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Foundations of a Theory of Mythical Forms.

Space, Time, and Number

1. The Articulation of Space in the Mythical Consciousness

WE MAY arrive at a provisional and general characterization of the mythical intuition of space by starting from the observation that it occupies a kind of middle position between the space of sense perception and the space of pure cognition, that is, geometry. It is self-evident that the space of perception, the space of vision and touch, does not coincide with the space of pure mathematics, that there is indeed a thoroughgoing divergence between the two. The determinations of mathematical space do not follow simply from those of sensory space (the former cannot even be derived from the latter in an unbroken logical sequence); on the contrary, we require a peculiar reversal of perspective, a *negation* of what seems immediately given in sensory perception, before we can arrive at the "logical space" of pure mathematics. Particularly, a comparison between "physiological" space and the "metric" space upon which Euclidean geometry bases its constructions shows this antithetical relationship in every detail. What is established in the one seems negated and reversed in the other. Euclidean space is characterized by the three basic attributes of continuity, infinity, and uniformity. But all these attributes run counter to the character of sensory perception. Perception does not know the concept of infinity; from the very outset it is confined within certain spatial limits imposed by our faculty of perception. And in connection with perceptual space we can no more speak of homogeneity than of infinity. The ultimate basis of the homogeneity of geometric space is that all its elements, the "points" which are joined in it, are mere determinations of position, possessing no independent content of their own outside of this

relation, this position which they occupy in relation to each other. Their reality is exhausted in their reciprocal relation: it is a purely functional and not a substantial reality. Because fundamentally these points are devoid of all content, because they have become mere expressions of ideal relations, they can raise no question of a diversity in content. Their homogeneity signifies nothing other than this similarity of structure, grounded in their common logical function, their common ideal purpose and meaning. Hence homogeneous space is never given space, but space produced by construction; and indeed the geometrical concept of homogeneity can be expressed by the postulate that from every point in space it must be possible to draw similar figures in all directions and magnitudes.¹ Nowhere in the space of immediate perception can this postulate be fulfilled. Here there is no strict homogeneity of position and direction; each place has its own mode and its own value. Visual space and tactile space are both anisotropic and unhomogeneous in contrast to the metric space of Euclidean geometry: "the main directions of organization—before-behind, above-below, right-left—are dissimilar in both physiological spaces."²

If we start from this standard of comparison, there would seem to be doubt that *mythical* space is closely related to the space of perception and strictly opposed to the logical space of geometry. Both mythical space and perceptive space are thoroughly concrete products of consciousness. Here the distinction between *position* and *content*, underlying the construction of "pure" geometric space, has not yet been made and cannot be made. Position is not something that can be detached from content or contrasted with it as an element of independent significance; it "is" only insofar as it is filled with a definite, individual sensuous or intuitive content. Hence in sensory as in mythical space, no "here" and "there" is a mere here and there, a mere term in a universal relation which can recur identically with the most diverse contents; every point, every element possesses, rather, a kind of tonality of its own. Each element has a special distinguishing character which cannot be described in general concepts but which is immediately experienced as such. And this characteristic difference adheres to the diverse directions in space as it does to the diverse positions. We have seen that *physiological* space differs from *metric* space

in that here right and left, before and behind, above and below are not interchangeable, since motion in any of these directions involves specific organic sensations—and similarly, each of these directions carries specific mythical feeling values. In contrast to the homogeneity which prevails in the conceptual space of geometry every position and direction in mythical space is endowed as it were with a particular *accent*—and this accent always goes back to the fundamental mythical accent, the division between the sacred and the profane. The limits which the mythical consciousness posits and through which it arrives at its spatial and intellectual articulations are not, as in geometry, based on the discovery of a realm of fixed figures amid the flux of sensory impressions; they are fixed on man's self-limitation in his immediate relation to reality, as a willing and acting subject—on the fact that in confronting this reality he sets up specific barriers to which his feeling and his will attach themselves. The primary spatial difference, which in the more complex mythical configurations is merely repeated over and over and increasingly sublimated, is this difference between two *provinces* of being: a common, generally accessible province and another, sacred, precinct which seems to be raised out of its surroundings, hedged around and guarded against them.

But although the mythical intuition of space is distinguished from the abstract space of pure cognition by this foundation of individual feeling on which it rests and from which it seems inseparable, even here a universal tendency and a universal function are manifested. On the whole, the mythical world view effects a construction of space which, though far from being identical in content, is nevertheless analogous in form to the construction of geometrical space and the building up of empirical, objective "nature." It, too, operates as a schema through whose mediation the most diverse elements, elements which at first sight seem utterly incommensurate, can be brought into relation with one another. We have seen that the progress of objective knowledge rests essentially on the reduction of all the merely sensuous distinctions provided by immediate sensation to pure distinctions of space and magnitude, which fully represent them; in the mythical world view there is a similar representation, a "copying" in space of what is intrinsically unspatial. Here every qualitative difference seems to have an aspect in which it is also spatial, while every spatial difference is and remains a qualitative difference. Between the two realms there occurs a kind of exchange, a perpetual transition from one to the other. The investigation of language has already indicated the

1. Cf. Hermann Grassmann, "Die Ausdehnungslehre von 1844," *Gesammelte mathematische und physikalische Werke* (3 vols. Leipzig, 1894–1911), I, 65.

2. Ernst Mach, *Erkenntnis und Irrtum* (Leipzig, J. A. Barth, 1905), p. 334.

form of this transition: it has shown us that a vast number of the most diverse relations, particularly qualitative and modal relations, come within the scope of language only indirectly, by way of spatial determinations. The simple spatial terms thus became a kind of original intellectual expression. The objective world became intelligible to language to the degree in which language was able, as it were, to translate it back into terms of space. (See I, 200 ff.)

A similar translation, a similar transference of perceived and felt qualities into spatial images and intuitions, also occurs constantly in mythical thinking. Here, too, we find that peculiar schematism of space through which space assimilates the most dissimilar elements and so makes them mutually comparable and in some way similar.

The further back we go in our study of specifically mythical configurations, and the closer we come to the truly primordial mythical forms and articulations, the more distinct this relation seems to become. In totemism we see a primordial articulation of this sort, a first primitive division and particularization of all existence into rigidly determined classes and groups. Not only are human individuals and groups sharply differentiated from one another by their membership in a particular totem; the whole world is permeated by this form of classification. Every thing, every occurrence is understood by being endowed with some characteristic totemic "badge." And, as in all mythical thinking, this badge is not a mere sign but the expression of relationships which are felt and understood to be quite real. But the immense complexity which results from this, the weaving of all individual, social, spiritual, and physical-cosmic reality into the most diverse relations of totemic kinship, becomes relatively transparent as soon as mythical thinking begins to give it a spatial expression. Now this whole elaborate division of classes seems to break down according to the main spatial directions and dividing lines and so to gain intuitive clarity. In the mythical-sociological world view of the Zuñis, for example, which Cushing has described in detail, the sevenfold form of the totemic organization, which runs through the whole world, is particularly reflected in the conception of space. Space as a whole is divided into seven zones, north and south, east and west, the upper and the lower world, and finally the center of the world; and every reality occupies its unequivocal position, its definitely prescribed place, within this general classification. The elements of nature, the physical substances

as well as the separate phases of the world process, are differentiated accordingly. To the north belongs the air, to the south fire, to the east earth, to the west water; the north is the home of winter, the south of summer, the east of autumn, the west of spring; etc. And the various human classes, occupations, and institutions enter into the same basic schema: war and warriors belong to the north, the hunt and the hunter to the west, medicine and agriculture to the south, magic and religion to the east. Strange and eccentric as these classifications may appear at first glance, it is certain that they did not arise by chance but are an expression of a very definite and typical outlook. The Jorubas, like the Zuñis, have a totemic organization which also finds its characteristic expression in the conception of space. Here again a specific color, a specific day of the five-day week, and a specific element is assigned to each region in space; here, too, the sequence of prayers, the order in which the cult implements are employed, and the seasonal sacrifices performed—in short the whole sacral system—goes back to certain fundamental spatial differences, particularly the fundamental distinction between right and left. Similarly, the structure of their city and its division into sections is, one might say, merely a spatial projection of their general totemic view.³

In Chinese thought we again encounter, in a different form but developed with the greatest subtlety and precision, the notion that all qualitative distinctions and oppositions possess some sort of spatial "correspondence." Once again all things and occurrences are in some way distributed among the diverse cardinal points. Each has a particular color, element, season, and sign of the zodiac, a particular organ of the human body, a particular basic emotion, etc., which belongs to it specifically; and through this common relation to a determinate position in space the most heterogeneous elements enter, as it were, into contact with one another. All species and varieties of things have their "home" somewhere in space, and their absolute reciprocal strangeness is thereby annulled:

3. For details see Leo Frobenius, *Und Afrika sprach* (Berlin ca. 1912), pp. 198 ff., 280 ff. Eng. trans. by Rudolf Blind, *The Voice of Africa* (London, 1913). From the quadriform "system" underlying the religion of the Jorubas Frobenius attempts to derive a kind of primordial relationship between them and the Etruscans, among whom he assumes this system to have first developed. However, the above considerations show the problematic character of such an inference. The fact that similar systems are found all over the world shows that what we have here is not an isolated offshoot of mythical thinking but one of its typical and fundamental intuitions—not a mere content of mythical thinking but one of its determining factors.

local mediation leads to a spiritual mediation between them, to a composition of all differences in a great whole, a fundamental mythical plan of the world.⁴

Thus the universality of spatial intuition becomes once again a vehicle for the "universalism" of a world view. But here, too, myth differs from cognition in the *form* of the whole toward which it strives. The totality of the scientific cosmos is a totality of laws, i.e. of relations and functions. Space and time, though at first taken as substances, as things existing in themselves, are, as scientific thinking develops, recognized more and more as ideal schemata, as systems of relations. Their objective being signifies merely that it is they which first make empirical intuition possible, that they are the principles in which it is grounded. And ultimately the whole reality of space and time, all the modes in which they are manifested, are brought into relation with this function of grounding. Thus the intuition of pure geometric space is also governed by the law formulated in the "principle of sufficient reason." It serves as an instrument and organ for an explanation of the world; and what happens in this explanation is simply that a merely sensuous content is poured into a spatial mold in which, one might say, it is re-formed and through which it is apprehended in accordance with the universal laws of geometry. Thus, space is an ideal factor which takes its place in the general work of knowledge—and this systematic position also determines its character. In the space of pure cognition the relation of the spatial whole to the spatial part is seen not materially but, fundamentally, in purely functional terms: the whole of space is not pieced together out of its elements but is built up from them as constitutive conditions. The line is "generated" from the point, the surface from the line, the body from the surface: thought makes one grow from another in accordance with a specific law. The complex spatial forms are understood in their genetic definition, which expresses the manner and the rule of their production. Accordingly, an understanding of the spatial whole requires a return to the producing elements, to points and the motions of points.

In contrast to the *functional* space of pure mathematics the space of myth proves to be *structural*. Here the whole does not "become" by growing genetically from its elements accordingly to a determinate rule; we find rather a purely static relationship of inherence. Regardless of how far

4. For more detailed treatment cf. my *Begriffsform im mythischen Denken*, with fuller documentation drawn from ethnological literature; see especially pp. 16 ff., 54 ff.

we divide, we find in each part the form, the structure, of the whole. This form is not, as in the mathematical analysis of space, broken down into homogeneous and therefore formless elements; on the contrary, it endures as such, unaffected by any division. The whole spatial world, and with it the cosmos, appears to be built according to a definite model, which may manifest itself to us on an enlarged or a reduced scale but which, large or small, remains the same. All the relations of mythical space rest ultimately on this original *identity*; they go back not to a similarity of efficacy, not to a dynamic law, but to an original identity of essence. This fundamental view has found its classical expression in astrology. For astrology every occurrence in the world, every genesis and new formation is fundamentally illusion; what is expressed in the world process, what lies behind it, is a predetermined fate, a uniform determination of being, which asserts itself identically throughout the moments of time. Thus, the whole of a man's life is contained and decided in its beginning, in the constellation of the hour of his birth; and in general, growth presents itself not as a genesis but as a simple permanence and an explanation of this permanence. The form of existence and life is not produced from the most diverse elements, from an interweaving of the most diverse causal conditions; from the very outset it is given as a finished form which need only be explained, which for us onlookers seems to unfold in time. And this law of the whole is repeated in each of its parts. The predetermination of being applies to the individual as it applies to the universe. The formulas of astrology often make this relationship clear by transforming the *efficacy* of the planets, which forms the basic principle of the astrological view, into a kind of *substantial inherence*. In each of us there is a definite planet: ἐστὶ δ' ἐν ἡμῖν Μῆνη Ζεὺς, Ἄρης Παφίη Κρόνος Ἥλιος Ἑρμῆς.⁵ Herein we see how the astrological conception of efficacy is ultimately grounded in that mythical view of space which astrology developed to its supreme, one might say, "systematic" consequence. In accordance with the fundamental principle which dominates all mythical thinking, astrology can interpret coexistence in space only as an absolutely *concrete* coexistence, as a specific position of *bodies* in space. Here there is no detached, no merely abstract, form of space; instead, all intuition of form is melted down into the intuition of content, into the aspects of the planetary world. But these are not unique and merely individual; in them the structural law of the whole, the form of the universe, emerges in

5. Cf. Franz Boll, *Die Lebensalter* (Leipzig, 1913), pp. 37 ff.

intuitive clarity and concretion. And regardless of how far we advance toward the particular, regardless of how much we split this form, its true essence remains untouched; it remains an indivisible unity. Space possesses a determinate structure of its own, which recurs in all its separate configurations, and no particular thing or process can depart or, as it were, fall away from the determinacy, the fatality, of the whole. We may examine the order of the natural elements or the order of the seasons, the mixtures in bodies or the typical temperaments of men, but always we find in them one and the same original schema, one and the same "articulation" through which the seal of the whole is imprinted on every particular.⁶

Of course this grandiose, self-contained intuition of the spatial-physical cosmos that we find in astrology is not the beginning of mythical thinking but is one of its late achievements. Even the mythical world view starts from the most restricted sphere of sensuous-spatial existence, which is extended only very gradually. We have seen in our investigation of language that the terms of spatial orientation, the words for "before" and "behind," "above" and "below" are usually taken from man's intuition of his own body: man's body and its parts are the system of reference to which all other spatial distinctions are indirectly transferred (see I, 207 ff.). Myth travels the same road: wherever it finds an organically articulated whole which it strives to understand by its methods of thought, it tends to see this whole in the image and organization of the human body. The objective world becomes intelligible to the mythical consciousness and divides into determinate spheres of existence only when it is thus analogically "copied" in terms of the human body. Often it is the form of this copying which is actually thought to contain the answer to the mythical question of origins and which hence dominates all mythical cosmography and cosmology. Because the world is formed from the parts of a human or superhuman being, it retains the character of a mythical organic unity, however much it may seem to disperse into particulars. As mentioned above, one of the hymns of the Rigveda describes how the world issued from the body of man, the Purusha. The world *is* the Purusha, for it arose when the gods offered him up as a sacrifice and brought forth the various creatures from the parts of his body, which was dismembered in accordance with the laws of sacrifice. Thus the parts of the world are nothing other than the organs of the human body.

6. Concerning this form of astrology cf. *Begriffsform im mythischen Denken*, pp. 25 ff.

The Brahmin was his mouth, his arms were made the Rājanya (warrior), his two thighs the Vaiśya (trader and agriculturist), from his feet the Sūdra (servile class) was born.

The moon was born from his spirit (*manas*), from his eye was born the sun, from his mouth Indra and Agni, from his breath Vāyu (wind) was born.

From his navel arose the middle sky, from his head the heaven originated, from his feet the earth, the quarters from his ear. Thus did they fashion the worlds.⁷

Thus here, too, in the early age of mythical thinking, the unity of microcosm and macrocosm is so interpreted that it is not so much man who is formed from parts of the world, as the world from parts of man. We find this same attitude, though in reverse, in the Christian-Germanic view that Adam's body was formed of eight parts, so that his flesh resembles the earth, his bones the rocks, his blood the sea, his hair the plants, his thoughts the clouds.⁸ In both cases myth starts from a spatial-physical *correspondence* between the world and man and from this correspondence infers a unity of *origin*. This transference is not limited to the relationship between world and man, which despite its vast importance remains *particular*, but is universally applied to the most diverse spheres of existence. As we have seen, mythical thinking in general knows no purely ideal similarities but looks upon any kind of similarity as an indication of an original kinship, an essential identity;⁹ and this is particularly true in regard to similarities or analogies of spatial structure. The mere possibility of coordinating certain spatial totalities part for part suffices to make them coalesce. From this point on they are only different expressions of one and the same essence, which can assume entirely different dimensions. By virtue of this peculiar principle mythical thinking seems to negate and suspend spatial distance. The distant merges with what is close at hand, since the one can in some way be copied in the other. So deeply rooted is this trait that with all its progress pure knowledge, the "exact" view of space, has never fully overcome it. As late as the eighteenth century Swedenborg, in his *Arcana coelestia*, attempted to construct a

7. Rigveda, x, 90. Eng. trans. by Thomas, p. 122. Cf. Paul Deussen, "Allgemeine Einleitung und Philosophie des Veda," *Allgemeine Geschichte der Philosophie mit besonderer Berücksichtigung der Religionen* (7 vols. Leipzig, 1894-1920), Vol. 1, Pt. I, pp. 150 ff.

8. See Golther, *Handbuch der germanischen Mythologie*, p. 518.

9. See above, pp. 67 ff.

system of the intelligible world according to this category of universal correspondence.¹⁰ Here all spatial barriers ultimately drop—for as man can be copied in the world, so the small can be copied in the large, the distant in the near, and the two are essentially the same. Thus, just as there is a magical anatomy in which particular parts of the human body are equated with particular parts of the world, there is also a mythical geography and cosmography in which the structure of the earth is described and defined in accordance with the same basic intuition. Often the two, magical anatomy and mythical geography, merge into one. The seven-part map of the world in the Hippocratic book on the number seven represents the earth as a human body: its head is the Peloponnesus, the Isthmus is its spinal cord, while Ionia appears as the diaphragm, i.e. the true center, the “navel of the world.” And all the intellectual and moral qualities of the peoples inhabiting these regions are regarded as in some way dependent on this form of “localization.”¹¹ Here on the threshold of classical Greek philosophy we find a view which can only be understood through its widespread mythical parallels. One need only compare this schema of the earth and of space as a whole with the universal spatial schematism of the Zuñis in order to perceive the fundamental relation between the two.¹² For mythical thinking the relation between what a thing “is” and the place in which it is situated is never purely external and accidental; the place is itself a part of the thing’s being, and the place confers very specific inner ties upon the thing. In totemic organizations, for example, the members of a given clan stand in this relation of original kinship not only to one another but also, for the most part, to certain zones in space. To each clan, above all, belongs an often precisely defined spatial direction and sector.¹³ When a member of a clan dies,

10. That even in modern thought this manner of thinking has not lost its attraction and importance is shown by Wilhelm Müller-Walbaum’s remarkable and instructive work, *Die Welt als Schuld und Gleichnis. Gedanken zu einem System universeller Entsprechungen* (Vienna and Leipzig, 1920).

11. Cf. Wilhelm H. Roscher, *Die Hippokratische Schrift von der Siebenzahl in ihrer vierfachen Überlieferung*, Abhandlungen der philosophisch-historischen Klasse der königlichen Sächsischen Gesellschaft der Wissenschaften, Vol. 28 (Leipzig, 1911), pp. 5 ff., 107 ff.

12. For a detailed treatment of the spatial schematism of the Zuñis see Frank H. Cushing, “Outlines of Zuñi Creation Myths,” (*Thirteenth Annual Report of the [U.S.] Bureau of American Ethnology*, 1891–92 (Washington, 1896), pp. 367 ff.

13. See the characteristic examples given by Alfred W. Howitt for the Australian aborigines in “Further Notes on the Australian Class System,” *Journal of the Anthropological Institute*, 18 (1889), 62 ff., reprinted as append. 2 of my *Begriffsform im mythischen Denken*, pp. 54 ff.

care is taken to bury him in the spatial position and direction peculiar and essential to his clan.¹⁴ In all this we see the two fundamental features of the mythical feeling of space—the thorough qualification and particularization from which it starts and the systematization toward which it nevertheless strives. The systematization has found its clearest expression in the form of “mythical geography” which grew out of astrology. As early as the old Babylonian period the terrestrial world was divided, according to its relation with the heavens, into four different realms: Akkad, i.e. south Babylonia, was governed and guarded by Jupiter; Amurru, the west country, was governed by Mars; Subartu and Elam in the north and east were ruled over by the Pleiades and Perseus.¹⁵ Later, the system of the seven planets seems to have led to a sevenfold organization of the whole world, such as we encounter in Babylonia, India, and Persia. Here we seem far removed from those primitive divisions which project and copy all human reality in the human body; here the narrow sensuous view seems to be overcome by a truly cosmic and universal perspective; but the principle of coordination has remained the same. Mythical thinking seizes upon a very specific and concrete spatial structure in order to carry through its whole “orientation” of the world. In “What Does It Mean to Orient Ourselves in Thought?”—an article which despite its brevity is highly characteristic of his manner of thinking—Kant attempted to define the origin of the concept of “orientation” and follow its development: “However high we may place our concepts and much as we may abstract them from the sensuous world, still images adhere to them. . . . For how should we give meaning and signification to our concepts if some intuition . . . did not underly them?” Kant then goes on to show how all orientation begins with a sensuously *felt* distinction—namely the feeling of the distinction between the right and the left hand—and how it then rises to the sphere of pure mathematical *intuition* and ultimately to the orientation of thought as such, of pure reason. If we examine the peculiarity of mythical space and compare it with the space of sensory intuition and the *logical* space of mathematics, we can follow these stages of orientation down to a still deeper spiritual level; and we can clearly discern the point of transition at which an opposition intrinsically rooted in mythical feeling begins to shape itself, to take on an objective form, through which the general process of objec-

14. Howitt, p. 62.

15. Cf. Jastrow, *Aspects of Religious Belief*, pp. 217 ff., 234 ff.

tivization, the intuitive-objective apprehension and interpretation of the world of sense impressions, assumes a new direction.

2. *Space and Light. The Problem of Orientation*

We have seen that the intuition of space is a basic factor in mythical thinking, since this thinking is dominated by a tendency to transform all the distinctions which it postulates and apprehends into spatial distinctions and to actualize them in this form. Thus far we have essentially regarded spatial distinctions as directly given, i.e. we have assumed the divisions and separations of spatial direction, of right and left, above and below, etc. to be effected in the primary sense impression without the need of a special intellectual effort, a specific "energy" of consciousness. But precisely this assumption now requires a correction, for on closer scrutiny, it contradicts what we have recognized as a fundamental characteristic of the process of symbolic formation. We have seen that the essential and characteristic achievement of all symbolic form—whether of language, myth, or pure cognition—does not lie simply in receiving given material impressions (which in themselves possess a fixed and definite character, a given quality and structure) and then grafting onto them, as though from outside, another form originating in the independent energy of consciousness. The characteristic achievement of the spirit begins much earlier than this. On sharper analysis even the apparently "given" proves to have passed through certain acts of linguistic, mythical, or logical-theoretical apperception. Only what is *made* in these acts "is"; even in its seemingly simple and immediate nature, what is thus made proves to be conditioned and determined by some primary meaning-giving function. And it is this primary, not the secondary, formation which contains the true secret of all symbolic form, which must forever arouse new philosophical amazement.

Here again the basic philosophical problem does not consist of understanding by means of what spiritual mechanism mythical thinking succeeds in relating purely qualitative distinctions to spatial distinctions, into which it transposes them, as it were. It consists rather in ascertaining the fundamental motive by which mythical thinking is guided in its original *setting up* of these same spatial distinctions. How, in mythical space as a whole, do particular "regions" and directions come to be singled out—how does it come about that one region and direction is

opposed to the others, "stressed" over against them, and endowed with a particular distinguishing mark? That this is no idle question becomes evident once we consider that in this differentiation mythical thinking proceeds according to entirely different criteria from those employed by theoretical-scientific thinking in mastering the same task. The latter establishes a determinate spatial order by relating the sensuous diversity of impressions to a system of purely logical, purely ideal, forms. The empirical straight line, the empirical circle, and the empirical sphere are determined and understood in reference to the ideal world of purely geometrical figures, in reference to the straight line "as such," the circle "as such," and the sphere "as such." An aggregate of geometrical relations and laws is set up which supplies the norm for all apprehension and interpretation of empirical things in space. The theoretical view of *physical* space shows itself to be governed by the same intellectual motive. Here, to be sure, sensory intuition as well as immediate sensation seem to play a part; here particular zones and directions in space seem to become distinguishable only when we link them with some material distinctions of our bodily organization, our physical body. But although the physical view of space cannot dispense with this support, it strives more and more to free itself from it. All progress in "exact," strictly scientific physics is directed toward eradicating the "anthropomorphic" ingredients of the physical world view. Thus, in particular, the sensuous antithesis of "above" and "below" loses its significance in the cosmic space of physics. "Above" and "below" are no longer absolute opposites. They have validity only in relation to the empirical phenomenon of gravity and the empirical regularity of this phenomenon. Physical space is in general characterized as a *space relevant to forces*: but in its purely mathematical formulation the concept of force goes back to the concept of law, hence of the function. In the structural space of myth, however, we see an entirely different line of thought. Here the universal is not distinguished from the particular and accidental, the constant from the variable, through the basic concept of law; here we find the *one* mythical value accent expressed in the opposition between the sacred and profane. Here there are no purely geometrical or purely geographical, no purely ideal or merely empirical distinctions; all thought and all sensory intuition and perception rest on an original foundation of feeling. However subtle and particularized its structure may become, mythical space as a whole remains embedded, or one might say, immersed in this feeling. In this

space, specific boundaries and distinctions are thus not arrived at by progressive logical thinking through intellectual analysis and synthesis; they go back to distinctions already made on the basis of such feeling. The zones and directions in space stand out from one another because a different accent of meaning is connected with them, and they are mythically evaluated in different and opposite senses.

In this appraisal a spontaneous act of the mythical consciousness is performed; but objectively considered, it is also tied to a specific and fundamental physical fact. The development of the mythical feeling of space always starts from the opposition of *day* and *night*, *light* and *darkness*. The dominant power which this antithesis exerts on the mythical consciousness can be followed down to the most highly developed religions. Some of these religions, particularly that of the Iranians, may even be designated as complete systematizations of this *one* opposition. But even where the antithesis does not take on this logical form, this almost dialectical sharpness, it may be recognized as one of the latent factors in the religious structure of the cosmos. Among the religions of primitive peoples that, for example, of the Cora Indians—described in detail by Preuss—is totally dominated and permeated by this opposition of light and darkness. Around it unfolds the mythical feeling and the whole mythical world view peculiar to the Coras.¹⁶ And in the creation legends of nearly all peoples and religions the process of creation merges with the dawning of the light. In the Babylonian creation legend the world arises from the struggle waged by Marduk, god of the morning sun and the spring sun, against chaos and darkness, represented by the monster Tiamat. The victory of the light is the origin of the world and the world order. The Egyptian story of the creation has also been interpreted as an imitation of the daily sunrise. The first act of creation begins with the formation of an egg which rises out of the primal water; from the egg issues Ra, the god of light, whose genesis is described in the most diverse versions, all of which however go back to the one original phenomenon—the bursting forth of light out of darkness.¹⁷ And it is the living intuition of this original phenomenon which gives the Biblical story of the creation its full concrete “meaning”—as Herder first pointed out and as he set forth with

sensitive eloquence. Perhaps Herder's gift of not seeing spiritual phenomena as mere facts but of transposing himself into the creative process from which they spring is nowhere so brilliantly revealed as in this interpretation of the first chapter of Genesis. For him the narrative of the creation is nothing other than the story of the birth of the light—as experienced by the mythical spirit in the rising of every new day, the coming of every new dawn. This dawning is for mythical vision no mere process; it is a true and original creation—not a periodically recurring natural process following a determinate rule but something absolutely individual and unique. Heraclitus' saying, “The sun is new each day,” is spoken in a truly mythical spirit. Here we have, as it were, the first characteristic beginning of mythical thinking; and in all its further progress the antithesis of light and darkness, day and night, proves to be a living and enduring motif. In his fine and moving book Troels-Lund followed the growth of this motif from the first primitive beginnings to that universal elaboration which it underwent in astrology. “We start from the assumption,” he writes,

that sense of place and receptivity to impressions of light are the two most fundamental and deep-seated manifestations of the human intelligence. It is by these two roads that the individual and the race achieve their most essential spiritual development. It is from this perspective that the great questions have been answered with which existence itself confronts each one of us: Who are you? What are you? What should you do? . . . For each inhabitant of the earth, this sphere which is itself not luminous, the interchange of light and darkness, day and night, is the earliest impulse and the ultimate end of his faculty of thought. Not only our earth but ourselves, our own spiritual I, from our first blinking at the light to our highest religious and moral feelings, are born and nurtured of the sun. . . . The progressive view of the difference between day and night, light and darkness, is the innermost nerve of all human cultural development.¹⁸

Every separation of the zones of space and hence every kind of articulation within mythical space as a whole is connected with this contrast. The characteristic mythical accent of the sacred and profane is distributed in different ways among the separate directions and zones and lends each

18. Troels F. Troels-Lund, *Himmelsbild und Weltanschauung im Wandel der Zeiten* (3d ed. Leipzig, 1908), p. 5.

16. Cf. Preuss, *Die Nayarit-Expedition*, 1, xxiii ff.

17. Cf. Heinrich K. Brugsch, *Religion und Mythologie der alten Ägypter* (Leipzig, 1888), p. 102; Franz Lukas, *Die Grundbegriffe in den Kosmogonien der alten Völker* (Leipzig, 1893), pp. 48 ff.

of them a definite mythical-religious imprint. East, west, north, and south are not essentially similar zones which serve for orientation within the world of empirical perception; each of them has a specific reality and significance of its own, an inherent mythical life. The directions are taken not as abstract and ideal relations but rather as independent *entities*, each endowed with a life of its own—as can be seen, for example, from the fact that they often experience the highest concrete formation and embodiment of which myth is capable, i.e. they are raised to the level of gods. Even at relatively low levels of mythical thinking we encounter these gods of direction: gods of the east and north, of the west and south, of the lower and upper world.¹⁹ And perhaps there is no cosmology, however primitive, in which the contrast of the four main directions does not in some way emerge as the cardinal point of its understanding and explanation of the world.²⁰ Thus Goethe's saying, "God's is the orient, God's is the occident; north and south rest in the peace of His hands,"—applies in the strictest sense to mythical thinking. But before it could arrive at this unity, this universal feeling of space and of God in which all particular distinctions seem dissolved, mythical thinking had to pass through these same distinctions and set them off against one another. Each particular spatial determination thus obtains a definite divine or demonic, friendly or hostile, holy or unholy "character." The east as the origin of light is also the source of life—the west as the place of the setting sun is filled with all the terrors of death. Wherever we find the idea of a realm of the dead, spatially separate and distinguished from the realm of the living, it is situated in the west of the world. And this opposition of day and night, light and darkness, birth and death, is also reflected in countless ways in the mythical interpretation of concrete events of life. They all take on a different cast, according to the relation in which they stand to the phenomenon of the rising or setting sun. "The worship of light," writes Usener in his *Götternamen*,

is woven into the whole of human existence. Its basic features are common to all the members of the Indo-European family of peoples; indeed they extend much farther; even today, often unconsciously, we are dominated by it. Out of the half-death of sleep the light of day awakens us to life: "to see the light," "to behold the light of the sun,"

19. Such gods of direction are found for example among the Coras. Cf. Preuss, *Die Nayarit-Expedition*, I, lxxiv ff.

20. Cf. Brinton, pp. 118 ff.

"to be in the light" mean to live; "to see the light" means to be born, "to depart from the light" means to die. . . . As early as the Homeric epics the light represents salvation. . . . Euripides calls the light of the day "pure." The cloudless blue sky with its unobstructed light is the divine prototype of purity and became the basis for the conceptions of the land of the gods and the sojourn of the blessed. . . . And this intuition was directly transposed into the supreme moral concepts of truth and justice. . . . From this fundamental view it followed that sacred actions for which the gods of heaven could be invoked as helpers or witnesses could be performed only under the open daytime sky. . . . The oath, whose sanctity is based on the invocation of the all-seeing, all-knowing, punishing gods as witnesses, could originally be taken only under the open sky. The Germanic assembly in which the community of free men who dwelt in houses were united for counsel and judgment took place "in the sacred ring," under the open sky. . . . All these are simple, involuntary notions; they arise under the irresistible power of sense impressions to which we have not yet grown impervious and which form a closed circle of their own. In them springs up an original and inexhaustible well of religiosity and morality.²¹

In all these transitions we are again immediately aware of that dynamic which belongs to the essence of every true spiritual form of expression. In every such form the rigid limit between "inside" and "outside," the "subjective" and the "objective," does not subsist as such but begins, as it were, to grow fluid. The inward and outward do not stand side by side, each as a separate province; each, rather, is reflected in the other, and only in this reciprocal reflection does each disclose its own meaning. Thus in the spatial form which mythical thinking devises the whole mythical *life form* is imprinted and can, in a certain sense, be read from it. This relationship found its classical expression in the Roman sacral order. In a basic work Nissen has elucidated this reciprocal transposition from all sides and shown how the mythical-religious feeling of the sacred found its first objectivization by turning outward, by representing itself in the intuition of spatial relations. Hallowing begins when a specific zone is detached from space as a whole, when it is distinguished from other zones and one might say religiously hedged around. This concept of a religious hallowing manifested concur-

21. Usener, *Götternamen*, pp. 178 ff.

rently as a spatial delimitation has found its linguistic deposit in the word *templum*. For *templum* (Greek *τέμενος*) goes back to the root *τεμ*, "to cut," and thus signifies that which is cut out, delimited. It first designates the sacred precinct belonging to the god and consecrated to the god and then, by extension, every marked-off piece of land, every bounded field or orchard, whether it belongs to a god, king, or hero. But by a primal and basic religious intuition the heavens as a whole appear as just such an enclosed, consecrated zone; as a temple inhabited by one divine being and governed by one divine will.

Then a sacral ordering of this unity sets in. The whole of heaven breaks down into four parts, determined by the zones of the cosmos: a hither part in the south, a nether part in the north, a left part in the east, and a right part in the west. From this first purely local partitioning developed the entire system of Roman theology. In searching the sky for omens of man's undertakings on earth the augur began by dividing it into definite sectors. The east-west line, established by the course of the sun, was bisected by a vertical from north to south. With this intersection of the two lines the *decumanus* and the *cardo*, as they were called in the language of the priests, religious thinking created its first basic schema of coordinates. Nissen has shown in detail how this schema was transferred from religious life to every sector of juridical, social, and political life, and how in this transference it became more and more precisely and subtly differentiated. It formed the basis for the development of the concept of property and the symbolism by which property was designated and safeguarded as such. For the fundamental act of "limitation," through which fixed property was first established in the juridical-religious sense, is everywhere related to the sacral order of space. In the books of the Roman *agrimensores* limitation was attributed to Jupiter and related directly to the act of creation—as though the strict limitation prevailing in the universe had thus been transferred to the earth and to all earthly relations. Limitation is also based on the world zones, on the division of the cosmos designated by the lines from east to west and north to south, the *decumanus* and the *cardo*. It begins with the simplest natural division into a diurnal and nocturnal aspect, followed by a second division into morning and evening, the waxing and waning day. Roman political law is closely bound up with this form of limitation; upon it is based the distinction between *ager publicus* and *ager divisus et adsignatus*, between public and private property. For only land enclosed in fixed boundaries, in immutable mathematical lines, passes as

private property. Like the god before them, the state, the community, and the individual now acquired a definite space through the intermediary of the idea of the *templum*, and in this space they made themselves at home.

It is not a matter of indifference how the augur limits the sky; for although the will of Jupiter extends over the whole of it, just as the *paterfamilias* governs the whole household, other gods dwell nevertheless in the various regions, and the lines are drawn according as one interprets the will of this one or that one. Once the lines are drawn the space thus hedged about is immediately occupied by a spirit. . . . Not only the city but also the *compitum* and house, not only the land as a whole but every field and vineyard, not only the house as a whole but every room within it, has its own god. The godhead is recognized by its workings and surroundings. Consequently every spirit which is confined within a given space gains an individuality, and a specific name by which man can invoke him.²²

This system—which also dominated the structure of the Italic cities, the grouping and order within the Roman camp, and the ground plan and inner arrangement of the Roman house—makes it clear how progressive spatial limitation, like every new boundary established in space by mythical thinking and mythical-religious feeling, became an ethical and cultural boundary. This relationship can be followed down to the very beginnings of theoretical science. The beginnings of Roman scientific mathematics, as Moritz Cantor has shown in a monograph, went back to the books of the Roman *agrimensores* and their system of spatial orientation.²³

Throughout the classical mathematical demonstrations of the Greeks we also discern an echo of primordial mythical notions; we feel the breath of that awe which surrounded the spatial "limit" from the very beginning. The form of logical-mathematical definition developed through the idea of spatial limitation. In the Pythagoreans and Plato limit and the unlimited, *πέρας* and *ἄπειρον*, are set off against each other as the determinant and the indeterminate, form and formlessness, good and evil. Thus the purely intellectual orientation of the cosmos grew from this spatial orientation of the mythical beginnings. Language has in many instances preserved the

22. Heinrich Nissen, *Das Templum. Antiquarische Untersuchungen* (Berlin, Weidmann, 1869), p. 8; idem, *Orientation. Studien zur Geschichte der Religion* (Berlin, 1906), Pt. I.

23. Moritz Cantor, *Die römischen Agrimensoren und ihre Stellung in der Geschichte der Feldmesskunst* (Liepzig, 1875). Cf. Cantor's *Vorlesungen über die Geschichte der Mathematik* (2d ed. Leipzig, 1894–1908), I, 496 ff.

traces of this connection; for example, the Latin term for pure theoretical thought and vision, *contemplari*, goes back to the idea of the templum, the marked-off space in which the augur carried on his observation of the heavens.²⁴ And from the ancient world this same theoretical and religious orientation entered into Christianity and the system of medieval Christian theology. The ground plan and structure of the medieval Church show the characteristic features of the old mythical symbolism of the cardinal points. Sun and light are no longer the godhead itself, but they still serve as the most immediate emblems of the divine, of the divine will to salvation and power of salvation. The historical effectiveness and historical triumph of Christianity were indeed closely bound up with its ability to assimilate and refashion the basic conceptions of the pagan cults of the sun and the light. The cult of *sol invictus* was now replaced by faith in Christ as the "sun of righteousness."²⁵ Accordingly, the early Christians retained the eastward orientation of their church and altar, while the south became the symbol of the Holy Ghost and the north conversely of estrangement from God, faith, and the light. Before baptism the novice was turned toward the west to renounce the devil and his works, and then toward the east, toward paradise, that he might profess faith in Christ. The four ends of the Cross were also identified with the four celestial and cosmic directions. And upon this simple plan was constructed the increasingly subtle and profound symbolism in which the whole of man's inner faith turned outward as it were, objectifying itself in elementary spatial relations.²⁶

If we look back over all these examples, we cannot fail to recognize that although they belong to the most diverse cultures and stages in the development of mythical-religious thinking, they reveal the same basic characteristics of the mythical consciousness of space. This consciousness is comparable to a fine ether which pervades the most diverse manifestations of the mythical spirit and binds them to one another. Cushing writes that thanks to the sevenfold organization of their space the whole world view of the Zuñis and their whole life and activity are completely systematized, so that, for example, when they occupy a new campsite the position of the different groups and clans is determined in advance. To this the structure

24. Cf. Franz Boll's fine lecture, *Vita contemplativa* (Heidelberg, 1920).

25. Cf. Usener, *Götternamen*, p. 184; Franz Cumont, "La Théologie solaire du paganisme romain," *Mémoires présentés par divers savants à l'Académie des inscriptions et belles-lettres de l'Institut de France*, 12, Pt. II (1913), 449.

26. Cf. Joseph Sauer, *Symbolik des Kirchengebäudes und seiner Ausstattung in der Auffassung des Mittelalters* (Freiburg, Herder, 1902).

and order of the Roman camp presents a perfect analogy, for the plan of the camp was drawn up according to that of the city, while the city in turn was constructed according to the general plan of the world and the different spatial zones of the cosmos. Polybius tells us that when the Roman army entered the site selected for their camp, it was as though citizens, returning to their native city, each sought out his own house.²⁷ In both cases the local ordering of the different groups was not looked upon as something merely outward and accidental but was required and predetermined by definite sacral notions.

Everywhere such sacral conceptions are bound up with the general view of space and distinct spatial boundaries. A primordial mythical-religious feeling is linked with the fact of the spatial "threshold." Men's veneration of the threshold and awe of its sanctity are expressed almost everywhere in similar usages. Even among the Romans Terminus was a special god, and at the festival of the Terminalia the boundary stone itself was crowned with a garland and sprinkled with the blood of a sacrificial beast.²⁸ From the veneration of the temple threshold, which spatially separates the house of the god from the profane world, the fundamental juridical-religious concept of property seems to have developed along similar lines in totally different cultural spheres. Just as it originally protected the house of the god, the sanctity of the threshold (in the form of land markings) safeguarded house and fields against hostile trespass and attack.²⁹ Often the terms coined by language for the expression of religious awe and veneration go back to a basic sensuous-spatial idea, the idea of shrinking back from a particular spatial zone.³⁰ And this spatial symbolism is transferred to the intuition and expression of circumstances of life bearing only the most indirect relation, if any, to space. Wherever mythical thinking and mythical feeling endow a content with particular value, wherever they distinguish it from others and lend it a special significance, this qualitative distinction tends to be represented in the image of spatial separation. Every mythically significant content, every circumstance of life that is raised out of the sphere of the indifferent and commonplace, forms its own ring of existence, a walled-in zone separated from its surroundings by fixed limits, and only

27. Polybius, ch. 41, line 9. Cf. Nissen, *Das Templum*, pp. 49 ff.

28. Ovid, *Fasti*, Bk. II, lines 641 ff. Cf. Wissowa, *Religion und Kultus der Römer*, pp. 136 ff.

29. Cf. the copious material assembled by H. C. Trumbull, *The Threshold Covenant; or, the Beginning of Religious Rites* (Edinburgh, 1896).

30. Thus, e.g., the Greek *σέβειν* is derived etymologically from a root represented in Sanskrit at *tyaj* (to leave, to thrust back). Cf. Williger, *Hagios*, p. 10.

in this separation does it achieve an individual religious form. All movements into and out of this ring are governed by very definite sacral regulations. Transition from one mythical-religious sphere to another involves *rites of passage* which must be carefully observed. These rites govern moves from one city to another, from one country to another, and changes from one phase of life to another—childhood to puberty, celibacy to marriage, childlessness to motherhood, etc.³¹ Here again we find confirmed that universal norm which is discernible in the development of all forms of cultural expression. The purely inward must be objectified, must transform itself into something outward; but on the other hand, all intuition of the outward remains enmeshed in inward determinations. Even where contemplation seems to move entirely in the outward sphere, the pulsebeat of an inner life can be felt in it. The barriers which man sets himself in his basic feeling of the sacred are the starting point from which begins his setting of boundaries in space and from which, by a progressive process of organization and articulation, the process spreads over the whole of the physical cosmos.

3. *The Mythical Concept of Time*

Yet significant as the form of space may be for the structure of the mythical objective world, it nevertheless seems that if we stop here, we cannot enter into the real being, the actual "heart" of this world. The mere term by which language designates such a world gives an intimation of this, for in its basic signification "*mythos*" embodies not a spatial but a purely temporal view; it designates a distinctly temporal "aspect," in which the world as a whole is seen. True myth does not begin when the intuition of the universe and its parts and forces is merely formed into definite images, into the figures of demons and gods; it begins only when a genesis, a becoming, a life in time, is attributed to these figures. Only where man ceases to content himself with a static contemplation of the divine, where the divine explicates its existence and nature in time, where the human consciousness takes the step forward from the figure of the gods to the history, the narrative, of the gods—only then have we to do with "myths" in the restricted, specific meaning of the word. And if we break down the concept "history of the gods" into its component factors, the emphasis is not on the second, but on the first factor, the intuition of the temporal. Its primacy

31. A summary of such rites may be found in Van Gennep, *Rites de passage*.

rests on the fact that it proves to be one of the conditions for the full development of the concept of the divine. Only by his history is the god constituted; only by his history is he singled out from all the innumerable impersonal powers of nature and set over against them as an independent being. Only when the world of the mythical begins as it were to flow, only when it becomes a world not of mere being but of action, can we distinguish individual, independent figures in it. Here it is the specific character of change, of acting and being acted upon, which creates a basis for delimitation and definition. True, a first step is presupposed, namely the universal differentiation underlying all mythical-religious consciousness, the differentiation between the worlds of the sacred and the profane. But within this universal differentiation, which finds its expression in purely spatial divisions and limitations, the mythical world achieves its true and specific articulation only when its dimension of depth, so to speak, opens up with the form of time. The true character of mythical being is first revealed when it appears as the being of origins. All the sanctity of mythical being goes back ultimately to the sanctity of the origin. It does not adhere immediately to the content of the given but to its coming into being, not to its qualities and properties but to its genesis in the past. By being thrust back into temporal distance, by being situated in the depths of the past, a particular content is not only established as sacred, as mythically and religiously significant, but also justified as such. Time is the first original form of this spiritual justification. Specifically human existence—usages, customs, social norms, and ties—are thus hallowed by being derived from institutions prevailing in the primordial mythical past; and existence itself, the "nature" of things, becomes truly understandable to mythical feeling and thinking only when seen in this perspective. A conspicuous trait of nature, a striking characteristic of a thing or species, is held to be "explained" as soon as it is linked with a unique event in the past, which discloses its mythical generation. The mythical tales of all times and peoples are rich in concrete examples of this kind of explanation.³² Here a stage has been reached at which man's thinking no longer contents itself with the mere givenness of

32. For examples of this form of explicative mythical tale, relating especially to the origin of particular species of plants and animals and their peculiarities, see Graebner, *Das Weltbild der Primitiven*, p. 21: "Red spots in the plumage of the black cockatoo and of a certain hawk originated in a great fire, the spout hole of the whale in a spear thrust which he once—while still a man—received in the back of his head. The sandpiper came by his strange gait—alternately running and standing still—when he attempted to follow the guardian of the waters unobserved and was compelled to stand still each time the guardian turned around."