Synergism is the life-giving essence of the Utah Rock Art Research Association. Rock art research is truly an interdisciplinary science. It is entirely appropriate to approach rock art research from any number of research disciplines. However, it is inappropriate and grossly inadequate to insist that research in the field should be confined to one discipline. The interesting thing about the research is that it spans not only science but the arts as well.

When we say that petroglyphic and pictographic inscriptions are "rock art", we have chosen a label that is intentionally far-reaching to span the broad base of the research. Some wish to call the inscriptions "rock writing" but in most cases this is a misnomer because most often the inscriptions range from actual pictures of the authors intended subject to symbolic forms. While we would not exclude the possibility that there is some writing, it seems from my years of experience in the region of the western U.S., this is quite rare or nonexistent. However, "art" is a much broader term which covers the host of the many millions of inscriptions that exist around the world from the earliest inscriptions in the caves of France to the later pre-Columbian American rock art. However, we must not lose sight of the now well established fact that many Mayan inscriptions have been proven to be the written word phonetically based. Artistic and symbolic representation did evolve into writing. But it doesn't therefore follow that all ancient inscriptions are writing. Remember what the term "art" brings to the research. It entails dimensions that writing can only express in many words. Words that did not exist in the vocabulary of the creator of the inscription but were included by the artist-author-creator through artistic expression.

If we are going to characterize the petroglyphic inscriptions as anything meaningful at all, we must first do so in light of the creators or authors of the inscriptions. They were people. That one statement means that the source of the inscription is so broad that no one classification of rock art can possibly apply to all inscriptions. There was no dictionary, lexicon or thesaurus. While there are some norms, they are broadly based with a great deal of local variation. The best source for understanding is found in the diversity of the cultures that created the inscriptions. For instance, when glyphs show a woven quality, they bare meaning that relates back to possible symbolic functions that naturally follow from weaving. It is highly unlikely that these woven glyphs were placed on the rocks as a weaver's manual. It therefore follows that symbolic function was their intent. The art of weaving entails a lot of mathematics such as numbers, patterns, patterns within patterns, and phase shift. With the woven glyphs we are given a window into the world of the glyphs' creators. Through this window we are able to gain some insights into their mean because weaving and woven glyphs contain number and pattern. By using these numbers and patterns we can look for, but not necessarily find, what those patterns and numbers may match in the culture and times of their creation. What are the windows through which we might peer into their world? A little thought tells us that each rock art inscription, doll, sculpture, edifice, legend, or history is a window into their world if we are
able to understand the symbolic expression used.

That characteristic which distinguishes man from the animals is based in meaning, representation, and symbol. This includes synthetic unity and jootsing. Synthetic unity is one of the most intriguing characteristics of human intelligence. For instance there exists at Parowan Gap a very simple little glyph, which I call “one snow”. It consists of one large circle surrounded by twelve smaller circles. It’s a year glyph. In its context, it indicates one year consisting of twelve moons. But synthetic unity of human intelligence has grouped something that only makes a unity in the mind of man. It exists only there. There is no natural phenomenon that unifies the year but the mind of man. The creating of a synthetic unity is a very complex process of unifying separate things into one concept. This process often requires representation. When the inscriber of the “one snow” glyph created it, he or she gathered together twelve separate things into one conglomerated thing, a year. This process needs expression in some fashion. If a person is creating a basket, then various sticks and fibers of the basket are woven together into a one item. But what if the creation were a concept and not a physical item, what then? What physical object will now hold and make permanent the concept? The concept needs some expression. In this case it is the petroglyph. As soon as the glyph was created the concept moved from thought to reality. A visual object then existed and a name could be given to this object. A quantum leap in human knowledge was accomplished. In effect, a synthetic unity had now been created such that it was no longer necessary to refer to the period of time as a set of twelve moons. A single word now existed, one snow (i.e. a year). This process was almost impossible to accomplish without the physical image as a middle step between concept and word. The foregoing is to illustrate the necessity of representation (in this case a petroglyphic inscription) in establishing human knowledge. In this particular illustration we are able to see even deeper if we understand the isolation of the culture of origin. There are no known books or other transportable means of communication found or related to the Parowan Fremont. Trade goods are present but the development of local knowledge was necessary locally.

The second epistemological process referred to above is called jootsing. This term was coined by Douglas Hoffsteader. The word is really an acronym for “Jumping Out Of The System”. It refers to man’s ability to raise above himself and look back on himself. Hoffsteader used the term in reference to heuristic software, i.e. software that is able to develop its own artificial intelligence within its own process of execution. Somewhere in the prehistory of man, he acquired this remarkable ability to look back at himself and see himself in his own situation. This is the second in our list of characteristics of human intelligence. It is man’s ability to image himself. At the Gap is a very telling glyph which resides at the Solstice-Equinox-Solstice Glyph. It contains just the head and torso of the classic Fremont anthropomorphic figure. At the gap and from many other anthropomorphic calendric forms, it is apparent that the shape of the Fremont petroglyphic torso is indeed solstice, equinox, solstice in its very form. The torso contains the wedge-shaped angle of the solar traverse between the solstices. The glyph is related to the solstice-equinox-solstice glyph in such a way so as to effect a signature which states that “I am the person” or “We are the people who totally model our lives after the sun”. It is the ability of man to see himself in an image as though he were apart from himself that makes him
what he is. Prehistoric human images are engraved all over the world. Once that was done, man had already acquired all the potential of becoming what he is today be that considered good, bad, or indifferent.

The importance of the representation of himself in glyphic image is undeniable. Ancient man represented himself in glyphic image as a mighty hunter, eternal god, great copulater, great warrior, in many animal forms, etc. In this way man has shaped his identity, his persona, his directions and meaning. Man could not become his totem in actuality but in glyphic image. Through this medium of self representation, man has gained a means of self expression and personal direction. From this we can see that petroglyphic image bears a necessary function in the development of human culture, personal and social image.

The study of rock art is truly an interdisciplinary science. This science is a synergism of many fields. My own research has been based on philosophy, ethnography, and astronomical calendar function. This research thus entailed understanding petroglyphic numbers, related legends, and subsistence patterns. The calendar function research entailed astronomy, computer modeling and trigonometric field survey techniques. The superb thing about the close and unmistakable identification of calendar function with petroglyphic inscription and petroglyphic numbers is the fixing of the particular glyph with that function and the meaning of that glyph. This is a superb opportunity to see how symbolic or geometric figures were used to represent a known and proven meaning. The certainty of meaning to glyph is accomplished by the correlation of glyphic numbers to alignments and event dates. From this it is possible to calculate probabilities for a value judgment of validity. However there are many other avenues through which to approach rock art research.

If you are an artist, you would be interested in the skills and techniques used in the creation of the glyph itself. If you are an archaeologist, you would regard the glyph as an artifact and want to identify the glyph with its cultural affiliation and date of creation. If you are an anthropologist, you would be interested in the glyph’s function and meaning in a cultural context. If you are a photographer, you are interested in recording the glyph in the most accurate detail possible. And if you are a rock art researcher from any profession or avocation, you are interested in all of the above.

We may never read rock art inscriptions but that’s not saying that we can’t understand them. Through the various different disciplines that may be applied to rock art research, a person is able to extract that information to which that particular discipline pertains. When you think about it, that can be a lot of information. You may date them; identify their style; address the techniques by which they were created; test them for calendar function; identify the standard symbolic forms, i.e. archetypes etc.; evaluate their function within their cultural origin; and relate them to known legends.

Every since Penfield, it has become obvious that the brain for some large part is spatiality. Of course the Heideggerians will argue that it is spatiotemporal but you can’t be carve on a rock so let’s just talk about spatiality (space). Penfield proved by touching electrodes to the exposed, but living brain, that the neurological space of the brain is isometrically mapped into the body. That may seem simple enough at the outset but some analysis of the human thought soon concludes that the mind has taken this spatiality and extended it.
way beyond the human body. Susan Langer coined an expression that I often think of while studying rock art inscriptions. She said in the introduction to one of Ernst Cassirer’s works that symbolic forms are “the odyssey of the mind.” In my research in pictographic and petroglyphic inscriptions, I see spatial-body think in most every glyph. For instance, that while I agree that a sheep can be just a sheep, when you come to a two-headed sheep, you are compelled to conclude a symbolic function for this glyph. When the sun ram reaches either solstice, as the sun bearer he acquires an extra head so that he may continue forward in time while simultaneously reversing his direction as the sun reverses its direction toward the other solstice. The sun ram has acquired symbolic spatiotemporality while remaining a purely spatial device. He was given bidirectionality to run forward in time while he starts his return to the other solstice in the opposite direction. However, all symbolic function is spatial. There is no way to represent time symbolically without a spatial device like the running year in Grapevine Canyon. Geometric devices are also used as in the one snow glyph spoken of above. Although there is another means of representing time that is totally sufficient. Number becomes the vehicle of both time and space. But we still have problems. Often in linguistic usage there is no distinction between space and time, i.e. ‘How long is your arm?’ or ‘How long have you been waiting?’. The same word is used to describe both space and time.

There are vast dimensions of the universe that man does not understand. In some ways human knowledge is quite feeble. We can’t know what we do not know. Logic has a rough time proving the existence of reality and man the existence of himself (i.e. the shame of philosophy). This is because logic sits above existence not below it. The foundation of a house (i.e. existence) does not sit on its roof (i.e. logic). Where is this leading us? Man is thrown into a world of existence but through language acquires logic. However because man has being, he seeks to look back at himself. Time is the substance of existence. It is impossible for the human mind to identify itself without expressing, representing, comprehending, and utilizing time. However, symbols for time are hard to come by in a time before watches, clocks, and printed calendars. Nevertheless, there were such symbols if we recognize them. The need for man to represent himself in the form of time generated a family of anthropomorphic calendar glyphs. This, at present, is the direction of my research.