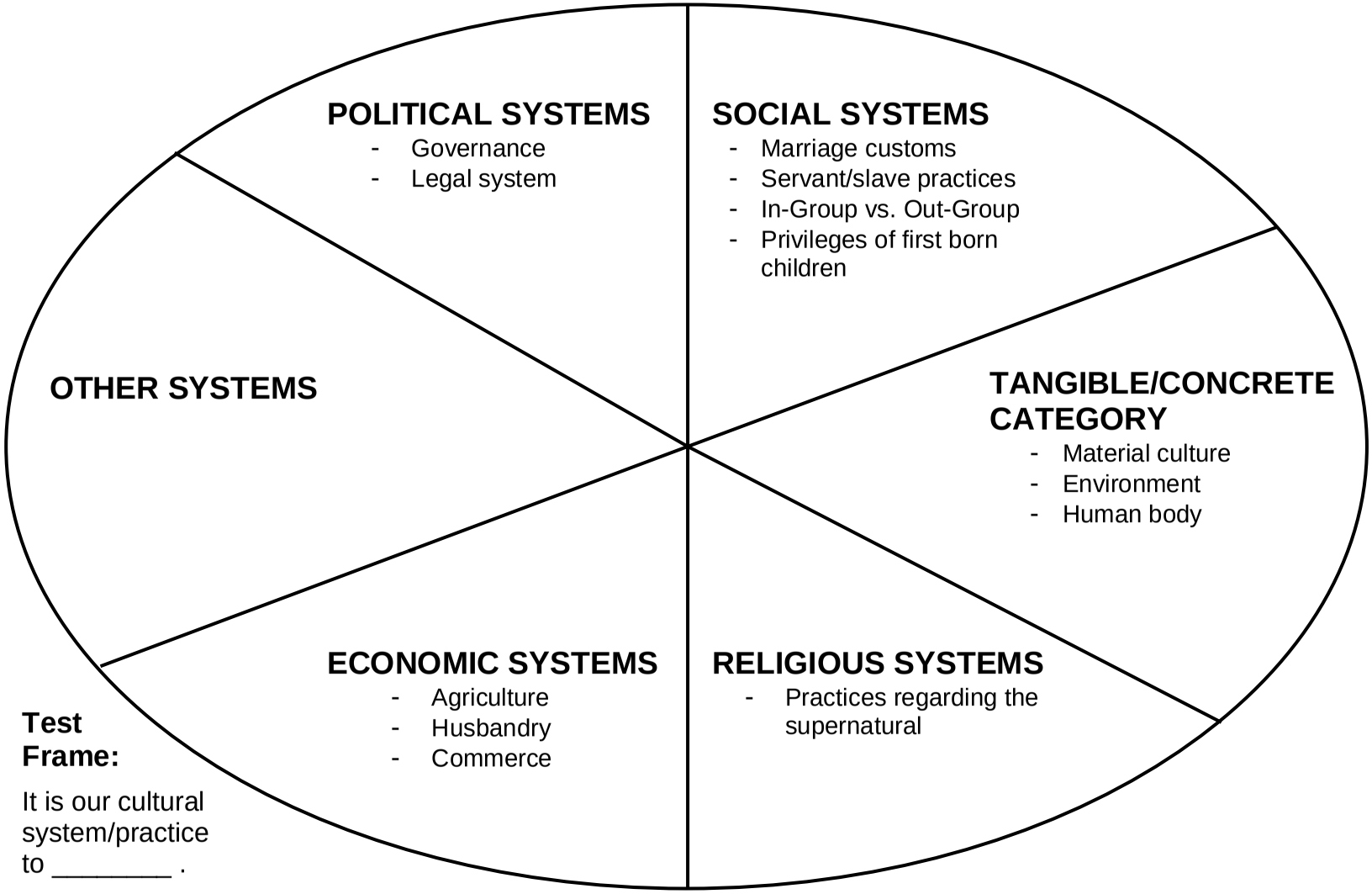

Figure 7. Prototypical model of cultural systems, practices, behaviors, adapted from Kraft (1996).

4. Analysis of TC-Rooted Translation Issues from East Africa

What follows is a selection of analyses performed on translation data taken from eastern Africa. The presentation is subdivided into the following sections:

1. Translation Programs Contributing to this Study,
2. Survey of Translation Issues Rooted in the Target Culture,
3. Zinza – Metaphorical Extensions of CONTAINER Image Schemas,
4. Zinza – Environment – Lake Victoria Ecosystem, and
5. Digo – Material Culture – Construction Terms.

4.1. Translation Programs Contributing to this Study

The inspiration for this study of translation issues rooted in the implicit cultural information that the target audience brings to the translation table, comes from my experience as an SIL translator serving the Zinza people of Tanzania, and more broadly as a translation consultant in Tanzania and Kenya. The people groups, their location, language family, major religions, basic ecology, and the scripture portions that I was involved in translating or checking are summarized in table 9. My translation and consulting experience are greatest for the Zinza and Digo, which will be emphasized in the data analyses presented in this section. For the Zinza, Suba, Rangi, Sandawe and Burunge, I was directly involved in the translation or checking of all data used in this report. For the Digo, limited data were also selected from portions of the completed New Testament, with which I had no direct involvement.

Table 9. Summary of people groups (including their country, language family, major religions and basic ecology) and Scriptures utilized in this work.

People Group	Country	Language Family	Major Religions	Ecology	Scripture Portions
Zinza	Tanzania	Bantu	Traditional, Christian	Lake Victoria	Genesis, Way of Salvation (numerous OT and NT portions)
Digo	Kenya	Bantu	Islamic	Coast	1, 2 Corinthians; 1, 2 Timothy; Titus; Hebrews; Gospel portions
Suba	Kenya	Bantu	Traditional, Christian	Lake Victoria	1 John, 1 Peter
Rangi	Tanzania	Bantu	Islamic, Traditional	Savannah	Jonah, Mark (portions)
Sandawe	Tanzania	Khoisan	Traditional	Savannah	Jonah, Genesis (portions)
Burunge	Tanzania	Cushitic	Traditional, Christian	Savannah	1, 2 Timothy, Titus, Philemon

4.2. Survey of Translation Issues Rooted in the Target Culture

The principal driving force for the development of the prototypical model of culture described in this work was the broad range of target cultural issues that I witnessed at the translation table as translator and translation consultant. In dealing with both inexperienced and experienced teams, TC-rooted translation issues consistently surfaced in discussions of the TL translation. A survey of the more notable translation problems that I encountered is given in table 10, categorizing the data according to the following cultural strata of the model:

A. Cultural categories, systems, practices – environment, material culture and their metaphoric / metonymic extensions

B. Cultural categories, systems, practices – political, social, economic, religious systems and their metaphoric / metonymic extensions

C. Beliefs and Attitudes

D. Values (Orientational, Focal, and Specific)

E. Worldview

F. Image Schemas

In accordance with the relative distribution of data from this limited survey into the various strata of the prototypical model of culture (figure 1), one stratum was subdivided while others were collapsed. This process reflects an important component of flexibility inherent in the use of the model; namely that, the strata may be collapsed or subdivided as needed to suit a particular investigation. In this case, the cultural systems stratum was subdivided into two strata: (1) the environment, material culture and associated metaphorical/metonymical extensions, and (2) the political, social, economic, and religious systems. In contrast, the strata of orientational, focal and specific values were collapsed into a single values stratum.

The division of the data into cultural strata was assisted by application of the proposed sentence-level test frames. Consider, for example, the translation issues of blood/animal sacrifices and sorcery that originated from a preliminary consultant review of Rangi Jonah 1. These provide an illustration of how the test frames were used to distinguish values and beliefs. In Jonah 1:7 the sailors "cast lots" to determine who caused the storm at sea. In this instance the Rangi team had decided to set aside their normal practice of avoiding borrowed words from the national language of Swahili, which reflects their value of preserving their ethnic language. Instead they chose to use the Swahili phrase, *kupiga kura*, an idiomatic expression that is translated to vote or to cast lots. I questioned whether Rangi had an appropriate term for an investigation that could be carried out on the deck of a ship during a storm, and further suggested that this process likely involved divination. The result communicated by the SIL team leader was that the translators had stated quite strongly that they really did not want to indicate that divination, i.e., sorcery, could be an effective/truthful means of determination. The use of a Rangi divination term would support this contention as well as associated, traditional religious practices. This divination issue, as expressed by the Rangi translators, appears to fit the second, sentence-level, test frame for values, more specifically a prohibitive value:

> We are strongly motivated that *we cannot credit divination/sorcery with conveying truth (i.e., being a valid practice) in the TL Scriptures*.

In Jonah 1:16 the sailors offer sacrifices and vows to God out of fear of Him after witnessing the calming of the seas when they threw Jonah overboard. As an aside, the expatriate team leader offered some background regarding the Rangi team decision to use a borrowed Swahili word *sadaka*, which means 'offering' and carries a broad range of applications. He explained that from their perspective Christians should not offer blood/animal sacrifices to the true God. In their religious belief this practice is for Satan only. Therefore, when the sailors offer pagan sacrifices, it implies they are not worshiping the true God. As expressed by the Rangi translators, this appears to fit the sentence-level, test frame for beliefs, more specifically religious beliefs.

> I/We believe that *the pagan sailors should not offer animal sacrifices to (G)od in the TL translation because this implies they were worshiping a pagan (g)od*.

There are notable advantages to analyzing translation problems rooted in the TC with a cultural model that extends from readily observable, surface features of culture to deep structural components of worldview, even pre-conceptual notions of image schemas. First and foremost, it helps to sort these translation issues into appropriate cultural strata so that they may be treated in the most effective manner. Translation issues allocated to the stratum of **cultural categories, systems, and practices, that is, environment and material culture**, are usually the easiest to recognize. They will often be identified and treated in some

fashion before the translation consultant ever sees the draft translation. For example, the Rangi and Sandawe, who live in dry savannah areas of central Tanzania, could easily recognize a number of cross-cultural challenges in translating the maritime events of Jonah, e.g., environmental factors, scripting, practices, etc. In contrast, the Zinza live adjacent to Lake Victoria. In translating Genesis, they had very limited comprehension of a desert, and little knowledge of the protocols for use of water wells and watering troughs in an arid environment. These kinds of translation issues are comparatively transparent and simple to uncover. Their resolution, which may be quite challenging, will often depend on the communication theory of translation that is employed and the style of translation that is desired.

Translation issues allocated to the second stratum of **cultural categories, systems, and practices, that is, political, economic, social and religious systems** were also comparatively simple to recognize. For example, traditional political/social boundaries of a village, city, region and nation differed from related biblical concepts. For the Zinza, Greek legal systems were traditionally unknown, including their spiritual extensions of, e.g., justification. For the Digo, the spiritual extensions of commerce and banking terms such as "deposit" and "pledge" were challenging to translate.

Translation issues assigned to the stratum of **beliefs and attitudes** may be more difficult to recognize, depending upon, for example, the diversity of religious views incorporated into the translation team. As the SIL leader for the Zinza translation team, whose members had very diverse religious backgrounds and experience[14], I could depend on the team to recognize and argue differences of belief. But if a translation team was heavily influenced by pastors and lay members of a particular theological persuasion, their theology regarding salvation, grace, works, consumption of alcoholic beverages, etc., would sometimes suggestively emerge from their translation. For example, a prohibition against drinking alcoholic beverages emerged from the Burunge team of Pentecostal pastors in a draft translation of 1 Timothy 3 regarding the qualifications of elders.

The most challenging beliefs or attitudes to discover and treat from a translation perspective are likely those that are strongly rooted in worldview. One source of concern was the belief that commands or actions such as to love, greet, care for, etc., that are directed towards a particular group can automatically exclude those outside of that group. This has been an important and recurring problem. For example, a Suba translator feared that commands to love one another in I John, which contextually target Christians within the church, could provide justification for Suba readers within the church to not love (i.e., to exclude) those outside of the church. The Digo translators were concerned that biblical instructions to greet a specific group of saints could be construed as purposely avoiding other people. I hypothesize that these beliefs are rooted in their collectivist worldview because the in-group status of such societies is normally stable and highly scrutinized. Members are very sensitive to any perturbations in the boundaries of the group, i.e., who is in and who is out.

Translation issues assigned to the strata of **specific, focal, and orientational values** present special challenges to translation. Values are motivational constructs. They are emotional and thus contrast with beliefs, which are more analytical in nature and can be treated in a detached fashion. Values guide behavior and the choices involved. They can surface in the TL translation in a potentially subtle agenda, as well as impact the social dynamics of the translation team. The consultant should recognize when he is bumping up against strongly held values because of the emotional sensitivities involved. For example, the prohibitive religious value against the consumption of alcoholic beverages is not limited to the author's experience in eastern Africa. In fact, the Hindi Bible uses grape juice instead of wine because Jesus could not be portrayed as drinking wine (Elinor Abbot, personal communication, 2006). Among the Rangi translators, a prohibitive value that sorcery cannot produce truth, and a prescriptive value to distinguish the true God from pagan gods may suggest a focal value among Rangi Christians that Christianity and their traditional religion must be carefully distinguished in the translation of the Rangi Scriptures.

Translation issues assigned to the stratum of **worldview** are among the most difficult to recognize and to understand. Our worldview consists of our tacit assumptions about ourselves and the world around us. A contrasting worldview can be foreign and very challenging to conceptualize. Nevertheless it is important

[14] Translation team members included Catholics (both nominal and devout), traditional Protestants and Pentecostals.

that the translator and the consultant alike recognize discrepancies between the worldviews of the target and biblical cultures. For example, among the Digo translators who live in a shame culture, the concept of a conscience, and in particular the difference between a clear and a guilty conscience, was confusing. This was challenging to the Burunge as well, and will likely be problematic for all of the teams that I serve, especially in translating Pauline epistles and Hebrews. For the Digo, the concepts of grace, sympathy, kindness, empathy, mercy, etc. are collectively represented by a single word, *mbazi*, and conceptually challenging to differentiate. For the Zinza, the Hebrew categorization of animals in Genesis, in particular their demarcation of animals as wild vs. domesticated, clean vs. unclean, edible vs. inedible, etc., was foreign. In addition, blood carried no special significance as life, i.e., of being life bearing. For the Suba, it was considered foreign to distinguish between sin, i.e., breaking God's law, and badness/evil, i.e., a negative quality defined by societal norms. The solutions to these kinds of translation problems are always quite challenging and depend on the communication theory of translation employed and the style of translation desired. Some topics are in practice "left to the pastors" to explain or must be described in supplementary helps.

The assignment of translation issues to the stratum of image schemas is likely original to this work. The initial setting was the translation of *The Way of Salvation* (*WOS*), a publication of Scripture Gift Mission (SGM), into Zinza and Swahili for a diglot publication. *WOS* presents 24 themes of salvation, from the creation of the world to the return of Christ, in the form of Scripture portions taken from both the Old and New Testaments. In this context the Zinza translators admitted that they had no real grasp of the meaning of several metaphorical extensions of locative, prepositional constructions found predominantly in the New Testament, e.g., in Christ, in the Lord, in Him, in the Spirit, etc. The pastors on the team admitted that they used this kind of "church" language but did not understand it and considered it unnatural in Zinza. A more complete treatment of this translation issue is given in the following section. A related issue was observed in Burunge in attempting to translate the concept of "outsiders" in 1 Timothy 3:7. The figurative extension of people "outside" of the church, meaning people of the surrounding community who are not church members, is problematic in Burunge. The literal/locative meaning of inside/outside of the church is expected.

The first advantage to analyzing TC-rooted translation issues using a cultural model that extends from readily observable, surface features to deep structural components is thus established—i.e., that the translation issues may be sorted into appropriate cultural strata and thereby treated in the most effective manner. A second advantage is to enable the analysis and treatment of these translation issues as part of an integrated network of culture. These cultural strata do not exist in isolation; rather, they exist as a network. As a result, a translation issue assigned to a particular stratum of culture may in fact have a web of connections within that stratum as well as to other cultural strata. Thus, through horizontal and vertical navigation of this cultural model we can gain insight into the scope of a translation issue that is rooted in the TC. Referring to the prototypical model of culture in figure 1 and the supporting descriptions of individual strata in figures 2-7, this process of navigating the network of the TC is generically divided into two processes:

1. a horizontal movement between various segments of the stratum to which the translation issue is assigned, and
2. vertical up→down or down→up movements to other strata within the cultural model.

The three studies that follow exemplify these navigational processes across the network of a particular TC.

1. Zinza – Metaphorical Extensions of CONTAINER Image Schemas: This is a horizontal navigation within the stratum of image schemas, and a down→up navigation to other strata.
2. Zinza – Environment – Lake Victoria Ecosystem: This is a horizontal navigation within the cultural systems stratum (in particular environment), and an up→down navigation to other strata.
3. Digo – Material Culture – Construction Terms: This is a horizontal navigation within the cultural systems stratum (in particular material culture), and an up→down navigation to other strata.

Table 10. Survey of translation issues rooted in target culture.

Topic	Language	Book[15]	Translation Problem
1. Cultural categories, systems, practices – environment, material culture and metaphoric/metonymic extensions			
birds	Sandawe	Genesis	Many indigenous birds have limited flight capability.
camels, horses	Zinza	Genesis	Camels and horses are largely unknown and undifferentiated.
clothing	Digo	NT letters	Digo clothing reflects a very warm climate and Islamic custom.
construction	Zinza	Genesis	Tar is unknown and cannot be used as mortar in laying bricks because the closest hydrocarbon equivalent is cooking oil.
construction – buildings	Digo	NT letters	Construction technology for buildings is very limited among the Digo causing concepts of foundation, roofs, etc., to be uncertain.
construction – buildings	Digo	NT letters	Metaphorical extensions of construction ideas (e.g., Christ as a firm foundation, capstone/cornerstone, etc.) have limited meaning.
church	Digo	NT letters	Metonymic meaning of church as believers is difficult to separate from the physical structure.
desert environment	Zinza	Genesis	The desert and in particular the absence of water and vegetation, the protocols for use of wells, etc., are largely unknown.
maritime environment	Rangi, Sandawe	Jonah	Large boats, captains, the ocean, whales, waves, etc., are largely unknown.
mountainous geography	Zinza	Genesis	Mountainous geography is poorly understood.
musical instruments	Zinza	Genesis	Known traditional instruments are limited in variety.
storms	Sandawe	Jonah	No word exists for a storm with wind and rain. The concept and its consequences are unknown in an ocean context
wine, grapevines	Zinza, Digo	Gen, NT letters	Wine and grapevines are largely unknown.
2. Cultural categories, systems, practices – political, social, economic, religious systems and their metaphoric/metonymic extensions			
agriculture - wheat	Zinza	Genesis	Grain (i.e., wheat) agriculture with bread as the staple food is largely unknown; tuber and legume agricultural systems predominate.
commerce/banking	Digo	NT letters	The spiritual extensions of commerce/banking terms such as pledge and deposit were challenging to translate in a meaningful manner.

[15] The reference to a particular book only reflects the experience of the author in translation and translation consultant activities and not the appearance of this topic more generally in the Scriptures.

Topic	Language	Book	Translation Problem
firstborn	Digo	Hebrews	Firstborn children receive no particular blessing or importance (e.g., responsibility) in Digo culture.
husbandry - sheep	Rangi, Zinza	Jonah, Genesis	Sheep are largely unknown and rarely raised.
legal system	Zinza	WOS[16]	Greek/western legal systems are traditionally unknown, including the application of the legal terms (e.g., justification) to spiritual matters.
maritime practices	Rangi, Sand.	Jonah	Maritime travel practices for people and cargo are largely unknown.
marriage	Zinza	Genesis	There is a high level of lexical/cultural differentiation of degrees of approval for marriage (in comparison to biblical culture).
marriage within the family	Zinza	Genesis	Marriage to a half sister (e.g., Abraham to Sarah) is shameful.
political/social divisions	Zinza	Genesis	Traditional definitions of villages, cities, regions, nations, and their governance vary greatly from the city-state models of the Bible.
protocols, scripting	Rangi	Jonah	Maritime protocols for preparations for travel are largely unknown so scripts must be elucidated in greater detail.
servant/slave culture	Zinza	Genesis	Mapping Hebraic servant/slave practices into Zinza is challenging.
temple	Zinza	Genesis	The Jewish temple and some associated religious practices are unknown.
3. Beliefs and attitudes			
alcoholic beverages	Zinza, (all)	WOS, Genesis	Drinking alcoholic beverages is considered sin by African Protestants, making one ineligible to be—or suspect as—a Christian.
children – their makeup	Zinza	Genesis	Zinza believe that the overall makeup of children comes at least 80-90% from the father. All children are sons unless altered by mom.
dreams, visions	Digo	NT letters	God talks directly to our spirit in dreams and visions [May God be be with your spirit (2 Tim 4:22) is not a simple exhortation].
free gift	Zinza	WOS	Gifts normally have “strings attached” or assumptions of reciprocity in equivalent measures.
exclusive actions	All	All	An action or command directed toward a specific group, e.g., to love, care for, greet, etc., can provide justification to exclude others, i.e., to preclude that action from being directed toward other groups.

[16] WOS – *The Way of Salvation*, a 70 page, diglot booklet of Scripture portions in Zinza and Swahili featuring 24 themes related to salvation: creation, creation of man, fall into sin, … to the return of Christ.

Topic	Language	Book	Translation Problem
language preservation	Zinza	All	Elders believe that translated Scriptures and literacy materials should teach language use, e.g., historically used vocabulary, numbers, etc. that currently are not widely used nor understood by youth.
sacrifices (blood/animal)	Rangi	Jonah	Christians should not offer blood/animal sacrifices to the true God; this practice is for Satan only. Therefore when the sailors offer pagan sacrifices, it implies they are not worshiping the true God. (Note: a general term for "offering" is acceptable here.)
salvation by works	All	NT	Works are necessary to get and to maintain salvation.
teaching Christian doctrine	Burunge	1, 2 Tim, Phm	Translation is embellished with the teaching of Christian doctrines, e.g., our unity of faith in Christ, the existence of one God and one Lord for all mankind, our future reign with Christ on earth, etc.
wealth	Zinza	WOS	Wealth is sin because it is the result of a lack of sharing.
4. Values — Orientational (O), Focal (F), and Specific (S)			
alcoholic beverages (S)	Zinza, (all)	WOS, Genesis	The religious prohibition against the consumption of alcohol influences the translation, e.g., that it not portray alcoholic beverages in a positive manner.[17]
borrowed/adopted words (S)	Rangi, (all)	Jonah (all)	A consistent practice against the use of Swahili words in the TL translation is complicated by conflict between underlying values of (1) a strong desire to preserve the TL, vs. (2) a strong desire to avoid traditional religious terms and any positive portrayal of their practices.
egalitarian values – sharing (S)	Zinza	WOS	Sharing is culturally prescribed.
ethical/moral values (F)	Burunge	1 Tim, Titus	Translation is embellished with societal values, e.g., the bringing up of well-behaved children, women living well with their husbands and children, young men to live wisely/respectfully
homosexuality (S)	Zinza	Genesis	Homosexuality is lexically unknown and a prohibited behavior.
God vs. gods (S)	Rangi	Jonah 1:6	The true God must not be construed as a (g)od (spirit) only.

[17] Alcoholism is widespread. Pastors fear that any non-negative reference to wine or beer will exacerbate the alcoholism problem and contradict their teaching.

Topic	Language	Book	Translation Problem
God's Word (S)	Sandawe	Gen 1:27, 2:7	Avoid explicit contradictions in the Word of God (e.g., the creation of man out of nothing vs. the forming of man from the ground by God.)
power-distance relationships (O)	Rangi	Jonah	Describing a limited differentiation of hierarchy/rule between the King of Nineveh and his nobles/ministers is challenging to translate (in part) because a large power-distance relationship is expected.
power-distance relationships (O)	Zinza	Genesis	The existence of executive servants to Pharaoh is challenging to translate (in part) because a large power-distance relationship is expected.
power-distance relationships (O)	Burunge	Philemon	Paul is expected to consider using the authority of his office as apostle to convince Philemon to welcome back Onesimus rather than a boldness in Christ as a fellow Christian.
preaching the Gospel as a spiritual value (S)	Burunge	1, 2 Tim, Phm	Preaching the Gospel is a valued ministry ascribed to all coworkers and servants of Paul independent of exegetical support from the Scriptures
separation of traditional and Christian religions (F)	Rangi (all)	All	Traditional religious practices, beliefs, vocabulary, spiritual beings, must be carefully distinguished from those that are Christian.
sorcery (S)	Rangi	Jonah	Rangi translators really don't want to portray sorcery as an effective means of divination, i.e., that it can be true.
unity (S)	Zinza	All	The Zinza decided to do a single translation for both the central-coastal and inland dialects (which are generally very close), encouraging their unity as Zinza people, but impacting the selection of vocabulary.
5. Worldview			
animal kingdom	Zinza	Genesis	The categorization of wild vs. domesticated animals, clean vs. unclean, edible vs. inedible is very different from the Scriptures.
blessing vs. good fortune	Zinza	WOS, Gen	Blessing and good fortune/luck are difficult to differentiate.
blood is life (life is in blood)	Zinza	Genesis	Among the Zinza, blood (particularly of animals) carries no special significance. Scriptural discussions of life being in the blood and the shedding of blood for sin are challenging to translate.
circumcision, foreskins	Zinza	Genesis	The discussion of circumcision and foreskins is taboo for older men.
clean vs. unclean or defiled	Zinza	Genesis	Spiritual and ceremonial cleanness vs. uncleanness or defilement is largely unknown and undifferentiated from taboo/not taboo.

Topic	Language	Book	Translation Problem
conscience, clear vs. guilty	Digo, Burunge	NT letters	The concept of a clear vs. guilty conscience is largely unknown; the concept of a conscience is difficult to differentiate from the will.
day/week definition	Digo	All	The week has 4 days, 3 working on the farm, and 1 in other activities.
grace	Digo	NT letters	Grace, compassion, sympathy, mercy, kindness, etc. are difficult to distinguish (note – there is a single word, *mbazi*, for these concepts).
narrative form	All	Genesis, Jonah	Narrative events are expected to occur in a temporally progressive fashion as opposed to the Hebrew presentation of an event summary followed by a detailed discussion. The scripting of narratives allows for on-line/offline digressions, but not blatant repetition of events.[18]
shame vs. guilt	Zinza, Digo, Burunge	WOS, NT letters	The contrasts between guilt and shame cultures are poorly understood. Guilt is largely undifferentiated from shame.
seasons (climatic)	All	All	The winter (cold) vs. summer (hot) seasons of the Bible are difficult to comprehend in a tropical equatorial climate with wet vs. dry seasons.
sin, evil, badness	Suba	1 John	Sin (i.e., breaking God's law) and badness/evil (i.e., a negative quality defined by society) are difficult to distinguish.
6. Image Schemas			
CONTAINER image schemas	Zinza	WOS, Genesis	Zinza translators admitted that numerous metaphorical extensions of the CONTAINER image schemas (e.g., in Christ, oceans full of fish, etc.) were almost meaningless or at best unnatural "church" language.
CONTAINER image schema	Burunge	1 Timothy	The figurative extension of people "outside" of the church, i.e., people of the community who are not church members, is problematic. The literal/locative meaning of inside/outside of the church is expected.

[18] The tentative assignment of narrative form to worldview raises the challenging issue of potential interplay between linguistic and cultural phenomena, in this case, the cause of variation in the discourse structure of narratives between biblical Hebrew and the East African language groups that I served.

4.3. Zinza – Metaphorical Extensions of CONTAINER Image Schemas

The following outline is intended to provide background information and orientation to the investigation of the CONTAINER image schemas and in particular their metaphorical extensions in the Zinza language. (The same format for background information and orientation will be used in all in-depth analyses of translation issues rooted in TL language culture.)

Language Group, Language Family and Location: Zinza, Bantu, southern shores of Lake Victoria, Tanzania.

Translation Issue: CONTAINER image schemas and in particular their metaphorical extensions.

Setting/Participants: The principal setting in which this issue was encountered was the translation of *The Way of Salvation* (SGM 1964) in Kahunda, Tanzania. At the time, I was the SIL team leader for six MTTs, representing five different locations within the lands of the Zinza, both genders, and both Catholic and Protestant denominations. This issue was observed on multiple occasions over a 5-10 year period, starting with the onset of Zinza translation activities. The Zinza team and I had no knowledge of the cognitive linguistic concept of image schemas during that time period.

Mechanism by which the Translation Issue Was Identified: In response to non-thematic, "What does this mean?" kinds of questions from the expatriate translator the MTTs admitted that selected expressions (e.g., *in* Christ) really meant very little to them. They also expressed concern over selected constructions (e.g., "oceans *full* of fish" and "*filled* with the Holy Spirit") as unnatural and unclear.

Tentative Analysis of Translation Issue: The Zinza appear to object to metaphorical extensions of CONTAINER image schemas. There is a tendency to consider these extensions (e.g., *in* Christ) literally as physical locatives, which is clearly problematic in a wide variety of biblical contexts.

Current Translation Solution: The current solution is to avoid metaphorical extensions of CONTAINER image schemas when the MTTs object, and to substitute more communicative metaphors or propositional expressions, e.g., "*in* Christ" becomes "*in union with* Christ."

Navigating the Target Cultural Network: This study is intended to examine the target cultural network in principally a horizontal fashion, i.e., within the stratum of image schemas. Upward vertical navigation of the cultural model takes place in the analysis of the biblical texts that are translated into Zinza and Swahili. The study will examine all occurrences of CONTAINER image schemas, in particular IN/OUT, and FULL/EMPTY, for both physical image schemas (e.g., *into* the world) and metaphorical extensions of image schemas (e.g., *in* Christ). It will determine how each occurrence is translated into Zinza and Swahili, i.e., whether it (1) keeps the original image schema, (2) substitutes an alternative image schema, or (3) converts the image schema into propositions.

A summary of all 48 occurrences of CONTAINER image schemas found in *WOS* is presented in table 11. A few additional data are taken from Genesis 1:22, 1:28 and 6:13 to supplement the analysis of the FULL/EMPTY CONTAINER schema. All CONTAINER image schemas were identified from a review of the New International Version. The table is broken down in the following manner: Categories A and B deal with the translation of literal/physical, CONTAINER image schemas (e.g., *into* the world), whereas categories C to G deal with the translation of metaphorical extensions of CONTAINER image schemas (e.g., *in* Christ).

A. Literal IN/OUT and FULL/EMPTY CONTAINER Image Schemas Translated as Literal CONTAINER Image Schemas

B. Literal IN/OUT and FULL/EMPTY CONTAINER Image Schemas Translated as Propositions

C. Metaphorical Extensions of IN/OUT and FULL/EMPTY CONTAINER Image Schemas Translated as Propositions

D. Metaphorical Extensions of IN/OUT and FULL/EMPTY CONTAINER Image Schemas Translated as the PATH Image Schema

E. Metaphorical Extensions of the IN/OUT CONTAINER Image Schema Translated as the LINK Image Schema (or mixed LINK/CONTAINER or LINK/PATH Image Schemas)

F. Metaphorical Extension of the IN/OUT CONTAINER Image Schema Translated as the FRONT/BACK ORIENTATION Image Schema

G. Metaphorical Extensions of the IN/OUT CONTAINER Image Schema Translated as Metaphorical Extensions of the IN/OUT CONTAINER Image Schema

The following discussion of the analysis of the CONTAINER image schema data for Zinza and Swahili presented in table 11 is divided into four sections: literal/physical examples of CONTAINER image schemas for Zinza, metaphorical extensions of CONTAINER image schemas for Zinza, the FULL/EMPTY CONTAINER image schema for Zinza, and finally the results for Swahili.

Literal/physical CONTAINER image schemas in Zinza are almost always translated as literal containers i.e., physical locative expressions (category A, table 11). Only 2 of 17 occurrences were translated otherwise, in both cases overturned as simple propositions (category B). No other image schemas were used.

Metaphorical extensions of CONTAINER image schemas in Zinza were typically overturned as propositions (category C), or translated as metaphorical extensions of the PATH image schema (category D) or metaphorical extensions of the LINK image schema (category E). This pattern was observed for 26 out of 33 occurrences. Semantically, virtually all of these metaphorical extensions of the IN/OUT CONTAINER image schema involved deity. The PATH image schema was typically indicated by the *ha-* locative prefix indicating a conceptual direction. The LINK image schema was typically indicated by the verb *kwikwatanisa* (to be united/linked).

Of grammatical interest, the Zinza, Class 18, locative prefix *omu-* is universally used for the literal IN/OUT CONTAINER image schema. In contrast, the Zinza, Class 16, locative prefix *ha-* is universally used for the PATH image schema. A credible and consistent differentiation of the diverse functions of *omu-* and *ha-* locative prefixes in Zinza has historically been very challenging. So this differentiation with the IN/OUT CONTAINER and the PATH image schema, respectively, is truly exciting.

The remaining seven occurrences of metaphorical extensions of the IN/OUT CONTAINER image schema are variously explained. One occurrence is translated as the FRONT/BACK ORIENTATIONAL image schema (category F). Five occurrences are translated as metaphorical extensions of the IN/OUT CONTAINER image schema, i.e., without change in image schema, in apparent contradiction of the 26 occurrences described above. However, these occurrences do not involve deity, but rather human beings (i.e., *in* you), sin (i.e., *in* it), circumstances and good works. One occurrence in 1 Thess 4:16, …the dead *in* Christ…, is anomalous.

The data for the **FULL/EMPTY CONTAINER image schema** are very limited, but nevertheless consistent with the data for the IN/OUT CONTAINER image schema. There is but a single occurrence in each of the categories A through D. Two examples of the literal FULL/EMPTY CONTAINER image schema are translated, one as a FULL/EMPTY CONTAINER image schema and the other as a proposition. Two metaphorical extensions of the FULL/EMPTY CONTAINER image schema are translated, one as a proposition and the other as the PATH image schema.

The results for Swahili mimic those for Zinza with two exceptions.[19] First, all examples of the literal IN/OUT CONTAINER image schema were translated unchanged into Swahili as literal IN/OUT CONTAINER image schema as opposed to being overturned as propositions. The discrepancy between Zinza and Swahili is observed in the translation of Exodus 20:4 (see table 11, category B) where Zinza

[19] It should be noted that the same Zinza translators did both the Zinza and Swahili translations of *WOS*. Despite deliberate attempts to separate the Zinza and Swahili translation activities, the influence of one translation on the other could not be eliminated. Thus, the translation of CONTAINER image schema in Zinza and Swahili could be anticipated to demonstrate strong similarities. The exceptions therein are noteworthy in that the translators purposely chose different modes of translation for Zinza and Swahili.

propositionalizes the IN/OUT CONTAINER image schema. Second, the single occurrence of the FULL/EMPTY CONTAINER image schema is translated without alteration, i.e., from a metaphorical extension to a metaphorical extension (see Ephesians 5:18 in category D). Although it was not understood by the MTTs at the time of translating *WOS*, they recognized that the FULL/EMPTY CONTAINER image schema in Ephesians 5:18 was fully acceptable in Swahili but not in Zinza. To provide clarity of meaning, the Zinza translation of Ephesians 5:18 reflects both (1) a FULL/EMPTY CONTAINER image schema, i.e., "be filled with the Spirit," and (2) part of a LIFE IS A JOURNEY conceptual metaphor (e.g., "GOD LEADS THE RIGHTEOUS," Jäkel 2002:32), i.e., "be led by the Spirit."

The most salient results of this investigation are best contextualized in a horizontal and vertical navigation of the prototypical model of culture. From a horizontal perspective within the stratum of image schemas, the Zinza generally rejected metaphorical extensions of the IN/OUT CONTAINER image schema in favor of PATH and LINK image schemas and propositional expressions. From a vertical perspective, an adjustment or change in a particular image schema (i.e., at the very bottom of the cultural model) has a broad impact on the translated Scriptures. Considering the entire New Testament, this single analysis suggests that hundreds of occurrences of "in Christ," "in Him," "in the Lord," "in the Spirit", "…filled," "…full," etc., should be carefully evaluated.

Taking a broader perspective, these results suggest a principle of naturalness and clarity in translation. That is, when faced with a problematic image schema in translation, alternative image schemas that perform an analogous role should be considered prior to overturning the image schema and propositionalizing the concept. Applying meaning-based translation principles of metaphors by Larson (1984:254), a three-fold hierarchy is suggested.

1. SL image schemas (literal or metaphorical extension) should be kept if the TL permits.
2. If an SL image schema is problematic, an acceptable TL image schema with analogous function may be substituted.
3. If an SL image schema is problematic and no acceptable TL image schema can be found, then the SL image schema may be propositionalized.

This translation strategy is particularly important given the deep, abstract, even pre-conceptual nature of image schemas and the observation that a particular image schema may evidence itself with high frequency in the Scriptures. As a result, it may be very challenging if not completely unreasonable to expect the target audience to cope with a problematic application of an image schema in the TL translation. At best it will be unnatural and unclear, perhaps a kind of church language that is used but never fully comprehended.

From a cognitive linguistic perspective, the results for the CONTAINER image schemas add to the ongoing discussion of constraints on the universality of image schemas and more generally conceptual metaphors.

> Why do people familiar with the theory [i.e., of conceptual metaphors] expect most metaphors to be universal? The answer is this: If metaphor is based on the way the human body and brain function and we as human beings are alike at the level of this functioning, then most of the metaphors people use must also be fairly similar, that is, universal—at [least] on the conceptual level.… However, I will also argue on the basis of a large amount of evidence that metaphors vary considerably on all levels of their existence—both cross-culturally and within-cultures—and that we can give a coherent explanation of this variation. (Kövecses 2005:34)

In summary, this research clearly suggests that the IN/OUT and FULL/EMPTY CONTAINER image schemas are constrained in their metaphorical extensions for the Zinza, who prefer PATH and LINK image schemas, or propositional statements in these applications.

Table 11. Translation of IN/OUT and FULL/EMPTY CONTAINER image schemas from *The Way of Salvation* (SGM) in Zinza and Swahili.

Reference	English (NIV)	Zinza	Back Translation	Swahili	Back Translation
A. Literal IN/OUT and FULL/EMPTY CONTAINER image schemas translated as literal CONTAINER image schemas.					
Genesis 2:7	breathed **into his nostrils**	kumúhuuhila olwôya lwo bulami **omu**nyîndo	breathed air of life **into** his nose	akampulizia pua**ni** pumzi ya uhai	he sprayed **into** (his) nose air of life
1 Tim 1:15	came **into the world**	**omu**nsi **ômu**	**into** the world-**into**	alikuja ulimwengu**ni**	he came **into** the world
Mark 9:31	betrayed **into the hands** of men	kutéebwa **omu**ngalo za babísa	to be placed **into** the hands of enemies	nitasalitiwa mikono**ni** mwa watu	I will be betrayed **into** hands of men
Psalm 24:1	everything **in it** (the earth)	ebintu byôna ebilí**mo**	things all that are **within**	vyote vilivyo**mo**	everything **within**
Psalm 24:1	all who live **in it** (the earth)	bóona abalíkwikalá**mo omwo**	all who live **within inside**	waishio hu**mo**	all that live **within**
Genesis 2:15	**in the Garden** of Eden	**omu**li Edeni	**in** Eden	**katika** bustani ya Edeni	**in** the garden of Eden
Genesis 3:1	any tree **in the garden**	omuti gwôna gwona kuluga **omu**nsambo êzi	Tree any at all from **within** this garden	mti wowote bustani**ni**	tree at all **in** the garden
John 1:10	was **in the world**	akaba alí**mo omu**nsi	he was **within-in** the world	alikuwepo hapa ulimwengu**ni**	he was here **in** the world
1 Tim 3:16	believed on **in the world**	Akeésigw **omu**nsi	he was believed **in** the world	aliaminiwa ulimwengu**ni**	he was believed **in** the world
1 Tim 3:16	was taken up **in glory**	kutwalwa na Mûngu **omwi**kuzólye	taken by God **in** his glory	alichukuliwa juu aende mbingu**ni**	he was taken up **into** heaven
Rev 21:8	**in the fiery lake** of burning sulphur	**Omu**mulílo gutálaala ogulíkwocha muno	**in** the fire that does not go out and that burns	kutupwa **katika** lile ziwa la moto	to be thrown **into** that sea of fire
Col 1:13	brought us **into the kingdom** of the Son	**omu**bukáma bwo Mwanáwe	**into** the kingdom of His Son	**katika** ufalme wa Mwanae	**into** the kingdom of His Son
1 Thess 4:17	meet the Lord **in the air**	kwinankúlwa no MUKÁMA **omwi**gulu	to unite with the Lord **in** heavens	tukutane na Bwana anga**ni**	to unite with the Lord **in** the heavens
Gen 1:28[20]	(God to people) **fill the earth**	**mwizuz** ênsi	**fill** the earth	(not translated by the Zinza team into Swahili)	(not translated by the Zinza team into Swahili)

[20] Data taken from the Zinza translation of Genesis, i.e., outside of the Scriptures contained in *The Way of Salvation*

Reference	English (NIV)	Zinza	Back Translation	Swahili	Back Translation
B. Literal IN/OUT and FULL/EMPTY CONTAINER image schemas translated as propositions.					
Exodus 20:4	anything **in heaven**	ebisusano bya bamûngu byo lugulu nke nyonyi	idols of gods of heaven like birds	kinyago cha chochote kilicho mbingu**ni**	forms of anything **in** heaven
Exodus 20:4	or **in the waters** below	nali byo mumenzi nke nfwi	or of the waters like fish	au maji**ni**	or **in** the waters
Gen 1:22[21]	**fill the water** in the seas	mukanye omunyanza	increase in the seas	(not translated into Swa.)	(not transl. into Swa.)
C. Metaphorical extensions of IN/OUT and FULL/EMPTY CONTAINER image schemas translated as propositions.					
John 3:16-17	…believes **in him**…	amwĕsiga	believes him (habitual)	Amwaminiye	believes him (habitual)
Acts 16:30	Believe **in the Lord Jesus**	Omwĕsig OMUKÁMA Yeézu	Believe the Lord Jesus	Mwamini Bwana Yesu	Believe the Lord Jesus
Luke 23:22	have found **in him** no grounds for the death penalty	tĭnkubon ensonga yóona yoona ehikíle yo kumuchwăziikila kufwa	I see no reason at all to judge/punish him to death.	Sioni sababu yo yote ya kutosha kumhukumu adhabu ya kifo	I see no sufficient reason at all to judge him with punishment of death
Isaiah 53:12	deceit **in his mouth**	akaba atákabeéhaga wean wean	he had not said any lie/deceit at all	hakusema neno lolote la udanganyifu	he did not say word any of deceit
Col 1:19	fullness dwell **in Christ**	kumúha omwanáwe obuhicha bwôna	to give him his son completeness all	kumpa Mwanae ukamilifu wake	to give him his Son completeness all
Col 1:21	enemies **in your minds**	mukaba muli ababísa boómwe	you were being enemies his	Mlikuwa maadui zake	you were enemies his
1 Tim 3:16	appeared **in a body**	akeeza omunsi nko omuntu	he came into the world as a man	alikuja duniani kama binadamu	he came into the world as a man
1 Cor 15:58	your labor **in the Lord**	omulim ôgwo mulíkukólel OMUKÁMA	that work that you do for the Lord	kazi mnayofanya **katika** utumishi wa Bwana	work that you do in service to the Lord
John 3:36	Whoever believes **in the Son**	alíkumwĕsiga Omwana	he who believes the Son	anayemwamini Mwana	he who believes the Son
Gen 6:13	the earth is **filled with violence**	baasuganísa obubi **omu**nsi yóona	They have spread evil **in** all of the earth[22]	(not translated by the Zinza team into Swahili)	(not translated by the Zinza into Swahili)

[21] Data taken from the Zinza translation of Genesis, i.e., outside of the Scriptures contained in *The Way of Salvation.*

[22] In Genesis 6:13, the Zinza translation of the metaphorical, FULL/EMPTY, CONTAINER image schema incorporates a literal, IN/OUT, image schema.

Reference	English (NIV)	Zinza	Back Translation	Swahili	Back Translation
D. Metaphorical extensions of IN/OUT and FULL/EMPTY CONTAINER image schemas translated as the PATH image schema.					
Luke 24:47	preached **in his name**	**hi**izíina lya Kristo	**by (**path**)** name of Christ	**katika** jina lake	**in** his name
Acts 2:38	**in the name** of Jesus Christ	**ha**izíina lya Yeézu Kristo	**by** (path) name of Jesus	**kwa** jina la Yesu Kristo	**by** (path) Christ Jesus
Eph 1:7	**In Christ** we have redemption through his blood	Twăchungulwa **ha**kulihililwa ne nsagama ya Kristo	We have been saved **by** (path) to purchase by the blood of Christ	**Kwa njia** ya damu yake Kristo sisi tumekombolewa	**by the path** of blood his Christ we have been saved
John 14: 26	send **in my name**	a**hi**izíina lyanze	**by** (path) of name mine	**kwa** jina langu	**by** (path) of name mine
John 14:13,14	ask **in my name**	**hi**izíina lyanze	**by** (path) name mine	**kwa** jina langu	**by** (path) name mine
Eph 6:10	**in his mighty power**	**ha**kuhabw amáani	**by** (path) receiving power	**kwa** kupatiwa nguvu	**by** (path) getting strength
Eph 6:18	Pray **in the Spirit**	**hakwibembelelwa** no Omwôyo gwa Mûngu	**By (path) being led by** the Spirit of God	mkiongozwa na Roho Mtakatifu	being led by the Holy Spirit
Col 1:14	**in whom** we have redemption	twăchungulwa **ha**kulihili-lwa ne nsagamáye	We have been saved **by** (path) payment of his blood	Ametukomboa **kwa** damu yake	He has redeemed us **by** his blood
Eph 5:18	Be **filled with the Spirit**	Mwizuzibwe no **kwibembelelwa** no Omwôyo Mutakatíifu[23]	Be filled and **led** by the Holy Spirit	**Mjazwe** na Roho Mtakatifu	**Be filled** with Spirit Holy
E. Metaphorical extensions of the IN/OUT CONTAINER image schema translated as the LINK image schema (or mixed LINK/CONTAINER or LINK/PATH image schemas).					
Eph 2:13	**in Christ Jesus**	habwo kuba **mwĕkwatanisa na** Kristo Yeézu	because you have **united** with Christ Jesus	kwa kuwa **mmeungana na** Kristo Yesu,	because you have **united** with Christ Jesus
2 Cor 5:17	If anyone is **in Christ**	omuntu wêna wena **kaleékwatanisa** na Kristo	person any if he is **united** with Christ	mtu akiwa **ameungana** na Kristo	person if he has been **united** with Christ
Rom 6:11	alive to God **in Christ Jesus**	**hakwĕkwatanisa** na Yeézu Kristo	**by (path) union** with Jesus Christ	**kwa njia** ya Yesu Kristo	**by path** of Jesus Christ
John 15:7	If you remain **in me**	**kwĕkwatanisa** neenye	**united** with me	mkikaa **ndani** yangu	if you remain **in** me

[23] The Zinza translation carries both the metaphorical, FULL/EMPTY, CONTAINER, image schema and a propositional statement. The FULL/EMPTY image schema was kept because the verse is well known in Swahili. But the propositional statement was added as necessary for clarity of meaning.

Reference	English (NIV)	Zinza	Back Translation	Swahili	Back Translation
1 Thess 5:18	God's will for you **in Christ**	**omukwĩkwatanisa** na Kristo Yeézu	**in union** with Christ Jesus	**katika kuungana** na Kristo Yesu	**in union** with Christ Jesus
Eph 2:10	created **in Christ Jesus**	**omukwĩkwatanisa** na Kristo Yesu	**in union** with Christ Jesus	**kwa kuungana** na Kristo Yesu	**by (path) to be united** with Christ Jesus
Eph 6:10	Be strong **in the Lord**	**omukwĩkwatanisa** no MUKÁMA	**in union** with the Lord	**katika kuungana** naye	**in union** with him
F. Metaphorical extension of the IN/OUT CONTAINER image schema translated as the FRONT/BACK ORIENTATION image schema.					
Col 1:22	holy **in his sight**	**omumeeso** ga Mûngu tuli abatakatíifu	**in front** of God[24] we are holy	**mbele yake** mkiwa watakatifu	**in front** of God we are holy
G. Metaphorical extensions of the IN/OUT CONTAINER image schema translated as metaphorical extensions of the IN/OUT CONTAINER image schema.					
John 14:17	and will be **in you**	alyĕkal **omuli** imwe	he will live **within** you	ataishi **ndani** yenu	he will live **within** you
Rom 6:2	how can we live **in it** (sin) any longer	nitugúma túta kandi kwikala **omu**bihéno?	we will continue how again to live **in** sin?	tuendelee vipi tena kuishi **humo** dhambi**ni**?	how shall we continue still to live **in** sin-**in**?
John 15:7	my words remain **in you**	ebigambo byânze **omu**miganya yênyu	words mine **in** your heart	maneno yangu yakikaa **ndani** yenu	words mine if they remain **inside** me
1 Thess 5:18	give thanks **in all circumstances**	kumusíima Mûngu **omu**li byôna	To give thanks to God **in** all matters	**katika** kila hali	**in** every circumstance
2 Cor 9:8	**in every good work**	**omuli** buli mulimo muzima	**in** every work **good**	**katika** kila kazi njema	**in** every work good
1 Thess 4:16	the dead **in Christ**	abeesiga **omúli** Kristo abaáfwile	believers **in** Christ who have died	waliokufa wakiwa wanamwamini Kristo	Those who have died believing Christ

Key to Shaded Areas of the table:

FULL/EMPTY CONTAINER Image Schema.

The Zinza text appears to be a complete exception to the rest of the data.

The Swahili differs from the Zinza.

[24] *Omumeeso ga Mungu* – literally "in the eyes of God," but idiomatic in meaning, i.e., "in front of God."

4.4. Zinza—Environment—Lake Victoria Ecosystem

In the previous section an analysis was performed concerning image schemas, a very deep, abstract component of the prototypical model of culture (figure 1). In this section we examine the impact of a tangible, surface feature of Zinza culture, namely the presence of Lake Victoria and its resulting ecosystem. The following outline is again provided for background information and orientation purposes.

> **Language Group, Language Family and Location:** Zinza, Bantu, southern shores of Lake Victoria, Tanzania.
>
> **Translation Issue:** Lake Victoria and its influence on the environment, cultural systems, and worldview of the Zinza.
>
> **Setting/Participants:** The principal setting in which this collection of issues was identified was the translation of Genesis in Kahunda, Tanzania. At the time, I was the SIL team leader for six MTTs representing five different locations within the lands of the Zinza, both genders, and both Catholic and Protestant denominations. The team was experienced, having completed two introductory courses in translation principles, the translation of *The Way of Salvation* (SGM 1964), numerous literacy projects, tentative orthography development, a preliminary dictionary, etc. Although the Zinza team and I recognized a number of specific problems related to translating Genesis for a people group who had never observed a desert, we did not have a comprehensive understanding of the problem.
>
> **Mechanism by which the Translation Issue Was Identified:** Some of the earliest clues to the collection of translation issues associated with the Lake Victoria ecosystem were gaps in the Zinza lexicon for "desert" and "flood," and the absence of any substantial rivers in the Zinza homeland. Additional clues came from areas of partial overlap with the biblical culture of Genesis. For example, man-dug wells are a recent technology for the Zinza, brought in from the outside to provide clean water that is free of parasites residing in the lake.
>
> **Tentative Analysis of Translation Issue:** Lake Victoria strongly impacts the cultural systems and worldview of the Zinza. Although this component of Zinza culture parallels the environs of e.g., the Sea of Galilee in the Gospels, it contrasts with the desert environments observed in Genesis, presenting a number of challenges to clarity and naturalness in translation.
>
> **Current Translation Solution:** The current solution is to treat individual problems of cultural disparity between the Zinza and that presented in Genesis with descriptive phrases or clauses, footnotes, etc.
>
> **Navigating the Target Cultural Network:** The navigation of the target cultural network in this study is both horizontal, i.e., within the environmental and material culture systems of the Zinza; and vertical, considering deep structural components of their worldview (see figure 1).[25]

A summary of topics related to the impact of Lake Victoria on the cultural systems and worldview of the Zinza specific to the translation of Genesis is presented in table 12. I selected these topics by scanning the Genesis text for items with potential connections to the ecosystem of Lake Victoria. Given that the Zinza translation of Genesis had already received a thorough review by the translation team and translation consultants at the time of this work, the intent was to test a top-down navigation of the prototypical model of culture to view how the translation dealt with an obvious and very important component of Zinza cultural systems. The results were in fact mixed in dealing with the translation issues involved. Table 12 is broken down into two sections: category A, concerning some remaining challenges in the Zinza translation; and category B, concerning some noteworthy adaptations of Zinza culture into the translation of Genesis for purposes of clarity and naturalness.

[25] The horizontal navigation of Zinza cultural systems in this study could in fact be much broader, including e.g., agricultural systems based on tubers (potatoes, cassava, etc.) as opposed to biblical agricultural systems based on grains, in particular wheat.

A. Selection of topics/occurrences where the TL translation is potentially problematic or lacking internal consistency.
    1. Floods, flood gates
    2. Desert and desert vegetation
    3. Water wells, cisterns in an arid environment
    4. Watering animals from a well, watering trough
    5. Large rivers, ford in a river

B. Selection of topics/occurrences where the TL translation succeeds in conveying a foreign meaning in a natural form.
    1. Blessings (or lack thereof) of heaven's dew
    2. Water containers, protocols for using wells

The translation challenges given in category A are diverse. In category A1 there is no word for flood and the verbal description that was adopted is cumbersome, giving it undo prominence in selected verses. There is also no word for desert, consistent with the fact that there is no desert in the Zinza geography and worldview. In fact, I had to show the translation team videos of Genesis filmed on site in the Middle East to provide some context for the idea of a desert. As a result there is undesirable variation in the descriptive phrases and footnotes used in referring to a desert (see category A2, table 12). An obvious example of this problem is given in Genesis 21:15 where Hagar is wandering in desperation in the desert of Beersheba, watching her son Ishmael dying from dehydration. In 21:14 the Zinza translated desert as *ilungu* or wilderness, which from a Zinza perspective is an unsettled area that has as a minimum of complete grass cover and bushes for vegetation, but can also be forest. As a result a substantial footnote was added describing "desert" as "rocks and mountains without water." But in the very next verse, the translation slips back into a Zinza worldview when Hagar lays the boy "in the shade of a tree" (as opposed to a bush), which for the Zinza can often be quite large.

Considering categories A3 and A4, wells and watering animals from wells in watering troughs are not cultural unknowns to the Zinza. Yet the Zinza translation suggests that they are uncertain or fuzzy concepts in their worldview.[26] In Genesis 26:32 there is no indication in the Zinza text that Isaac's servants are excited about finding water in a well they had dug. And the descriptive terms used for a watering trough vary between Genesis 24:20 and 30:38, suggesting a watering container in 24:20, and a watering area in 30:38. Finally, given that the Zinza have no rivers of substance, it is not unexpected that there is a problem translating a ford in a river in Genesis 32:22.

Selected instances where the Zinza translation appears to succeed in conveying a largely foreign meaning in a natural manner are given in category B. In Genesis 27:28-39, heaven's dew refers to "a condition of fertility. The reference is to the night dew that forms on the ground during the cooling period on hot summer nights. The dew supplies moisture for the plants" (Reyburn and Fry 1998:631). Given that dew provides insufficient water to be an agricultural blessing to the Zinza, "heaven's dew" was translated as "sufficient rain" with the literal rendering in a footnote. In Genesis 21:14, culturally expected gourds are used instead of animal skins for containers for drinking water. And in Genesis 29:2-3, the culturally unknown script (i.e., among the Zinza) for uncovering, use, and re-covering of a well when watering livestock is clarified as the normal protocol that was used among the peoples of the Genesis text.

Thus, a lateral and vertical navigation of the target cultural model for the Zinza regarding Lake Victoria and its environmental impact on Zinza culture has yielded a combination of results. Several suggestions have been made for further evaluation in checking the Zinza translation of Genesis, as well as a recognition of items where clarity and naturalness have been achieved for largely unknown or uncertain SL cultural concepts.

[26] Note, the more common practice is to take domesticated animals to water, i.e., Lake Victoria.

Table 12. Selection of topics related to the investigation of the impact of Lake Victoria on the translation of Zinza Genesis.

Ref.	Genesis Text	Zinza Translation	Back Translation	Issues Involved
A. Selection of topics/occurrences where the TL translation is potentially problematic or lacking internal consistency.				
A.1. Floods, flood gates				
7:6	floodwaters came on the earth	enzula ne nzwêlo zo kwĩkis ensi	**rains and springs to cover/drown the earth**	PROBLEM: "Flood waters" requires a lengthy descriptive clause.
7:11	floodgates of heaven were opened	ne enzula yaagwa yaágweleza	and **rain it rained**, it swelled/rose up	COMMENT: The image of floodgates is lost but the meaning of very heavy rain is clear.
7:17	the flood kept coming on the earth	enzúla ne nzwêlo êzo zikazendelel	rain and springs they continued	COMMENT: The flood is translated as the sources of flooding.
10:32	the nations spread out over the earth after the flood	abantu baasambaalil omunsi yóona, kázaalekelíil enzula ne nzwêlo zo kwĩkis ênsi	people spread in all the earth when ended the **rain and springs to cover/drown the earth**	PROBLEM: The flood is given undo prominence because of the lengthy descriptive clause.
A.2. Desert and desert vegetation				
14:6	near the desert	héehi nensi eyómile	near to land that has dried up	PROBLEM: inconsistent descriptive phrases for "desert"
16:7	near a spring in the desert	ensulo ya amênzi omumbuga eyómile eli peyege	spring of water in a valley that is **dry and clear**	PROBLEM: inconsistent descriptive phrases for "desert"
21:14	Desert of Beersheba	omwĩlungu lya Beer-sheba (Footnote: ensonga yaámo, ilungu lya mabanga na mabale eliteena amênzi.)	wilderness of Beersheba (Footnote: that is, **wilderness of mountains and rocks without water**)	PROBLEM: inconsistent translation of desert as "wilderness" (i.e., an unsettled area) with a footnote to avoid the normal vegetation (grass, bushes, etc.).
21:15	she put the boy under one of the bushes	yaamunágilana omutábani omuchibého cho omuti	she laid the boy in the shade of a **tree**	PROBLEM: Deserts don't have trees (as Zinza normally think of them) that provide shade. Note also the inconsistency with the environmental description in the footnote in 21:14.
37:22	into this cistern here in the desert	omuliina lila elili omwilungu (Footnote: ensonga, omunsi yo bwôma)	Into this deep hole in the wilderness (Footnote: **in the dry land**)	PROBLEM: Desert is translated as "wilderness" (i.e., an unsettled area) with a different footnote (compare 21:14) to avoid the normal vegetation (grass, bushes, etc.).

Ref.	Genesis Text	Zinza Translation	Back Translation	Issues Involved
A.3. Water wells, cisterns in an arid environment				
26:32	and told him about the well they had dug. They said, "We've found water!"	baámwĭzila no kumúgambila, "Twabona amênzi omuli êlyo iziiba êlyo twasumíle."	they came to him and **told him** we have found water in the well we were digging.	PROBLEM: There should be excitement here that they found water as opposed to a normal reporting of an event.
37:22	into this cistern here in the desert,	mumunág omuliina lila (Footnote: ensonga, omuliina lila elísumilwe kulega amenzi ge nzula) elili omwilungu	into this **deep hole** (Footnote: meaning, a deep hole that was dug to collect rain) in the wilderness.	PROBLEM: The footnote will help if it is read, but the concept of a cistern to collect water is largely foreign.
A.4. Watering animals from a well, watering trough				
24:20	she quickly emptied her jar into the trough, ran back to the well to draw more water, and drew enough for all his camels	Aho yaakola bwangu, yaazichénenela entwangabulênde amênzi kulug omunsúha no kuta **omwinywêlo** lye bitungaánwa, mala yaasubáyo bwangu ahi iziba kutáha amênzi agandi no kuzêndelela kutáha mpaka kuhícha kuzinywîsa zóona	So she worked quickly, she poured water for the camels from a water jug into a **watering container** for livestock, then she returned quickly to the well to collect more water and to continue to collect it in order to water all of them.	COMMENT: Although carrying water to livestock is largely foreign, the script for this mode of watering the livestock is well described in this verse. The watering trough is translated *omwinywelo* ("in the container for watering").
29:10	and rolled the stone away from the mouth of the well and watered his uncle's sheep	yaahilingisa ibaale êlyo kuluga hi iziba, yaázinywisa	he rolled that rock	PROBLEM: The script for going and collecting water from the well to bring and pour into a watering trough in order to water the livestock is largely unelucidated here.
30:38	Then he placed the peeled branches in all the watering troughs, so that they would be directly in front of the flocks when they came to drink.	Akaba aziimeelez êzo embazi héehi na **hameesélo** ge mbuzi habwo kuba embuzi zikaba zizil entûngwa zo kwĕyemya obuchilo bwo kwiza kwĕsela.	He had stood up these sticks near **the area for watering goats** (livestock) because the goats (livestock) were in the habit of mating when they came to be watered.	PROBLEM: inconsistent translation of the watering trough (compare 24:20) as *hameeselo* (area for watering).

Ref.	Genesis Text	Zinza Translation	Back Translation	Issues Involved
A.5. Large rivers, ford in a river				
32:22	That night Jacob got up and took his two wives, his two maidservants and his eleven sons and crossed the ford of the Jabbok.	Omuchil ômwo nyini Yakóbo akeemuka, yaatwal abakazíbe bábili, abazánakazíbe bábili na abatábani ikumi no omo, yaábambuch omunóna gwa Yaboóki.	That very night Jacob got up, took his two wives, his two female servants, and 11 sons and caused them to **cross the Jabbok river.**	PROBLEM: Translation missed the point of a ford in a large river and called it a river. (Note, fords are largely unknown among the Zinza as their "rivers" are small).
41:1	When two full years had passed, Pharaoh had a dream: He was standing by the Nile,	Emyáka ebili káyaahwêle, Omukáma Faráo yaáloota nkokwo akaba ayímeeliile hangeégeelo yo munóna ogwetwa Naili omunsi ya Miísiri.	When two years had past, King Pharoah had a dream in which he had stood beside a **river named the Nile** in the land of Egypt.	COMMENT: Many Zinza are unlikely to get the idea of a large river in referring to the Nile. See also the Euphrates in 31:21.
B. Selection of topics/occurrences where the translation succeeds in conveying a foreign meaning in a natural form.				
B.1. Blessings (or lack thereof) of heaven's dew				
27:28	May God give you of heaven's dew	Mûngu akuhe enzula ehikile (Footnote: nali, olume kuluga omwigulu)	God may he give you **sufficient rain** (Footnote: or dew from heaven)	COMMENT: God's blessing of heaven's dew (a staple source of water in arid regions of Israel) would be disappointing for the Zinza. Thus the blessing is translated "enough rain" with the literal version in a footnote.
27:39	Your dwelling will be … away from the dew of heaven above.	obwikalo bwawe … etéen enzula ehikile	Your dwelling does/will not have **enough rain**	COMMENT: This translation is consistent with that in 27:28. (No literal translation is given in a footnote.)

Ref.	Genesis Text	Zinza Translation	Back Translation	Issues Involved
B.2. Water containers, protocols for using wells				
21:14	and a skin of water	ne chisúsi echiizwile amênzi go kunywa	and a **gourd** of drinking water	COMMENT: Zinza have animals but they use gourds (which are common in the Lake Victoria environs) for carrying water.
29:2-3	the flocks were watered from that well. The stone over the mouth of the well was large. When all the flocks were gathered there, the shepherds would roll the stone away from the well's mouth and water the sheep. Then they would return the stone to its place over the mouth of the well.	gaba niganywĩsibw amênzi kulug iziba elyo. Ibaale lihângo likaba lifundikiile izíb êlyo. Obuteéka bwo buchil ôbwo, amásho góona ge ntaama kagaba geekóbya, niho abalíisa bóona hamo bakaba báhilingisa ibaale êlyo kuluga hiiziba no kunywis entaama. Kábaabeele bamála kuzinywîsa, balihílingisa kandi babóne kufündikila iziba.	These (flocks) were watered from that well. **According to the procedure of that time** all groups of sheep gathered together, then all shepherds together rolled that stone from the well and watered the sheep. When they had finished watering them, they would roll it back again in order to cover the well.	COMMENT: The Genesis text is largely self explanatory in explaining a foreign procedure to the Zinza regarding the use of the well. The Zinza translation clarifies that this was the normal protocol of that period.

4.5. Digo—Material Culture—Construction Terms

In previous sections, analyses were performed concerning two disparate aspects of Zinza culture: (1) CONTAINER image schemas, which are a component of the deep structure of the prototypical model of culture (figure 1); and (2) the impact of Lake Victoria on a tangible component of the surface structure of Zinza culture, namely the environment in which they live. In this section we switch to the Digo people of Kenya and examine the impact of a tangible surface feature of their culture, namely their material culture regarding the construction of buildings. The following outline is again provided for background information and orientation purposes.

Language Group, Language Family and Location: Digo, Bantu, coast of Kenya on the Indian Ocean.

Translation Issue: Challenges in translating building/construction terms and their metonymical/metaphorical extensions.

Setting/Participants: The Digo Bible translation project is administered by Bible Translation and Literacy (BTL) of Kenya. The work was started in the mid 1980s. I served the Digo translation team as a translation consultant for approximately 14 months in 2004-05, checking 1, 2 Corinthians; 1, 2 Timothy; Titus; Hebrews and portions of the Gospels. At that time the Digo translation team consisted of a single MTT with 8+ years of experience as a translation assistant and translator, plus his assistant. Most checking activity was conducted in Nairobi, Kenya. Unfortunately the Digo project has had to cope with a substantial turnover of personnel in its national translators, expatriate team leaders, and translation consultants. As a result, significant variation in translation style is possible from book to book. The entire New Testament is accessed in this study.

Mechanism by which the Translation Issue Was Identified: By the time I became involved in the Digo translation, the team had already discovered some of the translation issues related to construction terminology. For example, they had already made the New Testament-wide decision to refer to the "church" as "a group of believers." There is no specific Digo word for church. And the team was concerned that the imported Swahili word for church, *kanisa*, although widely known among the Digo, would be associated with the actual building rather than the Christians involved. In addition, when construction words such as "foundation" were used metaphorically, sometimes the metaphorical meaning, e.g., of truth, was added to the text for clarity. When queried as to why selected building metaphors and metonymy were overturned or adjusted in the translation, the MTT replied that the Digo traditionally had very limited construction practices and could not be relied upon to fully grasp these expressions.

Tentative Analysis of Translation Issue: According to the MTT, traditional Digo construction technologies are very limited. To construct a house, a circular portion of land is cleaned, sticks are erected for walls, mud daub is applied to seal the walls, and a grass roof is fabricated on top. As a result, metonymic and metaphoric associations with buildings and construction technologies tend to be weak. The "church" may be considered to be the building rather than the people. Construction words such as foundation, roof, cornerstone, capstone, etc. and their metaphorical/ metonymical extensions are potentially problematic.

Current Translation Solution: In books that I checked, metaphoric references to building components such as "foundation" were assisted in context with descriptive phrases as needed. However, no comprehensive, New Testament-wide solution for construction terminology was adopted.

Navigating the Target Cultural Network: The navigation of the target cultural network in this study (figure 1) is principally horizontal, i.e., within the material culture of the construction practice of the Digo. A downward, vertical navigation is implicit in considering the deep structural components of their worldview as to the structural components of buildings, and to the ability of the Digo to understand metaphorical/metonymical extensions therein.

In an attempt to focus the study on construction practices and their metaphoric/metonymic extensions that are most pertinent to this research, I was forced to make stringent decisions regarding the inventory of terms to be surveyed across the Digo NT. A summary of the terms surveyed is given below, and presented in table 13 with all Digo scriptural examples.

A. Foundation – physical meaning

B. Foundation – metaphorical/metonymical extensions

C. Capstone – metaphorical extension

D. Cornerstone – metaphorical extension

E. Roof – physical meaning

F. Roof – metonymical extension

G. Wall – physical meaning

H. Wall – metaphorical extension

All terms referring to specific buildings were excluded from the survey, e.g., church, house, barn, temple, synagogue, sanctuary, and tabernacle. The following terms were also excluded: courtyard, stairs/steps, pool, room (including upper room and inner room) and gate. Brick, bridge, and aqueduct were not found in the NT. Window was investigated but evidenced no translation issues of importance for the Digo.

The Digo translation had already received a thorough review by the Digo translation team, expatriate team leader, and translation consultants at the time of this research. So the intent of this work was to test a largely horizontal navigation of the prototypical model of culture for Digo in order to examine how the translation dealt with the material culture of construction as well as its metaphoric/metonymic extensions. The results were mixed in dealing with the TC-rooted translation issues involved.

Examining occurrences for the physical meaning of "foundation" (table 13A), the Swahili word *msingi* is borrowed in all instances except in Matthew 7:25 where "foundation" is omitted entirely. A further examination of the variation in the meaning of "foundation," in context across biblical books and translators, suggests a significant degree of uncertainty in how the term is understood. Consider the following examples.

Matt 7:25 **NIV** It [the house] did not fall, because it had its *foundation* on the rock.

Digo But it [the house] did not fall since it had been built on a rock.

Luke 6:48 **NIV** …who dug down deep and laid the *foundation* on rock.

Digo He dug a deep *foundation* and built on rock.

Luke 14:29 **NIV** For he lays the *foundation* and is not able to finish it.

Digo If you build the *foundation* only then if you would be defeated to finish it….

In Matt 7:25, Jesus discusses a house that does not fall because of rain, wind or rising streams because its foundation is built on the rock. But in the Digo, "foundation" is omitted in favor of the house itself being built on the rock. In Luke 6:48, "foundation" has the physical imagery of a deep hole in the ground. In Luke 14:29, a "foundation" is constructed. Although any one of these solutions may be appropriate in Digo, three different solutions are problematic. In other occurrences, the reader's understanding of foundation is semantically supported via context in connection to a particular structure, e.g., "foundations of the prison" in Acts 16:26, and "foundation of that wall" in Rev 21:19.

Examining occurrences for the metaphoric/metonymic extensions of "foundation" (table 13B), the Swahili word *msingi* is borrowed in all occurrences except Eph 2:19–20 and Hebrews 1:10 where "foundation" is omitted. In Rom 15:20 and 1 Corinthians 3:10, the "foundation" has the physical imagery of being built, whereas in 1 Corinthians 3:11, it is laid out. In several occurrences in 1 Corinthians, 2 Timothy, and Hebrews, the metaphorical meaning is supported either directly in the SL biblical text or in brief descriptive

phrases added to the Digo translation. For example, in 1 Corinthians 3:10–12, Paul refers three times to a foundation that, thankfully, he makes explicit as Jesus Christ in 3:11.

> **NIV 1 Cor 3:10** By the grace God has given me, I laid a foundation as an expert builder, and someone else is building on it. But each one should be careful how he builds. 11 For no one can lay any foundation other than the one already laid, *which is Jesus Christ*. 12 If any man builds on this foundation using gold, silver, costly stones, wood, hay or straw, …

In 2 Tim 2:19, Hebrews 6:1 and Hebrews 11:10, the Digo translates "foundation" as "foundation of truth," "foundation of teachings" and "foundations that last forever" to assist the reader.

In Ephesians 2:19–20 the Digo unfortunately drops the foundation metaphor, which is normally interpreted as either the (spiritual) foundation *of* the apostles and prophets (NIV), or the (spiritual) foundation *laid by* the apostles and prophets (Bratcher and Nida 1982:61-63).

> **Eph 2:19-20 NIV** Consequently, you are no longer foreigners and aliens, but fellow citizens with God's people and members of God's household, *built on the foundation of the apostles and prophets*, with Christ Jesus himself as the chief cornerstone.
>
> **TEV** So then, you Gentiles are not foreigners or strangers any longer; you are now citizens together with God's people and members of the family of God. You, too, are built *upon the foundation laid by the apostles and prophets*, the cornerstone being Christ Jesus himself.

In the Digo, the apostles and prophets are the active builders of a new building rather than the foundation of that building or the ones who laid that foundation.

> **Digo** So, you (pl) people who-are-not Jews you-are-not strangers again/any-more, but you-are children of God and citizens together with people of God. We are like stones which are used to build a new building by apostles and prophets. And-that building it is-being-built on important stone, which is Jesus himself.

The Digo treatment of "capstone" and "cornerstone" (table 13C–D) is a literal translation of the Habari Njema, or Good News Swahili Bible, in which these largely foreign concepts are explained in terms of the same Swahili word for foundation, i.e., msingi. Unfortunately this is explaining an uncertain foreign concept in terms of an uncertain, imported word. Consider, e.g., Matthew 21:42,

> **NIV** The stone the builders rejected has become the cornerstone.
>
> **Habari** *Njema Jiwe walilokataa waashi sasa limekuwa jiwe kuu la msingi*. ("The stone/rock that the stone masons rejected now has become the big/important stone of the foundation.")
>
> **Digo** *Dziwe roremewa ni adzengi, ndipho rikakala dziwe kulu ra msingi*. ("The stone/rock that the builders rejected, now has become the big/important stone of the foundation.")

The Digo translation of "roof" (table 13E) is inconsistent, indicating some uncertainty in how to translate the biblical concept of a roof, which was traditionally unknown to the Digo. Consider the following examples.

> **Matt 24:17 NIV** Let no one *on the roof* of his house go down to take anything out of the house.
>
> **Digo** He who is *outside his house* let him not return inside his house to take anything.
>
> **Mark 2:4** **NIV** They made an opening *in the roof above Jesus* and, after digging through it, lowered the mat the paralyzed man was lying on.
>
> **Digo** So they climbed *on top of the house* directly where Jesus was, they made an opening and they let down the sick man with his mat.
>
> **Luke 5:19** **NIV** They went *up on the roof* and lowered him on his mat *through the tiles* into the middle of the crowd, right in front of Jesus.
>
> **Digo** They climbed with him *on top of the house*, and they *broke away a few tiles* and let him down on his mat until in front of Jesus.

Acts 10:9–10 NIV Peter went up on the *roof* to pray. … he fell into a trance.

> **Digo** Peter climbed *on top of the house* … so as to pray. … he fell into a deep sleep and saw a vision.

A habitable roof is assumed in Matthew 24:17 (also Mark 13:15, Luke 17:31) when Jesus discusses the end times and warns, "Let no one on the roof of his house go down to take anything out of the house." In keeping with the traditional notions of a Digo grass roof which is uninhabitable, the Digo contextualizes the discussion, "He who is outside of his house, let him not return inside." But in Mark 2:4, Luke 5:19 and Acts 10:9, the roof is described as the top of the house on which people are climbing to lower a sick man to Jesus, or in the case of Peter, as a reasonable place to pray and even to fall asleep. And in Luke 5:19 (consistent with the Greek text), the construction material for the roof is revealed, i.e., ceramic tiles (*vigae*), which is conceivable for modern Digo homes. Again, a more systematic approach to the treatments of the literal/physical "roof" would have been desirable.

The Digo translation of the metonymic extension of roof (table 13F) found in Matthew 8:8 and Luke 7:6 is clear and natural. When the centurion with the paralyzed servant replies to Jesus, "Lord, I do not deserve to have you come under my roof", the Digo overturns the metonymy and says, "Lord, I am not worthy to welcome you (as a visitor) into my home."

The Digo translation of "wall" (table 13G) suggests a comprehension of the physical object, but metaphorical extensions are all overturned into propositional statements for clarity. For example, the Digo differentiate a hedge or fence that surrounds a vineyard in Matthew 21:33 and Mark 12:1 from a stone or brick wall through which Paul escapes from Damascus in a basket in Acts 9:25 and 2 Corinthians 11:33. But in Acts 23:3, Paul's accusation to the high priest that he was a "whitewashed wall" is overturned in the Digo to say, "You hypocrite that pretends to be a good person." And in Ephesians 2:14, the "barrier, the dividing wall of hostility" that Jesus has destroyed between the Jew and Gentile is omitted in favor of removing enmity that caused hatred. Unfortunately this removes any possible allusion to the actual walls and the enforced division between Jew and Gentile in, e.g., the Jewish temple.

> **NIV Ephesians 2:14** For he himself is our peace, who has made the two one and has destroyed the barrier, the dividing wall of hostility, …
>
> **Digo (Back Translation)** So/Then, Jesus himself he-brought-to-us peace by joining/uniting-them Jews and those-who-are-not Jews. He-made-us one thing by removing enmity which had made-us hate one another.

In summary, a navigation of the cultural systems stratum of the prototypical model of culture for Digo, specifically a survey of construction terms and their metaphorical/metonymical extensions, demonstrates a consistent challenge to the Digo translation of the New Testament. As evidence, vocabulary such as "foundation" and "wall" are borrowed from Swahili, while others such as "capstone" and "cornerstone" must be described, while others such as "roof" are sometimes unmentioned. In addition, the apparent physical meaning of selected vocabulary, in particular "foundation" and "roof," show inconsistencies between books and translators. Finally, metaphorical/metonymical extensions of construction vocabulary are often overturned into propositional statements or assisted by direct translation of the metaphorical/metonymical meaning.

Given that this research has been performed on the completed work of the Digo New Testament, it can only point out the successes obtained and the potential problems that were overlooked. The results are nevertheless encouraging. The translation issues that are now obvious in hindsight were not adequately clear to the participants involved in the translation at the time, but could have been better addressed with the tools developed in this research. Thus, in future applications of the prototypical model of culture, a more predictive role is anticipated in identifying challenges to TL translations.

4.6. Postscript

From a cognitive linguistic perspective, the metaphorical target domains of the source domain BUILDING or CONSTRUCTION appear to be weak in Digo. In addition, metonymic links to "building" words such as

"church" appear to be problematic, i.e., the Digo have difficulty differentiating the church building from the Christians that make up the group of believers. In contrast, Kövecses (72-3) has shown that the English target domains for conceptual metaphors BUILDING or CONSTRUCTION are quite prolific: THEORIES, RELATIONSHIPS, CAREERS, COMPANIES, LIFE, SOCIAL GROUPS, ECONOMIC SYSTEMS, FAITH, etc. Clearly a firm grasp of construction practices and the physical objects incorporated into buildings are essential to fully understand their metaphorical/metonymical extensions into e.g., spiritual concepts.

Table 13. Digo material culture, specifically construction terms and their physical and metaphoric/metonymic meanings.

Reference	English (NIV)	Digo	Digo Back Translation	Translation Issues
A. Foundation – physical meaning.				
Matt 7:25	yet it did not fall, because it had its **foundation** on the rock	Lakini taiyagbwa mana kala ikadzengbwa dzulu ya dziwe.	But it did not fall since it had been built on a rock	PROBLEM (inconsistency): Translation drops *msingi* / "foundation" and translates the concept of stability as a building built on a rock.
Luke 6:48	building a house, who dug down deep and laid the **foundation** on rock	Hiye ni dza mutu yedzenga nyumba, achitsimba **msingi** wa ndani na achidzenga dzulu ya mwamba.	He is like a person who built a house, he dug a deep **foundation** and built on rock.	PROBLEM: The foundation has the physical imagery of a hole in the ground.
Luke 6:49	built a house on the ground without a **foundation**	dza mutu yedzenga nyumba dzulu ya mtsanga bila ya kutsimba **msingi**.	he is like a man who built a house on the sand without digging a **foundation**	PROBLEM: The foundation has the physical imagery of a hole in the ground.
Luke 14:29	For if he lays the **foundation** and is not able to finish it,	uchidzenga **msingi** macheye alafu uchishindwa ni kuimarigiza	if you build the **foundation** only then if you would be defeated to finish it,	COMMENT: The foundation is constructed.
Acts 16:26	Suddenly there was such a violent earthquake that the **foundations** of the prison were shaken.	Gafula dunia ichisumba sana hata **misingi** ya jela ichisumba.	Suddenly, the earth tremored very much such that the **foundations** of the prison were shaken.	COMMENT: The term "foundations" is semantically supported as "of the prison."
Rev 21:14	The wall of the city had *twelve* **foundations**, and on them were the names of the twelve apostles of the Lamb.	Na hinyo ukuta wa mudzi kala ukadzengbwa dzulu ya *mawe kumi na mairi ga* **msingi**. Na chila dziwe kala rikaandikpwa dzina ra mmwengapho wa hara mitume kumi na airi a Mwana-ng'ondzi.	And this wall of city had been-built on-top of *twelve stones of* **foundation**. And each stone had been-written-on name of one-of-them of those twelve apostles of Lamb.	COMMENT: The physical imagery is descriptive of the city wall built on top of 12 "stones of foundation."
Rev 21:19	The **foundations** of the city walls were decorated with every kind of precious stone.	**Misingi** wa hinyo ukuta wa mudzi kala ukapambwa na mawe kumi na mairi manono sana ga samani.	**Foundations** of that wall of city had been-decorated with twelve very beautiful precious stones.	COMMENT: The term "foundation" is semantically supported as "of that wall."

Reference	English (NIV)	Digo	Digo Back Translation	Translation Issues
B. Foundation – metaphorical/metonymical extensions.				
Rom 15:20	so that I would not be building on someone else's **foundation**.	ili n'sedze *nkadzenga* dzulu ya **msingi** wa mutu wanjina.	so that I may not ***build*** on the **foundation** of another person.	COMMENT: The foundation has the physical imagery of being constructed.
1 Cor 3:10	I laid a **foundation** as an expert builder.	mimi ni dza fundi mzuri yedzenga **msingi** wa hiro dzengo. Na ayangu anjina *anadzenga* dzulu ya *msingi* hinyo hinyo.	I am as a good builder who laid the **foundation** of that building. And my other fellows they ***build*** on top of the same **foundation**.	COMMENT: The foundation has the physical imagery of being constructed. (The metaphor is explained by Paul in 3:11)
1 Cor 3:11	For no one can lay any **foundation** other than the one already laid,	Mana takuna mutu awezaye *kuika* **msingi** tafwauti na hura *urioikpwa, yani Jesu Kristo*.	For there is no one who can lay out a **foundation** different from the one that ***was laid, that is Jesus Christ***.	COMMENT: The foundation has the physical imagery of being placed or laid out. The metaphor is explained, "that is Jesus Christ."
1 Cor 3:12	If any man builds on this **foundation** using gold, silver, costly stones, wood, hay or straw	Anjina andahumira zahabu, feza, mawe ga samani kudzenga dzulu ya hinyo **msingi,** na anjina andahumira mihi, mabuwa au nyasi.	Others will use gold, silver, precious stones in building above that **foundation**, and others will use poles, hay or grass.	COMMENT: The foundation has the physical imagery of being constructed. (The metaphor is explained by Paul in 3:11.)
Eph 2:19–20	you are no longer foreigners and aliens, but fellow citizens with God's people and members of God's household, built on the **foundation** of the apostles and prophets (See also Eph 2:20 below in "cornerstone.")	mwimwi atu msio Ayahudi simwi ajeni tsona. Ela mu ana a Mlungu na enyezi phamwenga na atu a Mlungu. Hu dza mawe gadzengerwago dzengo dziphya ni mitume na manabii.	you (pl) people who-are-not Jews you-are-not strangers again/anymore, but you-are children of God and citizens together with people of God. We are like stones which are used to build a new building by apostles and prophets.	PROBLEM: The translation drops the foundation metaphor with respect to the apostles and prophets and makes them the active builders of a new building rather than the foundation of that building or the ones who laid that foundation.
2 Tim 2:19	Nevertheless, God's solid **foundation** stands firm with this inscription: "The Lord knows those who are his."	Lakini **msingi** *wa ukpweli wa Mlungu* wadina ndi-ndi-ndi na wapigbwa muhuri wa maneno higa: "Mlungu anamanya atue."	But the **foundation** ***of truth of God*** was made firm and it was stamped these words: "God knows his people."	COMMENT: The uncertain concept of the metaphorical foundation is semantically supported with the description "of truth of God."

Reference	English (NIV)	Digo	Digo Back Translation	Translation Issues
Heb 1:10	He also says, "In the beginning, O Lord, you laid the **foundations** of the earth, and the heavens are the work of your hands."	Piya Mlungu anambira mwanawe, "Uwe Bwana ndiwe uriyeumba dunia pho mwandzo."	Again God is telling his son, "You Lord you are the one who created the world in the beginning."	COMMENT: The translation drops the foundation metaphor and translates it as the creation of the world.
Heb 6:1	not laying again the **foundation** of repentance from acts that lead to death, and of faith in God	Nasi nahusiuyire nyo **msingi** *wa mafundzo* ga kutubu mahendo garehago chifo na kumkuluphira Mlungu.	And let us not return to the **foundation *of teachings*** of repenting deeds that bring death and to believe in God.	PROBLEM: The uncertain metaphorical concept of "laying again a foundation" is semantically supported with the description "of teachings," causing the active nature of repentance and faith in *laying* the foundation to be missed.
Heb 11:10	For he was looking forward to the city with **foundations**, whose architect and builder is God.	Naye Brahimu wahenda hivyo kpwakukala ka anagodzera mudzi mkpwulu urio na **misingi** *ambayo inadumu milele.*	And Abraham did that because he was waiting for the great city which has **foundations** *that last forever*.	COMMENT: The uncertain physical meaning of "foundations" is semantically supported by the description "that last forever."

Key to Shaded Areas of the table:

Translated without the borrowed Swahili term *msingi*.[27]

Translated using the borrowed Swahili term *msingi*.

C. Capstone – metaphorical extension.

Matt 21:42 (Mark 12:9, Luke 20:17, Acts 4:11, 1 Pet 2:7)	The stone the builders rejected has become the **capstone**.	Ndipho rikakala **dziwe kulu ra msingi**.	It is has become **the big (head) stone of foundation.**	PROBLEM: The translation of the culturally foreign "capstone" is given in terms of the uncertain concept of a foundation.

[27] *Msingi* is the physical foundation on which a building is constructed. In Swahili it can also mean a trench for diverting rain water, and metaphorically, it can mean the principle, basis, or origin of a concept.

Reference	English (NIV)	Digo	Digo Back Translation	Translation Issues
D. Cornerstone – metaphorical extension.				
Eph 2:20 (also 1 Pet 2:6)	built on the foundation of the apostles and prophets, with Christ Jesus himself as the chief **cornerstone**.	Hu dza mawe gadzengerwago dzengo dziphya ni mitume na manabii. Na hiro dzengo rina-dzengbwa dzulu ya **dziwe kulu ra msingi**, ambaro ni Jesu mwenye.	We are like stones which are used to build a new building by apostles and prophets. And that building is being built on the **big stone of foundation**, which is Jesus Christ Himself.	PROBLEM: See capstone. COMMENT: The metaphorical cornerstone is identified by the biblical text as "Christ Jesus."
E. Roof – physical meaning.				
Matt 24:17 (also Mark 13:15 Luke 17:31)	Let no one **on the roof** of his house go down to take anything out of the house.	Ndiyekala **kondze ya nyumba** naasiuye mwakpwe nyumbani kuhala chitu.	He who is **outside his house** let him not return inside his house to take anything.	PROBLEM: "On the roof" (implicitly a flat surface on which one can live) is translated as outside the home. This is inconsistent with the treatment of Mark 2:4, Luke 5:19 and Acts 10:9.
Mark 2:4	They made an opening in the **roof** above Jesus and, after digging through it, lowered the mat the paralyzed man was lying on.	Phahi apanda **dzulu ya hira nyumba,** achilekeza phara ariphokala Jesu, achiphahenda mwanya, chisha achimtsereza yuya mkpwongo na chitandache.	So they climbed **on top of the house** directly where Jesus was, they made an opening and they let down the sick man with his mat.	COMMENT: The "roof" is described as the top of the house, and it is implicit in making an "opening" through which to pass the sick man.
Luke 5:19	They went up on the **roof** and lowered him on his mat through the tiles into the middle of the crowd.	Phahi, apanda naye **dzulu ya nyumba**, achiusa vigae vichache na achimtsereza na chitandache mpaka mbere za Jesu.	So, they climbed with him **on top of the house,** and they broke away a few bits of the roof and let him down on his mat until in front of Jesus.	PROBLEM: The "roof" is specifically described in this verse only as the top of the house and constructed of clay tiles (i.e., *vigae*).
Acts 10:9	Peter went up on the **roof** to pray.	Petero wapanda **dzulu ya nyumba** kama saa sita za mutsi ili aswali.	Peter climbed **on top of the house** at around twelve o'clock in the afternoon so as to pray.	COMMENT: The "roof" is described as the top of the house, depending on an implicit idea that this is a reasonable place to pray.

Reference	English (NIV)	Digo	Digo Back Translation	Translation Issues
F. Roof – metonymic extension.				
Matt 8:8 (also Luke 7:6)	I do not deserve to have you come under my **roof**.	Bwana, sifwaha kukukaribisha mwangu nyumbani	Lord, I am not worthy to welcome you (as a visitor) into my home.	COMMENT: The "roof" is not translated in favor of overturning the metonymy, i.e., worthiness to welcome Jesus into the home.
G. Wall – physical meaning.				
Matt 21:33 (also Mark 12:1)	There was a landowner who planted a vineyard. He put a **wall** around it.	Achiizungulusira **lichigo**,	He surrounded it with a **fence/hedge**.	COMMENT: Digo term for fence/hedge is used.
Acts 9:25 (also 2 Cor 11:33)	His followers took him by night and lowered him in a basket through an opening in the **wall**.	na achimtsereza kondze na dzitunduni rokala **ukutani**	and lowered him down outside through an opening which was in the **wall**	COMMENT: Swahili word is borrowed for a wall constructed with rock or brick.
Rev 21:12	It had a great, high **wall** with twelve gates, …. The **wall** of the city had twelve foundations.	ukazungulisirwa **ukuta** mkpwulu wa dzulu … Na hinyo **ukuta** wa mudzi kala ukadzengbwa dzulu ya mawe kumi na mairi ga msingi.	it-had been-surrounded-with a big **wall** of high.… And this **wall** of city had been-built on-top of twelve stones of foundation.	COMMENT: Swahili word is borrowed for a wall constructed with rock or brick.
H. Wall – metaphorical extension.				
Acts 23:3	Then Paul said to him, "God will strike you, you whitewashed **wall**!	Uwe mnafiki udzihendaye mutu mzuri.	You hypocrite who pretends to be a good person.	COMMENT: "Wall" is not translated in favor of communicating the hypocrisy involved.
Eph 2:14	For he himself is our peace, who has made the two one and has destroyed the barrier, the dividing **wall** of hostility.	Wauhenda chitu chimwenga kpwa kuusa uadui uriouhenda uzirane.	He-made-us one thing by removing enmity which had made-us hate one another.	PROBLEM: "Wall" is not translated in favor of the enmity involved. The main idea of a wall/barrier between the Jews and Gentiles (which may be a physical wall in the temple) is omitted.

5. Insights Gained from Applying the Prototypical Model of Culture to Bible Translation

1. **The importance of anthropological research must not be underestimated** in attempting to understand translation issues rooted in the TC. For example, the cultural insights into traditional construction practices given to me by the Digo MTT were invaluable in designing the investigation into Digo material culture presented in this paper.

2. **The framework of the prototypical model of culture is flexible and sufficiently comprehensive** to accept all of the TC-rooted translation issues reported in this research. This was demonstrated in the survey of TC-rooted translation issues. Cultural strata could be expanded or collapsed to more effectively suit the analysis in the survey. For example, the cultural systems stratum was subdivided into two strata, (1) environment and material culture, and (2) social, religious, economic and political systems. Conversely, the strata of value orientations, focal values and specific values were collapsed into a single values stratum.

3. **The model enables the translator/consultant to view a number of distinct TC-rooted translation issues in a more collective manner** and to suggest more consistent and comprehensive solutions. For example, a comprehensive examination of Digo construction terms confirmed that the culture has a weak understanding of the literal meaning of e.g., foundations and roofs, which jeopardizes the metaphorical/metonymical extensions of these terms. Likewise, recognizing problematic applications of CONTAINER image schemas for the Zinza provides a strategy for better checking hundreds of individual translation problems in the New Testament.

4. **The navigation of the model in horizontal and vertical paths provides insights into how TC-rooted translation issues propagate through networks in the target cultural model,** and also provides a means for their discovery. In both the Zinza translation of Genesis and the Digo New Testament, i.e., documents that had been heavily reviewed and consultant checked, such investigations uncovered a number of instances where good translation practice had been applied, but also several instances in which challenges remained. These results encourage a more pre-emptive application of this cultural model to investigate topics of the TC that may negatively impact the comprehension of the TL Scriptures.

5. **The use of the cultural model by the translation consultant should provide a number of helpful insights for his/her ministry.** For example, the model provides a framework in which he can begin to differentiate translation issues rooted in the TC into categories of cultural systems, beliefs, values, and worldview by applying the frame sentences proposed in this report. Locating the TC-rooted translation issue within the model should clarify the path forward regarding its understanding and treatment. Consultant comments originating in differences between biblical and target cultural systems and practices should be comparatively simple to resolve by building context in order to support poorly understood biblical practices. However, if the consultant is challenging a strongly held value of the MTTs, e.g., against portraying alcohol consumption in anything but a negative light, change will be difficult to implement regardless of the persuasiveness of the biblical exegesis that is presented. In contrast, comments regarding substantial differences in worldview between the biblical and target cultures, e.g., biblical matters of conscience and guilt for members of a shame culture, will likely require patient dialogue and explanation because the biblical perspective may be quite foreign.

6. **The following protocol has proven effective for applying the prototypical model of culture to the investigation of TC-rooted translation issues**:

    a. Tentatively locate an TC-rooted translation problem in a particular stratum of the model, assisted by the sentence level test frames.

    b. Navigate the targeted stratum horizontally to assess the breadth of the issue.

    c. Navigate the model vertically to adjacent and distant strata to assess the origin (e.g., deep structural roots) and ramifications (e.g., surface cultural systems) of the issue.

d. Assess the impact of the problem for the specific portions of Scriptures being translated in order to better focus subsequent cultural research.

e. Repeat the procedure to refine the analysis.

7. **Finally, the model encourages a focused interplay between the investigation of TC-rooted translation issues and target culture research.** As a practical example, most of the translation issues reported in the survey in table 10 would encourage further cultural research in order to better understand their impact on the TL translation, and to identify those portions of the TL Scriptures that will be most seriously impacted.

6. Summary and Recommendations for Further Study

6.1. Development of Prototypical Model

The title of this work, "Toward a Prototypical Model of Culture for Bible Translation," suggests two operational words, i.e., prototypical and toward. A prototypical model is an attempt to conceptualize the core, prominent features of a system such that it may be described and utilized most effectively. The word "toward" reflects a process of development that is far from closed and an openness to revision to better support Bible translation practice. The proposed model integrates core features from surface to deep structure including cultural systems, beliefs, orientational values, focal and specific values, worldview, and image schemas. The model provides a cultural framework on which to tentatively locate a wide range of translation problems rooted in the TC, and to navigate the target culture network to investigate the sources, extent, and ramifications of these issues on TL draft scriptures.

This prototypical model of culture has been developed—in many cases assembled—from existing theory and practice in the literature. The model has been tested against a wide range of TC-rooted translation issues that I experienced as a translator and translation consultant in SIL translation projects in East Africa. Nevertheless, the structure of the model, in particular its network of cultural strata and their individual content, must remain sensitive to interplay with anticipated future data from a broader spectrum of translation experience.

6.2. Analysis of Translation Data

Four studies of translation issues rooted in the TC have been performed. The first was a survey of such translation issues gleaned from my work with five teams in Tanzania and Kenya. Assisted by the application of sentence test frames, all of these translation issues were assigned to cultural strata within the model: cultural systems, beliefs, values, worldview, and image schemas.

Three in-depth studies were subsequently performed which test both the extreme deep structure and surface structure of the model and demonstrate horizontal and vertical navigation processes within its strata: Zinza CONTAINER image schemas, the Lake Victoria ecosystem of the Zinza, and construction terms of the Digo. The study of Zinza CONTAINER image schemas emphasized a horizontal navigation of alternative image schemas, and a vertical, bottom→up navigation of its impact on a booklet of excerpts of Scripture, *The Way of Salvation* (SGM 1964). The Zinza systematically preferred LINK and PATH image schemas and propositional statements in comparison to metaphorical extensions of CONTAINER image schemas. The Lake Victoria ecosystem and Digo construction term studies featured horizontal navigations of the cultural systems stratum, and a top→down navigation towards their roots in worldview. In both studies, valuable insights were garnered regarding both strengths and weaknesses in existing TL Scriptures that had already undergone major team review and consultant checking.

6.3. Further Study

Opportunities for further study are extensive and are considered according to categories of model development, analysis methodology, and specific studies of TC-rooted translation issues. The proposed, prototypical model of culture is eclectic in origin. Although its strata are derived from extensive studies in the literature, their assimilation into a more comprehensive model of culture was likely not envisaged by

the original authors. The result is a helpful, descriptive tool with some obvious structural weaknesses. For example, image schemas have cognitive linguistic origins, whereas worldview universals and cultural systems derive from traditional anthropological sources. In addition, research by Hofstede, Mayers, and Schwartz regarding value orientations reflect not only markedly different approaches to prime values research, but also the neglect of a serious consideration as to the mechanisms by which they connect to worldview universals. Finally, networking between adjacent and non-adjacent strata in the model is recognized, but mechanistically uncharacterized. Thus a more integrated model of culture is desired in which the taxonomy of the various cultural strata, the subdivisions within each stratum, and the linkages between strata are supported by a more coherent theoretical approach.

The analysis procedures that are modeled in this study for the horizontal and vertical navigation of the cultural model are in an early stage of development. The current procedure is basically a repeatable sequence in which the investigator

1. locates a TC-rooted translation issue in a particular stratum of the model of culture, assisted by sentence level test frames,
2. navigates the network first horizontally within the stratum and then vertically to adjacent and distant strata to evaluate the origin and breadth of the issue, and
3. assesses the impact of the TC-rooted translation issue on the specific portions of Scripture being translated in order to focus his cultural research.

This protocol needs refinement, particularly if it is to be handed off to consultants and MTTs alike.

Further investigation is also suggested for several, specific TC-rooted translation issues from the eastern Africa data reported in this research.

1. A horizontal and vertical top→down analysis of the impact of the East African savannah environment on, for example, the Sandawe, Rangi and Burunge, is warranted, particularly in the translation of the Gospels and the associated lake culture.
2. An investigation of a focal value among Christians, e.g., the Rangi and Burunge, to separate themselves and the TL translation from traditional religious practices and associations, is warranted to better understand the nature and extent of its impact on the TL translation.
3. A vertical, bottom→up analysis of the impact of the worldview of a shame culture on Bible translation in eastern Africa is warranted. This would be particularly important for the translation of, e.g., Pauline epistles dealing with concepts of individual guilt and conscience, both clean and unclean.
4. A horizontal and vertical, top→down, investigation of "exclusive actions" is warranted. (This is the belief that an action taken toward a specific group can exclude that action being taken toward others.) A preliminary research agenda in a horizontal dimension would address which cultural expressions, e.g., blessings, greetings, commands, actions, etc., are most subject to this belief. In a vertical mode, the worldview roots of this issue could be investigated, e.g., originating in a closely monitored in-group vs. out-group status in a collectivist society.
5. An investigation of the hierarchy of values surrounding the acceptance or rejection of borrowed words from the national language (in this case Swahili) into the TL translation is warranted. The goal would be a more consistent and defensible approach to this decision-making process.

These proposed investigations are focused on eastern Africa. However, I hope that the prototypical model of culture and the investigative approaches to TC-rooted translation issues that have been developed in this research will be fruitful in the support of Bible translation without regards to geographic, language, or cultural boundaries.

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