

Zuni Language and Ontology: Implications of the Conceptual Presuppositions of the Zuni Worldview

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Synopsis: (1) Zuni world view and the conceptual presuppositions of the Beautiful and the Dangerous in Zuni language and cosmology, according to the writings of Frank Hamilton Cushing, Ruth Bunzel, Jane M. Young, and Barbara Tedlock on the linguistics and ontology of the Zuni culture; (2) Ruth Bunzel and Jane M. Young on form and function in the linguistics and ontology of the Zuni worldview; (3) (a) Frank Hamilton Cushing on the taxonomic structure of being in Zuni ontology and (b) the possibility of a Chomskyan analysis of Zuni transitivity; (4) Color Terms and the universalist and relativist aspects of the linguistics and ontology of the Zuni worldview; (5) (a) Ruth Bunzel on Zuni ceremonialism, (b) objectivity and personal accomplishment, and (c) the final statement of the Zuni worldview; (6) Frank Hamilton Cushing on form and function in the linguistics and ontology of the Zuni worldview, and the implications for pragmatics and cross-cultural referentiality; (7) Frank Hamilton Cushing on Zuni language and the collective consciousness.

Zuni World View, on the Beautiful and the Dangerous

In *Signs from the Ancestors*, a study of Zuni cultural symbolism and

perceptions in rock art, M. Jane Young cites the “dialectics of the beautiful and the dangerous” noted by Barbara Tedlock^[1] and states that “Tedlock posits an underlying aesthetic framework that informs cosmology, whereas I posit an underlying cosmological principle that informs aesthetics”^[2]. From the perspective of this paper and its conclusions it would appear that Young is perhaps partially correct in her ascertainment although the confluence of the two principles makes it difficult to discern logical priority in either the beautiful (*tso’ya*) or the dangerous (*attanni*), for the multireferential finds manifestation of beauty in the “aesthetic of accumulation, an elaborate redundancy of symbolism in Zuni sacred and secular environments”^[3] and informs cosmological principles of the preconditions of the rational, while aesthetic license premises pragmatics where proper interpretation of context ensures that rational thought of the “perspective-taker” attains objectivity as a “personal accomplishment” in the success of “reciprocal public intentions”.^[4] This is because the principle of the “base metaphor” cited by Young is inclusive of a body of conceptual presuppositions which include the notion of an interrelatedness of all things, which is seen here as a cosmological precept akin to notions of identity and individuation, and the notion of a predetermined harmony

as indicative of the aesthetic. Young notes that the “very generality of the metaphor lends its ambiguity--an ambiguity quite characteristic of the Zuni view of the world. Zuni ritual symbols, whether expressed verbally or visually, are frequently multivalent or multireferential, standing for both themselves and something else *at the same time*; yet all of the meanings are bound together, so that the Zunis say, as do the Mescalero Apache: ‘They’re all the same thing’ ”[\[5\]](#).

The implications and ambiguity of the base metaphor are immediately evident. If all things are the same then what constitutes an identity and how are names used to refer to specific things or images? Ambiguity is a consequence of the very tentativeness of life itself as perceived by an agriculturally based community situated in a desert environment; as ambiguous as the timing of the next planting season, crop yield, and rainfall. While it may be seen as a method of increasing well-being[\[6\]](#) most ritual is directed toward a perpetuation of the status quo, i.e. the rising of the morning sun or the repetition of the turn of the sun at the winter’s solstice. Sameness as things standing for themselves is a prerequisite to success in ritual logic and there can be no tolerance for deviance, especially in utterance. As Redfield noted, “memorizers and

depositors” of tradition may fulfill the role of preserving tradition, but this is not the concept of a thinker in the sense of building upon basic principles leading to variant conclusions^[7]. Anthropologists have noted the mechanistic tendency of most aspects of Zuni ceremonialism and that prayer must be “repeated verbatim to be effectual”^[8]. “The efficacy of prayer depends in no small measure on its correct rendition” and “is more nearly a repetition of magical formulae”^[9].

In this it appears that an effective rendering of a prayer in ritual would be dependent upon a specificity between words and images where a name must adequately show the identity of that which it is naming, that is, the same name usage is imperative as a reliable identifier and if the name is to refer to something else at the same time then that image must, *a propos*, display the same relation with a reliable identifier (name). Thus, it would seem that the individuating function is objectively well defined. As Bunzel also notes elaboration is allowed in individual prayer, but in regard to the common good the “ceremonious collectivism that characterizes social activities is the essence of religious participation” and the “supernatural conceived always as a collectivity” is “approved by the collective force of the people”^[10].

Young notes interpretations that reflect individual interests related to

“diverse artistic pursuits” and a “strong thread of individualism” as “idiosyncratic interpretation” in the categorization of visual images^[11]. The results of a card sorting experiment showed “that certain visual images evoked similar and sometimes formulaic responses”^[12] while some were categorized as “images that go on pottery” or as images “that seem to go together”^[13] and concluded that while the “Zunis may *recognize* designs on pottery, religious paraphernalia, or rock art, they have no culturally consistent terminology to apply to such designs-there may be no tradition of *naming* these designs”^[14].

Bunzel in contrast noted, “At Zuni, where the style is generally uniform, individual differences are shown mainly in the mastery of technique”^[15] in the more professional artisans but was “unable to find any noticeable difference in style”^[16]. While Bunzel did find design *names that evoked an image* such as the “deer”, most design names could not evoke an image. From this she concluded that there is no design terminology at Zuni. Bunzel also pursued this to the point of stating that the lack of linguistic designation would indicate that the image was experienced as sensual rather than intellectually and that an

experience for which there is no linguistic expression cannot be the object of rational thought^[17]. Bunzel states that the importance the Zuni attach to the purely aesthetic aspects of pottery design is greater than assumed^[18]. Principles of design are clearly recognized, for religious ideas are clearly associated with designs, but this does not strengthen the intellectual aspect at the “expense of the more purely aesthetic”^[19]. In this remark it is evident that aesthetics informs Zuni cosmology but it also displays tentativeness on Bunzel’s behalf to relegate the phenomenon to the rational.

Young reiterates religious associations in regard to the analysis of “clusters” (image groupings by individuals) which displayed an “inclination to relate rock art to ...the important concerns of daily life”^[20] and to the “various facets of their religious practice and/or to the myths describing the emergence of the Zuni people into this world”^[21], but Young also indicated the rational aspect of a polemic relation between the “strictly memorized texts of ritual prayers” and the identification of rock art images characterized by “the organization of diversity”^[22]. An example of organization is where human figures were grouped according to form (round, stick, etc.), but were included

in the unknown groupings, while known images were grouped by their content^[23]. Here Young is positing a formal, conceptual basis of presuppositions that appears to inform individual interpretation where referential distinction is made in relation to function yet inhibited in regard to specific terms.

Zuni Language and Worldview

While both Young and Bunzel agree on the religious importance of the images and the lack of a determinate naming process, they disagree on the role of the individual in interpretation^[24] and whether the interpretive process is sensual or rational. This disparity may be related to the different methodologies involved, for Bunzel worked through an interpreter and sought to evoke images in the use of names, often receiving diverse groupings within clusters while Young relied more so on ostensive definition, perceiving the images as having the power to evoke narrative, using the term “metonymic” to describe the power of images to evoke where ambiguity is present in both meaning and form^[25]. The one most notable aspect of Young’s study in regard to the individuating function is the observance that Zuni interpreters “included the entire environmental setting of the rock art in discussions of meaning rather than focusing on the image alone...and not only

placed individual images in the *context* of the whole corpus of rock art figures at the site, but also included other features of the landscaping, such as springs, plants, birds, and so on”[\[26\]](#).

In regard to the polemic relation noted by Young, the power to evoke narrative or to give names in ritual text is its demonstrated effectiveness in a given context which is dependent upon an accumulation of knowledge, or in the case of the interpretation of images is based upon the organization of diverse images into a given context where each individual image is related to the narrative according to its form and function as determined in accumulated myth. Multireferentiality is transitivity among the harmonious interrelations of all things and individuation is manifest as a thing standing for itself according to its form and function as determined within a context as perceived by a perspective taker. An image in isolation has many meanings but it is also constrained as a means to evoke a narrative. Such statements as “images that go on pottery” or “they seem to go together” are indicative of the ambiguity present in their relation and can only take on meaning by being assembled in conjunction with the form and function of a vessel[\[27\]](#) or some other object. Thus, where the context of an image or design is indeterminate the religious associations concerned will inhibit

a naming or narrative because of the danger of a deviant utterance. As Young's card sorting analysis showed, in the absence of content images were categorized according to form, and sensual, aesthetic appreciation was insufficient to evoke a name.

This would seem to confirm Bunzel's interpretation of the sensual, but in an anthropological sense of a theory about rationality as a social fact, irrationality is used to describe deviant utterance [\[28\]](#). This would presuppose an ontological sense of rationality where the viewpoint of the perspective taker does not guarantee objectivity, but objectivity is found in the personal accomplishment of an intersubjectivity required in reciprocal public intentions [\[29\]](#) and the decision not to act (verbalize) could be considered rational. To appreciate an object sensually yet not specify that object in linguistic expression in respect of religious beliefs and for fear of danger to one's self and the common good in the prospect of violating socially approved observances is rational thought. In the absence of verbal expression a sensual, aesthetic appreciation can be rational and in accordance with the collective force of the people, that is, it would be a personal accomplishment.

Our use of language is "constrained by our knowledge of objective reality" and "naming is seen as a process which confers contextual

significance on objective continuities and discontinuities in nature; and a properly contextual account of naming requires that we include connotative and metaphoric considerations in a description of the meaning of names”[\[30\]](#). This suggests that lexical variation corresponds to the importance and stability of constrictive contexts where names make distinctions where contexts require and reference becomes stable only when it is necessary that a particular discrimination be made; otherwise, referential distinction does not operate on the level of individual lexemes and may be used to do more than point[\[31\]](#). “Through metaphor men discover relevant resemblances between categories which are not ordinarily related to one another and men signify these resemblances in words”[\[32\]](#).

Rosaldo’s distinction between referential and metaphoric corresponds to Samarin’s distinction between the referential and expressive usage of language. Samarin also notes that the expressive use is distinct from the referential use transcends category boundaries[\[33\]](#). For example, in the English language the statement ‘You’re a skunk’ does more than point and is an expressive use of language. It would transcend certain categorical boundaries in ignoring the specific differences of two

individual entities. In regard to the Zuni use of language, this statement would not transcend any category boundaries typifying any specific beings and would not be considered expressive or metaphoric in that sense, for in referential distinction all connotation and metaphor have been accounted for in contextual significance. What is a metaphoric or expressive statement in one language may not have a metaphoric or expressive counterpart in another language. As Rosaldo noted, lexical variation is dependent upon the stability of context and reference, and Samarin states that the inventory of expressive language is inverse to the referential use. The lack of category boundaries within the Zuni taxonomic structure of beings^[34] would imply a low inventory of expressive terms.

Consider the Navajo language where a single lexeme multireferentially includes all hues of blue and green and the principle signification of the word is the sacred stone (turquoise)^[35]. The stone itself is appreciated for its aesthetic properties and has religious associations, thus, the lexical constraint, or the evident lack of the need to make further particular discriminations among the wide spectrum of blues and greens shows its importance and the stability of constructual contexts. To the outsider this lack of lexical variation to make particular distinctions may

appear ambiguous and represent a lack of stability in context. Showing a turquoise stone, which may display any combination of blue and green, would evoke the same response time after time. Any further expected verbalization in color terms would be to ask the Navajo to disrupt the contextual stability of their lexical environment by creating categorical boundaries by means of expressive or metaphoric terms, that is, to operate on the level of individual lexemes that may do more than point. Thus, in all likelihood, further referential distinction would be expressed in the name of a mountain or some other specific geographic location from which the stone originated.

Zuni Cosmology and Aesthetics: Color Terms

In a like manner, the Zuni terms for colors point to objects, but often by means of phrases using a comparative particle (*ikna*), which is a reference to a cultural norm. Color terms form a significant part of the Zuni lexicon, frequently occurring in texts (both myth and texts descriptive of daily life), and are pervasive in art and ritual. There is no general term for color in the Zuni lexicon and the only indication of an abstract term for color is where the color has changed or designated as an unnatural property of the thing (*jeli* or *heli*)^[36]. To the Zuni the power inherent in an image (assuming color to be an image) is its ability

to depict vital aspects of the physical world in relation to their “specificity-their ability to represent living beings”^[37]. Thus, in the absence of a general term for color, color terms have no category *sui generis*, but will refer to objects belonging to a separate taxonomic structure, often referring with religious connotation to the wide category of beings, which is inclusive of humans, animals, ceremonial objects, spirits (*Koko, Kachinas*)^[38], and possibly plants, insects, and natural concretions as well (corn maidens, *kokopelli*, or the twins of *Towayalane*). The similarities and dissimilarities in a contrast between the Zuni and Navajo, and their own inherent “continuities and discontinuities” show the cross-cultural implications for comparability of semantic categories where categories are culturally defined and a manifestation of a *Weltsanschauung*^[39]. The problem of a Chomskyan analysis of the Zuni language has been noted^[40] and it is apparent that the best approach to the language is one with a modified relativistic attitude.

The Zuni perceive of no phenomenon that is exclusively physical. Their ontological taxonomic structure is permeated with animate matter and their language has no means of explicitly expressing the distinction between the animate and inanimate. As Cushing pointed out, and later

Walker in his taxonomy of Zuni terms, the category of 'beings' has no distinct boundaries. There are no types of beings, but rather, degrees of being. Young also noted in the results of card sorting that figures with both human and animal characteristics were sometimes grouped as either, but were less specifiable as specific beings[\[41\]](#). In contrast to an ontology such as the Cartesian *cogito* where it can be assumed that everything external to the subject is physical, an ontology that admits of an interrelated sameness throughout animate matter would assume, *a priori*, universal subjectivity or other minds, however one wished to describe the intellectual and individuating function. Thus, objectivity, or more precisely, the resultant intersubjectivity which is evident in analysis of their usage of their semantic components seems to indicate that the distinction between the ontological and the epistemological is analogous to the confluence of their cosmology and aesthetics in the beautiful and the dangerous, and is for the most part logically imperceptible (non-distinct).

Ontologically and epistemically, for the Zuni, *logos* is deeply embedded in substance. As Young states, "...Zuni perceptions and interpretations of rock art reveal much about the Zuni world view..."[\[42\]](#).

Clarification is needed in regard to this statement however, for while “perceptions and interpretations” may be revealed conceptually and have a strong intersubjective basis visually (ostensively), the lack of a naming process indicates the strong presence of contextual implications where non-verbal expression is preferable when reference is indeterminate, for a deviant utterance may be the manifestation of the dangerous and subsequently the aesthetic is expressed as a communal act of appreciation visually.

There are some points to be made here in regard to the naming process; 1) because intersubjective objectivity can be revealed conceptually and non-verbally a linguistic relativism approach is preferable to a linguistic universalism, 2) given the extent of metaphor and analogy in reference to particular objects or figures in Zuni language and ritual a possible world semantics is inappropriate, and 3) Young’s assertion that “one cannot separate Zuni sacred and secular life”[\[43\]](#) is incorrect in view of non-verbal aesthetic expression.

Concerning (1), for the language universalist the ineffability thesis of semantics states that one cannot discuss the relationships that constitute the meanings of words and other expressions of language because it is an inescapable intermediary between me and the world, and one with which I cannot dispense, meaning that I cannot “step outside my

language (and the conceptual system it embodies) and view it from the outside”[\[44\]](#). The universality of language to the language universalist means that language is “inescapable”. Everything we say and (according to some philosophers) think presupposes the one language we are using, including the semantic relations in virtue of which it can be used to say something. We can only say things about our language by using that which we suppose in order to do so, i.e. our own language. Language of the user constitutes the language user’s universe. What lies outside of the language is not only inexpressible, but is meaningless.

The totality of the relationships that constitute the meanings of words and other expressions of language is semantics. The relation between simple objects and their names is presupposed in all use of language and because of this we have to treat the actual objects as existing necessarily and as necessarily exhausting the entire realm of all possible objects[\[45\]](#). These relationships that are the links between language and reality cannot, according to universalist, be rationalized for “semantic ideas can only be conveyed non-verbally...non-conceptually. They rely on an unexpressed and unexplainable preconceptual *Vorwissen*” [\[46\]](#).

Herein lies a crucial distinction, for Young notes that where ambiguity is present in both meaning and form, “the power invoked through particular images...may at times be metaphorical or ambiguous, but their form rarely is” and power is the power to *invoke narrative* of myth and the time of the beginning.^[47] Young’s specific meaning of “form” is basically that of shapes and is representative of universality. If the formal aspect of an object is what can be said to be true of it *a priori*, then the form of simple objects governs the way in which these objects can be combined with each other (elements of design) and form complex logical forms (patterns of design). If a culture’s ontological taxonomic structure admits of an animate matter, or more precisely, if the culture’s language has no means of expressing explicitly the distinction between the animate and the inanimate, and a totality of relations between things is referred to as a sameness of all things, then it would seem to admit of an *a priori* intersubjectivity in these relations. Semantic ideas are conveyed conceptually for “the power inherent in those images that depict being associated by the Zuni with vital aspects of the physical world is related to their specificity-their ability to ‘represent’ ” living beings”^[48]. For the Zuni, personification is inherent in the substance of animate matter and has existed since “the

beginning”. Ontology is then relative to personalization (as distinct from personification), individuation and context, where ‘to be’, in Hintikka’s terms, is to be the object of a search^[49] and to “find” as an act of quantification may be better served by the verb “to produce”^[50]. ‘To be’ is to be somewhere and is a relation that concedes to the eternal possibility of an existence. Thus, when an image may be recognized and categorized according to its form, even when labeled as “unknown” by the lack of content, it is still possible to convey semantic ideas conceptually according to principles that inhibit the tendency to render a deviant utterance, and can further be conveyed ostensively, where knowledge and aesthetic appreciation is dependent upon one’s cultural assimilation.

Zuni Language and the Ineffability Thesis of Semantics:

Universalist and Relativist Aspects

The language universalist would not accept a doctrine that subscribes to semantic ideas conveyed conceptually and would, at least in the case of Wittgenstein, for example, limit context to the meaning a word gains in its usage in the language. In the case of the Zuni, where meaning can be expressed non-verbally, the lack of a name would, according to the universalist, preclude ascertaining an existent’s identity. Both

universalist and relativist would probably agree that ‘the bridge between the subjective and the objective is the observer who is also a participant. There is no universe with an observer and no observer who is not a part of the universe of description. The identity of the two is not, nor can never be identical”[\[51\]](#). Friedrich continues that the role of the observer is also that of the participant and in a manner similar to the Heisenberg principle can effect the outcome of observation, i.e. the participant’s description. In this Friedrich is establishing the perspective taker as an efficient cause that has been eliminated in the universalist position. For assuming that semantic ideas could be conveyed conceptually and non-verbally, then same name usage is not sufficient to establish identity and ontological status. Identity is then dependent upon other, perhaps pragmatic interpretations of the form and function of things as relations of semantic ideas and to the universalist the subject becomes transcendent, in Kantian terms, and interpretation is meaningless. In order to further clarify this position, Friedrich states that reality involves the 'I' and the external world; organic life and the physical universe. The bridge between the subjective and the objective is the observer who is also the participant. The relation of the subject and object is, in Kantian terms, the transcendental ('I think'), and to

Friedrich, one of continuity. To disregard the continuity is to remove the 'I' from the experiential world and place it as an observer of the universe, and reference and meaning becomes transcendent (not transcendental). The effect of continuity is necessarily one where the participant affects description. Meaning and reference can never be identical, i.e. 'A is A' is never the case and is unreal. The disruption of the continuity yields a subjectivity that is just as fallacious as the positivistic reality ('A is A') of the external world. While it is evident that both the linguistic relativist and universalist alike agree that one cannot step outside their language in order to describe the world, there is a point of disagreement. The relativist would argue that since meaning and reference can never be identical, communication is only viable with non-verbal conveyance of semantic concepts, that is, if 'A is not A' then verbal signification is not ostensive and meaning must rely on what the universalist would consider pre-conceptual. The universalist would also consider that a non-verbal conveyance of semantic ideas as conceptual is transcendent (in effect, the transcendental bridge is transcendent). On the other hand, the relativist would view this as a confusion of the transcendent and the transcendental, for the universalist, in considering same name usage as identity, would be

asserting that 'A is A', and this is itself transcendent by the standard of the relativist. As an outside observer, Young commented on the "metaphor and ambiguity" in the multireferentiality of the Zuni base metaphor. This is the fallacy of a "universe with an observer", for while the Zuni may consider an image or name as ambiguous if the context is not certain, they would not consider the perceived uncertainty of multireferentiality as metaphoric, but as an integral part of the schematics of their transcendental bridge. In Young's defense, the language used was the language that could be understood by colleagues, much in the same sense that Cushing used the term "savage."

Hintikka also cites the "mutual dependence of linguistic relativity (impossibility of expressing reality as it is, considered independently of our language) and the ineffability thesis of semantics", and would probably describe Friedrich's position as generally stating the paradox of transcendental knowledge^[52]. The language universalist and the relativist would however, disagree on the role of the participant, and in Kantian terminology, would also disagree on the constitution of the transcendental subject defined as the logic of scientific language. While Kant would assert that possession of the concept of a thing is dependent upon knowing the "use" of an object given in intuition and this

cognition is a prerequisite to consciousness^[53], Wittgenstein would appropriately call this transcendental but as a transcendental subject it is also something that does not exist in the world^[54], an allusion that Kant would refer to as an interpretation of the transcendent and not the transcendental^[55].

According to this interpretation of a transcendental subject as something that does not exist in the world, Kant would be considered a linguistic relativist^[56]. Hintikka states that Wittgenstein held both sides of the linguistic counterpart to the paradox of transcendental knowledge where “the existence of an object can only be shown through its name’s use in the language”^[57]. “The ineffability of the simple name-object relation...amounts to maintaining that the existence of an individual can only be shown by means of language through the use of its name”^[58]; it cannot be stated. Identity is shown by the use of the same name. It is impossible to say what a particular object is, and likewise impossible to say what its *logical form* is. Individual existence is inexpressible and the world as a whole is inexpressible^[59]. The relativist could take exception to this, stating that logical form can be rationalized by reciprocal public intentions, and that the name’s use in language

presupposes knowing the use of the object.

Both of these positions are thoroughly grounded in the view that “human action is constitutive of the meanings of the world of our concepts more generally” and this view should be accepted for pragmatic reasons because “we cannot detach ourselves from our concepts, for we cannot possibly stop our conceptual practices without losing our concepts”^[60]. Hintikka’s criticism of this is that it is transcendental and “there is no reason why the concepts we need to master in order to talk about our language could not also be grounded on human activities. Hence, the pragmatic rationale for the ineffability of our conceptual world is not a valid one”^[61].

Since truth is that part of a relation within the totality of such relationships linking language and the world and is presumed to be conveyed in a linguistic expression about the world, the ineffability thesis of semantics is a thesis of the inexpressibility of truth. While Hintikka would prefer the term “indefinable” rather than inexpressible, either way it would appear that the universalist cannot speak of truth in terms of correspondence, or as a cross-cultural identifier. Suggested remedies of language as a calculus ratiocination or possible world semantics appear to be designed for an explication of a syllogistic

validity cross-culturally, that is, cross identification as the “identification of individuals across the boundaries of possible worlds” which results in “well defined individuations” as an “objectivity of individuating *functions*”[\[62\]](#). Hintikka states that “truth is not ineffable, but it is indefinable, except by transcending the language for which it has to be defined”[\[63\]](#). In this Hintikka seems to be describing the “unspeakable” of Wittgenstein or that area Langer describes as the “unexplored possibility of genuine semantics beyond the limits of discursive language”[\[64\]](#). Semantics is wider than language and contains non-discursive, non-translatable symbolism the form and function of which are not investigated by logicians under the heading of language[\[65\]](#). In principle, the “growth law” of semantics is metaphor[\[66\]](#).

In terms of (2) and a possible world semantics, it is insufficient in regard to defining truth across possible worlds, for unintentional metaphoric fancy will always be lost in the defining of intentional, well defined individuations, meaning that truth will always be nothing more than a synchronic glimpse, in contrast to, for instance, a Kantian pragmatics where the synchronic continually eclipses itself as

diachronic development by means of the need for epistemic fulfillment.

“Well defined individuations” may find objectivity where the individuating function is directed toward a well organized body of principles, but the subjectivity constituted by the individuating functions cannot be objectified.

Zuni Language and Ceremonialism: Objectivity and Personal Accomplishment

In a unique language such as Zuni where multireferential names and metaphoric symbolism are prevalent it is certain that much would be lost in translation to a universal syntax. Modal language is ineffective as well, for there are no possible worlds for the Zuni. Epistemic fulfillment is found and absorbed in the aesthetic. As Ruth Bunzel noted in her study of Zuni ceremonialism, a final statement of the Zuni worldview would be “The world then is as it is and man’s plan in it is what it is”^[67]. Necessity has absorbed the possible in the logic of ritual where the failure of prayer is attributed to a deviant utterance or a ‘bad heart’. Potential is everywhere in animate matter, but its manifestation is the actualization of form and function in cognition^[68]. Potential is what it is when it is not thought about, and when thought about it is for the most part restricted to the non-verbal. In the Zuni

language the word for “I think” is the same word for “maybe”, or “perhaps” (*hinik*)[\[69\]](#).

This may seem paradoxical if actualization is cognition and the “I think” is simply the possible or potential, but actualization of form and function is to know the use of the thing, which presupposes knowledge of its context. Knowledge of context and the things use is sufficient for naming. Indeterminacy of context and perhaps one’s belief is the vagary of cross identification making quantification uncertain and ontology relative, leaving potential to the non-verbal and subsequently giving the appearance of a lack of a naming process as well.

Individualism is discouraged and is distinct from personal accomplishment. Deviant utterance and a bad heart are qualities of individualism. As Cushing remarked, while learning the language during his tenure as a participant-observer residing in the Governor’s household at the Zuni Pueblo, his improper usage of the language *never* went uncorrected[\[70\]](#).

Thus, Zuni truth is determination according to the beliefs of the individual and subsequently to the reciprocal public intentions of a distinct culture where the individual as a “perspective-taker” performs rationalization in the ontological sense[\[71\]](#) or the “primitive”[\[72\]](#) and

intersubjectivity is validated as objectivity in “personal accomplishment”^[73]. Personal accomplishment is never identical to individualism and the beliefs of the individual are expressed objectively if their interpretation of an image invokes a proper narrative.

Young states “rock art is of special import because it demonstrates the involvement of the ancestors in present day life, the fluid boundary between events of the myth times and those of today. Because certain rock art images evoke recitations of traditional narrative, I regard them as a means by which to investigate the relationships between verbal and visual communication codes. This interrelationship is revealed in the way that the Zuni use these codes to recreate and structure the world of the myth time, making it a part of their contemporary existence”^[74].

What is important here is that verbal and ostensive definition presupposes myth and that proper interpretation of the image in context requires that it be related in the now, as a present tense, and where what is uttered or shown is always true and the belief of the producer.

Existence is the accumulation of the past that naturally conflates to the present. While it is always an eternal possibility, existence shows itself only as a necessary present.

Cushing referred implicitly to this phenomenon in equivocating the

Zuni term “*I-shothl-ti-mon*”^[75], meaning “always”, with “*ahâi*” (*ahoi*)^[76], meaning “beings”^[77]. The prefix *I* in Zuni is either reflexive or inchoative^[78] and the prefix *a*^[79] is either a verbal pronominal for the plural absolute or a derivational prefix pluralizing particles referring to persons^[80]. Miner notes that either of these uses of *a* is homophonous with the other and as a linguist one must assume that he intended that while pronunciation is the same they have different derivations, whereas Cushing, who knew the Zuni language and was familiar with the musicality of Zuni narrative, translated *a* as a unison, conflating their usage in, for example, his translation of *Apoyan* (sky or cover) *Tatcu* (father) as “all covering Father Sky”^[81]. Cushing implies this function of individuation several times throughout his essays, referring to the “Seven Cities of Cibola” while Frederick Hodge complained of finding the physical remnants of only six cities (pueblos), the seventh kiva or direction (there are six), and the nineteenth clan (eighteen clans divided into the dichotomy of Summer and Winter people)^[82].

Frederick Eggan seems to agree with Cushing’s observations^[83] and Young notes Eggan’s agreement when citing Cushing’s *Outline of Zuni*

Creation Myths^[84]. Young comments a number of times in her essay that the principle theme of the Zuni cosmology is the notion of the “center” where its multireferential aspects are integrated as a motion through time directed inward^[85], “collapsing the boundaries of space and time into the base metaphor, giving it the ability or power to refer to many disparate concepts simultaneously”^[86]. The center is represented as a class that is itself a member of its class where the multireferential images of the center refer to themselves and to the class as a whole in a seemingly paradoxical as well as tautological sense of logical extension, and is probably responsible for Cushing’s observation that the Zuni seemed to confuse the subjective with the objective^[87]. The extended and the non-extended are tautologically present in every image, where, for example, the seventh city is manifest in the collectivity of the six pueblos known to exist, or the summer-winter dichotomy which is one representative of the idea of the center as indicative of the nineteenth clan.

Zuni Pictographic Language: Pragmatics and Cross-Cultural Referentiality

The seven kiva is also representative of the center as a polemic of the

inside and outside, which refers to the heart of the individual, as a center, and inner and outer space occurring in the “same place at the same time”^[88] in their observance of the six directions, or the center of the pueblo as a center in relation to its periphery. Historical evidence for the physical existence of the seventh kiva is noted by Dutton where the Tiwa had a seventh kiva outside the village walls and its original association was with the scalp society or warrior cult, and the Isleta which had a seventh kiva where scalps and other dangerous things were stored^[89]. These kivas were representative of a possible fringe element in opposition to the center and their contents were antithetical to the peaceful center. It was the task of men with religious knowledge (e.g. the kiva) to harness and control natural forms outside the pueblo, an area that the gods ruled, and bring them peaceably to the core. Acts of violence were reconciled and malevolent spirits transformed, for example, in a scalp dance required in the presentation of a scalp by a warrior returning from war, and was reconciliation in a paradoxical tribute to the sanctity of life^[90].

In a like sense, the rock images of the Zuni lie at the periphery of the village and can stand in opposition to the peaceful center. Their peaceful integration to the center is dependent upon a proper

interpretation of context that requires an extensive knowledge of Zuni religion and myth. In this it is representative of the dangerous. While an image can be appreciated visually, its power to evoke proper narrative can bring danger in a deviant utterance. Proper interpretation is the pragmatic elimination of individual expression and the proper narrative is reflective of a collective cohesion that is manifest as aesthetic appreciation, and while aesthetics and art find religion as their motive, aesthetic expression cannot be a part of religious dialogue. As Walker noted, expressive language tends to categorize the user [\[91\]](#) and to the Zuni if this act has religious associations it could bring danger to the individual and lack personal accomplishment for it may subsequently bring danger to the collectivity.

Bunzel distinguishes between the old and new dances of the Zuni, remarking that only the new dances allow for self-expression but even then the “precision of movement belies a union of the totality”[\[92\]](#). The exaltation of the religious experience lies in the manifestation of the activities and appreciation of the aesthetic quality that pervades. This compensates for the intensity that is inherent in the personal religious exaltation and subjective satisfaction indicative of the vision quests of all the plains tribes. To the Zuni, the lack of that feeling is the

descriptive cohesion of the collective unity^[93].

Because verbal and ostensive definition is related to the present, utterances and showings do not refer or display contextual implications. It is for this reason that contemporary Western logic and anthropological analysis has failed in distinguishing Zuni concepts of being from concepts of becoming^[94]. Newman comments that the Zuni language has no specific term for the copula, that function being filled by the term *teya*, which means “be” or “to live in a place”^[95]; *te-* meaning terrestrial containment and location (both space and time)^[96], and *ya* a collectivity. Thus, when a Zuni asks you “How you have been living these many days?” (*Ko’na to’ tewanan ateyaye*), it is asked in the present tense and imperative (-*ye*), for if you have been living according to observances (*teshkwí*), then the necessary answer, which may be provided, is *Ketsanishi* (happily). Zuni logic dictates that the present state necessarily affirms all that has proceeded, much in the same sense that if a prayed for event transpires, then the prayer or ritual was properly performed, akin to Western logic’s ‘affirming the consequence’^[97].

This phenomenon has been approached in analysis^[98] and has shown

some merit in assuming syllogistic (validity) to be universal and propositional logic (truth) to be culturally sensitive, but appears to have failed in constructing cross-cultural identifiers in assuming that “meaning” structures both validity and truth^[99]. For instance, in cases where “kind of” was absent as a semantic universal^[100] the probability of idealizing physics would render ineffective any notion of an ideal (syntactic) language cross-culturally. The very nature of semantics is the inherent improbability of idealizing physics. From a Zuni standpoint, the idealization of physics is not improbable, for ritual presupposes that in aRb, R is necessary, and relieves the perspective-taker of substantiating rationality ontologically.

Cushing’s writings are rich with examples of how the Zuni concept of being must conform to the context of form, function, and a pragmatic interpretation of context through ceremony. In a narrative on pottery making he describes how vessels come to be made beings^[101]. “The clay which served for their wares was seldom taken from the native quarries without propitiatory offerings” and the transition of the dormant potency of the raw material was by means of coaxing the “treasured source” which is the source of life that accompanies, protects, and preserves whatever it is contained within^[102]. Through

the finishing and decorating of the vessels “no laughing, music, whistling or any other unnecessary noises are indulged in, and conversation was carried on in faint whispers or by signs; for it was feared that the “voice” would enter the vessels, and that when the latter were fired, would escape with a loud noise” thereby shattering the vessel. It is imperative that the “noise made by the pot when struck or when simmering on the fire is supposed to be the voice of its associated being”[\[103\]](#). It is imperative that the voice of the pot be its true voice and not the voice of a deviant utterance.

Form and function serve to instill meaning to design images. Cushing also describes the making of a canteen, which is formed in the shape of a female mammary gland. It is named *me'hetonne*, according to both shape and function, where *me'hana* is the word for a human mammary gland, and *ettonne* is a word for fetish or ceremonial object. The design images receive their specificity, which is to insure that vessel is always providing the milk of the desert (water), by the context, or function of the canteen. It is an *ettonne* because it contains the “treasured source”[\[104\]](#).

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Cushing also cited an incidence where he showed a pole that accompanies a theodolite to an old Zuni man and asked him what he thought the name of it was. In response the old man inquired as to the *use* of the item. After briefly describing the implementation of the device the old man provided a rather lengthy sentence-word that Cushing translated as “heights of the world progressively measuring stick”. The next day Cushing took the pole to the extreme corner of the pueblo and began “to flourish it around” until a middle-aged man relented to curiosity and asked what it was. Cushing then provided the Zuni name he had learned the day before and the man promptly requested, “Can they actually tell how far up and down journeying the world is?”[\[105\]](#).

When a Zuni is planting his field and performs the ceremonious prayer and ritual of planting prayer sticks, offering cornmeal and reciting to the six directions, changing the words only to correspond to the direction he is facing, it not likely that he is distinguishing between his religion and the agra-science he has learned. Samarin remarked that “as one level of *scientia* there is knowing how to perform a task or knowing the effects that natural and supernatural forces perform. That is primitive science or- depending on what we are looking at or what our prejudices may be-

prescientific thinking”——.

In this regard there is no distinction between religious and secular language as the logic of scientific language. There does however appear to be an underlying theme where non-verbal expression and the prospect of a deviant utterance distinguishes between the secular and religious in contradistinction to Young’s remark.

In *Zuni Law*, Smith and Roberts state, “In manifest cultural content, Zuni law appears less highly elaborated than Zuni religion. It is also true that Zuni law is less important in Zuni values than Zuni religion...In the institutional field of religion, direct association between high cultural elaboration and high evaluation is present” and while there is a an obvious disparity in elaboration of the religious and legal fields “the differential between religion and law in cultural evaluation appears to be less striking”, with the Zuni community possessing a high evaluation of law and the Tribal Council as a legal body[\[107\]](#).

In reports of litigation in both religious and legal trials “there is little expression ...of an awareness of values pertaining to beauty”[\[108\]](#) and upon examination the most notable instance of any reference remotely related to aesthetic expression was case 62 where it was stated “Although in a dance it was desirable that one of the dancers wore

jewelry, it should not have been stolen jewelry”[\[109\]](#). In fact, most references were in regard to *attanni*, such as, “the woman should not have become a coyote at night”[\[110\]](#), or “the woman should not have brought a plague of grasshoppers into the valley”, or “it was undesirable that a man could send a centipede into the side of a woman”. All of these references are related to violations of observances and are considered as acts of witchcraft.

The duties of the Bow Society, and latter the Tribal Council, was enforcement as a secular institution despite religious evaluations. It would not do to punish or fend witchcraft through religious rite and ceremony, for to do so the canonical rite would paradoxically expose itself to the dangerous simply by reference to it, and would be akin to ‘fighting fire with fire’, a very undesirable prospect to the Zuni. Thus, *attanni* is negated by observance (*teshkwi*) and violations are reflections upon the individual, and dealt with by secular enforcement, which collectively, may include gossip, criticism, and public ridicule[\[111\]](#).

The underlying dialectic of the beautiful and the dangerous is evident in distinct dialogues, even in the absence of aesthetic expression, for *attanni* is proper to secular dialogue and is pertinent to religious dialogue only in the sense of observance where ‘if you have been living

rightly, then *attanni* is not an issue' (*Ko'na to' tewanan ateyaye*). Non-verbal expression is not meaningless nor is a deviant utterance meaningless where the objective is the immersion of the subject into the social structure in order to eliminate causes of behavior conducive to the anti-structure of a social hierarchy where the collective consciousness of the people is to "pray to become one"[\[112\]](#).

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[3] Ibid, 106-107.

[4] These terms are Willard's, Pp. 160-163, 1989.

[5] *Op. cit.* Young, 1988: 105-106.

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- [9] Ibid, c615.
- [10] Ibid, a480.
- [11] *Op. cit.* Young, 1988: 90.
- [12] Ibid, 93.
- [13] Ibid, 86.
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- [15] Bunzel, Ruth L. *The Pueblo Potter: A Study of Creative Imagination in Primitive Art*. New York: Dover, 1929: 68.
- [16] Ibid, 65.
- [17] Ibid, 54.
- [18] Ibid, 51.
- [19] Ibid, 53.
- [20] *Op. cit.* Young, 1988: 90.
- [21] Ibid, 92
- [22] Ibid, 128-129.
- [23] Ibid, 92.
- [24] Bunzel, does note that new masks and dances are not uncommon and do allow for aesthetic expression; however, all new dances must be approved by the head priest of the kiva, and the masks must be defined and absorbed by society. Any new creation is completely integrated. In this is evident that aesthetics can provide for epistemic fulfillment in diachronic development.
- [25] *Op. cit.* Young, 1988: 159.
- [26] (Ibid, xvii, *italics mine*)
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- [29] Ibid, 163.
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[35] The term for blue or green is *doot•'izh*. Turquoise is the same, except with emphasis and length on the last syllable (*doot•'izhii*). (Young, Robert W. and William Morgan. "*The Navajo Language*". Albuquerque: University of New Mexico Press, 1980). Attempts to describe turquoise in terms of blue and green refer to the same term conjunctively or disjunctively and will thus be described referentially in terms of things (per an informant who is an artist and jeweler and an informant who isn't).

[36] See Hickerson, Nancy P. "Two Studies of Color: Implications for Cross-Cultural Comparability of Semantic Categories". In *Linguistics and Anthropology: In honor of C.F. Voegelin*. Pp. 317-330. Ed. By M. Dale Kinkade, Kenneth Hale, and Oswald Werner. The Peter De Ridder Press, 1975.

[37] *Op. cit.* Young, 1988: 159.

[38] *Op. cit.* Cushing, 1883.

[39] From the showing of a stone the Navajo may not provide a color term but will refer to an object (location) corresponding to the hue. Conversely, the name of the location in conjunction with the stone will redundantly refer the name for the stone (color). Meaning, the color term in this case refers multireferentially from the stone. For the Zuni, the showing of the color will produce a term that is the name of an object or direction that belongs to a category other than color, meaning all colors refer back to an extensive category of religious association (being). There seems to be a distinction here corresponding to the Navajo as a centrifugal society and the Zuni as a centripetal society. The Navajo will begin a sandpainting from the center and proceed outward, whereas the Zuni will begin from the outside and work inward.

[40] Stout, Carol. "Problems of a Chomskyan Analysis of Zuni Transitivity". *International Journal of American Linguistics*. 39: 207-223, 1973.

[41] *Op. cit.* Young, 92.

[42] *Ibid*, 158.

[43] *Ibid*.

[44] Hintikka, Jaakko. *Lingua Universalis vs. Calculus Ratiocination: An Ultimate Presupposition of 20th Century Philosophy*. Vol.2. Dordrecht: Kluwer Academic Pub., 1997: 3.

[45] *Ibid*, 26.

[46] Ibid.

[47] Young, 1988, p. 159.

[48] Ibid.

[49] Hintikka, Jaakko. *“Logic, Language Games, and Information: Kantian Themes in the Philosophy of Logic.* Oxford: Clarendon, 1973, p. 91.

[50] Ibid, p.61.

[51] Friedrich, Paul. “Linguistic Relativity”. In *Linguistic Anthropology: Essays in Honor of Harry Hoijer.* Ed. By Jacques Marquet. Malibu: Undera, 1980, p.98. The prerequisites of Friedrich's position can be found in his discussion of the "principle of arbitrariness of the language" or the "arbitrariness of the symbol." ("The Lexical Symbol." In *Linguistics and Anthropology in Honor of C. F. Voeglin.* Ed. by M. Dale Kinkade, Kenneth Hale, and Oswald Werner. Peter De Ridler Press, 1975, pp. 199-247.) Friedrich argues for the non-arbitrary in the objective semantic character of language and the subjective intuitions of the speaker, stating that this is necessary for the transition from positivism to formal structuralism. The inclusion of an interpreter (i.e. observer) is an important distinction between positivist theories and those of a "mentalist cast", and the controversy between idealistic and materialistic conceptions of meaning could be avoided by recognizing that different semantic systems, and specifically, systems of lexical symbols, are differently related to reality (Friedrich citing Sapir, "Language and Environment." *American Anthropologist.* 14:226-42, 1912.). The internal consistency of a semantic system is a diachronic development, generated as symbols are aligned with different categories. A symbol may denote an image, which in turn can be multi-referential, but relativity at the individual level is foregone by a series of alternate explanations and the correspondence of semantic schemata and internal consistency is the result of a common purpose.

The effect of reducing lexicology to syntax is to ignore socio-cultural systems and increase the theoretical role of arbitrariness in linguistic theory. The position of the thing interpreted is in terms of linguistic code and must be presumed to belong to an external world that is ordered and non-arbitrary. It would appear then that the thing interpreted is semantic at all levels. What may be questionable is, if semantic values are continuous as a consequence of the interaction of lexemes in their diverse constructions and occurrences (multireferentiality and combinatory meaning in the form of underlying propositions) within a socio-cultural setting, then to what degree is the indexical inventory distinguished from non-egocentric ostensiveness once symbolism is conventional. That is, is diachronic development terminated in identity, e.g. same name usage, or is there still a role of the interpreter in distinguishing perhaps between the use of a word and the use of the thing which the word denotes.

[52] *Op. cit.* Hintikka, 1973, p.166. The paradox of transcendental knowledge has an

intrinsic link and mutual implication between, 1) the unknowability of things *considered* in themselves independently of our knowledge seeking activities and the conceptual framework they utilize; and, 2) the unknowability of these activities and of this framework. The linguistic counterpart to the epistemic paradox is the “mutual dependence of linguistic relativity (impossibility of expressing reality as it is, considered independently of our language) and the ineffability of language”.

According to Hintikka the transcendental paradox is “Kant’s fallacy”. The “semantic turn” is that unknowability cannot be expressed apart from the language (Hintikka 1981: 377). Hintikka, Jaakko. “Wittgenstein’s Semantical Kantianism”. *Proceeding of the Fifth International Wittgenstein Symposium: Ethics, Foundations, Problems, and Applications*. Pp. 375-390. Ed. by E. Morscher and Rudolph Stranzinger. Holder, Pichler, Tempsky, 1981.

[53] Kant, Immanuel. *Logic*. 1800. Trans., R.S. Hartmann and Wolfgang Schwartz. New York: Dover Publication, 1974: 37-38.

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[55] For the distinction between transcendent and transcendental, see Strawson, Peter F. *Bounds of Sense*. London: Methuen, 1966:18.

[56] *Op. cit.* Hintikka, 1997: 166. Also, Hintikka, Jaakko and Merrill. *Investigating Wittgenstein*. Oxford: Basil-Blackwell, 1986: 5.

[57] *Ibid*, Hintikka 1997: 168.

[58] *Ibid*.

[59] *Ibid*, 162-190.

[60] *Ibid*, 5-6.

[61] *Ibid*, 6.

[62] Hintikka, 411,415, *italics mine*). “The Semantics of Modal Notions and the Indeterminacy of Ontology. *Synthese*. 21: 408-424, 1970.

[63] *Op. cit.* Hintikka, 1997: 36.

[64] Langer, Susanne K. *Philosophy in a New Key*. Cambridge: University of Harvard, 1951: 86.

[65] *Ibid*, 87.

[66] *Ibid*, 147.

[67] *Op. cit.* Bunzel, 1932:a486.

[68] Images for water are not put on water vessels, but on bowls for holding cornmeal; hence, the desire for increase (Bunzel 1929: 23-24, 69-71).

[69] Bunzel, Ruth L. *Zuni Texts*. Publications of the American Ethnological Society, 15. New York: G.E. Steckert & Co., 1933, and Newman, Stanley. *Zuni Dictionary*. Indiana University Research Center Publication Six. Bloomington: Indiana University, 1958.

[70] Cushing, Frank Hamilton. *My Adventures in Zuni*. 1882. Palmer Lake, CO: Filter Press, 1999 reprint.

[71] *Op. cit.* Willard, 1989: 160.

[72] Fabian notes that “primitive” is essentially a temporal concept (and temporally distancing), is a category, not an object, of Western thought (1983: 18). Dunn defines the “primitive” as an interpreter or seer, and that every culture has them, making them a category of individuals. She also refers to the universal use of systems of symbols by cultures and implies that symbols, as objects of the interpreters, are primitives. Dunn, Dorothy. *American Indian Painting of the Southwest and Plain’s Area*. Albuquerque: University of New Mexico, 1968: 24-25. Fabian, Johannes. *Time and the Other: How Anthropology Makes Its Object*. NY: Columbia University Press, 1983.

[73] *Op. cit.* Willard, 1989: 163.

[74] *Op. cit.* Young, 1988: 7-8.

[75] Cushing, 1883, (*ishalhma-te*, per Newman, 1958)

[76] The term *ahoi* is a superordinate generic term. *Ahoi* has become a term translated as ‘people’ by English speaking bilingual Zuni, and is a secondary echelon in the being hierarchy subsumed under the superordinate generic term. (Walker 1966a).

[77] Cushing, 1883: 10. Compare this with Plato dropping “now” from timeless propositions and importing “always” in its place (Timaeus 38a, cited from Owens 1966: 333). Owens, G.E.L. “Plato and Parmenides on the Timeless Present”. *Monist*. 50: 317-340, 1966.

[78] *Op. cit.* Newman, 1958.

[79] Zuni informants suggest a slight difference in pronunciation corresponding to context, but it is imperceptible to my ear. They confirm, however, that it can be used to have simultaneous meaning, but the term *apoyanne* is associated to strict religious dialogue and is presently archaic.

[80] Miner, Kenneth L. “Noun Stripping and Loose Incorporation in Zuni”. *International Journal of American Linguistics*. 52: 242-254, 1986: 246n.8. Walker states that *a* is not only a particle referring to persons, but also categorizes it as a being (1966a).

[81] Cushing, Frank Hamilton. “Outlines of Zuni Creation Myths”. *Thirteenth*

Annual Report of the Bureau of American Ethnology, 1891-1892. Pp. 321-447. Washington, D.C.: Government Printing Office, 1896. Reprint. Bunzel criticizes Cushing's interpretations as containing "endless poetic and metaphysical glossing of the basic elements" (1932b: 547). Bunzel translates *apoyanne* as "stone cover" where *a* is denoted by its root use as a term for "stone" (1932a: 487). The distinction is viewed here as relative to the distinction between folklore and mythology, where, as Benedict notes, a Zuni narrator is free to incorporate his knowledge into folklore and tales (1969: xiii, Benedict, Ruth. *Zuni Mythology*. 2 vols. Columbia University Contributions to Anthropology, no. 21. New York: Columbia University Press, 1935. AMS Press reprint, 1969). Bunzel had received her version from a man who was not a priest and was a story that belonged to all the priests for the purpose of storytelling during the winter retreats. Her source had learned the story from an uncle who had refused to give the origin myth of his society since that was his "very own prayer" (1932b: 548).

In a letter to the to the Peabody Museum, Cushing distinguished between the "abundant folklore and more serious mythology" (Green, Jesse. 1990: 304, *Cushing at Zuni: The Correspondence and Journals of Frank Hamilton Cushing, 1879-1884*. Albuquerque: University of New Mexico Press, 1990.). It is apparent from information in several correspondences (including Lt. John Bourke's journal; *Ibid*, 188, 394 n. 67), that Cushing learned his version of the origin myth from Keasi, who was second in command in the Order of the Priests of the Bow (*Apila Shiwani*) and who's duty it was, according to Keasi, to preserve the "Sacred Genesis" of the Zuni, handed down by word of mouth from the "Old Days...given to me by...day and night pouring it into my ears" (*Ibid*: 187). In Cushing's day the Society was the most powerful of all the kivas and its strength depended upon its secrecy, even to the exclusion of the collective, for this was the source of its motive as an enforcement agency of the secular, and also was the unification of the collective (Harvey, Byron III. p.204. "An Overview of Pueblo Religion". *New Perspectives on the Pueblos*. Ed. by Alfonso Ortiz. Pp. 197-217. Albuquerque: University of New Mexico Press, 1972.). By the time of Bunzel's field work however, the war cult was "greatly in abeyance" and had been "stripped" of its power: the pattern of assignment of the priestly hierarchy had been drastically altered and the dissemination of information and the handing down of the society's ritual history had been drastically curtailed (Bunzel 1932b: 525-526). Thus, it is likely that information that had been available to Cushing as a member of the Bow was, for the most part, unavailable to Bunzel, at least in its original form. The most interesting aspect of this is that Bunzel's informant was in all likelihood Nick Tamaka, who was persecuted for witchcraft by the Bow in or around 1895. Tamaka immediately informed the U.S. authorities and later become Governor of Zuni. Throughout these years it was he who stripped the Bow of its power.

[82] Cushing gives an account of the division of the summer and winter people in a myth telling “how soon after the emergence from the under world Yanauluha carried a staff among the plumes of which appeared four round things, seeds or eggs, two blue like the sky or turquoise, two dun-red like the earth. Yanauluha told the people to choose. From one pair would issue beings of beautiful plumage, and where they flew would be everlasting summer; from the other would come evil beings, ‘uncolored, black, piebald with white’, and where these flew, and the people should follow, winter would strive with summer, and food would be obtainable only by labor. The people choose blue eggs, and the strongest seized them. Worms issued from this pair of eggs, which grew into ravens. But the other eggs held by Yanauluha and by the fewer and weaker but wiser people who waited with him, grew into macaws, who flew to the summer land of the south”. Yanauluha became the “speaker to and of the Sun-father”. In this myth there seems to be an implied moral prescribing aesthetics should be informed by qualities of a more immanent nature for there is an inherent danger in the aesthetic (quote cited from Kroeber , 1919: 94-95. Kroeber, Alfred L. “Zuni Kin and Clan”. *Anthropological Papers of the Museum of Natural History*, 18. 1919: 39-204. Reprint, AMS Press.).

[83] Eggan, Fred. *Social Organization of the Western Pueblos*. Chicago: University of Chicago Press, 1970: 300.

[84] *Op. cit.* Young, 1988: 257n.31.

[85] *Ibid*, 136.

[86] *Ibid*, 106.

[87] *Op. cit.* Cushing, 1883: 10.

[88] *Op. cit* Young, 1988: 114.

[89] Dutton, Bertha P. *American Indians of the Southwest*. Albuquerque: University of New Mexico Press, 1983: 22.

[90] Gutierrez, Ramón A. *When Jesus Came, the Corn Maidens Went Away*. Stanford, CA: University of Stanford Press, 1991: 26.

[91] Walker notes that referential meaning is about the non-linguistic environment of a speaker, e.g. color-coding. Walker, Willard. “Taxonomic Structure and the Pursuit of Meaning”. *Southwestern Journal of Anthropology*. 21: 265-275, 1966b: 266.

[92] *Op. Cit.* Bunzel, 1932c, 899.

[93] *Ibid*, 1932a, 480, and Pareto, Nancy. “Introduction”. In the 1992 reprint of Bunzel’s *Zuni Ceremonialism*, p.xxix.

[94] Roberts, John. “The Zuni”. In *Variations in Value Orientations*. Ed. by F.R. Kluckhohn and F.L. Strodbeck. Pp. 285-316. Evanston, IL and Elmsford, NY: Row, Peterson, 1961.

- [95] Newman, Stanley. "The Zuni Verb 'To Be'." *Foundations of Language, Supplemental Series*. Vol. 1. Ed. by John W. Verhaar. The Humanities Press, 1967.
- [96] Time and space are simultaneously implied in *te-*, a prefix denoting a terrestrial occurrence or event. Time is circular, corresponding to the seasons and the sun's (*yatokk/a*) revolutions. *Yato* can be a term meaning "day" or "light", or an intransitive verb meaning to "move over or above". The suffix *kk/a* is causative and forms a verb. The Zuni term for a timepiece is *yatokk/a*, the same as the sun.
- [97] Cushing notes this phenomenon where essentially the migration of birds to the south brings the winter; *Zuni Breadstuff*. Indian Notes and Monographs, 8. 1920. Reprint. New York: Museum of the American Indian, 1974: n20), and Dennis Tedlock notes it as a fallacy citing Aristotelian logic; Tedlock, Dennis. "Pueblo Literature: Style and Verisimilitude". *New Perspectives on the Pueblos*. Ed. by Alfonso Ortiz. Pp. 219-242. Albuquerque: University of New Mexico Press, 1972.
- [98] Hamill, James F. *Ethnologic: The Anthropology of Human Reasoning*. Chicago, Urbana: University of Chicago Press, 1990.
- [99] *Ibid*, 104.
- [100] *Ibid*, 21. In cases where the universal was true, the subsumptive was not considered valid. "Some" was not a valid inference from "all".
- [101] *Op. cit.* Green, 1979: 227-245.
- [102] Cushing termed animate matter as "one great system of all *conscious* and interrelated life" (1883: 9, *italics* mine), and Bunzel noted that there is "no antithesis of...matter and spirit (1932a: 486). Cushing also remarks that the Zuni perception of the harmony of all things in the universe means that, to the Zuni mind, nature is quite literally endowed with the gift of reason (Cushing, 1920: n20).
- [103] *Op. cit.* Cushing, 1920: 176.
- [104] *Op. cit.* Green, 1979: 241-244.
- [105] German and Zuni are both polysynthetic languages. Cushing noted the similarities in the two languages where with different roots and affixes one could construct, in any direction, sentence-words ("coinages"). Green, Jesse. *Cushing at Zuni: The Correspondence and Journals of Frank Hamilton Cushing, 1879-1884*. Albuquerque: University of New Mexico Press, 1990: 107-108.
- [106] Samarin, William. "Theory of Order with Disorderly Data". In *Linguistics and Anthropology: In honor of C.F. Voegelin*. Pp. 509-519. Ed. By M. Dale Kinkade, Kenneth Hale, and Oswald Werner. The Peter De Ridder Press, 1975.
- [107] Smith, Watson and John Roberts. *Zuni Law: A Field of Values*. Papers of the Peabody Museum of American Archaeology and Ethnology, Vol. 43. Cambridge, MA: Peabody Museum, 1954: 147.

[108] Ibid, 144

[109] Ibid

[110] Notable in this statement is not that the woman became a coyote, but that she became a coyote at *night*. Metamorphosis did not traverse category boundaries, but the day/night dichotomy as a concept of the center was somehow violated, and represented *attanni*.

[111] *Op. cit.* Dutton, 1983: 13.

[112] Eggan, Fred and T.N. Pandey. "Zuni History, 1855-1970". *Handbook of North American Indians, Southwest*. Vol.9. Ed. By Alfonso Ortiz. Pp. 474-481. Washington, D.C.: Government Printing Office, 1979.

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