

# AN AMERICAN INDIAN MODEL OF THE UNIVERSE<sup>1</sup>

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I FIND IT gratuitous to assume that a Hopi who knows only the Hopi language and the cultural ideas of his own society has the same notions, often supposed to be intuitions, of time and space that we have, and that are generally assumed to be universal. In particular, he has no general notion or intuition of *time* as a smooth flowing continuum in which everything in the universe proceeds at an equal rate, out of a future, through a present, into a past; or, in which, to reverse the picture, the observer is being carried in the stream of duration continuously away from a past and into a future.

After long and careful study and analysis the Hopi language is seen to contain no words, grammatical forms, constructions or expressions that refer directly to what we call *time*, or to past, present, or future, or to enduring or lasting, or to motion as kinematic rather than dynamic (*i.e.* as a continuous translation in space and time rather than as an exhibition of dynamic effort in a certain process) or that even refer to space in such a way as to exclude that element of extension or existence that we call *time*, and so by implication leave a residue that could be referred to as *time*. Hence, the Hopi language contains no reference to *time*, either explicit or implicit.

At the same time, the Hopi language is capable of accounting for and describing correctly, in a pragmatic or operational sense, all observable phenomena of the universe. Hence, I find it gratuitous to assume that Hopi thinking contains any such notion as the supposed intuitively felt flowing of *time*, or that the intuition of a Hopi gives him this as one of its data. Just as it is possible to have any number of geometries other than the Euclidean which give an equally perfect account of space configurations, so it is possible to have descriptions of the universe, all equally valid, that do not contain our familiar contrasts of time and space. The relativity viewpoint of modern physics is one such view, conceived in mathematical terms, and the Hopi Weltanschauung is another and quite different one, nonmathematical and linguistic.

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Thus, the Hopi language and culture conceals a *metaphysics*, such as our so-called naive view of space and time does, or as the relativity theory does, yet a different metaphysics than either. In order to describe the structure of the universe according to the Hopi, it is necessary to attempt — insofar as it is possible — to make explicit this metaphysics, properly describable only in the Hopi language, by means of an approximation expressed in our own language, somewhat inadequately it is true, yet by availing ourselves of such concepts as we have worked up into relative consonance with the system underlying the Hopi view of the universe.

In this Hopi view, time disappears and space is altered, so that it is no longer the homogeneous and instantaneous timeless space of our supposed intuition or of classical Newtonian mechanics. At the same time new concepts and abstractions flow into the picture, taking up the task of describing the universe without reference to such time or space — abstractions for which our language lacks adequate terms. These abstractions, by approximations of which we attempt to reconstruct for ourselves the metaphysics of the Hopi, will undoubtedly appear to us as psychological or even mystical in character. They are ideas which we are accustomed to consider as part and parcel either of so-called animistic or vitalistic beliefs, or of those transcendental unifications of experience and intuitions of things unseen that are felt by the consciousness of the mystic, or which are given out in mystical and (or) so-called occult systems of thought. These abstractions are definitely given either explicitly in words — psychological or metaphysical terms — in the Hopi language, or, even more, are implicit in the very structure and grammar of that language, as well as being observable in Hopi culture and behavior. They are not, so far as I can consciously avoid it, projections of other systems upon the Hopi language and culture made by me in my attempt at an objective analysis. Yet, if *mystical* be perchance a term of abuse in the eyes of a modern Western scientist, it must be emphasized that these underlying abstractions and postulates of the Hopian metaphysics are from a detached viewpoint equally (or to the Hopi, more) justified pragmatically and experientially as compared to the flowing time and static space of our own metaphysics, which are *au fond* equally mystical. The Hopi postulates equally account for all phenomena and their interrelations, and lend themselves even better to the integration of Hopi culture in all its phases.

**T**HE METAPHYSICS underlying our own language, thinking, and modern culture (I speak not of the recent and quite different relativity metaphysics of modern science) imposes upon the universe two grand COSMIC FORMS, space and time; static, three-dimensional, infinite space, and kinetic, one-dimensional, uniformly and perpetually flowing time; two utterly separate and unconnected aspects of reality (according to this familiar way of thinking). The flowing realm of time is, in turn, the subject of a threefold division; past, present, and future.

The Hopi metaphysics also has its cosmic forms comparable to these in scale and scope. What are they? It imposes upon the universe two grand cosmic forms, which as a first approximation in terminology we may call *manifested* and *manifesting* (or, *unmanifest*) or again, OBJECTIVE and SUBJECTIVE. The objective or manifested comprises all that is or has been accessible to the senses, the historical physical universe, in fact, with no attempt to distinguish between present and past, but excluding everything that we call future. The subjective or manifesting comprises all that we call future, *but not merely this*; it includes equally and indistinguishably all that we call mental — everything that appears or exists in the mind, or as the Hopi would prefer to say, in the *heart*, not only the heart of man, but in the heart of animals, plants, and things, and behind and within all the forms and appearances of nature in the heart of nature, and by an implication and extension which has been felt by more than one anthropologist, yet would hardly ever be spoken of by a Hopi himself, so charged is the idea with religious and magical awesomeness, in the very heart of the Cosmos, itself.<sup>2</sup> The subjective realm (subjective from our viewpoint, but intensely real and quivering with life, power, and potency to the Hopi) embraces not only our *future*, much of which the Hopi regards as more or less predestined in essence if not in exact form, but also all mentality, intellection, and emotion, the essence and typical form of which is the striving of purposeful desire, intelligent in character, toward manifestation — a manifestation which is much resisted and delayed, but in some form or other is inevitable. It is the realm of expectancy, of desire and purpose, of vitalizing life, of efficient causes, of thought thinking itself out from an inner realm (the Hopian *heart*) into manifestation. It is in a dynamic state, yet not a state of motion — it is not advancing towards us out of the future, but *already with us* in vital and mental form, and its dynamism is at work in the field of eventuating or manifesting, i.e. evolving without motion from the subjective by degrees to a result which is the objective. In translating into English the Hopi will say that these entities in process of causation *will come* or that they — the Hopi — *will come* to them, but in their own language there are no verbs corresponding to our *come* and *go* that mean simple and abstract motion, our purely kinematic concept. The words in this case translated *come* refer to the process of eventuating without calling it motion — they are *eventuates to here* (pew'i) or *eventuates from it* (angqö) or *arrived* (pitu, pl. öki) which refers only to the terminal manifestation, the actual arrival at a given point, not to any motion preceding it.

This realm of the subjective or of the process of manifestation, as distinguished from the objective, the result of this universal process, includes also — on its border but still pertaining to its own realm — aspect of existence that

<sup>2</sup> This idea is sometimes alluded to as the spirit of the Breath (hikwsu) and as the Mighty Something ('a'ne himu) although these terms may have lower and less cosmic, though always awesome connotations.

we include in our present time. It is that which is beginning to emerge into manifestation; that is, something which is beginning to be done, like going to sleep or starting to write, but is not yet in full operation. This can be and usually is referred to by the same verb form (the *expective* form in my terminology of Hopi grammar) that refers to our future, or to wishing, wanting, intending, etc. Thus, this nearer edge of the subjective cuts across and includes a part of our present time, viz. the moment of inception, but most of our present belongs in the Hopi scheme to the objective realm and so is indistinguishable from our past. There is also a verb form, the *inceptive* which refers to this *edge* of emergent manifestation in the reverse way — as belonging to the objective, as the edge at which objectivity is attained; this is used to indicate beginning or starting, and in most cases there is no difference apparent in the translation from the similar use of the expective. But at certain crucial points significant and fundamental differences appear. The inceptive, referring to the objective and result side and not like the expective to the subjective and causal side, implies the ending of the work of causation in the same breath that it states the beginning of manifestation. If the verb has a suffix which answers somewhat to our passive, but really means that causation impinges upon a subject to effect a certain result — i.e. *the food is being eaten*, then addition of the *inceptive* suffix in such a way as to refer to the basic action produces a meaning of causal cessation. The basic action is in the inceptive state, hence whatever causation is behind it is ceasing, the causation explicitly referred to by the causal suffix is hence such as WE would call past time, and the verb includes this and the incepting and the de-causating of the final state (a state of partial or total eatenness) in one statement. The translation is *it stops getting eaten*. Without knowing the underlying Hopian metaphysics it would be impossible to understand how the same suffix may denote starting or stopping.

**I**F WE WERE to approximate our metaphysical terminology more closely to Hopian terms, we should probably speak of the subjective realm as the realm of *hope* or *hoping*. Every language contains terms that have come to attain cosmic scope of reference, that crystallize in themselves the basic postulates of an unformulated philosophy, in which is couched the thought of a people, a culture, a civilization, even of an era. Such are our words reality, substance, matter, cause, and as we have seen space, time, past, present, future. Such a term in Hopi is the word most often translated *hope* — *tunátya* — *it is in the action of hoping, it hopes, it is hoped for, it thinks or is thought of with hope*, etc. Most metaphysical words in Hopi are verbs, not nouns as in European languages. The verb *tunátya* contains in its idea of hope something of our words thought, desire, and cause which sometimes must be used to translate it. The word is really a term which crystallizes the Hopi philosophy of the universe in respect to its grand dualism of objective and subjective; it is the Hopi term for *subjective*.

It refers to the state of the subjective, unmanifest, vital and causal aspect of the cosmos, and the fermenting activity toward fruition and manifestation with which it seethes — an action of *hoping*, i.e. mental-causal activity, which is forever pressing upon and into the manifested realm. As anyone acquainted with Hopi society knows, the Hopi see this burgeoning activity in the growing of plants, the forming of clouds and their condensation in rain, the careful planning-out of the communal activities of agriculture and architecture, and in all human hoping, wishing, striving, and taking thought; and as most especially concentrated in prayer, the constant hopeful praying of the Hopi community, assisted by their exoteric communal ceremonies and their secret, esoteric rituals in the underground kivas — prayer which conducts the pressure of the collective Hopi thought and will out of the subjective into the objective. The inceptive form of *tunátya*, which is *tunátyava*, does not mean *begins to hope*, but rather *comes true, being hoped for*. Why it must logically have this meaning will be clear from what has already been said. The inceptive denotes the first appearance of the objective, but the basic meaning of *tunátya* is subjective activity or force; the inceptive is then the terminus of such activity. It might then be said that *tunátya coming true* is the Hopi term for objective, as contrasted with subjective, the two terms being simply two different inflectional nuances of the same verbal root, as the two cosmic forms are the two aspects of one reality.

AS FAR AS space is concerned, the subjective is a mental realm, a realm of no space in the objective sense, but it seems to be symbolically related to the vertical dimension and its poles the zenith and the underground, as well as to the *heart* of things, which corresponds to our word *inner* in the metaphorical sense. Corresponding to each point in the objective world is such a vertical and vitally *inner* axis which is what we call the wellspring of the future. But to the Hopi there is no temporal future; there is nothing in the subjective state corresponding to the sequences and successions conjoined with distances and changing physical configurations that we find in the objective state. From each subjective axis, which may be thought of as more or less vertical and like the growth-axis of a plant, extends the objective realm in every physical direction, though these directions are typified more especially by the horizontal plane and its four cardinal points. The objective is the great cosmic form of extension; it takes in all the strictly extensional aspects of existence, and it includes all intervals and distances, all seriations and number. Its *distance* includes what we call time in the sense of the temporal relation between events which have already happened. The Hopi conceive time and motion in the objective realm in a purely operational sense — a matter of the complexity and magnitude of operations connecting events — so that the element of time is not separated from whatever element of space enters into the operations. Two events in the past

occurred a long *time* apart (the Hopi language has no word quite equivalent to our *time*) when many periodic physical motions have occurred between them in such a way as to traverse much distance or accumulate magnitude of physical display in other ways. The Hopi metaphysics does not raise the question of whether the things in a distant village exist at the same present moment as those in one's own village, for it is frankly pragmatic on this score and says that any *events* in the distant village can be compared to any events in one's own village only by an interval of magnitude that has both time and space forms in it. Events at a distance from the observer can only be known objectively when they are *past* (i.e. posited in the objective) and the more distant, the more *past* (the more worked upon from the subjective side). Hopi, with its preference for verbs, as compared to our own liking for nouns, perpetually turns out propositions about things into propositions about events. What happens at a distant village, if actual (objective) and not a conjecture (subjective) can be known *here* only later. If it does not happen *at this place* it does not happen *at this time*; it happens *at that place* and *at that time*. Both the *here* happening and the *there* happening are in the objective, corresponding in general to our past, but the *there* happening is the more objectively distant, meaning, from our standpoint, that it is further away in the past just as it is further away from us in space than the *here* happening.

AS THE OBJECTIVE realm displaying its characteristic attribute of extension stretches away from the observer toward that unfathomable remoteness which is both far away in space and long past in time, there comes a point where extension in detail ceases to be knowable and is lost in the vast distance, and where the subjective, creeping behind the scenes as it were, merges into the objective, so that at this inconceivable distance from the observer — from all observers — there is an all-encircling end and beginning of things where it might be said that existence, itself, swallows up the objective and the subjective. The border land of this realm is as much subjective as objective. It is the abyss of antiquity, the time and place told about in the myths, which is known only subjectively or mentally — the Hopi realize and even express in their grammar that the things told in myths or stories do not have the same kind of reality or validity as things of the present day, the things of practical concern. As for the far distances of the sky and stars, what is known and said about them is suppositious, inferential — hence, in a way subjective — reached more through the inner vertical axis and the pole of the zenith than through the objective distances and the objective processes of vision and locomotion. So the dim past of myths is that corresponding distance on earth (rather than in the heavens) which is reached subjectively as myth through the vertical axis of reality via the pole of the nadir — hence it is placed *below* the present surface of the earth, though this does not mean that the nadir — land of the

origin myths is a hole or cavern as we should understand it. It is Palátkwapi *At the Red Mountains*, a land like our present earth, but to which our earth bears the relation of a distant sky — and similarly the sky of our earth is penetrated by the heroes of tales, who find another earth-like realm above it.

It may now be seen how the Hopi do not need to use terms that refer to space or time as such. Such terms in our language are recast into expressions of extension, operation, and cyclic process provided they refer to the solid objective realm. They are recast into expressions of subjectivity if they refer to the subjective realm — the future, the psychic-mental, the mythical period, and the invisibly distant and conjectural generally. Thus, the Hopi language gets along perfectly without tenses for its verbs.

#### REFERENCES

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