

## EAST, SOUTH, NORTH, WEST

**Kenneth Rose**

Can you point toward the east? If you are in a familiar environment you may already be oriented (which means knowing which way is east), but anywhere else you could miss by a wide margin. The place where you are is moving toward the east, at a speed that probably exceeds a thousand kilometers per hour, but that does not seem to result in any direct evidence. A bird, if it can see the Sun, can find out which way is east by watching that star for a minute or two. Other creatures with supposedly larger brains have trouble doing even that much.

If someone shows you which way is east, can you point north? A 90-degree turn to the left will get you to what is commonly called north, but is that good enough? A compass may give you an approximation of north, with a discrepancy from "true" north that varies a great deal according to where you are.

Can you point toward God? Hopefully you are moving toward conjunction with Him at the speed of light, but it is not always easy to tell which way to go. If someone shows you which way good is, can you point toward truth? Or might you find yourself pointing instead toward what is generally accepted as truth? In geography and religion (not to mention mathematics and other subjects) there are many commonly accepted misunderstandings. Some of them are cherished deeply, and attempts to correct them are not welcome. The present discussion may for that reason have its unpleasant moments.

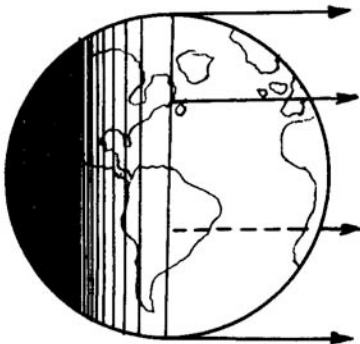


Fig. 1. Four observers looking at the Sun.

- One near the North Pole is looking north.
- One in Nova Scotia is looking east.
- One in Australia is looking west.
- One in Antarctica is looking south.
- A fifth in Africa could be looking straight up.

Figure 1, for example, can be distressing. It shows the Earth at 5 a.m. Eastern Standard Time on March 21, with a bright side facing the Sun and a dark one facing away from it. The arrows represent the directions that four people are looking. One is in Nova Scotia watching the Sun rise, another in Australia watching it set. The other two, near the North and South poles, can see only the upper edge of the Sun, and that just above the pole. So all are looking in just about the same direction, but they call it east, west, north or south according to where they are.

Fig. 2. Terrestrial and celestial east.

The handle of the Big Dipper is at its east end. This view shows the United States as seen from the inside looking out. It is usually viewed from the other side, but the Big Dipper cannot be. On a celestial map with north at the top, east is on the left and west on the right.



That illustrates one of the difficulties of terrestrial directions. Figure 2 moves up to the celestial, but remains below the spiritual (as in some of Swedenborg's works). The Big Dipper has two stars that do a good job of pointing north. So which is the west end of the Big Dipper? Before you answer, notice what is below the constellation. It is not a mistake, unless the printer could not stand to put it in as intended. It is a view of the United States as it would appear from inside the Earth. This is not an easy view to obtain, but it is much easier than trying to see the Big Dipper from its other side! Those seven stars are at very different distances from Earth, constituting a three-dimensional shape that looks like a dipper from only one place. Many years ago this fact was used as evidence against the theory that the Earth moved. If it did so, it was argued, there would be changes in the apparent patterns of the stars. What they did not realize was that such changes would not show from the mere 300

million kilometers that the Earth swings back and forth in the course of a year, nor even from the other end of the orbit of Halley's Comet (where it was in 1948 and will be again in 2024). All the stars are so far away that they may as well be considered to be on a sphere so large that our whole solar system is at its center. Astronomers use globes of the stars, and look at them from the outside, seeing everything distressingly backward. The most expensive models have a globe of the Earth (much too large) at the center, and on that globe the United States looks the way you would rather see it. But if you look down you cannot see stars. So if you want to get to know stars, you must adjust to the fact that the dipper's handle is at its east end. More generally, if a map of the stars has north at the top it has west on the right side.

Most people do not get that involved with stars—except one, and that one has a lot to do with east, south, north, and west and people's ideas about them. Once there was a movie company that wanted a shot of the Sun rising over the ocean. Being on the west coast, they found it easier to film the Sun setting over the Pacific and run the film backward. It looked pretty good until someone noticed that the waves were rolling out from the shore. Worse than that, but more subtle, the Sun was moving from right to left as it came up. This probably did not bother the moviemakers, at least not if they are the same ones who introduce a television news broadcast with a picture of the rotating Earth turning the wrong way!

The Sun always moves from left to right around here. But when a navigation teacher tells his students that, they are quick to correct him: "Oh, no, it doesn't do that! It rises in the east, sets in the west and is overhead halfway in between." These tidbits of knowledge are acquired as items of historical faith, and rarely checked. Maybe an observer who has never seen the Sun overhead thinks he just did not hit noon precisely enough. He probably does not realize how lucky he would have to be to find a clear morning on one of the four days in the year when it is possible for the Sun to rise in the east.

A variation on the same theme tells you where to park your car while driving around North America. Depending on the weather of the moment, you may be interested in keeping it out of the Sun or in the Sun, and so you look for the shadow of a tree. You can park in the shadow or out of the shadow, but can you predict which way the shadow will move while you are seeing the local sights? Easily! No matter where you are, or which way the parking area is oriented, or what time it is, the shadow will move clockwise. It is more correct to

say that clocks move shadow-wise, because a clock is simply an automated sundial (that works even on cloudy days or at night!). And a sundial represents mankind's discovery of which way north really is. A vertical stick's shadow can help you tell what time it is, but the scale will drive you crazy! The hours are uneven angles, and they change from day to day—unless the stick points NORTH rather than straight up.

Now, I know that there are *New Philosophy* readers beyond the bounds of North America, and I do not want to be provincial, but I have to warn you that parking your car will be more difficult if you decide to tour Ecuador! Indeed, if the sundial had been invented in the southern hemisphere, clockwise would have been the other way. And this brings me back to what got me interested in investigating east, south, north, and west. I already had a reputation for knowing something about them some years ago, and that must be why a minister consulted me about a perplexing problem. He was translating the Writings into Spanish for South American readers, and had reached a passage that explained that south is where the Sun is highest. Well, it is not that way in the southern hemisphere. So should 'south' be changed to 'north' in those passages? And if so, what should be done about a statement that south is on your right when you are facing east? I could find no way to untangle the mess, and recommended a footnote pointing out that all these things had a northern-hemisphere viewpoint because the books were written there! This problem is not unique to Swedenborg. In the Old and New Testaments there are places where 'west' and 'sea' are used almost interchangeably (as in AC 9653) because the Mediterranean so dominates the western side of the arena of the stories.

I decided that I should share my thinking on this subject, because the Writings have quite a lot to say about these four directions. It would seem that a prerequisite to understanding, for example, the quarters of heaven is to understand the quarters of Earth. But does a sphere have quarters? The situation reminds me of what Swedenborg says at the end of DLW 405. He has already said a good deal about how the heart and lungs illustrate the will and understanding, but he finally breaks down and says, in effect (please read the number itself to judge the quality of my paraphrase): "I would like to tell you more about this, but you just don't understand enough about the heart and lungs." I think Swedenborg would have enjoyed talking to Robert L. Heinrichs. He (along with some ministers) made a study of how the heart and lungs respond to stress, and I daresay

that his extended view of the natural physiology could be very helpful to ministers wanting to explore the spiritual implications.

That is what I would like to do with east, south, north, and west: try to get you better versed than the average person in what they mean naturally, so that some of you can go on to improve our grasp of what they mean spiritually. I will also make a few presumptuous remarks about the spiritual, since explaining why I am wrong may be more stimulating than starting from scratch.

To get started on orienting you, I would like to get the Earth out of the way. So please picture yourself in a space ship going around the Sun just the way the Earth used to. Your ship has windows all around, and it certainly looks as if you are at the center of a sphere of fixed stars. You can see all your favorite constellations except any that happen to be near the Sun. As the year goes by (days do not), you notice that the Sun is changing its position, and you take it upon yourself to map its path among the stars (which we will call the Ecliptic). It is a difficult task, because of the glare near the Sun. It was even worse for the astronomers who did it originally. They had not only an Earth to contend with (as you will soon), but also an atmosphere that made it impossible to see any stars when they could see the Sun. It is a great credit to them that they plotted the Ecliptic so accurately before 70 A.D. Another troublesome chore they mastered was to find out how long the year is. You can get a rough idea from the weather, but for accuracy you must look beyond all that is terrestrial. The Egyptians learned that when the Dog Star (Sirius) rose, the Nile would soon be flooding and they would have to redo a lot of surveying.

So far you have been allowed to use attitude controls freely in your space ship, so that you could examine the Universe in all directions. Now it is time to start it turning at a steady rate. You will not be conscious of this motion, but will indulge in the appearance that the whole sky is turning the other way. That is roughly opposite to the Sun's progression along the Ecliptic, and much faster. So each and every star in the sky appears to go around a circle  $366 \frac{1}{4}$  times every time the Sun goes around the Ecliptic once. If the Ecliptic were one of those circles, things would be pretty simple. But no, it is tilted 23.4 degrees from them, and this gives the Sun an apparent motion reminiscent of Dr. Charles Pendleton's models of Swedenborg's finites, as shown in fig. 3. During one Earth turn, the Sun falls short of completing a circle, and it wasn't going to meet itself anyhow. The spiral in this picture is simplified; the actual  $366 \frac{1}{4}$

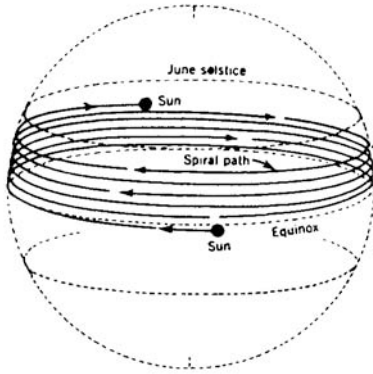


Fig. 3. The Sun's apparent path in the sky.

During a year the Earth's motion makes it appear that the Sun is moving around the ecliptic once. But it also goes around the axis  $366 \frac{1}{4}$  times, resulting in a spiral that is highest in June and lowest in December. The viewer's horizon hides half of the spiral, but it can be tilted in any direction according to latitude. (Reprinted with permission from *The Earth Sciences*, Harper and Row, New York, p. 66, copyright © 1963 by Arthur N. Strahler.)

loops are closer together than the apparent diameter of the Sun, so that the spiral covers about two fifths of the sky sphere, sweeping all the way 'down' and then back 'up' in the course of a year, like a painter doing two coats.

The common center of all the star circles and the Sun's nearly circular loops is a point in the sky with a fairly bright star conveniently close to it. The direction toward that point is NORTH, and the opposite direction is south. We are getting somewhere, but we still do not know which way is up—or down. For those amenities you need an Earth. It is very, very tiny compared to the sky, but when you are standing right on it it blocks your view of half the sky. When I am showing the sky to people, they will often ask where Venus or the Pleiades or something is. I try to oblige by pointing at the object in question, but they usually laugh if I am pointing down at the ground.

Up is a decidedly local phenomenon. On a spherical planet up means 'away from the center of the sphere,' and this can be in any direction whatsoever. So the visible half of the sky (which includes half of the Sun spiral) may have the North Star straight overhead, straight down, lying on the horizon, or anywhere else. Each position has its own version of the Sun's annual spiral. One of the most dramatic is at the North Pole. We have all heard that the Sun is up for six months there, but our sources do not always point out how it spirals upward from the horizon for three months and down again for three. You can take a picture of the sunset in any direction you choose, because it goes all the way around while setting. And then you can enjoy over a month of twilight (during which you should go home, because a cold night is expected).

On the equator, on the other hand, twilight is very brief. The Sun comes straight up out of the horizon, anywhere along a 47-degree band of it, and the portion of the spiral it covers before going down looks very much like a half circle every time.

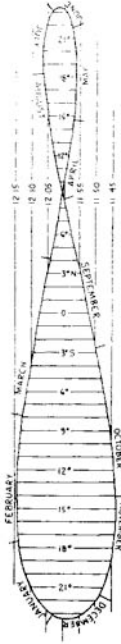
Most of the people on Earth live in the in-between places where the spiral is tilted. The Sun's sojourn above the horizon ranges from a bit over a third of a circle to almost two thirds, just the lengths of those days would account for winter and summer, without other details like the angle of the Sun's rays.

It is not fair to ask how long it takes the Earth (or the sky) to go around, because our time units are based on that revolution. But, since you asked, it turns around once in about 23 hours and 56 minutes. Is that a mistake? Yes, in a way. We should have started each day when a certain point on Earth is pointed toward a certain point in the sky. Serious people do that, and call it sidereal time. But everybody else (including the serious people in their lighter moments) likes each day to have a morning and an evening. The interval between the two varies a lot, but the time halfway between them, when the Sun reaches the highest point of its loop, occurs at fairly regular intervals.

Fairly regular. At the top or bottom of the spiral, the Sun's motion along the Ecliptic stretches 'noons' pretty far apart. At other times the effect is less pronounced because the Ecliptic motion is angled across the loop rather than directly opposed to it. The average time between noons has been immortalized as a day, and divided into pieces that are funnier than English money. Even if America goes metric, we will stick with the Babylonian fractions of days, for the silly reason that all countries on Earth do it the same illogical way.

But we have a worse problem on our hands. The Ecliptic is a nice circle on the sidereal sky, but if we decide to arrange things by days we must move the June part two hours back with respect to the July part, etc., etc. The result is that the Sun makes a graceful figure 8 in the sky, which has often been drawn in the Pacific Ocean on globes. It is called the analemma, and no brief explanation can do it justice. But in 1977 Dennis di Cicco set out to take a picture of it! On a single piece of film, he took a snapshot of the Sun once a week for a year, each at 8:30 a.m. When he developed the picture he found that he had cut the subject's head off, and so he took it again (another year's work). It made a beautiful centerfold in the June 1979 *Sky & Telescope*, and is available from the publisher. I found it as thrilling as the time when the first photographs of the whole Earth were taken from

Fig. 4. The Analemma



If the Earth's axis were perpendicular to the plane of its orbit, the Sun might be highest in the sky at the same time each day. The  $23.4^\circ$  tilt makes it follow this curve. If the Earth's orbit were circular, the figure 8 would be the same shape at both ends. In January the Earth is closest to the Sun and moving fastest, and this adds to the motion due to the tilt.

The long lines outside the curve mark the local times

when the Sun is highest. Standard time zones introduce a bias depending on the observer's distance from a longitude of  $75^\circ$  or  $90^\circ$  or  $105^\circ$  or . . . The short lines inside the curve show the Sun's declination. Its highest altitude above the horizon (near noon) is

$90^\circ + \text{Sun's declination} - \text{observer's latitude}$ .

The equinoxes are when the Sun's declination is zero. The last sunrise before an equinox, or the first after, may be due east.

The sundial is 14 minutes slow in the middle of February, and 16 minutes fast at the beginning of November. The difference is called the equation of time.

The solstices are when the Sun's declination is greatest. December 21 is the shortest day of the year in the northern hemisphere, but that is when the Sun is moving most rapidly from fast to slow. So the earliest sunset is near the beginning of December, and the latest sunrise in January. This varies with latitude; above  $70^\circ\text{N}$  the Sun does not rise at all during December.

satellites; it looked just the way Rand & McNally had drawn it without ever seeing it!

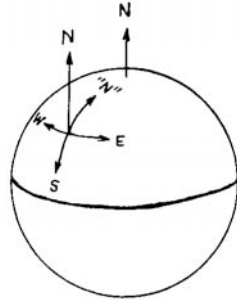
It is tempting to go further into the analemma and the Equation of Time, and also into spherical geometry, but space is limited. We should note that there can be no straight lines on a sphere, but that great circles do most of the things that straight lines do. They are the shortest paths between points (not counting going inside the sphere), and are followed by satellites that are theoretically free to go other ways but would rather not.

We have established that north is the direction that the axis of the Earth points, and that is the direction that the gnomon of a sundial should point. At the north pole that is straight up. At the equator it is parallel to the ground. In short, it makes an angle with the horizontal that is equal to the latitude. In Philadelphia or Denver or Salt Lake City or San Francisco, that is about 40 degrees, and people pointing north from those places should point 40 degrees above the horizon. What is popularly called north is the horizontal direction that is directly below north. But that has its difficulties. Airplanes travel along great circles when it is practical to do so. A non-stop flight from New York to Hong Kong should take off due north. So should the return flight!



Fig. 5. North and east on Earth.

North is the direction the Earth's axis points. What is usually called north is the direction closest to that along the Earth's surface, following a meridian of longitude. East is the direction the Earth turns, following a parallel of latitude (cf. Fig. 2).



East is perpendicular to both kinds of north, but let us not define it that indirectly. EAST is the direction that the Earth is rotating, as shown in fig. 5. Since the rotation is circular, east goes in circles, and only along the equator is the circle a great circle. For this reason, it is impossible to travel straight east; you can go straight or east, but not both at once. The map of the United States shown earlier makes it look as if Maine is further north than Minnesota, but this is only because east is being thought of as straight. That line between Canada and the United States goes east (not straight), and if continued it will pass above Maine.

Being circular, east is fickle. It points toward the Sun in the morning and away from it in the evening. We know the Sun did not move that much; it was east that changed. Even so do states of good come and go, while states of truth are relatively stable. On Earth it is easy to find out how far north you are; measure the altitude of Polaris. But finding the longitude at sea was a problem that Swedenborg gave up on! He concluded that it could not be done until very accurate clocks were developed.

We have worked our way down from the celestial to the natural, and now we proceed to the spiritual. This is an area where I think I have witnessed the demise of a commonly accepted misunderstanding. I used to walk into classrooms after Religion classes and see a diagram of the heavens on the board. The highest heaven is celestial (with a new meaning that will be clarified shortly). Below that are the spiritual and the natural, and those are the three heavens. But there are also two kingdoms, which used to be represented by drawing a vertical line through the middle of the three heavens. This six-part heaven included the celestial of the spiritual and the spiritual of the celestial (which the Writings certainly talk about), but it also suggested a spiritual of the spiritual and a celestial of the celestial. Now, I do not believe the Writings use either of these phrases, but it is very dangerous to make statements about what the

Writings do not say. In such cases I used to turn to the Rev. Ormond Odhner. I never discussed this in detail with him, but I recognized his handwriting on what I considered an improved diagram. It showed the three heavens, one above the other, but with the vertical line only in the bottom layer. The celestial kingdom, he noted, consists of the celestial heaven and the celestial part of the natural heaven; the spiritual kingdom likewise. This seems to me a logical consequence of two teachings: the celestial kingdom is the celestial heaven and the spiritual the spiritual (AC 5922, 6366, 6417, 8796); but the ultimate heaven consists of the external of each of these heavens (AC 9741). It is both celestial and spiritual (AC 4279).

I think the teachings about east, south, north, and west provide a better diagram, and it ought to be viewed chronologically. In the study of this subject, it is important to note when things are said! Between the beginning and the end of the *Arcana*, there was a judgment that reorganized heaven considerably. And it was preceded by other similar judgments. So let me boldly write a first draft of the history of heaven, to be corrected and expanded by ministers with a firm background in the meanings of directions.

Originally there was heaven, with the Lord above it. Around it in several directions was the World of Spirits. Parts of that were later reorganized into other heavens, the way the Louisiana Territory became several states. Into that World of Spirits were coming many, many people who did not qualify for entrance into heaven. But they did not belong in hell either. A new kind of heaven was needed for them, and it was formed at the Lord's first advent (AC 8054, 6854). Then there were two quarters. The original heaven became east, and the new one south. A new name was needed for the old heaven to distinguish it from the new one, which was spiritual. The Writings called it the heavenly heaven, which is a bit awkward but preferable to 'first' and 'second' (and later 'third'), which are sometimes transposed for different emphases. In English we use 'celestial heaven,' which sounds more like two different words. The heaven that was formed first is the last one achieved by man.

The two heavens are of very different kinds, but there is communication between them. In the middle where east and south meet there are the celestial of the spiritual and the spiritual of the celestial.

But even two heavens were not enough. The last judgment that took place in Swedenborg's time produced a natural heaven with two parts: one 'heavenly' and one spiritual. These line up with the first two heavens to form a celestial kingdom running east and west,

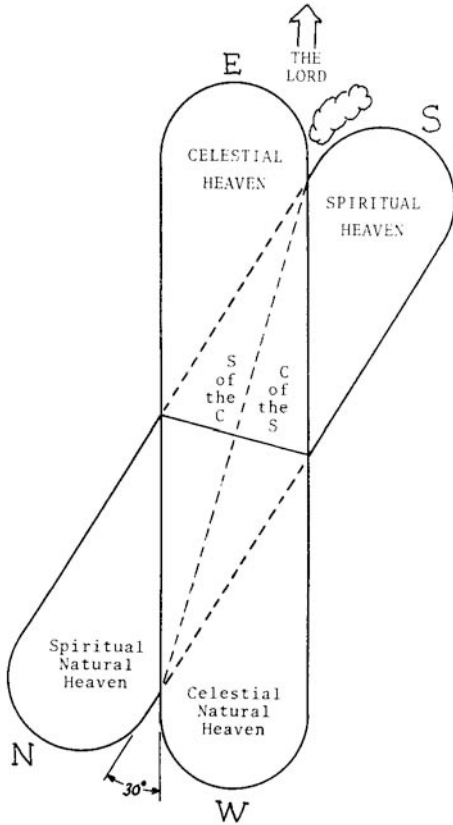


Fig. 6. The quarters in heaven.

The celestial heaven is in the east, nearest to the Lord. Its external part is in the west, in the natural heaven. The spiritual heaven is similarly situated in the south and north. The angle between east and south in heaven is 30° rather than 90° as on Earth.

This diagram does not attempt to show what is higher, lower, interior, or exterior. This is, after all, only a paper about east, south, north, and west; up and down are another subject.

and a spiritual kingdom from north to south (AE 971). Between the two quarters of the natural heaven are the celestial of the spiritual in the natural and the spiritual of the celestial in the natural. Two of these complexities are discussed extensively in the *Arcana* as Joseph and Israel, but I have not found details to place them more precisely among the four quarters. This will result in more than six parts of heaven, but arranged quite differently from the old two-by-three grid. Since the time I first put this diagram together (fig. 6), I have seen things that fit into it showing up in all sorts of places that I thought I had read before. The main discussion of the subject is in HH 141-153, but references show up in many other places, as in the discussion of man's progression in TCR 476, or the flow of light and heat in AE 422.

The terms 'length' and 'width' are sometimes used in Swedenborg's celestial geography, and they definitely correspond to east-west and north-south, respectively. This conforms with our usage of latitude and longitude (AC 10179, HH 197). The terms were coined when the civilized world was just the neighborhood of the Mediterranean Sea, with a definite long direction running east and west. A sphere does not have length or width, but those two directions have to be called something, and the old names were retained.

The angle between east and south, which is 90 degrees on Earth, is 30 degrees in heaven. This is discussed in HH 146, where it is also said that the Sun and Moon appear 30 degrees apart. I do not think this means that two things are seen side by side. I think the spiritual angels, facing 30 degrees away from the celestial, see the same Sun more obscurely through the clouds (AC 1043), and that is what is called the Moon. The natural angels sometimes see the Sun (DLW 85); usually they see neither Sun nor Moon, but a light (AC 6832).

There are quarters in the hells also. The worst kind of hell is said to be in the west, and the worst of one kind in the north (HH587). The peace of heaven comes from its remoteness from hell, which is most pronounced in the celestial heaven.

Turning the diagram upside down places the Lord at the bottom and shows two directions that are mentioned from His viewpoint. He is said in AC 4410 to see the good (celestial) on His right and the truth (spiritual) on His left. In AC 1276 it is the good (sheep) on the right and the evil (goats) on the left. The hells are further away than the spiritual heaven, but both are on the Lord's left.

While we are this thoroughly into directions in the other world, let us consider the teaching that all angels face the Lord. We have seen the suggestion that the spiritual angels do so more obliquely than the celestial, but they all do it. This is said to be a spiritual facing, not to be limited by space. But I found a number that suggests a way of viewing this phenomenon. It is HH 142, and it says, "... on Earth ... there is a direction of all things to a common center; but there is this difference ... that in heaven the front parts are turned toward the common center, but in the world the lower parts of the body." This suggests that we are already all facing in the same direction, but it is not our faces that do it. What we all do is point our feet toward the center of the Earth. This does not stop us from facing and/or traveling in all sorts of directions. In heaven it is the front parts that turn toward the common center. Now, we do not want to think of the angels as being facedown, but how about

faceup? Picture a lot of people floating on their backs in a large lake. They are free to move about, and to associate with each other. But even as they are facing each other, they are all facing upward—up to where the Sun is. This thought has not been with me as long as the others in this paper, and I have not seen other things in other places that fit in with it. But even this one number is trying to tell us something. Let us keep it in mind, and try to find out as much as we can about the geography of heaven before we make the final field trip to see for ourselves.

## DISCUSSION

President Cole gave the speaker permission to moderate the discussion.

Mr. Leon Rhodes inquired about the three-dimensional appearance of the diagrams. Mr. Rose replied that they do not attempt to show up and down, only east, south, north, and west.

Rev. Willard Heinrichs asked about some angels seeing the Lord obliquely on the right and others obliquely on the left, but that teaching (DLW 125) had escaped Mr. Rose's notice. Mr. Heinrichs later expressed the opinion that the spiritual angels were not facing south, but the other way, toward the Moon (the love toward the neighbor that reflects love to the Lord).

Dr. Erland Brock clarified that going north follows the curvature of the Earth, so that it is curved. But north and south follow great circles while east and west curve along small circles except for the equator.

Dr. Gregory Baker was disturbed by the image of the inhabitants of heaven lying down and not able to move around, but the speaker noted that they can move like swimmers. Dr. Brock later clarified that the angels would not appear to themselves to be lying immobile.

Rev. Andrew J. Heilman asked whether the 30-degree angle between east and south might be related to the angle between the equator and the ecliptic. It was noted that the Sun appears 45 degrees above the horizon to all in heaven, while this varies on Earth according to latitude.

Rev. Prescott Rogers recalled his days in Mr. Rose's math classes and his difficulties with four-dimensional geometry. He asked how the diagram shows the celestial within the spiritual. Mr. Rose said that it does not; it is only two-dimensional, whereas the reality it represents could well be more than four.

Rev. W. R. Woofenden emphasized the value of using more than one diagram, even including the two-by-three division.

Mr. Donald Fitzpatrick pointed out that the human body has a kingdom of the heart and a kingdom of the lungs, both of which are present everywhere and indispensable.

Dr. Charles Ebert suggested integrating the idea of sameness in greatest and least, and Mr. Rose said he would be glad to have him do so.

Dr. James Pendleton suggested that since directions have to do with time and space they might not exist in heaven except symbolically.

Prof. Bruce Glenn followed up on this idea, pointing out that the Writings use directions to help us see things, but that we do not have to take them literally. Two angels facing one another in a mutual use are facing the Lord.

Rev. Robert Cole compared the parts of heaven with the cerebrum, cerebellum, and spinal cord. He emphasized that the heavens should be regarded as inmost (celestial) to ultimate (natural), not just horizontally.

Rev. Daniel Goodenough pointed out that there is no constant space in the spiritual world, and explained how facing the Lord can be understood in terms of mental attitude.

The speaker was glad to see people ready to take the subject apart and put it back together some other way.

Mr. Charles Cole characterized Mr. Rose as a nice New Church genius, particularly in his ability to illustrate knowledges.

Mr. Jerome Sellner pointed out that the meeting was taking place on Mr. Cole's 70th birthday, and led the group in singing "Here's to Our Friend" to close the meeting.