

CHAPTER 6: ACT OF MAKING; A LIVED EXPERIENCE

Introduction

The previous Chapter studied the building-as-artefact already executed. Although an evolution of archaeological and historical types was evident, these types were still being built. This was dependant on personal choice or sometimes due to climatic, topographical or other forces. This body of executed intentions provided a body of accumulated knowledge of practice to the new generation of subsequent builders. This continuation implies that reciprocity was present within the time frame of its history.

Place-capacity was an essential component of lived experience, equally valid for group affinity but also a cause for reciprocal appreciation by users of her intended added value. In this Chapter the principles for the existence of reciprocity was firstly used to derive implications from the actual acts of execution and possible evolution of her intentions, in Chapter seven the aim was to test whether it followed that these actions created a response of reciprocity from the users of a *BaSotho* woman's effort; were her boundaries, symbols and mental intentions legible and useful.

This Chapter concentrated the research process on action as text. Conclusions could be induced by observing and recording women acting out the making of artefacts-as-homes especially when applying *litema* to the individual facades.

Evidence of the interactive relationships between the main components of the research (eg. phenomenology, reciprocity, language, learning, forces and process) was found and applied to the body of text.

Ontological and haptic phenomenology were combined because of similarities in objectives, other than that the first is intentional and the second its execution. These inflexions were enhanced by authors as architects as well as other authors who articulated, in support of the inflexions, an interrelated bond between intended and interpreted sensations.

This infused the process of actions with a continuous reflective attitude. **Its articulation further enhanced the hypothesis by adding a dynamic dimension to reciprocity.**

ONTOLOGICAL PHENOMENOLOGY; Adjuncts expand its specification applied

1 Key to the sensuous

Ontological phenomenology concentrated the research on the thought process of bringing sensual intensions into existence. The eye through visual evaluation, the hand through tactile quality, the body through how the retinue of movement meets with the flow of a curve; all the senses had to respond; if correct or incorrect, but with experimentation found resolutions as to how the act could be corrected. The ear dictated rhythm in her singing that added to the tempo of working.

2 Subjectivist

Action was a major vehicle of culture, bearing in mind that vernacular architecture had the material dimension of culture. There remained a continuation in the way people of similar cultural histories perpetuated their organisation of space and form.

3 Communalism

She and her helpers, often daughters, or anybody willing to help, took dry earth, mixed it with water and turned buildings-as-artefacts into monuments to her and her social group as cultural phenomena. Their roles changed over time in relation to themselves, as potential, then actual and last the role of role models, as their time context altered within their social constructs.

4 Humanist

Her unique way of creating the manifestation of herself was to establish boundaries. She achieved this through rites, rules, decisions, edges, walls. She established boundaries and these boundaries created her, her strengths, dignity, person and self. She did protest when her values or traditions was violated. Her social construct reinforced and supported her protest.

5 Idealism

Achieving reverie, while making built form, enhanced the feeling of success which resulted in reciprocity. If not successful the making woman would remake her artefact-as-home till she brought her intensions into existence. The result was to her satisfaction but might be of evolved intentions.

Hartoonian; an architectural theoretician from Australia, said that through an evolutionary process the maker establishes an own identity; the acceptance of reciprocity. Yet here the

sensuous is not caught and elaborated on only by means of thoughts, but must directly be treated and acted upon. For the *BaSotho* woman as maker this implores her to act upon her thoughts. The responsibility for executing it cannot be entrusted to anyone, but the maker, for two reasons – firstly because the maker often cannot imagine it precisely enough to give directives before having started executing it, and secondly because these directives can never be so precise as to dissociate execution from the act of making by the specific maker.

HAPTIC PHENOMENOLOGY; its specification applied

1 Emotional engagement

Haptic phenomenology resulted after her intensions have been brought into existence and her buildings-as-artefacts appealed to all the senses

2 Of the senses

She will decide if and how much she reveals or hides behind boundaries as well as on which side she can be found, depending on the occasion. Her act of making and placing that boundary speaks volumes about herself and the response she will elicit. With her consequent response she either reinforces or rejects. Permeability remains in her control.

3 Comprehended gradually by all the senses, phenomena elicit memories with associations as they occur

Our perceptions of the physical world are neither a passive registering of, nor an active imposing of meaning; to sense something is to co-exist or commune with it, to open oneself to it and make it one's own, prior to any reflection or specifically personal act. Consequently, the appearance of objects is always inseparable from a particular bodily attitude, "an expression of an incarnate subjectivity that is always already situated in intentionally charged space which is never encountered as an empty void of co-ordinates, but as the dramatic possibility of movements, a perceptual field that is an invitation to action" (Merleau-Ponty in Foster, 1998:67)

4 Immediacy offered reverie

This hard work strained the body; developing muscles she never realized she had. At the end of the task, her body, especially the fingers felt raw from the abrasive materials, the odd sharp stone cut

into her hand, skin was made soft by working with wet material. **This all taught perseverance; in spite of the pain, she achieved reciprocity through reverie for the task**, spoken about by Bachelard, (1969).

5 Guided by the body

The interconnection of the joints enables the nimbleness in the hand. This dexterity is extenuated to the arms, legs and whole body. Together with the muscular and tendon systems, develops a finger dexterity that is even further evolved by the culture of making since childhood. **But making does not go without thinking, another aspect of reciprocity.**

Pallasmaa referred to haptic phenomenology in sensing architecture. This haptic sensibility savoured molded form resulting from the stroke of the hand. The capabilities of the body and its movement. Honesty of material, earth remains earth when transformed into walls, seats sculpture. The tactile response of the hand to make form and give texture. Immediacy, it offers nearness and affection rather than distance and control. While some images of architecture can rapidly be consumed, haptic architecture is appreciated and comprehended gradually, detail by detail. It depends on peripheral and anticipated vision, the sound around a corner, the event behind a wall, the scent below a surface. Found in places in natural settings that elicit a powerful emotional engagement. Peripheral perception transforms retinal images into spatial and lived experience, phenomenology, and participation by all the senses of the total body. (Pallasmaa, 2005:194).

Since childhood she unconsciously evolved the nimbleness of her body as part of games and expected growth.

Every part of her body becomes a tool, for the maker of artefacts, the hands are the lead instruments for other body parts to play their role, wither it is to instinctively move her feet, arch her back, strengthen the muscles in her arms if required by an act at that moment. The recurrence of the circular patterns is not coincidence, it also forms an integral part of ‘speech acts’ (her *litema*) circle generated by the reach of an arm.

Detail design of the skeleton facilitates dexterity from fingertips to whole body

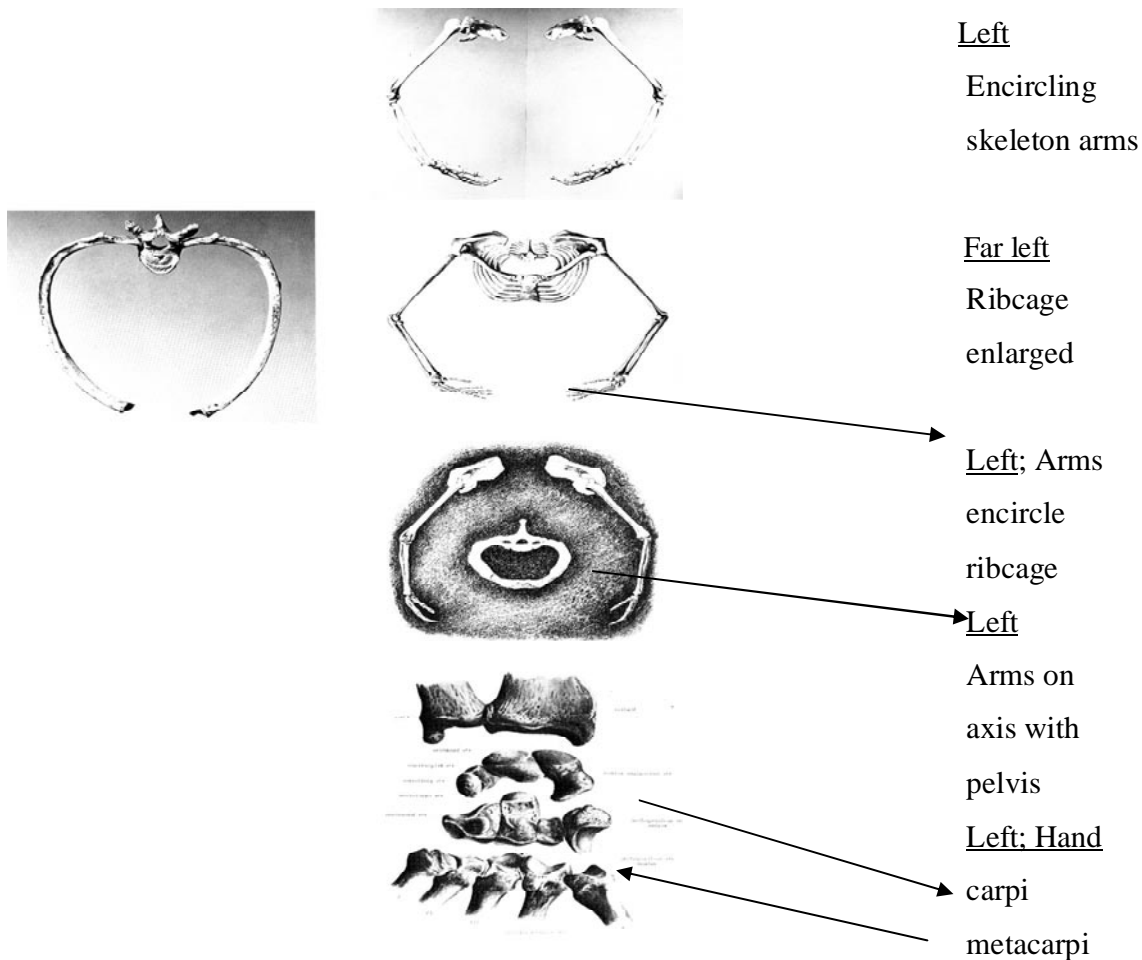


Figure 6.1 Bodiliness and action as another aspect of enabling reciprocity Mees, 1981

The skeleton and for the purposes of this study, her upper torso is symmetrical, it consists of bones with rounded ends fitting into concomitant ‘cups’ to enable the specific bone to move in a multitude of directions.

The build up of the skeleton relies on the lever crated by the length of a bone, but, that each bone is ended off with a rounded or convex end that interconnects with the next bone as a continuous series of loose connections. These connections are turned or manipulated by another system of muscles and tendons acting as tension members with the bone structure as the ‘bow’ of a bow-and-arrow. The symmetry of the vertical assembly of main structural skeleton helps the flexibility for a multitude of movements but, unless hurt, will always return through the design of the joints to the vertical symmetry

It is the hand that acts as the primary tool, as extension of the body, of action to create devices to elicit response of the senses. An important role in this evolution, apart from the natural growth of her physique, was the way her body was designed.

From own experience when helping a woman with building it was tiring, and could not keep up with the strain on muscles, whereas this woman coped well, her muscles have developed and she as fit. The body of our child will also evolve to a fit muscular human, with skeletal and other physical requirements as part of her timeline necessary for her future role as a woman. The child's hands strengthen from kneading the clay and her skin toughens as it engages in this way, getting rid of grass and stones. **Reciprocity evolves through active participation.**

RECIPROCITY

Reciprocity combined with the disciplines of haptic and ontological phenomenology

Making of artefacts (architecture) and making of mature women the role as builder.

The realisation of her reciprocal development observed within her experience of ontological and haptic phenomenology.

The construct of the timeline of the woman implies that the process of making evolved, similarly, her products evolved. This gave rise to an ongoing dynamic of self growth establishing a communal culture. She had her social benefits enhanced at a macro level resulting in the woman's social construct being enhanced. **This was her reciprocal evolution, but also increased her reverie of making.**

The home-as artefact in use, under circumstances imponderable at the time of her making has proven her value as decision maker and the execution of those decisions resulting in a product of excellence within societal construct *Ubuntu*. "The responsiveness of tribal architecture to both internal and external forces is a lesson that has practical significance. The architect knows that in shaping life space [she] also shapes lives." (Walter Goldschmidt in Prussin, 1969: ix)

The timeline is a temporary as well as long-term dependence on nature, materials and mobility affects both gender roles because both female and male has role obligations expected by the societal construct of *Ubuntu*.

Reciprocal process as a continuum of phenomenology

New challenges occur throughout her life and answers have to be found or action needs to be taken continuously as she matures as person and her dependants grow through the various phases. Her role changes over time in relation to herself and her context within the social constructs.

Along her timeline necessity dictated a cause to reach maturity. This cause compelled her to take action and expand her body of knowledge. Its successful accumulation enabled her to experiment with a fixed or usual method of making her building-as-artefact. **Having done something with vigour but also effective was an event given which received reciprocity in return.** Due to a compulsion for accumulating knowledge was a lengthy process which required special effort in learning about form and the use of details from previous performances preceded success. **This knowledge of something before it occurred prepared a result that could easily be foreseen, this certainty caused a feeling of reciprocity.** To bring shelters into existence with certainty also imposed the required reading of the nature of nature as powerful forces, but became through past experiences foreseeable courses of climatic events that ensured makers of reciprocal fulfilment.

The 'wallness' of the wall enhanced the woman's sensual boundaries, defined or demarcated but also told others of her domain of values, decisions and influence, first intended and then realized. She allowed and controlled penetration through signs and protocol. She also determined the quality of reception on her side of the boundary. That reception was her way of expressing welcome as well as comfort. She invited or excluded penetration or participation, visitation, through a multitude of signals that relied on all the senses, ranging from visual stimulation, facial expression, tone of voice, smell, touch and most important, her buildings-as-artefacts. The response she received as well as gave was within its comfort.

LANGUAGE

Ice is a form of solidified water; icicles form and grow to become solid forms, crystals accumulated along an ordered series of material. This is a narrative of growth, both of language and form; both a metaphor as well as allegory of the way in which buildings-as-artefacts

enveloped by *litema* (an ornate and figurative *BaSotho* figure of speech), came into existence. Metaphor because language was transmuted into a process of making form. Allegory; a story in which the meaning or message is represented symbolically, *litema* was the use of such symbols. The mental tools derived during the enactment of fluidity prevailed due to the making woman's insistence. **The producer of this narrative initiated her own language or dialect of incremental making and reciprocity was the hidden hand in its final manifestation.**

Built language invented idioms as forms of expression peculiar to this language, each person added her manner of the way things were done or happened. The *BaSotho* as a group of people evolved characteristic modes of expression; their group of symbols was established by mythical derivation or chance, with no assignable cause. Creative license fostered interpretation to bring about particular instances which modify the often inferred case of a general mental cocoon. Many of these particular instances generated the dynamics essential in any art form. **The person who caused changes experienced reciprocity, especially being copied by other makers.**

Grammar was dictated by earth, its malleability when wet allowed a fluidity of form that later solidified when dry. A materially distinctive built manner with its own morphology or study of shaped buildings-as-artefacts generated the system of forms evident in a language of built style, 'spoken' in lived place-making. Grammatical execution combined with directed virtuosity appropriate to the nature of this material, earth. An inherent precondition of earth dictated the necessity to use ideograms as simplified signs; which were not only a container that existed as a character symbolizing the idea of home-coming, but also became compositions of brightly coloured settlements in their landscape as welcome home statements, legibility of each façade covered in *litema* incorporated the fluidity of earth as precondition. But grammar also implied syntax, a spatial arrangement of consequent signs originated as hints phrased by her when captured in her built discourse. **Being fluent and inventive with the intonations of these expressions generated reciprocity**

Phonetics had a direct correspondence between symbols and sounds developed a vernacular *BaSotho* 'tongue', a common visual speech, a sign language within which symbols of use evolved into a private language with its own meanings. This cultural form of language originated in the literal intensions of the maker and taking symbols in their usual or primary sense within instructed

understanding and recognition. Outward forms and marks lead to suggestive habitation. **Its articulation was realized by an acquired expertise of awareness; reciprocity was the affect of an intimate mentally conscious symbolic awareness.**

This reciprocal process placed the need for, and expression of meaning before that of only self-indulgence. Meaning alone however cannot forge a lasting bond between artefact and its articulated use. This required the mediation provided by a shared way of life, required entry into a language game - a game understood as a whole, consisting of language and the actions into which it is woven. To enter into such a game was rather like learning to play a certain part in a theatrical play: It presupposed opportunities to see others in the same role; to be actor and spectator of the conditions of human life. But if acting out such a role was to be experienced as more than a meaningless routine that had little to do with who she really was it must have been supported by an internal mental inquest of the validity of dreams and ideals. These put her in touch with what most deeply motivated her contract with the *Badimo* and her subconscious; her necessity of execution. At any rate with expectancies that, while obscured by the routines of everyday, still needed to be recalled from time to time.

Her home-as-artefact spoke of welcome home, built language was a major vehicle of culture, by adding an artefact-as-home there remains a continuation in the way makers of homes within the same cultural history will perpetuate their organization of space. **Each woman maker was conscious of this expectation of continuity and by making herself a willing perpetuator felt the result of reciprocity**

“Similar to the act of making, the act of speaking one word brings another with it and so thoughts are eventually set forth. It is truly a speech that emerges from the background, usage of language and space are already schematized in advance. We speak and the word or artefact goes beyond to consequences and ends which we have not perhaps conceived of. When you take a word in your mouth you must realize that you have not taken a tool that can be thrown aside if it won’t do the job, but you are fixed in a direction of thought which comes from afar and stretches beyond you”.
(Gadamer, 1975: 497)

FORCES

Forces initiated responses to become solid which required an intense effort. **Reciprocity caused and affected the intended will to create and to produce by mental and physical effort form as it can be seen or touched.** A predetermined arrangement of structure and style was tested by execution of the true and real building-as-artefact. **The strength of will to determine the outward or visible appearance was induced as a measure of creative reciprocity.** This measure influenced and tended to cause execution by the body; it required knowledge of her body and its power to carry out a vigorous set order of actions during the ritual of making. **Reciprocity was confirmed as her body gave its dexterity in return for new rules uncovered.** If valid these rules immediately became effective in the duration of execution.

To strain to the utmost or to use force in order to do something did oblige the woman making a building-as-artefact to summon assistance from people organized or available for a purpose of labour. **Being available was the reciprocal motive given or felt by each helper towards the other.** With the help available or to force the pace she was destined to impose restrictions on herself to make decisions, not necessarily the optimal, but did force her to select a particular choice. **To force the issue of making an immediate necessary decision her self confidence could only the result of a reciprocal knowledge of the forces affecting her.**

PROCESS

Interactive processes were continuously inherent in decision making during implementation Decision making was to the maker continues interactive processes. The actions in making became a constantly changing threshold of interactive multi reciprocal processes that affected both the maker and the actions with its rules dictated by the material used: earth. Senses evaluated but also instructed; gave continuous guidance to the process of tools used, these tools with the material, forced actions which then affected the senses. Time created allowances for experimentation.

Plasticity and consistency of the material she worked with directly affected her precision of an intended detail. Knowledge with experience or advice of the sources of materials allowed her to make the correct choices. If her choice was limited, the material at hand forced her to change or adapt her intended detail.

The material dictated the execution of intentions. Her acceptance of this reality and ability to evolve new designs that became part of her archive of solutions formed part of her experience of reciprocity.

Through experience specialisation was an extension of each one's natural reciprocal ability. The actions in making became a constantly changing threshold of interactive multi reciprocal processes that affected both the maker and the actions with its rules dictated by the material used: earth. Senses evaluated but also instructed; but gave continuous guidance to the process of tools used, these tools with the material as well as time forced actions which then affected the senses.

Threshold of interaction

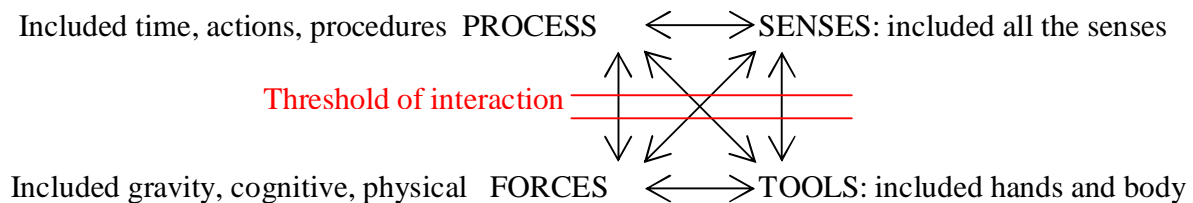


Figure 6.2 Reciprocity matured during each live exercise at this threshold of interaction

Interactive relationships were generated within phenomenology, reciprocity, learning, language, forces and process reacted as one unified intuitive phenomenological scenario; all effected and reinforced or inhibited one another. Effects gave reciprocity dimensions; the three dimensions of form, time was the fourth, and the fifth, consciousness, given and performed willingly through creativity in mental or psychic preparation.

Comprehension of action as culture

Action as text being a reflective reverie of making buildings-as-artefacts made haptic phenomenology relevant; it was the hand that acted as the primary tool, as extension of the body, of action to shape form which evoked the senses.

Her comprehension of action as culture was a question; 'what if I try something else?' It set into motion a series of reactions to discover new procedures other than those used previously. While she was making her preconceptions were amended. This challenge to the process of artefact making can only be resolved by generating solutions during the process of acting out 'what if'.

By being receptive to the challenge she expands her control and her reciprocity. As actors in the building culture new challenges occur throughout their lives and answers have to be found or action need to be taken continuously as they mature as a making people.

The home-as artefact in use, under circumstances imponderable at the time of her making has proven her value as decision maker and the execution of those decisions resulting in a product of excellence within societal construct *Botho*, Sesotho word for *Ubuntu*. “The responsiveness of tribal architecture to both internal and external forces is a lesson that has practical significance. The architect knows that in shaping life space [she] also shapes lives.” (Walter Goldschmidt in Prussin, 1969: ix)

The timeline was a temporary as well as short and long-term dependence on nature. Materials and mobility affected gender roles because both females and males had role obligations expected by the societal construct of *Botho*. The construct of her timeline implied that the process of making evolved, similar to how her products evolved. This gave rise to an ongoing dynamic of self growth establishing an evolving communal culture. **She continuously strived to enhance her social benefits enhanced at a macro level resulting in a reciprocal but dynamic social construct.** Answers had to be found or action taken continuously as she matured as person and while her dependants grew through their various stages. Her role changed over time in relation to herself and her context within the social constructs. It still directly emphasized her role of making a home; in this case the home was deliberately described and used as such an artefact. **These processes became a reciprocal continuum of phenomenology as new challenges occurred throughout her life.**

This mainly applied in her rural context, when she became urbanised she had no opportunity to act as maker but had to accept a finished product.

Perseverance was the essence of experimentation; the intensity of immersion in the process had positive as well as negative lived experiences. She did not always achieve the correct solution; she could get hurt, things break, and fall. Resolving this however, was essential to the qualities sought in the made artefact.

Bodily rhythm required dexterity of using any tool only came from continues trial and error. To get into the quality of execution was evidence of this. She discovered the value of procedures, how the use of her body helped to decrease effort, and the affective pleasures derived from making. She also realized when the limitations of her body necessitated the making of tools if, for instance, the hand was not sufficient. The ability to innovate when tools or materials were not what were expected, being for example, too short or too long, big or small but could not be replaced due to external factors.

The making process also had to adapt over time, especially adapt to the woman, every new location brought new intentions, ideas as collections of sensual experiences, and she personally got involved in re-making the home-as-artefact. It resulted in the familiar muscles shaping a culture of self-built extensions of her expectations, calloused hands, hurt of excessive force, responsibility of future safety, correctness, lessons learnt from previous experience, elders and peers. Her freedom to innovate and invent made her responsive to solve unexpected problems, discover through discovery ideas and the exact quality of a material which will determine her final choice, if only sometimes by applicability of colour variation or texture.

The procedures of making the home-as-artefact were highly collaborative. This process was committed to hands-on experiments and engagement with all aspects in the making of artefacts. The ways it operated and the resultant end products were very much the result of her intentions, predilections and personality. Yet it was also dependant on the rules she was acquainted with since childhood, accumulated through play, contributions of collaborators and outside help, experienced knowledge of elders and the availability of the right quality materials.

The 'wetness' of water also had a practical implication, it is a tool because it determines the pliability of earth, if too wet it will not adhere to the vertical walls, if too dry it is not cohesive and thus not usable. If it was not for this wetness the grains of earth could not be bound together, neither could the mixture be made malleable if not by adding water, nor if too wet had to be left to dry and evaporate the water in excess. After application the product was left to dry and become hard. It is also this wetness that can cause future collapse of a wall if it becomes too moist after heavy rains.

Using her body as tool she had to overcome gravity especially because she had to counteract the force of her hand when imprinting markings into the wet earth but there was nothing else she used as counter balance other than her body.

In the act of making lay the paradigm of tactical activity; her procedures to achieve reciprocity evolved from bodily learning. The human being patiently created her own hands as tools by gradually freeing them from the animal world. Though her hands made artefacts and other things, they also made that 'thing' which was herself: they were the instruments of creation, but even before that, from antecedents and her own development they were organs of embodied knowledge.

All kinds of making must be at the start of the intentionally directed movement of the hand. Initially, the hand may have moved across earth by direct contact, such may be her rudimentary movement that left in the earth a drawing of a circle, imprecise as it may be. If the movement had to become more precise, or if the hand was by itself insufficient for the task, the hand must then have made an artifactual instrument to make actions more efficient. The made instrument or tool, multiplied the capacity and efficiency of the hand that initiated it.

She also had to have total self confidence in her own instrumentality, she might have lacked all the necessary instruments to satisfy her extra-natural being, to earn her life metaphysically, but she did make these instruments out of outlying matter, as a *bricoleur* would have done, in order to remain in control of her own destiny. Such invention was seen to be a table fork or else a comb to engrave the earth coat of the façade. A fine grained pattern was the discovered result; finger tips would give a different shadow pattern than the table fork.

Another such instrument was an ancient but also contemporary compass; a centre pin and a string attached to another incising pin. Holding a compass, and supported by it, the hand brought its movement into greater control and drew the outline of the more precise circle. Here was the beginning of a systematic social geometry, which recorded the abstract choreography of movement, as lines representing barriers became walls constructing the basic scaffolding of space. In this ordered space, embracing and reflecting the thinking capacity of the mind, the hand did continue with its precise making of space. Tools were occasions to further the work of the hand; they were the precise point of interaction in experiments of knowledge that neither mind nor sight

did conduct alone. **Projects of *Homo faber* became the reformation of nature by the constructed building-as-artefact, her intended reciprocal reaction to nature.**

A question; ‘what if I try something else?’ sets into motion a series of reactions to discover new operations other than those used previously. While making, this will change preconceptions. This challenge to the process of artefact making can only be resolved by generating solutions during the process of acting out ‘what if’. By being receptive to the challenge she expands her control and her reciprocity.

This involvement has three critical aspects: control, memory and cultural continuity. These are embodied in the hands of the same individual using mechanisms such as personalization by taking possession of intentions, control of the process, and continuously creating by changing the material artefacts that constitute each part of the home-as-artefact. **This provides the woman with maximum freedom to manipulate her own immediate expressions, realizing this ability gives her reciprocity.**

Her process of making can be described as *Bricolage* because of the same methods of intention (ontology) and execution (haptic) is applicable. A French word for ‘tinkering about’ or ‘do-it-yourself’; a *bricoleur* (eg. the making woman) undertakes odd jobs, the French term has been retained by translators of Levi-Strauss, (1969) who uses *bricolage* to describe a characteristic feature of mythical thought, or thinking that creates myths [and artefacts-as-homes], expresses itself with a heterogeneous but limited repertoire of oddments left over from a variety of human endeavours. Its themes are a subset of a wider culture [that] already has their own meaning, but they can be rearranged in new combinations and contexts. Mythical thought uses them because it has nothing else to hand, and cobbles them together to create new myths and stories through a process of intellectual *bricolage*. *Bricolage* is not a primitive form of thought that is transcended through evolution, but a fundamental aspect of human intellectual activity; all societies use it to create their own myths. (Macey, 2001:52)

BaSotho women’s art of the earth, *litema*; a word derived from the *Sesotho* verb *ho lema*, to cultivate. The term is applied to all four forms of mural decoration: engraved patterns, mural painting, relief mouldings and mosaic. The association with cultivation is the scratching of the

surface as if the soil is prepared for the sowing of seed as in the fields. She will be engraving the wet mud with a sharp tool, done with absolute control of the hand, without the aids available to a draughtsman, set square, protractor, spirit level or measuring tape. **This accepted assurance of eye-hand coordination is a sign of reciprocity.**

Perseverance

The intensity of this immersion in the process has positive as well as negative lived experiences. She does not always achieve the correct solution; she can also get hurt, things break, and fall. Resolving this however, is essential to the qualities sought in the made artefact. This only applies in her rural context, when she becomes urbanised she has no opportunity to act as maker but has to accept a finished product.

The making process will also have to adapt over time, especially adapt to the woman, every new location brings a new collection of ideas as sensual experience, she will personally be involved in re-making the home-as-artefact, resulting in the familiar muscles shaping, culture of self-build and make as an extension of her expectations, calloused hands, hurt of excessive force, responsibility of future safety, correctness, lessons learnt from previous experience, elders and peers. Her freedom to innovation and invention from accumulated experience makes her responsive to solve unexpected problems, discover through discovery ideas and the exact quality of a material which will determine her final choice, sometimes by colour variation or texture about applicability.

Bodily rhythm

Dexterity of using any tool only came from continuous trial and error. To get into the quality of execution was evidence of this. She discovered the value through bodily action of procedures, how the use of her body helped to decrease effort, and the affective pleasures derived from making. Also when limitations of her body necessitated the making of tools, if for instance, the hand was not sufficient. The ability to innovate when materials were not what was expected, being for example, too short or too long, big or small.

The procedures of making the home-as-artefact were highly collaborative. This process was committed to hands-on experiments and engagement with all aspects in the making of artefacts. The way it operated and the resultant end product were very much the result of her intentions,

predilections and personality. Yet it was also dependant on the rules she was acquainted with since childhood, accumulated through play, contributions of collaborators and outside help, experienced knowledge of elders and the availability of the right quality materials.

EXECUTION AS THRESHOLDS OF INTERACTIONS

Empirical observation and induction of the evolution of form in action

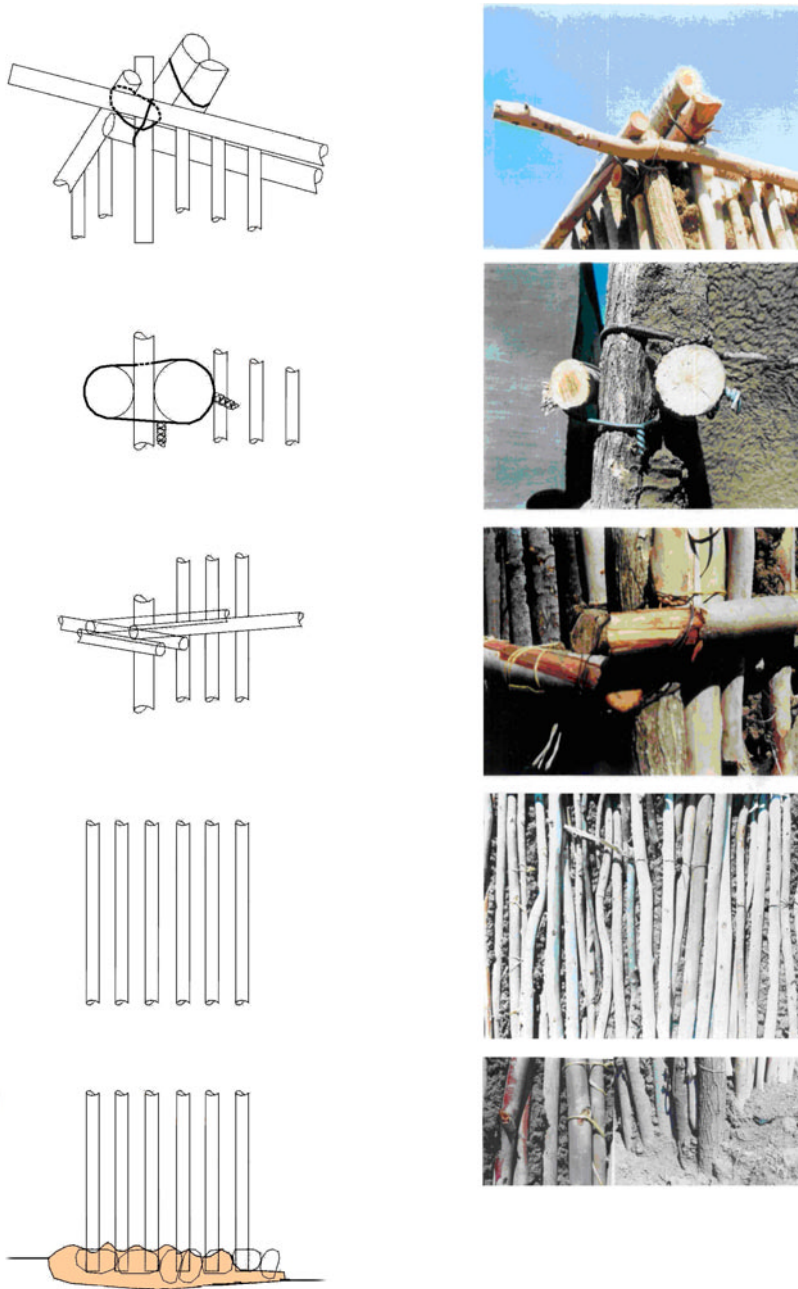


Figure 6.3 A sequential collage of starting the process of making a home

Shown is the sapling framework ready to receive the earth plaster. This frame only served a purpose of initial support, once the clay had been applied it became redundant, saplings acted as the first structure, this role was taken over by successive layers of earth, the saplings were eroded by time which left a hollow core with a clay wall substantial and robust enough to protect the family, also spoke its own language.

Preparing earth for use

Her source of knowledge of materials is from helping her mother as a child and from peer group neighbours who might know the context better. These are stored, dried till ready for use. Her materials for plastering the wall is black clay and cow dung mixed with water to the right consistency



She uses her hands for the mixing of the clay and cow dung to test the consistency and also to find any stones or organic material that might reduce the quality of the plaster and impede the process of plastering



The mixed material is gathered in a bowl for application to the timber frame structure, already in place, usually done by her husband, an expert or by herself



She uses hand fulls of the mixtures to test its consistency and its mass to prevent damage to her body especially because she has to work in awkward positions



Figure 6.4 The method of mixing and preparing the earth and cow dung mixes

The earth, a sacred material to the *BaSotho* because it is the realm of the *Badimo*, protected and provided by the *living dead*, was mixed with water and cow dung and kneaded to get the mix to the right consistency, pressed by hand into the spaces between the saplings and left with the impressed hand and fingers reading in the shadow patterns of the surface for the sun to dry it. After application the product was left to dry and become hard. It is also this wetness that caused future collapse of a wall if it became too moist after heavy rains.

Application

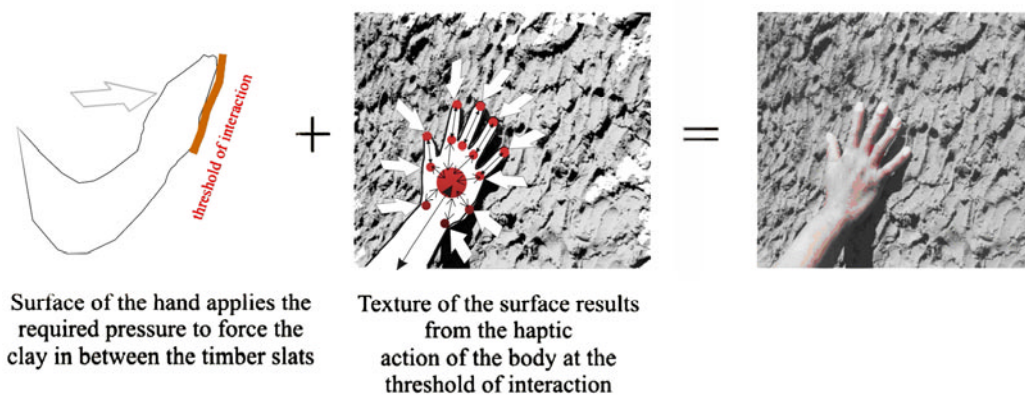


Figure 6.5 Application of the wet earth mixture to the frame of saplings

The pressure of the hand had to be counteracted by a bodily pressure or else she will fall over backwards. Her bodily instinct of overcoming the forces of gravity prevented this by the full body counteracting the force by leaning into the plane of action and therefore changing her centre of gravity. **This bodily adaptation became an integral component of innate knowledge; it enlarged her experience of reciprocity.**

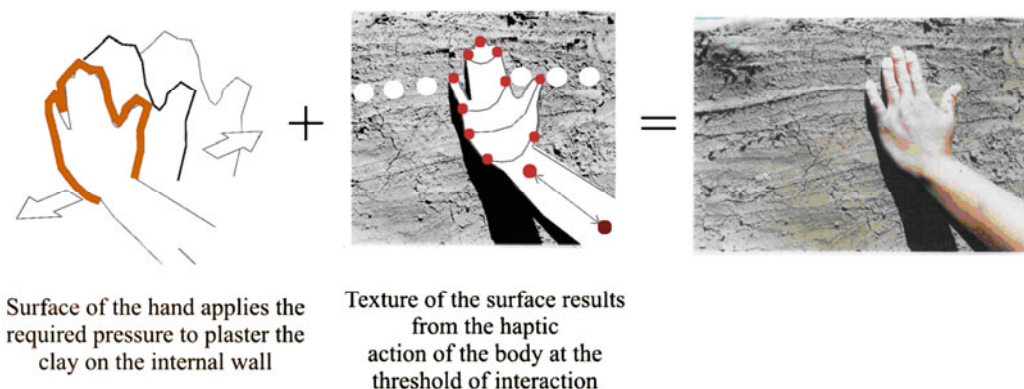


Figure 6.6 After several layers of plaster the function of the saplings lapsed

Layer by layer a coat of mud plaster covered the rough surface, and was smoothed over by her hand in rhythmic sweeps as if a child is pacified, the sweep of the hand remained as a pattern of care and reminder. She learnt as child while observing her mother doing the same, and through the touch and feel of the material she understood just when the correct amount of water made her material useful, it will not fall off or crack after application. New layers of plaster applied seasonally to prevent erosion gave the wall its thickness and it's reading of solidity.

The initial timber framework has become redundant and regular and constant maintenance of the external and internal surface results in a wall of almost 300mm. The inaccuracy and warping of the wall plain results in a story of the past and passing of time

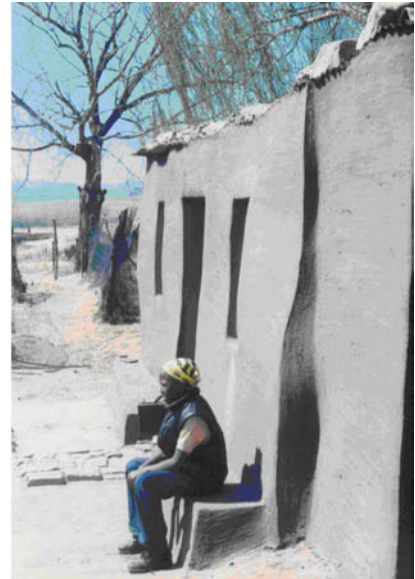


Figure 6.7 The act of layering sometimes resulted in pleasant human errors



Figure 6.8 The curved façade was such a result of a sculptural hand Photo; FitzGerald

Built earth blocks became a home

Building with earth blocks a spade was used to methodically remove earth sods from the patch chosen as correct in quality of material. The earth block was the width as well as the length of the spade. Working along a straight line the front edge of the block was the back edge of the previous block. Side edges were cut before the process started. Any roots in the soil strengthened the block. These blocks were immediately ready for building. Earth slurry was used as bonding agent between the blocks. An opening for the door and windows was left as the building actions progressed; these were later installed when the wall was complete. In the figure a lintol off the branch of a tree was used to act as support for the section of wall above. The walls were plastered and finished inside and outside with *litema*.



Figure 6.9 Earth blocks or sods were used as alternative to the use of a sapling frame

Photo; FitzGerald

This method of building is common in the biggest part of Africa with cultural variations as part of a continuum of social constructs and is still used in contemporary building processes. There was also a prevalence of women as makers of these homes as artefacts, whereas men built the community buildings (eg. Mosques and structures for storing agricultural products in ancient Egypt and Tunisia). Continues maintenance and regular replastering the wall ensured that moisture did not penetrate the wall and cause its collapse. **The opportunity for her to exploit this necessity was the result of subtle additions or variations in the *litema* added to her biography of reciprocity.** At times this change was of the whole façade, which gave the artefact a fresh series of meanings and constant innovation.

ACTING OUT ONTOLOGICAL AND HAPTIC PHENOMENOLOGY

The play of 8 acts by the intentional maker as play-wright

Actors are the making women

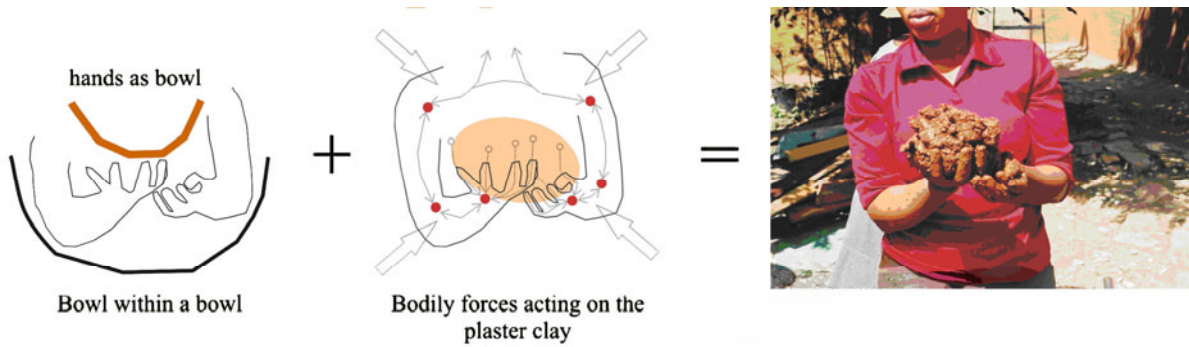


Figure 6.10 Act no. 1 in the play of 8 acts by the playwright, the actors were making women

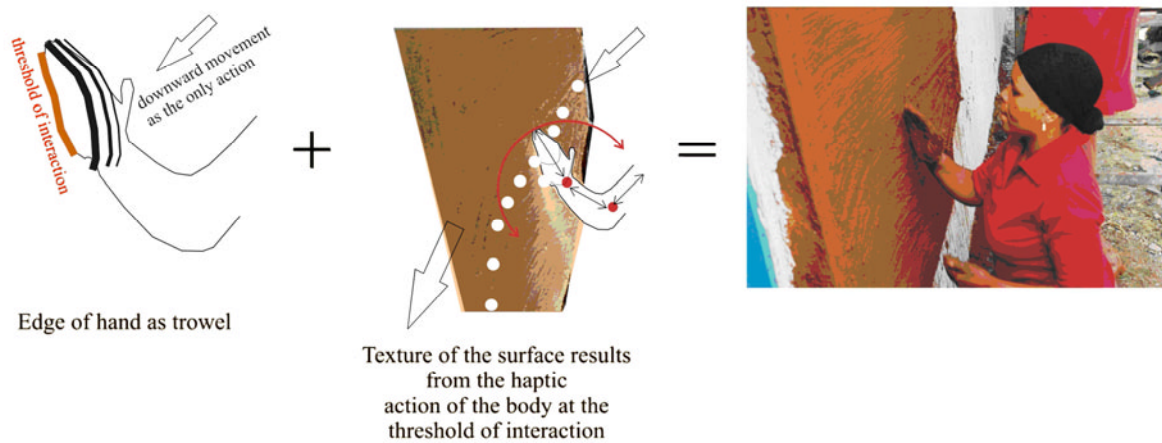


Figure 6.11 Act no. 2

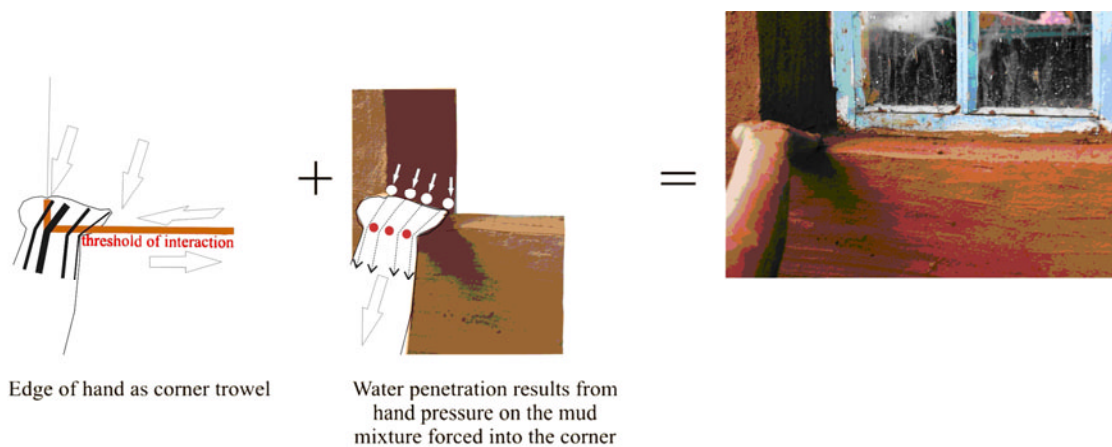


Figure 6.12 Act no. 3

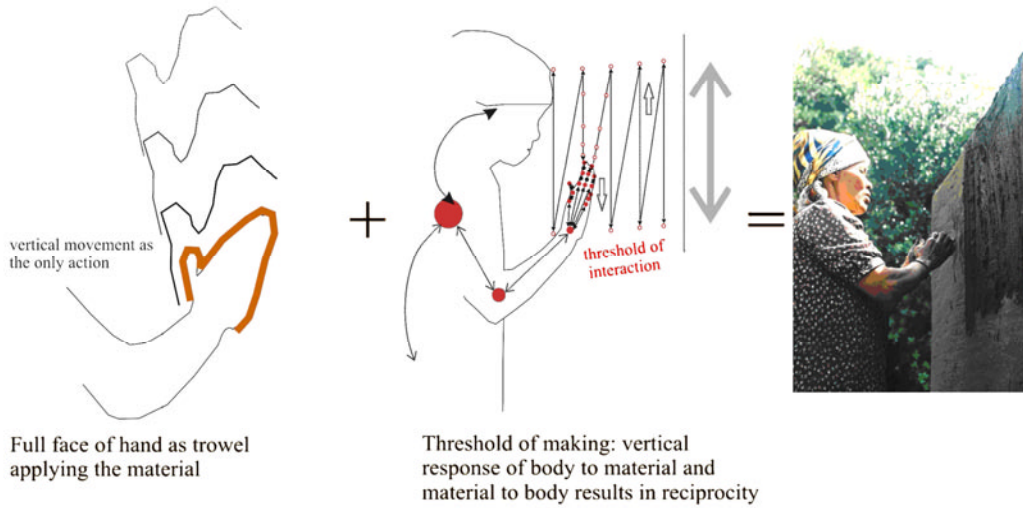


Figure 6.13 Act no. 4

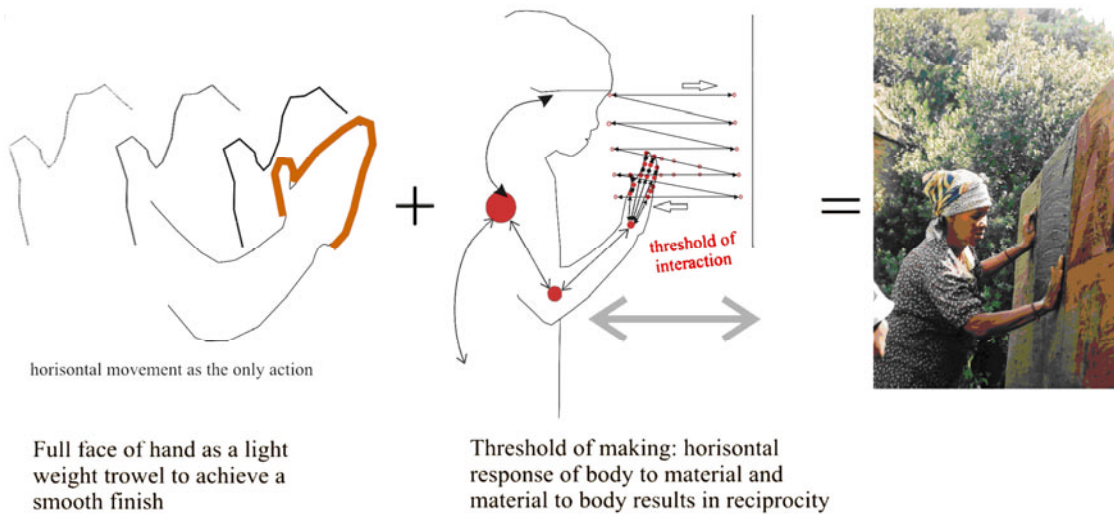


Figure 6.14 Act no. 5

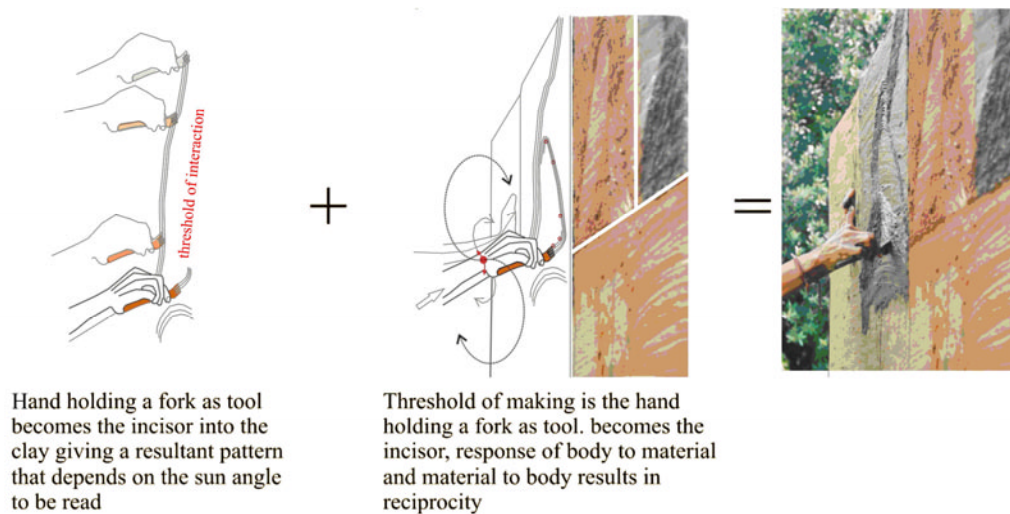
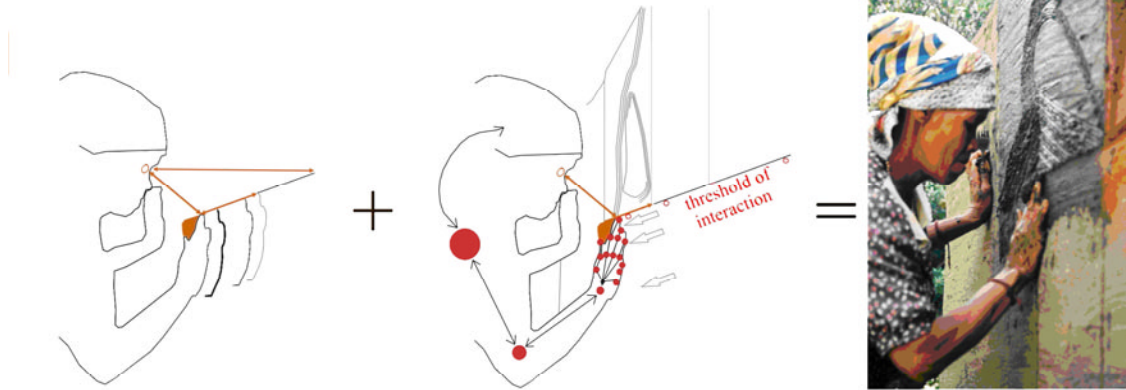


Figure 6.15 Act no 6



The threshold of the pattern made is the hand as edging tool. The eye perpetuates the line of the previous patterns to create a total coherence

Threshold of making is the hand as edging tool. The excess clay is bundled up in front of the hand. The eye hand interaction comes from years of experience and self knowledge. This is the ultimate test of reciprocity existing

Figure 6.16 Act no7

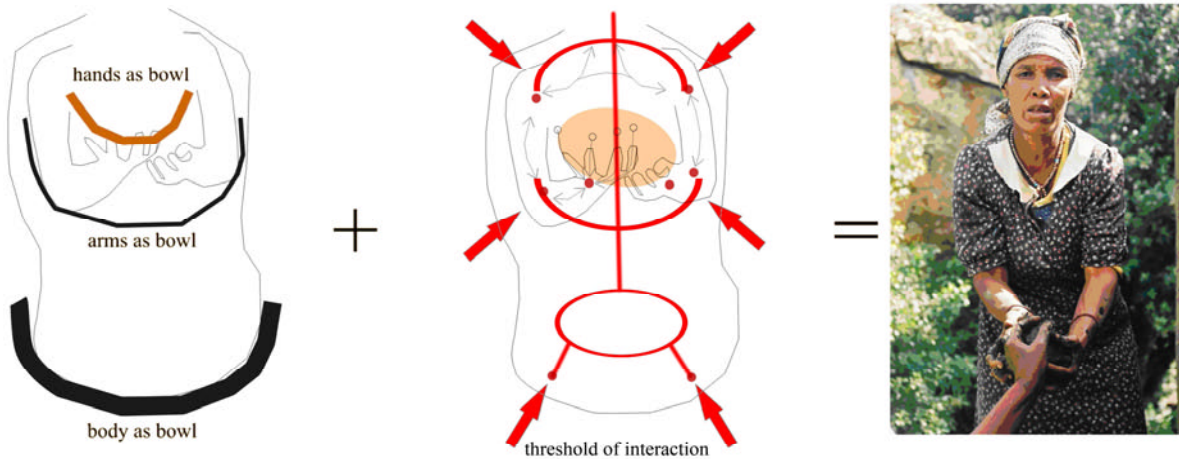


Figure 6.17 Act no 8

During a process of making, all her senses were combined in an intense bond between herself and the task at hand, be it the building of an earth wall or doing *litema*. Associations were derived from the senses being stimulated but equally this stimulation resulted in the realization of new associations. **The increase in the intended range of associations being executed led to reciprocity being engendered.**

LITEMA: AS AN ART OF THE EARTH (Van Wyk, 1998: 78)

Litema was unique as the *BaSotho* women's language of the earth, *litema*; a word derived from the *Sesotho* verb *ho lema*, to cultivate. The term was applied to all four forms of mural decoration: engraved patterns, mural painting, relief mouldings and pebble mosaics. The association with cultivation was the scratching of the surface as if the soil was prepared for the sowing of seed as in the fields. She engraved the wet mud with a sharp tool, done with absolute control of the hand, without the aids available to a draughtsman, set square, protractor, spirit level or measuring tape. This accepted assurance of eye-hand coordination was a sign of inward reciprocity.

The home-as artefact in use, under circumstances imponderable at the time of her making and in society has proven her value as decision maker and the execution of those decisions that resulted in a product of excellence. "The responsiveness of tribal architecture to both internal and external forces is a lesson that has practical significance. The architect knows that in shaping life space [she] also shapes lives." (Walter Goldschmidt in Prussin, 1969: ix)

The imperfections of the handmade *litema* gave it its haptic quality (Pallasmaa, 2005). Although it mainly addressed the visual senses, the hand and its bodily movement and control made it tactile. **It also imbued the *litema* with meaning through thought processes, thus decisions made and the resultant reciprocity.**

Each one of the façades of a home had a multitude of finishes of only one material, earth. The various sectors had the signs of the hand as trowel, or the alternate as incisions using a comb or fork as tool. Its effect was by a combination of the shadows and bright bands caused by the sun.

To accentuate the centre of a single block in another façade the earth is painted with a circle of white clay with the black adjoining clay sector to enhance the contrast achieved in the total blocked façade. The following figures show a sequence of these particular visual images, the first was from a distance and the only impression was of white marks on a black background, as the distance between the observer and the figure decreased the detail of the white mark could be read as a diagonal cross within diagonals of grey and black as extensions at the ends of the crosses. Only when close to the figure did the variations of smooth and tactile surfaces become apparent, the tactile quality of *litema* also became legible, sun light accentuated all the qualities of finishes.



Figure 6.18 This multitude of creative effort resulted from adding ‘wetness’ of water to earth



Figure 6.19 Inflections of light enhanced the tone of coloured textures



Figure 6.20 This detail of *litema* captured the haptic qualities of the tools used

The front façade in the figure above had pebbles bedded into the earth, mud, within a delineated matrix, finger drawn and painted. The façade on its right was cut into the mud by a tool, perhaps a fork. The back wall was earth plaster and finished by hand. In all these examples the markings of the finishing tool, especially the hand, was clearly legible and gave it the quality of caress. Also clear was the process of the act, in painting it, this quality would be referred to as painterly by its readers and critics in the humanities.

The *litema* was covering a wall from end to end but not beyond the corner on adjoining walls.

Each façade was done as though by someone else. The *litema* also had no correlation with the other façades in a settlement. This was common with almost all the *litema*; it was only related in thought within its own boundaries. Variations of a specific *litema* might be used somewhere else but each plane contained its own identity, also its own associations and use along its length.

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CONCLUSION TO CHAPTER SIX

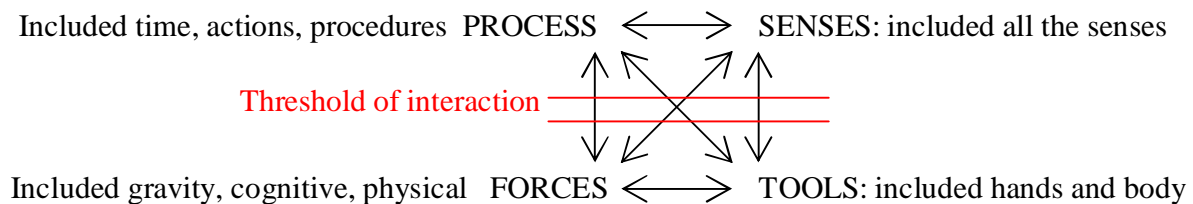
The crux of the research was the process of action It concentrated the investigation in order to discover information and record action as text. Primary data could be induced by observing and recording women in the acts of creating artefacts-as-homes, not only while building walls, but especially when applying *litema* to the individual inner and outer plains of these walls.

The relationship to previous Chapters was to further the substantiation of the hypothesis by the maker's liability to answer how recurrent tactics underpinned and concluded that reciprocity was transferred to the making woman being 'made', a substantiation of reciprocity in the hypothesis.

Links and connection points between aspects of work, thoughts or ideas

The process of action was intensified at the interface of hand as tool, the material (earth) and the receiving plain of intended embellishment. This action became a constantly changing threshold of interactive multi reciprocal processes that affected both the maker and the actions with its rules dictated by the material used: earth. Senses evaluated but also instructed; gave continuous guidance to the process of tools used, these tools with the material as well as time forced actions which then affected the senses.

Threshold of interaction



A maker's mental and physical concentration on this process of action was an innate ability to control and creatively use the interactive relationships between the main components of the research (eg. phenomenology, reciprocity, language, learning, forces and process) Through the experience of this interactive process, specialisation was an extension of each one's natural reciprocal ability. Excellence was not automatic; it had to develop during her lifetime but talent or a natural ability or effective learning, although in her world of intentions it was not only what she knew but what she did with what she knew.

INTERACTIVE COMPONENTS

Ontological and haptic phenomenology

Ontological and haptic phenomenology were combined because of similarities in objectives, other than that ontology was about intentions and haptic was about execution of reactions to ideas. These two inflexions of phenomenology were the most appropriate method for researching the

deeper meaning of the hypothesis due to its reliance on actual recorded action substantiated by inductive reasoning.

Botho as the African phenomenology of expectations, aspects of this was referred to in this Chapter as the execution of moral obligations with the inclusion of the relevant implication; to develop an applicable language that was uncovered during the act of making. Relevant in that it invited a communal discourse within her social construct.

These inflexions, ontology and haptic, were enhanced by authors as architects as well as other authors who articulated, in support of the inflexions, an interrelated bond between intended and interpreted sensations. This infused the process of actions with a continuous reflective attitude. Its articulation further enhanced the hypothesis by adding a dynamic dimension. Reciprocity from ontological phenomenology resulted from her staying in control of the process of making with every decision considered, accepted or rejected and the her proof of her correct decision was evident in the final product and its language spoken to the members of her social construct.

The observation of reciprocity presenting itself in haptic phenomenology could be induced from the fingertip dexterity that has evolved within the making woman who stayed in control of her hand, body and tools implementing sensorial intentions. She was satisfied not only with its material qualities but also its level of resolving her aims. She did evoke reactions of the senses, but also from the imponderable use of her artefact.

Reciprocity

Reciprocity was the accumulated result of lived experience, phenomenology, during the procedures of making a home-as-artefact. Having been a witness to the agility and conviction of women makers busy in actions of executing objectives; of endless deliberation, discussion and conjecture, was enough to induce the relevance of the statement; as she made she got 'made'; reciprocity as her expected implied reward sought by the hypothesis.

Language

Speech acts; whatever can be thought can be made, were confirmed by the observed actions of the women makers. The variations of executed language, *litema*, emanating from their procedures of labeling interpersonal discourse was sufficient evidence of lessons learnt informed the senses while busy with their acts of engagement. The language made was convincing and legible. Successful application at macro and micro levels generated the intended responses from those involved in her communicative acts. This gave respect from spectators and their applause; it was a valuable form of reciprocity.

Learning

Certainty during an exercise in action endorsed the value of learning. The growth of innate knowledge could only be tested by executing an accumulated understanding of the forces acting on the process and staying in control. This learning process resulted in being confident and re-assured; it had its measure of reciprocity. The accumulation of knowledge could become an end in itself; it was not only about what she knew but the challenge was what she did with what she knew.

Forces

During design and as it was acted out materials dictated possibilities and limitations. Actions of her body dictated form, decoration or beautification were the lacing of the habitable woman; she sourced materials at hand, found out how new needs demanded new inventions, with tradition as part of her knowledge base. Distilled insight was recorded during execution, the making procedures turned into continual experiments, repetition developed confidence. The quality of execution also relied on visual intelligence, being inventive, talent and self confidence.

Process

Phenomena of sequential action were interconnected between intentions and perceptions. These interactions were dynamic; when executed intentions became perceptions, but new interpolations of perception generated new intentions. Consequential results were generated by the intensity of infused involvement in these impulsive processes; the uncompromising response of her social construct determined her index of reciprocity.

By making she generated insights, but only through this involvement did disclosure generate new insights. It confirmed that through acts a cultural continuum of lived experience, but also reciprocity, was achieved. During the process of action of making an artefact-as-home, she did get made. Reciprocity in the evolution of self during a process of making was observed as existing.

By making humans are made. This confirmed the hypothesis.

The cardinal aspects of the phenomena captured within the process of making

A complex network of phenomena as communicative action was revealed. Other aspects affecting this complex network were presented within the intention (ontology) and its sensorial perception through execution (haptic) during a lived experience of the making women and its reciprocal, being 'made'. The hypothesis was confirmed.

The essentials of what was taken from the review into the rest of the work

In previous Chapters as well as in the subsequent Chapter tests confirmed the existence of reciprocity. The positively identified principles aided confirmation that the creator, a *BaSotho* woman, whose actions of making homes-as-artefacts appeared to her peers, carrying with it their approval, praise and recognition. Induced from this is proof of her lived experience of reciprocity.

Through observation of the process an interactive network was confirmed. Lived experience assists reciprocity to be accumulated, the quality of reciprocity is dependent on the extent to which knowledge was applied during the process of making a language which could be interpreted as responses to forces. This gave a deeper meaning to reciprocity. She was rewarded for adding meaning to her and other people's lives.