ISSA Proceedings 2006 ~ On How To Get Beyond The Opening Stage
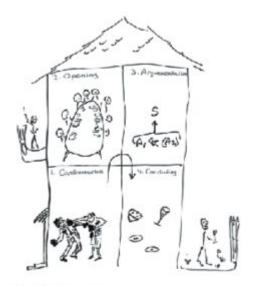
1. *Introduction*
What is the opening stage? And why would it be hard to get beyond it?

The opening stage – as many will know – is one of the four discussion stages contained in the familiar pragma-dialectical model of critical discussion (Van Eemeren & Grootendorst 1984, 1992, 2004), which constitutes a normative model for argumentative activities aimed at the resolution of a difference of opinion. It is one of the merits of this model that, in its description of the ideal argumentative process, it does not limit itself to argumentation in the proper, but narrow, sense of advancing arguments for a standpoint, but includes discussion stages where other necessary steps for the resolution of differences of opinion are located. Remember that there are just four stages, and that they are, in order, the following:

1. Confrontation Stage
2. Opening Stage
3. Argumentation stage
4. Concluding Stage.

Contrary to what may be expected, the opening stage does not figure as the first stage (whereas the concluding stage finds itself indeed neatly placed at the end). This is a vagary of nomenclature that sometimes breeds confusion even among experts. Apart from that, it is clear that the process of argumentation proper has been placed in the third stage, the argumentation stage, and that the first two stages figure as preparatory stages.

The problem I want to discuss actually pertains to both preparatory stages, namely: how can one get them completed, in a satisfactory way and within a reasonable time, to move on to what is properly called argumentation. However I will discuss this problem with special reference to the opening stage.

To enhance a more lively remembrance of the four stages of discussion you could picture them as a house with four rooms (see Figure 1).

Figure 1: The House of Stages

When guests enter into this house they start on the ground floor in Room 1, a kind of gym – a place suitable for boxing exercises – which represents the confrontation stage, i.e., the stage where a difference of opinion is made explicit. The goal is to get, ultimately, to Room 4, another ground floor room, giving on to the garden, where refreshments are served – drinks and tidbits – which room represents the concluding stage, i.e., the stage where agreements are achieved. Now to get there, our guests have to pass through two other rooms, both on the upper floor, which represent the opening stage (Room 2) and the argumentation stage (Room 3). In Room 3, the actual business of argumentation is going on: for instance, a standpoint S is being supported by argument. But before one gets there, a lot of preparatory work needs to be done. The agenda will be presented in the next section, but one thing that has to be settled is the choice of a system of discussion rules that the parties are going to adhere to. No wonder Room 2 is packed with theorists of argumentation debating these rules. The complexity of issues and the multiplicity of perspectives is making one wonder whether any agreement will ever be reached at all. One would be fortunate to see the people in Room 2 manage to come to an agreement about just the shape of their table. Even that issue can be nasty, as was the case at the opening stage of the Paris Peace Conference about Vietnam. As some will remember, in 1968-69 the shape of the table was debated for months. This, of course, was a case of opening a negotiation dialogue, not a persuasion dialogue or argumentative discussion. Yet, the case of the Paris Peace Conference constitutes a classical illustration of how difficult it may be to get beyond the opening stage of a discussion. (Which is not to say that the issue of the shape of the table was unimportant at the time.)

The rest of this paper will be organized as follows. As I announced before, I shall first present the agenda for Room 2, i.e., a task list for the opening stage, assembled from pragma-dialectic writings (Section 2). Then I shall illustrate these tasks in a dialogue (Section 3), point out some problems (Section 4) and start on some sketch of a way to adapt the architecture of critical discussion in order to overcome these problems (Section 5).

2. *The Agenda*

Coming from downstairs (the gym) with a freshly formulated difference of opinion our guests must now, in Room 2, consider what they will do about their dispute. Fortunately there is, put up on the wall, a large piece of paper on which their tasks are listed. They must come to agreements on the following issues:

1. whether to opt for discussion, i.e., whether to engage in some kind of discussion at all, or rather do something else, for instance, draw lots or have recourse to violence (Van Eemeren & Grootendorst 1984, pp. 85, 88, 105; 1992, p. 35; 2004, pp. 68, 137);

2. whether to opt for argumentative discussion (persuasion dialogue), which is aiming at rational conviction (rather than, for instance, negotiation dialogue aiming at a compromise or an eristic altercation;**[i]**

3. what global discussion rules to use to organize the discussion, i.e. what system of persuasion dialogue to adopt (Van Eemeren & Grootendorst 1984, pp. 88, 105; 1992, pp. 35, 39; 2004, pp. 60, 68, 137, 142-43);

4. who will perform the role of Protagonist and who will perform the role of Antagonist, with respect to each of the propositions constituting the difference of opinion (Van Eemeren & Grootendorst 1984, pp. 85, 88, 105; 1992, p. 35, 39; 2004, pp. 60, 105, 137, 141-42);

5a. what logic system is to determine the underlying concepts of validity and consistency (Van Eemeren & Grootendorst 1992, p. 94; 2004, p. 148);
5b. what procedures to adopt for testing for validity and consistency in concrete cases that may arise at the argumentation stage (Van Eemeren & Grootendorst 2004, p. 148);

6a. what argument schemes to admit and to what standards applications of these schemes should conform in order to be correct (Van Eemeren & Grootendorst

1992, p. 159; 2004, p. 149);
6b. what procedures to adopt for testing for admissibility and correctness of application of argument schemes in concrete cases that may arise at the argumentation stage (Van Eemeren & Grootendorst 1992, p. 158-59; 2004, p. 149-50);

7a. what propositions to accept as basic premises, whether as axioms or as defeasible presumptions, to function as starting points for arguments (Van Eemeren & Grootendorst 1992, p. 35, 149, 151; 2004, p. 60, 68, 137, 145);
7b. what procedures to adopt for testing for acceptability of basic premises in concrete cases that may arise at the argumentation stage (Van Eemeren & Grootendorst 2004, p. 145-48).

A glance at this paper on the wall should convince the participants that they need not fear to run out of work, unless they would skip, or only summarily discuss, large parts of the agenda. The dialogue in the next section will serve as an illustration.

3. *A Dialogue*
In their conversation, as recorded below, Ophelia and her father will demonstrate the various tasks that need to be performed to complete an ideal opening stage. Numbers in brackets indicate the various items on the agenda.

Polonius: To say it just simply and in unadorned language: dolphins are astoundingly intelligent.
Ophelia: Why do you say so, father?
Polonius: Oh dear, didn't you see the latest issue of the Proceedings of the National Academy of Science?
Ophelia: Stop, daddy. If this is an argument, you are skipping the opening stage.
Polonius: Am I?
Ophelia: Yes, before you can present an argument we must first agree what to do about our difference of opinion. [1] Shall we discuss it?
Polonius: By all means.
Ophelia: [2] Contentiously? Or by rational persuasion?
Polonius: Rational persuasion would be perfect, sweetheart. Someone will try to convince the other that dolphins are really smart.
Ophelia: And someone else will try to cast doubt on that proposition. [3] What discussion rules shall we use? How about the pragma-dialectic model?

Polonius: Fine. [4] Let me be the Protagonist.

Ophelia: And I shall be the Antagonist. [5a] I suggest we use classical propositional logic.

Polonius: [5b] And we'll check specific cases by truth tables. [6a] I suppose arguments from authority will be acceptable?

Ophelia: I do not fancy them. But OK, provided the authority is impeccable.

Polonius: [6b] Scientific journals would count as such?

Ophelia: And the bible.

Polonius: [7a] Now, what propositions do we agree about to begin with? I presume that if a species uses proper names they must be astoundingly intelligent?

Ophelia Absolutely! But only humans do.

Polonius: Ho stop! We are not yet through with the opening stage.

Ophelia: What more?

Polonius: [7b] As a general procedure to agree on basic premises, I suppose you will gladly accept Freeman's manual (2005) in its entirety?

Ophelia: With pleasure. But now let's have our argument.

It is obvious that in this conversation between Ophelia and Polonius the opening stage was cut down so as to retain just the barest exchange needed to address each item on the agenda. (Nevertheless what was said sufficed to give Polonius a very strong position as a Protagonist in the next room.) It is not hard to imagine that a more serious opening stage would have to be much more involved and protracted.

4. *Problems*
The most striking problem about the opening stage is its tremendous workload. Given that it is at that stage unknown what arguments will turn up in the next room, how can one make sure that enough argument schemes, procedural methods, and substantive propositions have been agreed on to have a fruitful argumentation stage? When is an opening stage completed? This I shall call the *completion problem*.

The completion problem becomes even more pressing on three counts. First there is the indefinitely long list of propositions to be screened for eligibility as basic premises. Perhaps this list can be handled more systematically and more efficiently by agreeing on procedures to establish basic premises instead of considering them one by one. Even so the discussants need to consider, section by

section the issues in Freeman's book (2005).

Second, what if the discussants do not immediately agree on a proposed basic premise, or on the appropriateness of a type of argument, or its conditions of correctness, or on some matter of logical theory, or on some detail of one of the testing procedures? How do they settle their differences? If they decide to resolve them by critical discussion, this would lead to yet another opening stage to prepare for the argumentation stage of this inserted discussion. And if differences of opinion were again to arise in the opening stage of this inserted discussion, this could lead to yet another inserted discussion, and so on. Thus, the danger of an infinite regress looms ahead.

Third, even when both parties agree after some time that their discussions at the opening stage now provide a sufficient basis for them to proceed to the next room, they could, at the argumentation stage, run into unforeseen problems that necessitate a return to the opening stage. According to Van Eemeren and Grootendorst, as soon as the Antagonist overtly doubts some explicit or implicit premise used by the Protagonist, a new difference of opinion (a subdispute) arises occasioning a new discussion (a subdiscussion):

Besides advancing contra-argumentation against all or part of his opponent's argumentation, a discussant can also indicate that he does not accept all or part of it. This he does by casting doubt on the statement or statements concerned or by describing them as insufficient justification or refutation. In all these cases this means that strictly speaking a *new* dispute has arisen which in turn gives rise to a *new* discussion, the outcome of which may, however, be crucial to the resolution of the original dispute. (Van Eemeren & Grootendorst 1984, p. 89, original emphasis)

Applying the pragma-dialectical model of critical discussion to this new discussion (the subdiscussion), one must conclude that, upon entering a subdiscussion, another opening stage is called for. Since the opening stage of the original discussion may be so construed as to include the opening stages of the subdiscussions, one may also express this by saying that a return to the opening stage of the original discussion is required. For instance, a return to the opening stage would be required if Polonius, in the argumentation stage, were to present an argument that is thereupon criticized by Ophelia. (The example continues the dialogue recorded above at the point where the discussants enter the

argumentation stage.)

Polonius: Dolphins are astoundingly intelligent, because they are a species that uses proper names and if a species uses proper names they must be astoundingly intelligent.
Ophelia: But how do you know they use proper names?
Polonius: That was in the Proceedings of the National Academy of Science.**[ii]**
Ophelia: Ho stop, daddy. Mine was an expression of doubt, so we are having a subdispute and must first return to the opening stage.

Van Eemeren and Grootendorst suggest that for subdiscussions one could do with the blanket stipulation that they must be "conducted in accordance with the same premises and the same discussion rules accepted in the original discussion" (Van Eemeren & Grootendorst 2004, p. 147). But it seems hard to exclude the possibility that the special character of some premise would require some special provisions as to the way it should be defended. For instance, the original discussion may be about some moral proposition, and not require a deductive proof, whereas one of the premises used by the Protagonist may belong to applied mathematics. If so, upon each utterance of doubt, expressing a difference of opinion, a return to the opening stage would have to follow, a circumstance that would aggravate the problem of getting beyond the opening stage.

There is, however, also a reverse problem, which arises if the parties would indeed succeed in bringing their opening stage to definite completion. This is the *fixity problem*, the problem that, once the opening stage has been completed, hardly anything is left for the argumentation stage. The decisions taken at the opening stage seem to suffice to determine completely the formal and informal logic that governs the argumentation stage as well as the set of available basic premises. Thus it seems to be determined whether or no an acceptable argument for the initial standpoint can be put forward. Hence the opening stage all but determines the outcome of the argumentation stage, all interesting matters having been discussed at the earlier stage. Given that the argumentation stage is usually seen as the heart of the argumentative process, this is at least an odd result.

A more technical and theoretical problem is that of the relation between the concepts of metadialogue and that of an opening stage. This is the *status problem*: does the opening stage belong to metadialogue? In a former paper I

used the opening stage as an example of metadialogue (Krabbe 2003) because it contains dialogue about dialogue. But within pragma-dialectical theory the opening stage is clearly positioned as one of the stages of the ground level dialogue. This needs to be sorted out.

5. *Solutions*
At this point I would be glad to conclude my paper since, as usual, I see many problems but hardly any solutions. Nevertheless I shall present some suggestions to steer between the Scylla of the completion problem and the Charybdis of the fixity problem. The goal is of course to get a more realistic, yet normatively strict, set of rules for dialectic.

Foremost, I think it would be a good idea not to try to treat all tasks on the agenda of the opening stage on an equal footing. These tasks may be relocated at different points of the dialectic procedure.

As far as I see there are four possible locations for these tasks:

1. outside the discussion;
2. at the opening stage of the discussion;
3. in a metadialogue embedded in the discussion;
4. at the argumentation stage of the discussion.

The first location lies outside the dialectic process. The idea is to remove some tasks from the dialectic procedure and to presuppose that these tasks were performed before the discussion starts. This way of removing items from the agenda could be considered for
(1) the decision whether to engage in discussion at all and
(2) the decision to engage in persuasion dialogue and
(3) the decision to engage in a specific type of persuasion dialogue which is characterized by a specific set of discussion rules. The task of the dialectician is just to describe a certain system of discussion rules and does not include the description of rules that govern the decision to select the very system he describes.

The second location coincides with the present location of these tasks at the opening stage as a preparatory stage of the dialectic process. The following tasks on the agenda could keep their place at this stage: (4) the decision who is to perform what role; (5a) the decision on logical theory and (6a) the decision on

appropriate argument schemes including some of the theory of correct application of these schemes; for the other items, which concern procedures ((5b), (6b), and (7b)) or propositions ((7a), and (7b) again) it could be made optional to what extent they are to be discussed at the opening stage.

The third option for locating tasks on the agenda would be to execute them in a metadialogue, which in a sense amounts to returning to the opening stage. This metadialogue must however be embedded in the argumentation stage, i.e., at the point where the participants enter the metadialogue, it must be functionally relevant for the purpose of that stage. This option is suitable for discussing details of the procedures that take care of (5b) the application of logic, of (6b) the application of argumentation schemes, and of (7b) the testing for acceptability of basic premises. Consequently, these matters will be discussed only when, at the argumentation stage, the occasion arises to do so. Metadialogue can also be used for (7a) the determination of the status of proposed basic premises.

The fourth location is the ground level discussion itself. It is another suitable location for (7a) the introduction of basic premises, supposing that the Antagonist is free to concede propositions that may be used as basic premises in addition to those granted at the opening stage.

The reorganization of the agenda of the opening state may not, in all respects, provide a solution for the completion problem, but it will at least mitigate the trouble. For if such a reorganization is accepted, one forgoes the ambition to achieve completion of the original agenda at the opening stage. Even for the part of the agenda that remains at the opening stage completion is not necessary, since there is lots of room to make repairs later in the metadialogues.

But how about the danger of an infinite regress? To avoid an infinite regress in the opening stage, it suffices to stipulate that the opening stage, in its reduced form, should not itself exhibit argumentative discussion but rather be limited to some uncomplicated version of negotiation dialogue.[iii] However, a theoretical regress in the metadialogues cannot be ruled out in this way, since, presumably, these must be argumentative. In this case, however, infinite regress can be condoned as an acceptable idealization. Moreover, infinite regress will not occur in practice, since, as we know, real discussions are all finite in length.

About the other two problems I shall be brief. Upon reorganizing the agenda, the

fixity problem disappears now that more of the tasks are left to the argumentation stage. As to the status problem: we see that not all of the tasks of the original opening stage need to be performed at a metadialogical level, though some will. So part of what used to be the opening stage will retain the status of ground level discussion, and part will be reassigned to the metalevel.

NOTES
i. In the pragma-dialectical writings this item and the preceding one occur as one issue of deciding to discuss.
ii. May 2006.
iii. I am thinking of a simple system of offering, accepting, and rejecting, without recursion, and without embeddings of dialogues of other types.

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South Africa – The National

Association of Social Housing Organisations

Ills.: nasho.org.za

Who is NASHO?

The National Association of Social Housing Oganisations – NASHO – is an independent member-based association of 18 well-established social housing institutions (SHIs) across South Africa. NASHO was formed at an inaugural congress held in May 2002 and formally launched by the then National Housing Minister, Sankie Mthembi-Mahanyele.

Collectively, our membership owns and/or manages approximately 24 000 units, providing subsidised rental accommodation for over 115 000 low-to middle income families throughout the country.

NASHO serves its members with advocacy, information, and training. Maintaining strong links between NASHO and its members is a priority for the federation, in order to reduce the isolation of individual members and to ensure that services and information are widely available.

What Is Social Housing?

Social Housing aims to contribute towards restructuring South African society through economic, social, spatial location and functional housing opportunities. It aims to achieve economic empowerment, integration, sustainable human settlements and improving the overall functioning of the housing sector by widening the range of affordable housing options available (rental housing). Social Housing targets facility rich areas, all within walking distance or well connected to the transport network.

Read more: http://www.nasho.org.za/

Saudi Gazette – Slums Highlight Wider Housing Gap

Saudi Gazette. Jan.11, 2014. JEDDAH — The authorities are quietly planning to raze slums in Jeddah to make way for newer, restored neighborhoods as part of a wider plan to keep up with soaring demand for affordable housing.

A gap between what is available on the market and what many Saudis can afford has left people frustrated and accusing officials of corruption. A shortage of low- and middle-income housing means millions of Saudis cannot afford to buy a home. Young Saudis are especially affected since it takes years of saving before many can afford to buy a home, often a precursor to marriage.

To address the housing shortage and public grumbling, the city of Jeddah is a testing ground for a plan that includes getting rid of most of its roughly 50 unplanned settlements, which comprise a third of its built-up area, according to municipality figures.

In their place, the city plans to build subsidized housing complexes for Saudis.

Read more: http://www.saudigazette.com.sa/20140112192242

Marx, Benjamin (MIT), Stoker, Thomas (MIT) & Suri, Tavneet (MIT) ~ The Economics of Slums

in the Developing World

The global expansion of urban slums poses questions for economic research as well as problems for policymakers. We provide evidence that the type of poverty observed in contemporary slums of the developing world is characteristic of that described in the literature on poverty traps. We document how human capital threshold effects, investment inertia, and a "policy trap" may prevent slum dwellers from seizing economic opportunities offered by geographic proximity to the city. We test the assumptions of another theory — that slums are a just transitory phenomenon characteristic of fastgrowing economies — by examining the relationship between economic growth, urban growth, and slum growth in the developing world, and whether standards of living of slum dwellers are improving over time, both within slums and across generations. Finally, we discuss why standard policy approaches have often failed to mitigate the expansion of slums in the developing world. Our aim is to inform public debate on the essential issues posed by slums in the developing world.

Full text: <http://www.aeaweb.org/>

Rock Art Research in South Africa

Therianthropes and trance dance from artwork painted by Kalahari artist, the late Vetkat Regopstaan

Kruiper (with permission)

Ethno-archaeology: Oral narratives and rock art
The focus of my research is on the method of recording oral narratives and their link to, and possible use in, the interpretation of rock art, specifically rock engravings. Research on indigenous knowledge and artefacts falls within a contentious area of indigenous archaeology associated with colonialists' geographic and intellectual imperialism. It is necessary for my contextual approach to include, as in the exploration of myths, the theoretical setting of ethno-archaeology within which my research takes place. In the discipline of archaeology the use of ethnography falls under what Renfrew and Bahn (1991: 339) call *'What did they think?'* The use of *'they'* points not only to ethical issues of *'othering'*, the negative artificial construction of two camps of cultures and the corresponding approaches of scholars and present day descendants of the artists, but also to the time gap between the artists of the past and the present (Lewis-Williams & Pearce, 2004).

The rock paintings situated in caves, shelters and on portable stones, mostly in the mountainous regions in South Africa, and rock engravings situated predominantly in the plateau areas, on boulders on hills or near rivers, date mostly from within the last few thousand years. However, small mobiliary painted stones from Apollo 11 Cave and an engraved ochre piece from Blombos Cave date from some 25 000 and up to 70 000 years ago respectively (Lewis-Williams & Pearce, 2004). This considerable antiquity complicates any attempts at interpreting the rock art by way of oral narratives, even those recorded by the earliest colonialists. Furthermore, our views and therefore theories on art, oral narrative and methodology are constantly changing (Bahn, 1998).

3.1 Early recordings and attitudes: evolutionist thinking and sympathetic magic
The Islamic incursions into Asia, Europe and Africa approximately 1 300 years ago and the interest of Western countries in foreign countries after the Middle Ages are cited historical events that precipitated an awareness of, and interest in, recording the customs of foreign cultures (Maree et al, 1997). The arrival of foreigners in ships, using horses and later ox wagons, was recorded in rock paintings and engravings by the indigenous people of South Africa (Lewis-Williams, 1983).

Travellers, adventurers, missionaries and soldiers in turn recorded aspects of

African cultures in their diaries and reports prior to the formal emergence of anthropology as a science and the development of an evolutionist approach. The contribution that the drive for material rewards played in the early visitors' hazardous journeys to the southern part of Africa was recorded by a Dominican priest in 1586:

The country is very hot, unhealthy, and prejudicial to foreigners, especially the Portuguese, who generally fall sick and die of fever; but this is not sufficient to restrain their avarice and the eagerness with which they go thither in search of the mines and riches of the country. (Dos Santos, 1586)

The '*gaze*' of the colonialists on the '*exotic other*' is apparent in these writings which, despite attempts to include the voice of the indigenous people, often reveal more of the attitudes and perceptions of the writers than about the cultural features they seek to portray. An example is this account of the Khoikhoi/ Khoekhoen by Christoffel Langhansz when stopping at Cape Town on his way to the Indies in 1694:

As to their religion, they have none, but live like the unreasoning brutes from day to day. Although some say of them that they reverence the moon this is not so, although it is true that by night, especially at the New Moon, they dance, or better said leap before it, and thereby howl rather than sing. But this dancing is done only for their pleasure, since leaping against their shadows and clapping their hands delights them especially, in that they see their shadows also do this; and this they continue so long as the moon shines on them, so that this dancing is thus to be considered as solely and entirely for their pleasure and amusement. (Langhansz, 1694 in Maclennan, 2003: 50)

The recording of rock art during this time was incidental and did not follow any formal methodology. The Chinese have the earliest recordings of rock art dating back to approximately 2 300 years ago by Han Fei (280-233 BC) (Bahn, 1998: 1). Mention of rock art in Europe is minimal before the 19th century.

The colonisation of the New World in the 16th century resulted in identification of rock art in South America. The link between the rock art and indigenous religion, particularly belief in '*Quetzalcoatl*' (the feathered serpent God), caused Spanish missionaries to destroy or attempt to allocate Christian meaning to the images (Bahn, 1998: 9-10). In Ireland recordings of engravings in a burial tomb were

made by Edward Lhwyd (1660-1708). The negative colonial attitudes of scholars of the time to this type of art, labelling it *'primitive'* (Smith & Blundell, 2000:8) and of little aesthetic value, is reflected in Lhwyd's reference to the art as *'rudely carved'* and *'Barbarous a sculpture'* when referring to a *'spiral like a Snake, but without distinction of Head and Tail'* (Bahn, 1998: 6).

Charles Darwin's *Origin of the Species by Means of Natural Selection* (1859) impacted not only on ideas concerning man's origins but, as mentioned previously, on the recording of cultures. In the field of rock art, evolutionist thinking in terms of categorization from simple to complex forms led to South African rock art – especially geometric engravings – being interpreted as the idle doodlings of a primitive people (Maree et al, 1997; Lewis-Williams & Pearce, 2004) or caricatures (Bahn, 1998). The earliest recordings of rock engravings in South Africa and specifically the Northern Cape are credited to H J Wikar from Sweden on his journeys along the Gariep/Orange River in 1778.   Not all early Europeans dismissed the value of the rock art in South Africa and some, such as Barrow in 1797, attempted an understanding of rock art and appreciated the realistic depictions of animals within it (Bahn, 1998). When the beauty and artistic merit of the rock art was acknowledged, some Europeans considered the art beyond the scope of the 'primitive' indigenous people, the San. Alternative cultures were invoked and the art was attributed to visiting *'Caucasians'*. The best known example is the *'White Lady'* of the Brandberg (South West Africa/Namibia), so named by Breuil in 1917 (Smith & Blundell, 2000; Bahn, 1998: 62-63): *'Heading the* 'early' *school Abbe Breuil had seen, in such paintings as the famous* 'White Lady', *early Mediterranean influences, and attributes an age of several millennia to much of the art'* (Foreword SA Arch Soc, date and author unknown (approx late 50s).

The impact on meaning attributed to rock art during the unilineal or classical phase of evolutionist thinking was the view that *'primitive'* art was linked to *'primitive'* religious practice, namely belief in magic. In the same way that *'civilized'* man controls his environment with science and technology, this theory proposed that *'primitive'* man controlled his environment with magic. This conjecture was applied to the interpretation of rock art in Europe by historic figures such as Breuil, who regarded rock art *'primarily in terms of hunting magic'*, in that the depicted animal and an associated ritual were believed to influence the outcome of the hunt (Bahn, 1998: 62; Smith & Blundell, 2000).

3.2 Early records and analysis: traditional systematic

The development of anthropology and archaeology as sciences at the beginning of the 20th century resulted in an emphasis on quantitative methodology and positivist research theory. Diffusionist theory in the late 19th and early 20th century emphasized the need to record as much data as possible before it disappeared.   In archaeology and specifically the recording and analysis of rock art, a traditional, systematic approach entailed definition of artefacts in space and time.   In reaction to previous subjective guesswork and *'imaginings'* as to the significance of artefacts including rock art (Renfrew & Bahn, 1991), emphasis was placed on artefacts that could be analysed scientifically to achieve knowledge of the *'true'* past. The excavation system of General Pitt-Rivers, developed between 1880 and 1900, influenced the recording and publication of archaeological finds (Renfrew & Bahn, 1991; Webley et al, 2000). This system required occurrence distribution maps, stratigraphic allocation and finally the assignation of artefacts or assemblages to a specific archaeological culture (Renfrew & Bahn, 1991).

Further systematic analysis of rock art in the traditional approach includes description of rock engravings in terms of place, techniques and time. Accordingly, Northern Cape rock engravings are found predominantly on *'rocky outcrops of dolerite and diabase'* (Morris, 1998); they are divided into three techniques whereby the patina (rock crust) is removed, using another hard stone to expose *'the lighter coloured rock beneath'* (Morris, 1998: 16), namely: fine lined (cutting with a sharp stone), scraped and pecked techniques (Dowson, 1992: 1). The three types sometimes overlap in a single site but may be assigned by archaeologists to different cultures and time periods. There is not yet unity amongst archaeologists and anthropologists regarding the culture(s) to which the rock engravers belonged. Some engravings in the Northern Cape have been dated broadly by their association with different stone tool assemblages (Morris, 1998):

The rock engravings, which are most frequently met with in the central districts of the Orange Free State and the adjoining northern parts of the Cape lying immediately to the west, also belong to this art group [Bushmen]. Its distribution coincides with that of the Upper Smithfield Industry of the Later South African Stone Culture, and the paintings and engravings are always found associated with implements of this Industry. (Schapera, 1930: 211)

Broadly, the fine line/ hairline engravings may date back up to some 8 000 years

and appear to be generally older than the pecked and scraped techniques engravings, of which the oldest may extend back to approximately 3 000 years ago, with the most recent being dated 150-200 years from the present (Beaumont & Vogel, 1989; Morris, 1988; 1998; Dowson, 1992). Direct cation ratio dating of rock engravings has been attempted (Whitley & Annegarn, 1994) but the plausibility of the results has been questioned (Morris, 2002). Different engraving *'traditions'* have been attributed to San hunter-gatherers, Khoekhoe pastoralists or Bantu-speaking farmers (Smith & Ouzman, 2004).

3.3 A Multilinear evolution, cultural ecology and rock art

Unilineal evolutionist thinking theorizing that all cultures could be graded on one path to Civilization was replaced in the 20th century with multilineal evolutionist thinking, which emphasized rather that cultures developed *'along different paths and at different rates'* (Webley et al, 2000). This approach falls within American cultural anthropologist Frans Boas's (1858-1942) theory of *'historical relativism'*, which called for a break away from broad unilinear evolutionary research and greater detailed focus on individual sites (Renfrew & Bahn, 1991). The *'classification and consolidation'* of artefacts in order to record a culture was extended by the work of Marxist-influenced Gordon Childe in Europe with publications such as *The Dawn of European Civilization* (1925), in which he posed questions of archaeology that applied not only to the *'what'*, *'where'* and *'when'* of a culture's prehistory, but included an attempt at *'why?'*. The impact of this type of research on the theory and practice of rock art research is that focus is not solely on chronology and cultural sequences but includes the historical, cultural or ecological context of their creation. The cultural historians *'described'* rather than *'explained'* prehistory (Webley et al, 2000: 7).

In the 1940s North American anthropologist Julian Steward and British archaeologist Graham Clark promoted the inclusion of the ecological impact as an additional factor alongside intercultural impact (Renfrew & Bahn, 1991). Towards a more ecologically inclusive approach, Clarke incorporated the investigative skills of specialists in animal bones and plant remains to develop the archaeological record. This type of approach is reflected in South African rock art through an emphasis on the inclusion of rock art as part of the archaeological record: *'after all, the art is a part of the culture of the peoples who created it, and must be studied along with bones and stones, pottery, houses and graves'* (Foreword SA Arch Soc, date and author unknown [approx late 50s]). Northern

Cape rock art research *"in the 1980's was very much concerned with seeing rock art as part of the broader archaeological record (cf. Inskeep, Parkington), and I still believe this to be a crucial perspective"* (Personal correspondence, D. Morris 2009).

Fig.3.1 Mc Gregor Museum archaeologist, David Morris, shares the historical context of Wildebeestkuil rock engraving site with visiting students. Photograph: K-S Lange (with permission)

In 1948 WW Taylor published *A Study of Archaeology* wherein he opposed the culture-historical approach with his call for a cultural anthropological methodology, which echoed contemporary ethnography (Webley et al, 2000). The dissatisfaction with older forms of archaeological research culminated in the 1960s with the formation of a much more positivist '*New Archaeology*'.

3.3B Quantitative studies: search for patterns and rock art
In South Africa during the 1950s the theory of interpretation of rock art included '*art for art's sake*'; that is, that the rock art was created with no specific meaning but purely for recreational purposes. Unlike in the colonial approach, the aesthetic merits of the art were recognised:

The aesthetic value of such paintings is widely appreciated and has already been greatly exploited by the makers of fabrics, ashtrays, and beer mugs[...] Carefully protected and properly published, it may provide a wealth of information for those interested in Africa's past, and a source of pleasure for generations to come. (Foreword SA Arch Soc, date and author unknown (approx late 50s)

But no symbolic meaning was attached to the images, as illustrated in *The Rock Paintings in Africa*, published by The South African Archaeological Society (date unknown [approx. late 1950's]. The images of the rock art are grouped geographically but no interpretation is imposed in the caption, for example:

Human-headed seals or fishes at Ezeljachtspoort, George district, Cape Province. A painting 10 ¼ inches (26 cm) in horizontal diameter, generally known as the Mermaid Scene, and probably represents a local legend linked with the sea. (Plate XXXV Copied by Miss M. Wilman. Vol. ii, No. 7)

An explanation for this lack of interpretation is given as follows: *'partly because it is thought that this is an exercise in which readers may wish to indulge according to their own tastes and theories without interference from the editor!'* (Foreword SA Arch Soc, date and author unknown). Although meaning was not attributed, the significance of motivation and examples of possible inspirations for the art were proposed:

It is important to attempt to arrive at the motives underlying the art […] there seem to be a variety of motives. Hunting magic may well be one, but it is less easy to be sure than in Europe. Some, such as the lone piper, may well be simply the expression of artistic feelings, but elsewhere there is good reason to believe that some paintings are true pictograms recording particular events in the life of a group of people. Others are almost certainly connected with initiation centres and ceremonies. (Foreword SA Arch Soc, date and author unknown)

An emphasis on quantitative studies was influenced by scientific discoveries in

the mid 20th century and a dissatisfaction with the lack of scientific procedures as expressed by the South African Archaeological Society in the above-mentioned publication regarding the dating of rock art: *'There are two main schools of thought (how nice it would be to replace them with volumes of facts!)'* (Foreword SA Arch Soc, date and author unknown [approx late 50s]).

Quantitative studies in rock art meant further categorization according to details typical of a structuralist approach, whereby understanding is sought within the break-down into smaller segments. The styles of engraving were divided further than the categories mentioned earlier (such as technique) into the type of images depicted; that is, representational and non-representational or geometrics. Representational rock engravings were also categorized into either specific

animals as opposed to humans, or into types of animals such as rodents, mammals etc; the frequency with which each of these appeared on a site was noted, for example, in the records of rock engravings of South Africa by G J Fock in the 1960s and 1970s (Smith & Blundell, 2000).

The development of scientific dating, such as dendrochronology in 1929 by A E Douglas and radio carbon dating by W Libby in 1949, shifted the emphasis in archaeology from merely descriptive and inductive approaches (that is, looking for generalizations from specifics) to a more deductive approach (that is, explaining processes, which could now be dated more securely, rather than just describing them). This approach was led by Lewis Binford and other American archaeologists in the 1960s and named *'New Archaeology'*. This type of archaeology, also known as *processual archaeology,* called for a process in archaeology and therefore rock art research that required: *'the formulation of a hypothesis and then testing it through a carefully designed research project'*. Research, however, was still situated within *'culture historical reconstruction'* (Webley et al, 2000: 10).

3.4 Multiple voices and rock art

The influence of post-structural semiotics and the unstable sign or multiple meanings impacted rock art research theory with the appearance of several new theoretical approaches. The functional and evolutionary approaches discussed previously were rejected in favour of a more human based approach. Post-processual archaeology emphasized people as:

knowledgeable actors who construct, change and manipulate their social worlds. Meaning is more important than materialism and is always actively created, mediated in relation to interests and social strategies. (Binneman, 2000: 45)

In South African rock art though *'the history of rock art research does not simply follow that of archeaology'* (Ouzman, Sven 2007), as in other parts of the world, research approaches that emphasized quantitative processes were not discontinued but were found to be inadequate: *'counting and listing require enormous amounts of time and labour, and at the end of the day do not reveal anything much about meaning – they merely provide the raw material on which hypotheses can be based'* (Bahn, 1998: 68). New approaches in archaeology are reflected in some South African rock art research, where bridging the gap between the sign and relative interpretation is attempted by means of emphasis

on universal physiological traits, as in the psychoneurological theory of Lewis-Williams and Dowson (1989) or emphasis on landscape context, for example, Deacon (1994). Solomon (2006) developed a research process intended to reveal the ideology behind the sign, with an emphasis on post-colonial theory including feminism and the rights of indigenous people. There is new focus on intertextuality and pluralism either by emphasizing the multiplicity or *'multivocality'* behind the text or through inclusion of multiple voices, especially the voice of indigenous people and the marginalized, as in the work of Morris (2010 in press).

Fig. 3.2 – The 'power of the place' Wildebeestkuil rock engraving site. Photograph: K-S Lange (with permission)

3.5 Psychoneurological/ Shamanistic model of rock art
Archaeology differs from historical studies in that it is not only a discipline of the humanities but also a science, and as such requires scientific investigation of material traces from the past (a past which extends right up to the present) – investigation that emphasizes the importance of the archaeologist's analysis as much as it does the *'instruments of a laboratory'* (Renfrew & Bahn, 1991: 10).

Lewis-Williams and Dowson made use of 'controlled experiments, observations of contemporary hunter-gatherers [...] and formulations' that *'translated the*

contemporary observations of static material things, and quite literally, translated them into statements about the dynamics of past ways of life' (Fagan, 1994:26). Lewis- William's breakthrough in rock art interpretation was ten years before Dowson collaborated with him (Ouzman, Sven 2007). His work *'came in via structural Marxism, an offshoot of especially Childe's culture history'* (Ouzman, Sven 2007). The formulation used by Lewis-Williams and Dowson, initially for the interpretation of South African rock art but later attributed international relevance, is known as the neuropsychological or shamanistic model of rock art interpretation (Lewis-Williams, 1980, 1982, 1983, 1988; Lewis-Williams & Loubser, 1986; Lewis-Williams & Dowson, 1989).

The focus of this research requires exploring the neuropsychological model in some detail, given its marked influence on contemporary rock art interpretation, whether in terms of inclusion or opposition:

The ground breaking work of David Lewis-Williams not only introduced a new paradigm in our understanding of San rock art, but an increasing number of researchers utilised aspects of this shamanistic model into their own work. However, the absence of any substantial body of southern-San ethnography cast doubt for some workers on aspects of the shamanistic model, which was essentially based on Kalahari San ethnography, intertwined with historical records of the southern San. (Prins, 1999: 47)

Contemporary interpretative archaeology, according to Prins, often exists within a positivist view of reality (one true, knowable, reality) and *'is still practiced largely along the empirical and scientist frameworks of the 1960s and 70s'* (Prins, 1999: 43). Lewis-Williams & Dowson made use of two *'interlocking approaches'* of processual archaeology, namely *'ethno-archaeology'* and *'experimental'* archaeology (Fagan, 1994: 328). Rock art research focused on the meaning the art held for the artists (Lewis-Williams & Dowson, 1989).

Ethnography became 'the key to the art' when archaeologists turned to indigenous people's beliefs for understanding of rock art (Smith & Blundell, 2000: 11). The early diaries of travellers, missionaries and explorers provided the first written records of the customs of the Khoisan speaking people of Southern Africa. These recordings were limited by the majority of these first writers not speaking the indigenous languages, as well as by their context and their colonial prejudices, specifically regarding the religious and spiritual beliefs of the

indigenous people of South Africa.

The necessity of understanding the religious and spiritual beliefs of a people in order to understand their art is communicated by Lewis-Williams and Dowson through the analogy of Leonardo da Vinci's artwork in *The Last Supper*. Quantification of images present in the artwork does not bring the viewer closer to understanding the significance of the artwork within a Western Christian context, neither does an aesthetic (discussion of the use of colour and composition) or narrative (the art as a record of the customs, dress and so on of the time) description of the artwork. Knowledge of the role of Christ, the Eucharist (the Last Supper) and Christian or Western symbolism transforms the artwork from being merely a record of a group of men eating to the representation of an important Christian ritual (Lewis-Williams & Dowson, 1989; Lewis-Williams, 1990).

The neuropsychological model accommodates the religious and spiritual beliefs of the rock artists, acknowledging the integral role of spiritual life in everyday activities and the lack of compartmentalization between the sacred and the secular (Lewis-Williams & Dowson, 1989). Lewis-Williams and Dowson used the following sources to research these beliefs: recordings made in 1873 by Natal Government magistrate Joseph Millard Orpen of Bushman guide Quing's stories and explanations of rock paintings in Lesotho; the 1870s records of German philologist Dr Wilhelm Heinrich Immanual Bleek and his sister-in-law, Lucy Lloyd, based on the testimony of Southern /Xam Bushmen prisoners in Cape Town; information on the ingredients used in rock painting from Mapote, a Basuto man whose father Moorosi had painted in the caves as recorded by Marion Walsham How in the 1930s (How, 1970); the American Marshall family's written and filmed ethnographic records of the Kalahari !Kung in the1950s (Smith & Blundell, 2000: 12); as well as:

…research done on the Kalahari Bushmen during the last three decades. Writers such as […] Mathias Guenther, Philip Tobias, Alan Barnard, Marjorie Shostak, Richard Katz, Nancy Howell, Patricia Draper, George Silbauer and Polly Wiessner. (Lewis-Williams & Dowson, 1989: 28)

Criticism mentioned earlier by Prins of the use of Kalahari !Kung ethnography for interpretation of art by a completely different San/Bushmen language group in South Africa, namely the /Xam, was addressed through emphasis on the similar

'ritual practices' of the two peoples (Smith & Blundell, 2000: 12):

San beliefs and rituals still form an important aspect of their lives. The basic structure and metaphors in this belief system have strong similarities with those used by the /Xam and Quing and it is these that have shed welcome light on the rock art. And because these similarities can be identified from information gathered a century ago and several thousand kilometres apart, we feel confident about using the general principles of the beliefs and rituals to interpret the rock art. (Deacon & Deacon, 1999:169)

Further ethnography on the southern San was introduced into the archaeological research arena by Prins and Jolly in 1986:

With the publication of two articles relating to the discovery of a first generation southern San descendant, known as M, with authentic knowledge of rock art production and symbology (Jolly, 1986; Lewis-Williams, 1986). M's father Lindiso was probably the last known San painter, and he passed on some of his knowledge to M (Prins, 1994). Given developments in rock art research at the time it is not surprising that M's testimonies were largely utilised to validify and to complement aspects of the shamanistic model or the trance-hypothesis, as it was then known. (Prins. 1999: 47)

Lewis-Williams's current work includes reference also to the ethnographic research of Megan Biesele in the Kalahari, specifically regarding maidens and *'metaphors of transition'* (Lewis-Williams & Pearce, 2004: 160).

3.6 Aspects of the neuropsychological model
The neuropsychological model proposes that rock art was painted by medicine men or shamans and that the content of the rock art largely comprises a record of the shamans' trance hallucinations. The neuropsychological model bases its hypothesis on three aspects of research, namely: Western neuropsychological laboratory experimentation on the effects of mind altering drugs on patients and the stages of *'trance'*; ethnography of the trance or curing dance from the Kalahari !Kung, and the prominent role in trance dance of the eland in /Xam and !Kung spiritual beliefs and rituals.

Fig.3.3 Eland rock engraving at Wildebeestkuil rock engraving site. Photograph: K-S Lange (with permission)

The work of Patricia Vinnicombe in 1976 is cited by Lewis-Williams as a turning point in rock art research, as she (along with Tim Maggs in the same year) revealed the significant contribution of breaking away from the narrative approach to rock art research. Quantification indicated the eland as the most frequently depicted animal in most parts of South Africa (Lewis-Williams, 1990). Ethnographic collections in South Africa revealed the eland as an integral part of San/Bushman rituals and thought (Smith & Blundell, 2000). As mentioned previously, multiple meanings (polysemy) influenced the interpretation of rock art in the 1970s, particularly with regard to the frequent depiction of the eland in rock paintings and engravings in southern Africa (Lewis-Williams, 1990). Narrative interpretations had previously read the depictions of animals in specific places as indication of the prevalence of that type of animal within that area, but in the 1970s the influence of research into the beliefs of the artists led to the eland gaining multiple meanings, including religious symbolic status.

Not only were words indicating respect attributed to the eland by the San/Bushman, but sometimes the strength of naming it was considered too strong and therefore a taboo. Lorna Marshall mentioned the !Kung word *n/om* for the power or energy that certain animals and people contain at certain stages of their

lives. Like electricity, the potency could be useful or dangerous. Shamans and the eland (and parts of the eland such as its fat and blood) were considered to be full of potency, which the shaman was required to control *'for the good of all people'* (Lewis-Williams & Dowson, 1989:32). The eland was part of the most important rituals of the San/Bushmen's lives, namely: the boys' hunting rituals, the girls' puberty rituals or Eland Bull dance, the curing and rainmaking dances. All these rituals were important for the unity of the people and therefore the eland brought with it connotations of 'fatness, well-being and rain' (Lewis-Williams & Dowson, 1989: 82). In the initiation rituals the fat of the eland was used on the initiates (Lewis-Williams, 1990) and in the paintings the eland blood was used in the ingredients (How, 1970).

3.6B The trance dance
A ritual central to the neuropsychological model of rock art interpretation is the trance or curing dance (Deacon & Deacon, 1999). This dance is led by medicine persons in the San/Bushmen groups. Lewis-Williams and other archaeologists and anthropologists name these spiritual leaders of the San/Bushman, *'shamans'*:

'Shaman' is a Tungus word from central Asia. It has been accepted in the anthropological literature to mean someone in a hunter-gatherer society who enters a trance in order to heal people, foretell the future, control the weather,ensure good hunting, and so forth. (Lewis-Williams & Dowson, 1989: 30-31)

In the 1830s, the French Protestant missionary Thomas Arbousset described a dance called *'the dance of blood'* because of the number of nose bleeds during the dance (Maclennan, 2003; Smith & Blundell, 2000). The trance dance is performed in order to *'obtain supernatural power from God'*, which is mainly used to heal people, as well as for rain making, game control and group cohesion (Deacon & Deacon, 1999: 168). Unlike shamans in other parts of the world who do not participate in everyday life, the Bushman shamans are non-privileged *'ordinary people'* with approximately half the men and a third of women in a particular group claiming to be shamans (Lewis-Williams & Dowson, 1989:31; Deacon & Deacon, 1999). Ethnography recorded from Quing by Orpen refers to an apprenticeship training whereby experienced trancers taught new pupils, over a few years, the techniques needed for trancing, and imparted potency (Deacon & Deacon, 1999).

The trance dance of the Kalahari !Kung and !Xo, like other traditional San/Bushman dances, usually takes place around a central fire with the women sitting and clapping the rhythm and men and women dancing around the women, or with the dancers inside with the clapping group standing or sitting around them (Marshall Thomas, 1959; Lewis-Williams & Dowson, 1989; Lange et al, 2003b).

Shamans traditionally wear a kaross around their shoulders for a trance dance and have a stick in one hand and often a fly whisk, which is made from the tail of a buck and used to *'remove the arrow of sickness'*, in the other hand (Deacon & Deacon, 1999:173). The Kalahari !Kung and !Xo dancers tie rattles made from dried cocoons and small pebbles, pieces of ostrich egg shell or camel thorn tree seeds around their legs (Lewis-Williams & Dowson, 1989; Lange et al, 2003b). The /Xam are recorded as also making rattles out of *'dried springbok ears'* (Lewis-Williams & Dowson, 1989: 44). On their heads, the dancers often wear headdresses made of animal skin and designed with animal qualities such as horns or ears and a tail (Lewis-Williams, 1990).

The intense dancing, singing, clapping, rattles and stamping continue for hours until the shamans, aided by *'intense concentration and hyperventilation'*, enter a mind-altered state of trance. Physical indicators of the shaman having entered this state recorded by Orpen include bending over, falling down and blood running from the nose (Deacon & Deacon, 1999: 170-171). During this state, *n/om* potency builds up painfully in the body as the dancer gasps for breath, sweats and trembles, feeling hairs standing up on the body (Lee & Woodhouse, 1970). Metaphors used for this experience include dying, drowning and flying (Lewis-Williams & Dowson, 1989).

Depending on the dance, the shaman can harness the potency in different ways; for example, during a trance dance the shaman would, trembling, place hands on a sick person to draw out the illness. In rainmaking ceremonies, when the shaman collapses, his spirit leaves his body to harness a rain animal and bring it across the mountains and veld where, on its killing, the blood or milk would provide rain. These scenes were depicted in rock paintings in which Lewis-Williams and Dowson read the eland, the favourite animal of the San/Bushman trickster-God /Kaggen (Deacon & Deacon 1999), as mirroring the shaman in trance with buckled crossed knees, blood from the nose and potency indicated by continuous or dotted lines emitted from behind the neck (Lewis-Williams, 1990). Shamans

drawn in association with eland, in postures such as touching their tails, are read as drawing strength from the potent animal. Lewis-Williams and Dowson regard the eland as a metaphor for the trancing shaman; that is, a symbol of entering an altered state of consciousness, entering the spirit world with the rock face as the veil between the real and the spiritual world (Lewis-Williams & Dowson, 1990).

The depiction in rock art of therianthropes – creatures with animal and human features – is also read in the trance hypothesis as an indication of an altered state of consciousness and therefore supportive of the shamanistic model. The reason for this attribution is discussed below.

Fig.3.4 Therianthropes and trance dance from artwork painted by Kalahari artist, the late Vetkat Regopstaan Kruiper (with permission)

3.6C Neuropsychological research
Lewis-Williams insists that neuropsychological research was not used to 'show that the art is the product of altered states of consciousness', as he believed the ethnography had already proved this. Neuropsychological research was used for further understanding of rock art as depictions of *'visions and experiences of shamans who entered trance'* (Lewis-Williams, 1990: 55-56). This was particularly relevant for Lewis-Williams and Dowson's (1988) interpretation of geometrics.

The neuropsychological research approach used by Lewis-Williams and Dowson was applied by Siegel to *'the experiences of people from a variety of ethnic backgrounds in different countries around the world who have taken hallucinatory drugs'* (Deacon & Deacon, 1999: 172). The laboratory experiments made use of *'hallucinogenic drugs such as LSD'* (Lewis-Williams, 1990: 55). The

experiments noted that all subjects went through three stages: a first stage of seeing *'entoptics'* (geometric shapes); a second stage of trying to make sense of these entoptics according to the cultural context of the subject, for example: a u-shape interpreted as a boat; a third stage where the subject loses a grip on his sense of reality and entoptics are no longer important. Images seen are no longer *like* but rather *are,* as the subject hallucinates *'animals, monsters and other things with a powerful emotional content'* (Lewis-Williams, 1990: 56-57).

The third stage was used to explain the depiction of therianthropes within a trance hypothesis. The shamans depicted animals that they experienced themselves *becoming* (Lewis-Williams, 1990). (This aspect and others mentioned previously relating to states of altered consciousness and the production of rock art will be explored further in the discussion of rock engravings in the research area.) Other sensations related by the subjects such as lengthening and extra digits were also used to interpret rock art that had fallen outside of the narrative approach (Lewis-Williams & Dowson, 1989). Lewis-Williams noted the greater concentration of entoptics in rock engravings as opposed to rock paintings but, in the 1990s, could only speculate as to the significance of this phenomenon (Lewis-Williams, 1990).

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From: [Mary Lange – Water Stories and Rock Engravings- Eiland Women at the Kalahari Edge](#)

University Of Minnesota – Human Rights Resource Center – The Right To Adequate Housing

Housing forms an indispensable part of ensuring human dignity. "Adequate housing" encompasses more than just the four walls of a room and a roof over one's head. Housing is essential for normal healthy living. It fulfills deep-seated psychological needs for privacy and personal space; physical needs for security and protection from inclement weather; and social needs for basic gathering points where important relationships are forged and nurtured. In many societies, a house also serves an important function as an economic center where essential commercial activities are performed.

Despite global recognition of the importance of housing to human welfare and survival, it is estimated that over one billion people live in inadequate housing while over 100 million people are homeless. Governments claim lack of capacity and resources to implement programs and undertake reforms aimed at creating the conditions for expanding access to housing. The right to adequate housing therefore provides a unique paradigm for monitoring the steps taken by states towards the provision of housing through citizens' demands and insistence upon the fulfillment of this basic human right.

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