APPENDIX L: ANALYTICS

[Hall, Edward T. Handbook for Proxemic Research. p.22-26]

"setting (one aspect of context) is inextricably involved with behavior and that given a particular context, an individual chooses (unconsciously) which one of a number of behavioral repertoires is appropriate."

"Stated somewhat differently, **situational frames** (S/F's), and the **action chains** performed in the frames, apparently constitute the smallest meaningful complete components of culture."

"The point is that the linguistic codes, the clothes worn, the material surroundings, the type of association, the activity, the sex of the parties involved, and the temporal and spatial setting are all patterned, albeit often unconsciously, by culture. The entire situational frame functions under cultural constraints."

"Primary activities are also, archetypal and physiological, or common to all cultures. These might be termed nonsetting activities such as breathing. Nonsetting activities are contrasted with those that occur in settings, or for which settings exist, such as birth and death, eating and sleeping, excreting, sex and the like, all of which exist as kind of given in the human as well as the prehuman situation. **Secondary**

activities are also, if not biologically based, at least widely shared among other species, but they do not have the imperative quality associated with primary activities. Secondary activities would include such things as grooming, washing, raising the young, maintenance of all types, learning and play, communicating and associating."

"The proxemicist's responsibility is primarily focused on the setting and people's behavior in that setting."

"All of the sets that go to make up a situational frame (time, space, situational dialects, and materials, that is, the microcultural setting, people and association, extensions including language, activities, as well as the bisexual and learning aspects) are governed by the **laws of order, selection,** and **congruence**, particularly congruence (Hall 1959). As stated earlier high congruence equals a good performance in addition to all of the above."

"Situations follow either an **open or closed score**, are **high or low context**, and occur in a **public or private context**. All of these distinctions are important."

"a **score** can be anything from a simple shopping list to a musical score to a computer program. Some scores tend toward closedness and some are more open. **Success** in performance in a closed score requires the user to achieve the objectives as set down in the score-putting a man on the moon-with all that implies. One slip and the mission aborts. **Failure** when using an open score is to follow the score too closely because to do so inhibits the expression of individual and situational factors. The jazz or rock combo, if it is good, follows an open score."

"Closed scores are L/C, open scores are H/C."

"The order law (Hall 1959) applies- in fact, seems to dominate-the action chain."

"Indeed, virtually everything that living creatures do constitutes an action chain of some type."

"From the proxemicist's viewpoint, the importance of action chains is that not only is there a **beginning**, **fulfillment**, and **termination stage**, each broken down into a number of steps, but the **proxemic events** that must be recorded are determined by the sets or stages in the action chain."

"as one moves from one point to another in an action chain, there are either subtle or quite obvious shifts"

"Another important, highly relevant feature of the action chain is that there must be a certain type and amount of both **time and space**, as well as other **environmental features**, before it can be played out."

"The term 'action chain' can be misleading in that a chain of events is normally conceived as linear."

"The complex chains are played out following **innate** as well as **learned** paradigms in which responses

are released alternately and in sequence in the two partied until the goal is reached. Sexual intercourse would be an example of a complex chain in which many of the steps are pre-programmed, but modified by culture."

[Hall, Edward T. Handbook for Proxemic Research. p.102]

"It is a mistake to limit studies such as this one to a single statistic. Commenting on **statistics**-this is the Western world's way of validating what sensitive observers discover in a fraction of the time. The statistical treatment, however, does suggest new observations and may even help to tell us what to pay attention to."

Future workers are encouraged to experiment and to innovate, for everything new that was tried has taught us something."

[Ittelson, William H. and Proshansky, Harold M. An Introduction to Environmental Psychology: Research Methods in Environmental Psychology. p.210-211]

"Holistic Research. In this procedure the objective is not the study of selected environmental variable, but rather the relationships which exist among these variables as part of a complex situation. Broadly speaking, this design is qualitative, seeking the underlying themes of a situation rather than the relationships existing between isolated variables. 'Holistic research takes as its problem the nature of the total system rather than of a particular process within the situation.' (Weiss 1968:343) Like experimental research, it also has a set of procedures enabling the researcher to check the validity of his assumptions."

"The Field Study. Unlike survey research the field study uses existing data. For this reason it is often called an ex post facto method. Demographic information, such as government statistics, medical records, and the like, comprise the raw material, over which, or course, the investigator has no control. Field studies correlate this social, physical, and psychological data in an effort to find relevant associations that may indicate a causa relationship among specific variables."

"Exploratory Research. Like the holistic model this approach can be used to study complex environments such as cities or ethnic communities. However, the material gathered this way is more likely to be quantified and correlated into possible sets of significant relationships. It says, in effect, 'Let's look at the situation and see what characteristics are suggested for further study.' Thus, in practice, exploratory research is frequently preliminary to a more precisely formulated and narrowly focused design in which, it is hoped, certain causal relationships can be tested."

"All research is simply the gathering and interpretation of information. It is the point of view behind the study - the objectives of the investigation - that determines the most suitable overall procedure."

"Many research procedures rely heavily on the observation of behavior by the investigator."

"he might **observe unobtrusively** and make an exact record of his observations by using a **camera** or tape recorder. He may then systematize or **map his observations** according to predetermined **categories of interest** or **time segments**. Sometimes he will use a confederate to stimulate certain kinds of behavior he wants to study. Additional techniques especially pertinent to environmental research include simulation of selected aspects of an environment, cognitive mapping, and gaming. In **simulation** one attempts to create a mock environment in order to predict behavior in a comparable real environment. **Cognitive mapping** indirectly reveals something about an individual's behavior by comparing his mental image of an environment to that which actually exists. **Gaming** uses simulated situations or processes, as well as environments, in an effort both to elicit behavior traits which the individual may not always be aware of and to acquaint

the player with the complexities of the many environments with which he may have contact."

[Ittelson, William H. and Proshansky, Harold M. An Introduction to Environmental Psychology: Research Methods in Environmental Psychology. p.218-221]

"If you want to know how a person stands on a question, ask him. Of course, he may not be aware of the real nature of his opinions; except for conspicuous deviations from what is usual, for example, new settings may influence the behavior of the person with **little or no conscious awareness on his part**. What he is unaware of he clearly cannot report, although, in fact, his **behavior may have changed**. Possibly, he will also be biased: what a person thinks about something is filtered through his prejudices, hopes, and expectations."

"Because people are not always aware of the effect a setting has on their actions, the survey approach, in some instances, may be quite inappropriate."

[Ittelson, William H. and Proshansky, Harold M. An Introduction to Environmental Psychology: Research Methods in Environmental Psychology. p.222-224]

"In **holistic and exploratory research** such material is evaluated largely on the basis of personal judgment, with statistical formulations playing a secondary role."

"When physical objects are the components of an experiment this is relatively easy. Distance, weight,

size of object, and the time necessary for a given event to take place can be expressed in quantitative terms; interaction among the variables-which is the purpose of the experiment-is measured empirically and described statistically."

"A number of techniques are used to make such information more clearly interpretable. The most commonly employed, and the one discussed here, is **factor analysis**. In essence, factor analysis identifies those items or attributes that can be grouped (hence studied) together, rather than separately, because of a particular property or 'factor,' they share in common. Ideally, it limits the number of variables which must be dealt with and in this sense simplifies data analysis. This affinity grouping is done **statistically** by ascertaining the nature of the correlations among the items included in the study."

"Objective physical and geographical measures. The topological attributes of a setting, both as entities and in relation to one another, are subject to measurement. They have size, weight, shape, color, and temperature, and are separated from other entities by exact distances. These are the verifiable physical qualities of an environment."

"Sequential notational systems. (Thiel 1970). These describe reactions to an environment as experienced by an observer moving through it. Certain objects and surfaces constitute 'space-establishing elements' which orient one's movements through a setting. The architect's elevations, plans, and perspectives together constitute a form of notational system."

[Ittelson, William H. and Proshansky, Harold M. An Introduction to Environmental Psychology: Research Methods in Environmental Psychology. p.231]

"Observation of an ongoing series of activities made at specific intervals is known as **time-sampling**. By shifting the emphasis one can also measure the various occurrences irrespective of their time span. This is known as **event-sampling**."

[Ittelson, William H. and Proshansky, Harold M. An Introduction to Environmental Psychology: Research Methods in Environmental Psychology. p.234]

"reproduce a simulated or mock environment and then observe the individual's response to it. A scale model."

"By looking at the model and evaluating our **reaction to it**, we decide, for example, whether or not we think it is attractive or whether it will suit our needs."

"It has the further advantage that it can precede and therefore act as a guide to changing the real

environment."

"Recently techniques have been devised in which the relationships generated by the environment are used rather than a realistic reproduction of it. In other words, our model need not resemble the real object; it is important, however, that its components operate as though in a real-life situation. 'Successful **simulation** requires only that one be able to reproduce the system under study as accurately as possible without actually employing the system itself."

"It **abstracts** what are believed to be the salient aspects of the real-world system and replicates them for purposes of study."

[Alp, Ahmet Vefik. An Experimental Study of Aesthetic Response to Geometric Configurations of Architectural Space. p.151-156]

"The objective of our research was to use systematically **manipulated physical/visual aspects** of architectural space to determine their 'aesthetic-emotional effects.' All other perceptual variables were kept constant in order to detect possible causal relationships."

"Describing a list of adjectives that represents and describes the aesthetic dimension of architecture was my first step in devising the measuring instrument."

"I compiled **scales** from those that previous research had established as representing the aesthetic dimension of the built environment (Table 2)."

"a final list of 26 adjectives was created (Fig. 1). Instead of using **bipolar scales** where two contrasted or antonymic adjectives delimit the end-points, **a single adjective** was employed to represent each scale to avoid any confusion that might result from the ambiguity of antonyms. While scales used to describe the perception of physical properties and

that express a range such as light to dark' appear to lie on a **linear** continuum, this may not be the case for emotive scales such as 'kind to cruel,' which seems to contain several **latent** scales, including 'kind to not-kind' and 'cruel to not-cruel' (23). We used the findings from various studies to establish an aesthetic-dimension structure that would be valid cross-culturally and cross-architecturally."

"The **independent variable** in this experiment consisted of three geometrical configurations of architectural space: a rectangle, a triangle and a circle."

"The three models simulated fictitious office spaces, standardized for space and furniture arrangements."

"Respondents were encouraged to make more natural eye-level observations using the window openings at the perimeter walls."

"The models, including their furniture, were built by the same craftsperson using the same materials. Color, texture and the quality of craft were, therefore, identical."

"The use of **primary forms** was intended to control confounding effects from the differing visual complexity of the three models. The primary shapes have been demonstrated to be perceived easily and rapidly and to possess the same degree of visual information and simplicity/complexity."

"the independent variable conditions were equated on all 'Gestalt factors of formal organization.' "

"The correlation of results elicited using scale models and full-scale environments was thoroughly investigated."

"The analysis indicated that observers tend to be even more constant on assessments of scale models than of full-size rooms."

"of the three geometric conditions, at least two differed significantly."

"triangular versus rectangular conditions and rectangular versus circular conditions yielded more significant differences (p<.01) than did triangular versus circular conditions"

"circular space-system had the highest score of positive adjectives,"

"the **rectangular** space organization was the least preferred one."

"unfamiliar geometric organizations, specifically circular and triangular layouts, are preferred over rightangle intersections - implying that people, including architects, adapt to the familiar space configurations, and consequently are attracted to original and novel spatial relations."