IMPACT GEOLOGY

&

GRAVITATIONAL DISRUPTION

BY

ALLAN O. KELLY

1989

AND ____ LETTERS

PREAMBLE TO IMPACT GEOLOGY

THIS BOOK HAS BEEN WRITTEN AS A PARTIAL HISTORY OF IMPACT GEOLOGY, ONE MAN'S EFFORT TO BREAK DOWN THE LONG WALL OF LYELL'S "PRINCIPLES OF GEOLOGY" THE THEORY OF UNIFORMITY THAT WE LIVE BY EACH DAY,___THE PHYSICAL FACTS OF EROSION, SEDIMENTATION, WEATHERING, GLACIATION, EARTHQUAKES AND VOLCANICS.

NOW COMES ASTEROIDAL IMPACT, THE RANDOM FORCE NEEDING TO BE ADDED TO THE LONG CATASTROPHIC HISTORY OF MAN'S MOTHER EARTH, A FORCE WHOSE TIME HAS COME.

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WATER RUNS UPHILL

by Allan O. Kelly

(This originally was a five minute speech to the Carlsbad Toastmasters Club in 1938)

Most people like to hear what they already know, or think they know to be true.

It is a truism to say that water runs downhill and yet if I should seriously try to prove to you that water has run uphill at certain times in the past, you might not like it because I would imply that you are ignorant and that I am wiser than you. Because of this implication that one person is smarter than another, people in general are allergic to new ideas.

Chrysler tried to sell the public the "airflow car", some 15 years ago but they would have none of it.

Most anyone can conceive a new idea, but only the wise man can put it over. As the lady lecturer said about making a speech, --- "it's like having a baby, easy to conceive but hard to deliver".

In my years of experience in trying to sell people on new ideas, I have come to the conclusion that the way to sell them is to convince them that it is really old stuff. Just the same old car with a new radiator grill.

Two years ago, as some of you know, I came out with a new geological theory, that is, I thought it was new. I made a speech or two about it. No sale! I wrote it up in the first person singular. I used as many I's as there are in this speech. It stank! Then I wrote it up in the third person, used the editorial "we" and the author thinks so and so stuff. That doesn't work either. You can't smile when you say it. Finally, now I have gotten completely into the spirit world. I have written up what the great men of the past have said and shown that they had the same idea. The Greeks had it. The Romans had it. Leonardo De Venci had it. Cuvier and Chamberlin had it. Do I seem to put myself in their class? No, I think not, I am only adding a new radiator grill to the same old car and it may not work.

So far, all of the Professors of Geology who have criticized my work have been good toastmasters, they have criticized me and not my material. They have said in effect. "You are a conceited ass. Mortimer, how can you be so stupid?"

Gentlemen, since the year 1833 when Sir Charles Lyell published his "Principles of Geology", there has not been advanced <u>one single new basic idea</u> in the science of geology. That's one hundred and sixteen years! By basic, I mean causes of geologic change in the earth's crust.

Up until the time of Lyell, most students of geology believed in catastrophism, -- a series of deluges caused by earthquakes or other "acts of God".

Sir Charles Lyell established the principle of Uniformitarianism, which is till taught in our best colleges and universities. Briefly stated, this theory is that the geological past must be judged by the geologic present, or that the causes of geologic change, erosion, vulcanism, earth movements, etc. were the same in the past as they are at present. No flood or cosmic collisions allowed!

My quarrel with Uniformitarianism is that it leans over backwards as far one way as the fundamentalist religionists lean the other way. It takes as a fair sample, the 2000 years of recorded history against the billion years (their own figure) of the earth's age as a means of determining what went on in past ages, or 1/5000 of 1%. They have become so engrossed in their battle with the religionists that they have lost all thought of progress and become as dogmatic as their opponents. They see a "religious fanatic" behind any theory of a flood.

Most of you have heard of the "Chamberlin and Molten Planetary Hypothesis". It is the presently accepted theory of the origin of our planetary system. Briefly, it states that a passing star sucked away great masses of the suns hot gasses and that these masses coalesced to form the planets. The earth in particular was formed by many of these small planetesimals colliding with one another and later with the earth as it grew. That these planetesimals, up to several hundred miles in diameter, heated the earth to a molten state

by their impacts. At this point, the geologists dropped their planetesimal theory without having noticed that if they had carried it to its logical conclusions, it would have answered all of the geological questions they had been unable to answer before.

Here is where I come in and add the new radiator grill to the Chamberlin-Molten car. I say that down thru the ages (I don't pretend to be smart enough to say how long) these planetesimal collisions occurred at irregular intervals and with varying intensity. They caused world wide oceanic floods which laid down great beds of sedimentary rocks and broke up other older beds and elevated them into mountains. Each such cataclysm also produced a new set of lavas and volcanos and caused the extinction of many forms of plant and animal life.

I could go on for hours and tell you how and where the records in the rocks bear out this theory, but time forbids. Suffice it to say that water did run up hill and that the evidence is everywhere to prove it, but people are funny and I too am one of the people.

Carlsbad CAliformia.
Jan. 11, 1947.

Popular Astronomy
Carlton College
Northfield Minn.

Curvin H. Gingrich, Ed.

Dear Sir,

The inclosed manuscript, A New Approch toGeology, may sound as if it had little to do with astronomy, but it does contain a good deal of astronomy and especially in regard to the Carolina Bays, meteorites and the craters on the Moon.

My primary purpose has been to carry Chamberlin & Moltens planetesimal hypothesis to its logiclal conclusion and show that plantismal collisions were the major cause of the great unconformities and changes in the earth's crust.

That the craters and seas on the moon are of thesame origin and that the last greatplanetismil collision caused the Carolina Bays, and a world wide oceanic flood that changed the earth's axis, brought the so-called ice age to a close, accounted for the mammoth and other animals found frozen in the Arctic and a great many other things. In fact the planetismal theory carried to its logical conclusion answers all of the geological problems that have been left unanswered.

This is the first basicly new theory that has been advanced in the field of geology since 1833 when Sir Charles Lyell published his Irinciples of Geology, which advanced the idea of Uniformitarianism, which opposed the older Catastrophism of Playfair, Cuvier and other savants of that day.

Geologist in general, have taken a very dim view of my new approach to geology, many of them seemingly think that I have some religious axe to grind, and tht I am trying to put over the fundamentalist bible flood idea. I have no such intent but do suspect that the Bible Flood was caused by the same planetesimal that made the Carolina Bays.

The inclosed manuscript is a concensed version of a much longer one which I hope to build into a book. If it is still too long, it might be condensed further or just the part dealing with astronomy used.

Yours very truly,

Allan D. Kelly

This letter was retyped in 1988 because the signature was faded byond recognition.
AOK

Carlsbad California
Aug. 13, 1947

Popular Astronomy.
Carlton College, Minn.

Curvin H, Gingrich, Ed.

Dear Sir:

Last Janurary I sent you and article called A New Approach to Geology, which you returne along with a criticism by an unnamed scientist.

Being of a nature not easily discouraged, I take the liberty of sending you another and shorter article about the craters on the moon which contains new material not in the previous article. I hope you will be kind enough to publish it.

My friend Major Chapman Grant sent you something of a similar nature some time ago. Grant is a grandson of General U. S. Grant, and a wealthy man who has time to travel and study any branch of science that may interest him. He is a keen observor and a man who will say what he thinks. He is a firm believer in the new theories that I am trying to advance, as are a great many other laymen who are well educated men. The observable facts and the common sense of this theory appeal to the average man.

I have given a number of talks to Rotary Clubs in the towns nearby, using my 21 x 27 inch phots to illustrate my points. I have no trouble selling them the theory when I can actually point out on the picture what I am talking about. A trained scientist that I tried to talk to, wanted to know first, what my background was, and finding that I had none, his mind closed at once. He immediately began telling me the books I should read, and on finding that I had read the books, he apparently concluded that I was too dumb to understand and ended the interview. However, I keep plugging away, sending these ideas to you and to other publications.

ncerely,

Allan D. Kelly

This letter which was a copy of the origional, was faded and blurred in spots and the ink signature was hardly visible so I retyped it in 1988

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September 26, 1947

Mr. Allan O. Kelly
P. O. Box 542
Carlsbad, California

Dear Mr. Kelly:

In reading your paper again yesterday I felt that the following introductory paragraph was in order.

> "This paper once more attempts to explain the various features seen on the surface of the moon. After all that has already been written on this subject, it is not very likely that the final word will be contained in a brief discussion such as this. However, the photographs and keys to them furnish interesting material for a detailed study of certain lunar formations, even though the conclusions drawn from them in the paper do not meet with the approval of all readers. Editor.

This will appear at the beginning of the paper. We have not as yet had the cuts made, hence I cannot as yet tell you the cost of them.

I have a letter from Mr. Chapman Grant in which he expresses disappointment in the fact that we declined to publish his paper but accepted yours which he says is practically the same as his. If such is the case, and if you together work out the ideas expressed in your paper, possibly you and he might wish to collaborate on the paper and have it appear with joint authorship. You will readily see that we should not wish to publish two papers expressing the same ideas. I shall await your reply before answering Mr. Grant's letter.

Yours truly,

C. H. Gingrich

Carlsbad, Calif.
Oct. 20, 1947.

POPULAR ASTRONOMY
Carltan Colleg
Northfield , Minn.

Dear Dr. Gingrich:

I just received your letter of the tenty.

Concerning Major Grant: I talked to him over the telephone about ten days ago. He was very enthuistic about his work on the Origin of the Carolina Bays but said nothing about the moon. He is working on some experiments of shooting into damp earth covered with fine powder to see if the blast will make shallow oval craters, without showing craters made with bullet or buckshot. Sounds interesting!

In the matter of cost of engraving etc., that will be quite alright with me. I would like the pictures to be as large and clear as possible.

Also, there is another item in my manuscript I would like to have corrected.. On page 8, I stated that only Shaler of Harvard, had ever suggested that the so-called seas ofn the moon were of impact origin.. Since then, in correspondence with Dr. H.H.Niningea American Meteorite Museum of Winslow Arizona, I find that he had advanced the same idea in an article published in the Scientific Monthly in March of 1943. I just received a reprint from him of the article. He differs with Schaler and myself in believing that the Maria were made by an encounter with a comet consisting of many small bodies rather than one of asteroidal size. As a result of the many impacts the lava lakes coalesced to form one great lake---or maria. He also made the following statement in the same article, which is almost identjcal with what I have said on page nine.. "Cometary encounters, such as may possibly have caused the maria, may well be considered as having been responsible on the earth for the puzzling succession of geological revolutions which mark the principle time divisions in historic geology" I had not read this article by Dr. Nininger because I was not then a member of theA.A.A.S. and did not have access to the Scientific Monthly.

Will you then give credit to Dr. Nininger in the proper fotnotes for these items.

Yours very truly

Allan D. Tully

Copy to Nininger.

IS METEORITIC COLLISION THE MISSING FORCE IN GEOMORPHOLOGY?

BY

ALLAN O. KELLY

1951

Geologists have long been aware that their profession is faced with many unsolved problems and that these problems, to a great extent, have to do with basic causes, the forces that produced the unexplained phenonena.

Geology has been called the"Mother of science"and with good reason, for it is perhaps the oldest of the sciences and the one from which the others have sprung. Out of necessity, men have become familiar with the processes of Nature. They observed the life cycle of plants and animals from birth until death. They saw the forces of erosion at work and the wondered how the earth, mountains and sea came into being. They were interested in the workings of Nature and so the study of geology gradually arose out of this natural curosity. T C. Chamberlin, great American cosmologist and geologist, said of this natural desire: "There is no nobler asperation of the human intellect than the desire to compass the causes of things."

It is my purpose in thisarticle to point out the possibility that th collision ofgigantic meteorites with the earth in past ages, may have been the missing force that will account for all the unexplained phenomena. First, however, we shallconsider some of the history relative to the collision theory.

T. C. Chamberlin might bea called the father of the collision theory for it was he, along with Moulton, of the University of Chicago who proposed the "Planetesimal Hypothesis,__the theory that the origin of the earth involved a process of growah by accretion of dust particles and meteorites. Chamberlin, however, did not conside the possibility of large meteorites striking the earth or what the consequences of such collisions might be. He apparently held to the theory of Uniformity (unwittingly) for he wrote an articlein the Journal of Geology in 1897 called "The Method of Multiple Working Hypothesis." This article emphasised the need for creative study as contrasted with the more common practice of acquiring knowledge

by memorizing the work of others. He advocated independent thinkingfrom all sides of a question,__"Multiple working Hypothesis" rather than what he called a "Ruling theory." Chamberoin was first of all, a geologist and he did not see that his "Mother of Sciences" had long since developed a Ruling Theory. This waa and is, the theory of Uniformity.

According to the dictionary,__Uniformity is the doctrine that the present laws, forces, or principles, which govern the world as it is, are just the same as always and are responsible for whatever geologic changes that have taken place.

Sir Charles Lyell, although perhaps not the origionator of the theory was without doubt, its greatest advocate. His chief work, "Principles of Geology" published in 1833, is the acknowledged authority of Uniformitarianism, and remains to this day the foundation upon which modern geology rests.

Before the time of Lyell, many men of science had believed in cataclysmic deluge because of the evidence they saw but they could not produce a reasonable cause of physical force to account for the giagantic effects, so they fell back on the supernatural. Lyell denied the idea of supernatural cataclysm most forcefully and emphatically, he said,__"No causes whatever have changed the earth except those that still do so under the eyes of man." He was also very critical of his predecessors and contempories for indulging in speculation: They employ themselves in conjecturing what might have been the course of Nature in a remote period, rather than in the investigatio of what was the course of Nature in our own times."

Lyell looked to the forces he could see and investigate to give him the key to the earth's history. He held that ordinary erosion, sedimentation and volcanics, working slowly through very long peroids of time, could produce all of the earth's Physical features excepting those for which there was no explanation. These latter, he thou would be explained some day when more was learned about the earth. Time has shown that these simple processes are not enough, for afte 117 years, many of the problems unsolved in Lyell's time, remain so today. Let us look then, at some of these unsolved problems and see how the collision theory may explain them.

1. What caused the so-called"ice ages"and why did the ice expand over great areas of North America in what are now low elevations and comparatively mild climates?

2. What caused the glaciation inSouth America and in South Africa in what are now subtropical regions?

3. Why are coal and coral found in arctic regions now incapable of supporting this kind of life?

4. Why were thousands of animals suddenly frozen in the Arctic?

5. How were submarine canyons built?

6. What is the cause of earthquakes?

7. Why are large erratic boulders found in warm climates where there is no evidence of former glaciation?

8. Whatforce produced the lateral pressure in the earth's crust that built earth's mountain ranges?

These and many other questions have long been considered by geologists wothiut reaching any reasonable conclusion or solution. Becausethese known forces of Nature have been found wanting. geologi have added "movements in earth's crust" for which they can find no cause. We are told that great areas of the earth's crust rise and f That tremendous lateral pressures develop in the crust and that moun tain ranges are buckled up or faulted so that in some cases one side of the fault is thrust over the other as much as fifty miles. These movements are thoughtso slowly that they cannot bemeasured with any assurance or accuarcy, specially those that have to do with the rise and fall of land, large surfaces of land, for there is no stable point from which to measure except sea level, and we cannot b sure that the ocean did not rise and fall instead of the land. On a lesser scale, we see that our great mountain systems were once laid down as nearly levelsedimentary rocks. Now they are thrust high in t sky. But this vact movementdid not take place "under the eyes of ma So we have no historical experience to prove whether it took place slowly or quickly. Some believe that the physical evidence shows

a quick birth, but most geologists jave tried to explain it by some v very slow process. On of these is the theory of "Isostacy."

Isostacy is defined as " the theory of general equilibrium in the earth's crust supposed to be maintained by the yielding or flow of rock material beneath the surface under stress of gravitation." It is supposed that as rivers transport sediments from their watersheds to their deltas, that in time, this redistribution of weight causes the hot material beneath the crust to flow as a plastic substance. Thus the magma moves under the crust to replace, [illegible] the weight of the sediments removed from the mountains. Or, in other words, The mountains become lighter and float on the magma beneath. According to this reasoning, it might be argued that mountains should rise as fast as they are lowered by erosion and so we would be faced with the necessity of finding an origional cause for the mountains in order to start this never-ending cycle. Another argument against Isostacy is the fact that rivers carry a considerable portion of the sediments into the sea, and that the ocean water thus displaced is spread evenly over a great part of the earth. The facts are that most large rivers are building new land at their mouths and there is very little if any evidence that these delta area are sinking. If Isosta were a fact we should find drowned river valleys all around the worl but this we know is not so, for the deltas of great rivers like the Nile and the Tigris-Euphrates have been extended for many miles, eve withinhistoric time. This would seem to mean it is much easier for the ocen to flow, than it is for the magma to flow under the crust. It may be possible wher rivers empty their sediments into inland bas or desert regions, that Isostacy could take place, but only to the extent of leveling the land surface. If mountains were elevated onl as fast as erosion takes place, then there would be no rugged perpendicular mountains but only smooth, rolling, surfaces.

Volcanic eruptions are the only mountain building forces that men have observed. It is known that such eruptions can build or destroy large mountain peaks in a very short time but the total volume of volcanic mountains is very small compared to pressure mounta: in fact volcanoes are in most cases, only a by-product of pressure mountains, for in many cases the lavas are seen to have come up thr

the sedimentary rocks along the faults caused by lateral pressure. What then, caused the lateral pressure? This is one of the questions that Uniformity could not explain in Lyell's day and does not answer now. Is meteoritic collision the key, the missing force that geologists have been looking for?

It must be obvious that any large body striking the earth would cause oceanic flooding, and that such flooding would cut submarine canyons across the continental shelves at the mouth of every large river. The ocean water would surg inover the land and back again to the bed of the deep ocean; not once but many times, something in likeness to gigantic tides that would gradually abate until the ocean returned to normal. The greater part of these flooding waters would be concentrated in the large river valleys, and since the continental slopes are the greatest relief features on the earth's surface, the steep descent into the abysmal depths would provide tremendous cutting power for the ocean waters concentrated in the river valleys, and so the submarine canyons would cut back across the continental shelves.Such oceanic flooding not only accounts for the submarine canyons off the mouths of rivers, but also those found far from land such as Bering Canyon. Bering Canyon is perhaps the largest canyon on the face of the earth, yet this is not remarkable when we realize that a great part of the Artic Ocean may have been forced through Bering Strait into Bering Sea. Young Bering Canyon lines up with Bering Strait just as other submarine canyons line up with river valleys.

Uniformitarian geology has never been able to account for submarinea canyons by their process, —"going on under the eyes of man", so they have been forced into the speculations that Lyell so abhorre Some suggestions have been; spring sapping, undersea landslides, slumping of cavern roofs, and the lowering of ocean level due to the locking up of ocean water in greatly enlarged ice caps. This latter supposition has had the greatest vogue but it too has its difficulti Many submarine canyons are near a mile in depth and Congo Canyon, is said to be nearly 9,000 feet deep at the edge of the continental shelf. This would require nearly half of the oceans to be locked up in polar ice if the rivers were to have cut canyons down to an old sea level 9,000 feet below the present level. The fact that submari

canyons are of all sizes and depths indicates that the ocean had nothing to do with the depth but that when the ocean surged over the land, it cut submarine canyons of a depth to match the river valleys above. If the ocean level had remained at some lower level for a sufficiently long time to have produced submarine canyons by ordinary erosion, then all of these canyons would hve descended to the same level.

The glaciation of North America can also be explained by meteoritic collision and oceanic flood, as can the oldersigns of glaciatio in Africa and South America. These are the glaciated areas once beneath older polar icecaps when the earth's polar axis was in these respective locations. The earth did not become warmer or colder but each major collision produced a new polar axis and a new glaciat Any large body striking the earth and penetrating the crust would throw it out of balance and of necessity, a new rotational axis. On the other hand it is next to impossible to believe that vast shee of continental ice would have formed all over the eastern half of north America while Alaska, Siberia and the northern fringe of isla in Canada, remained free of ice, if the North Pole was in the same locationthen as now. There is plenty of physical evidence to show that the old north pole was located near the mouth of Hudson Bay, an that the old arctic circle encompased an area extending from the northern islands of Canada to Kansas City , and from Alberta to Iceland. If this seems difficult to believe, it may be pointed out th all the rules of Uniformity must be broken to believe that a sheet of ice two miles thick formed in one segment of the northern hemisp while the rest of it remained free of ice. This is not going on un the eyes of man today, and it is very unlikely that it ever did.

The presence of coal and coral in the polar regions is also ver good proof that the polear axis has been in different locations in past ages. In fact, no other theory has ever been advanced, so far as we know, that was accepted as more than just speculation.

The various kinds of prehistoric animals found frozen in Siberi and northern Alaska, are also good proof of the collision theory. The sudden change of the polar axis moved these animals from a nor temperate climate into the Arctic and the following oceanic flood

buried them in a great mass of muck and gravel that was quickly frozen and has remained so until today.

The so-called "erratic boulders" are another evidence of collision and flood. They are found all over the world in warm climates and where they never could have been transported by floating icebergs. These were transported from their source by oceanic flood. As a matter of fact,"erratic" stones of all sizes may be found in almost any stream at lower elevations. Stones utterly foreign to any mother rock to be found in that watershed..These stones are just as "erratic" as the huge boulders moved by ice in the glaciated area of the world.

Earthquakes are the continuing adjustments of the earth's crust as the forces of gravitation and rotation work to make the earth a more perfectly balancead sphere, following the impacts and dislocations cause by major meteoritic collisions.. The deep ocean floors are the beds of the great collision points. Here the molten lava caused by impact, welled up and took the curviture of the earth. Earthquakes are rare under these deep ocean beds. Around their rims (which are seen as continental slopes, mountain chains or island arcs and their accompanying deeps) we find great seismic activity. Here the earth's crust is cooling and cracking, pulling away from the surrounding crust as the central lava pool made by impact,cools and contracts. Thus earthquakes are more frequent along these old crate rims where the crust is cooling and faulting. The volcanoes which usually line these rims, are the result of lava coming up through th faults. The fact that the volcanoes are gradually migrating from the outside of the arcs to the inside, is proof that a circular pool of lava beneath the crust is actually cooling, for the more ancient volcanoes are always found on the outside and the younger on the inside of the island arcs or curved mountain rims. Most of these ol collision craters overlap one another so that only segment of thei rims are still visible. This condition is also found on the moon. Space does not permit the lengthy discussion of each of these proble suffice it to say, that meteoritic collision is a known fact, a prov fact, and a force that cannot be dismissed as something apart from geologic history of the earth,

Allen O'Kelly

POPULAR ASTRONOMY

April 1951

Carlsbad, Ca. Jan. 3, 1989

After reading this article once more, I find very little that I would change after 37 years. It stopped the great debate because it was just a matter of common sense that any lay person could understand.

How much better for education it would have been if they had just left the field open and given credit where credit was due.

AOK

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AMERICAN METEORITE MUSEUM, P.O. BOX 1171, WINSLOW, ARIZONA.

The Origin of the Carolina Bays and the Oriented Lakes of Alaska

By ALLAN O. KELLY

The "Carolina Bays" have been the subject of discussion in a number of papers in this magazine in the last few years. Here is another paper in which a new point of view is presented as an explanation of them. The degree of conviction induced by this argument will, no doubt, vary with the experience, background of thinking, and subjectivity of the reader. EDITOR.

The origin of the Carolina Bays and the Oriented Lakes of Northern Alaska is a problem that has long intrigued the scientific world. Probably the great interest in this scientific puzzle arises from the fact that Melton and Schriever, geologists from the University of Oklahoma, who first discovered the Carolina Bays, attributed them to a gigantic shower of meteorites. This interpretation was made in 1933. Such a spectacular theory immediately aroused the interest of the Press and several articles appeared in popular magazines describing the fearful holocaust that must have occurred. Following this introduction to the public, the scientific world began to investigate. Many different hypotheses were proposed but none seemed to fulfill all the requirements.

This article ended all further debate and nothing more was published on the subject.

AOK 8/16/89

Dr. Douglas Johnson, geologist of Columbia University, said of these bays or depressions: "They are without doubt one of the most remarkable geomorphic features on the surface of the earth. They share with submarine canyons the distinction of being among the most difficult of earth forms to explain." Johnson was unaware of the Oriented Lakes of Alaska.

The Oriented Lakes of Northern Alaska were first investigated by R. F. Black and W. L. Barksdale of the United States Geological Survey. They published a rather complete article about these lakes in the *Journal of Geology* in March of 1949. They did not propose a complete theory of origin but they did give a table of comparisons between the Carolina Bays and these lakes. It was shown that out of 17 items of comparison, the two groups were similar in all but five. Among other things they concluded that "The Carolina Bays and the Oriented Lakes of Alaska are so strikingly similar that it is believed that the conditions operating to produce them must have been, at least in part, similar." No one else, so far as we know, has made any investigation or any proposal as to the origin of these lakes.

It is not our purpose in this short article to criticize other theories of origin but rather to advance one which we believe answers all of the requirements, so far as we know them.

This theory is based on cosmic collision as the motivating energy that produced these bays or lakes, and, in fact, the force that has produced most of the physical features of the earth. Such collisions and the oceanic floods that must have followed, can explain every unexplained problem of modern geology, including submarine canyons. Many thousands of these collisions have occurred in the earth's long history and the last major one caused the Biblical Flood which is also recorded by many other races of people. The physical evidences of this last great flood are found all around the world, in tremendous gravel deposits in unusual locations; in old shore lines high above the present levels of inland lakes such as Great Salt Lake and the Dead Sea; in recent glaciation and evident change of climate; in prehistoric animals found frozen in the Arctic, and a vast array of other physical evidence that cannot be mentioned here.

The Carolina Bays and Oriented Lakes of Alaska are only a small part of this great array of collision evidence, but they are the immediate concern of this article and one more step in proving the collision theory. Our reasoning is as follows: Before this last great catastrophe, the North Pole was located near Apatak Island in Hudson Strait. This fact is proved by drawing an arctic circle around this point, which is then found to contain all the glaciated area of North America, including Greenland and Iceland. These two islands were in practically the same relative position to the old arctic circle as they are today, so that their ice conditions have not changed.

It will be seen, then, that a considerable part of the North Atlantic

was well within this old arctic circle and so must have contained large quantities of sea ice and glacial ice. On the other side of the circle, the Arctic Ocean also was in a position suitable to the production of ice.

The meteorite or asteroid, which caused this last cataclysm, struck the earth at a point which was then just outside the arctic circle but now off our South Atlantic Coast. It formed a great under-sea crater whose outlines can be traced for hundreds of miles as a nearly perpendicular wall (Figure 1). When this collision occurred it moved the surface of the earth in relation to the rays of the sun and at the same time changed the axis of the earth to its present location. A new alignment would certainly follow if the striking body penetrated the crust of the earth

FIGURE 1

and added its weight to one side of the earth flywheel. On the other hand, if it only struck a glancing blow, the earth would probably wobble a little like a spinning top and soon regain its former axis. All the evidence seems to indicate that this object did penetrate the crust of the earth.

Such a collision would, of course, cause a terrific earth shock felt all over the world. The polar ice cap would have been shattered and the oceanic flood that followed would have floated vast quantities of ice far away from its source. Geologists have estimated the ice over Hudson Bay to have been over two miles thick. This ice and the ice in the Great Lakes apparently melted in place but the old polar cap was elevated and the ice moved off the land in all directions as the grooves in the rocks so plainly indicate. The glacial ice and sea ice that was floated by this flood must have rushed back with these waters to fill the impact point. This ice would have melted quickly in such an inferno but some of the sea ice far away near the coast of Greeland might have trailed far behind and missed this hot water bath. This ice could have been stranded like a great fleet of ships, for wind and tide would have tended to orientate them to some degree. When they grounded on the coastal plain, the seaward end of each berg or cake of ice would float more easily. Thus the bergs were grounded or anchored like ships in a harbor and would swing with the tide, all pointing in the same direction as the outgoing tide. As the tides receded, there came a time when the bergs failed to float on the incoming tide and so remained in this fixed position until melted.

Once the stranded bergs were firmly fixed on the bottom, the tides began to shape the final surfaces between. Since ice floats with about nine-tenths of its mass below the surface, this grounding would take place while the tidal floods were still quite deep for these cakes of ice might have been several hundred feet thick, judging by Antarctic sea ice. The ice in the Carolina Bay region probably remained for a year or so after the tides had returned to normal but in Alaska, they may have remained hundreds of years before melting completely.

The length of time that might have passed before the tides returned to normal would be difficult to determine by geological observation but the Biblical account of the Deluge tells us that the waters were "Going and returning continually for one hundred and fifty days." This seems like a reasonable estimate of the time that might have been required.

Major Chapman Grant, of San Diego, California, who visited the Carolina Bays in 1948, describes the area as not really a flat plain but a region in which low gravel hills are interspersed with Bays of a little lower elevation and with stream channels a little lower than the Bays. He also pointed out that seldom, if ever, does a stream flow from one bay to the next as is the case in all other lake country, but always around the Bays. In like manner the gravel hills do not encroach upon the

The Finns have a legend of a hot water flood.

bays nor do the so-called beach ridges. Johnson and others were at a loss to explain why these old surf lines or beach ridges, as they called them, did not cross the bays for the ridges are no higher than the bay rims. All these questions are easily answered if we imagine a cake of ice in each bay and tidal waters flowing in and out among these obstructions.

At first, when the tides were deep and strong, the gravel hills were deposited in the larger open areas between bergs. At the same time, channels were eroded out where the bergs were closer together and the current stronger. This kept the gravel hills from approaching too close to the bergs and produced the "kettle holes" or basins around each berg. Big bergs usually produced the dominant current and so the bays formed by little bergs close by seldom overlap the rims of bays made by bigger bergs. There are exceptions to this overlapping of rims, but, in general, the rule holds good. There are, in fact, exceptions to every general feature of uniformity in the Carolina Bays but all of these exceptions can be explained by the varying shape of the bergs, by distance of separation, and by the varying current of water flowing between them. Aerial photographs show this flow pattern around fixed objects so plainly that one wonders why this explanation was not forthcoming long ago.

Another characteristic feature of the Bays is the occurrence of pairs or chains of Bays. Many chains of three or more are found nearly touching one another and with stream channels on either side. Usually these chains are made up of bays of nearly equal size and may have resulted from a large berg breaking up after grounding. In any event, such a chain would force the water to flow parallel to the sides of such group and the current would tend to arrange them in better alignment. These chains occur so frequently in the Carolina Bay region that they became a stumbling block to the advocates of the meteoritic theory, for it seemed beyond the realm of chance that meteorites should fall in many rows.

Since the ice probably remained long after the tides receded, the final melting took place without any passing current. Thus the final meltwater overflowed the bowl in which each berg was sitting and produced the delicate sand rims, even improving upon the symmetry that the tidal current had produced. Later, small channels were cut in the rim of each bay, allowing the greater part of each lake to drain into the stream channels.

The Oriented Lakes of Alaska show greatest deviation from the Carolina Bays in that the water drains from one lake to the next. This may be explained by the fact that Alaska was moved from a north temperate climate into the arctic; that the ice bergs stranded there did not melt for many hundreds of years; and that the streams and vegetation built up the land around them so that when the bergs did finally disappear, the streams were forced to flow from one lake to the next.

The Alaskan Lakes cover an area somewhat larger in size than the Carolina Bays, being about 450 miles east and west and extending from Point Barrow south about 100 miles. As in the Carolina region, the biggest lakes are found near the coast for the largest bergs grounded first. Farther inland the lakes become more scattered, less elongated, and more erratic in orientation. A few scattered lakes of smaller size are also found near the coast, but on higher ridges and plateaus, apparently because smaller bergs were thrown to greater heights by the first great tides and were less well orientated because of the shallower tidal currents following.

In outline, the Alaska Lakes are more rectangular than the Carolina Bays. This was probably due to a different fracture pattern and to the different orientation relative to the sun. The Carolina Bays are oriented in a northwest-southeast direction and therefore the northeast and east side of most bergs received more sunlight and melted faster. This difference in exposure to the sun produced the curious ovoid shape with the straighter side on the shady side. Where bergs were close together so that one might shade the other, the curvature on the shady side fits the theory. Another point bearing this out, is the fact that in large bays with multiple rims, the outer older rim is always a more perfect oval, showing that as the berg melted faster on the sunny side the new formed rims changed in shape with the berg. No other theory has ever been able to account for these multiple rims or the ovoid shape.

In Alaska the lakes are pointed more nearly north and south, the average trend being 12 degrees west of north. Being well above the Arctic Circle (most of them above 70 degrees north) the summer sun shone on all sides of the bergs with little favoritism, so that a more even rectangular shape was achieved.

Another possible reason for the uniformity in outline of these bays and lakes would be that the shock waves from the collision, through the water and through the earth, produced a uniform pattern in cracking the ice. This same collision shock pattern may be seen in the grid-like pattern of the mountains on the moon, especially in the mountain rim around Mare Imbrium. Shock waves traveling outwardly and upwardly might fracture ice floating on a sphere, in boat-shaped forms. In Alaska, which was much more distant from the point of collision than the Atlantic ice, the shock might have cracked the ice in a more rectangular pattern. Such a shattering of ice would almost surely produce a uniformity of some shape but there would be many minor variations. Such is the case, in both Alaska and Carolina, and, as the old proverb goes, "The exception proves the rule."

Conclusion. We believe that the Carolina Bays and the Oriented Lakes of Alaska were formed by strong tidal currents flowing around fixed objects that have since disappeared, that cakes of sea ice are, so far as we know, the only large objects in nature that could have fulfilled all the requirements, and that cosmic collision flood is the only possible force that could have moved them into place. We therefore rest our case and await the onslaught of our critics.

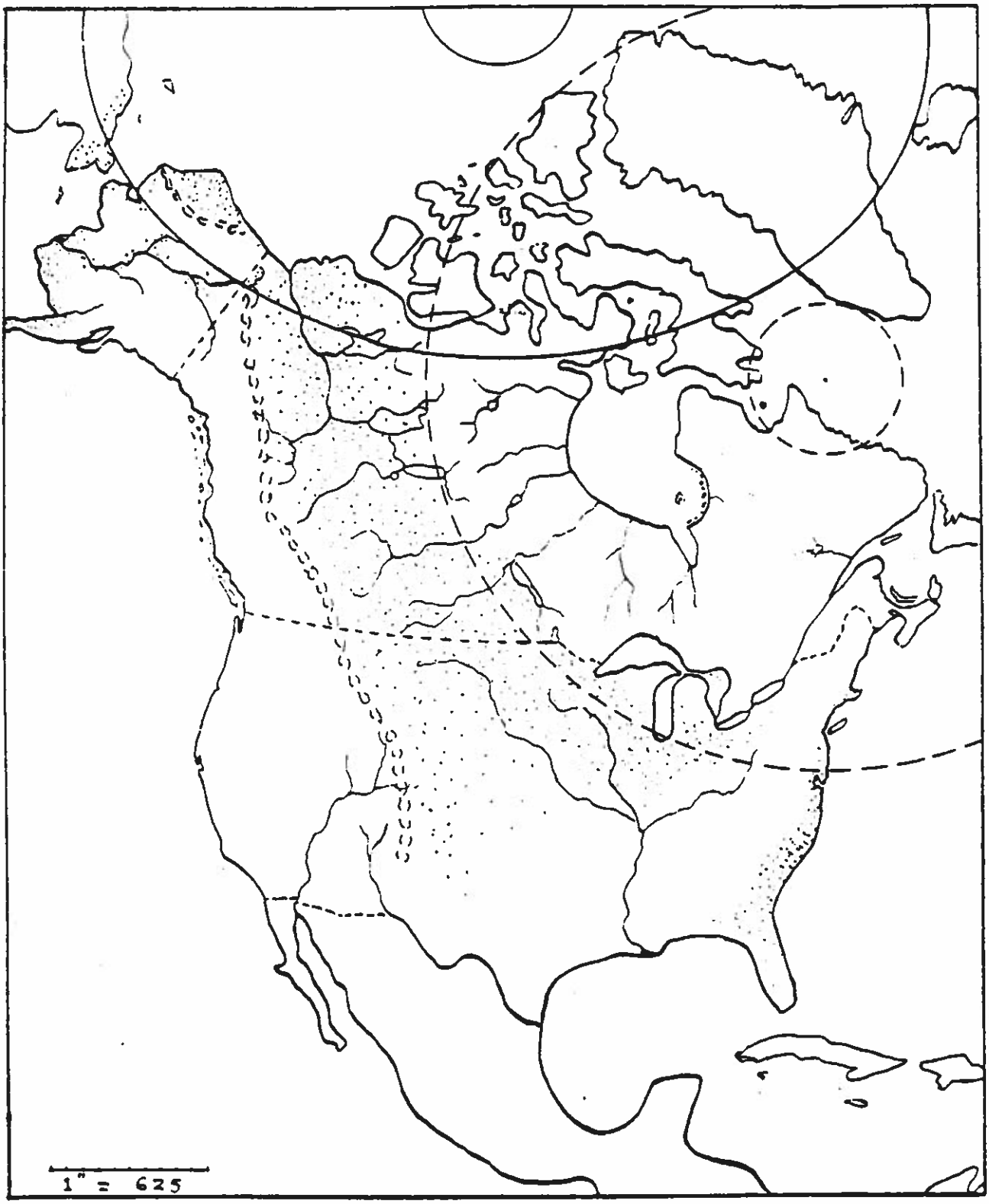
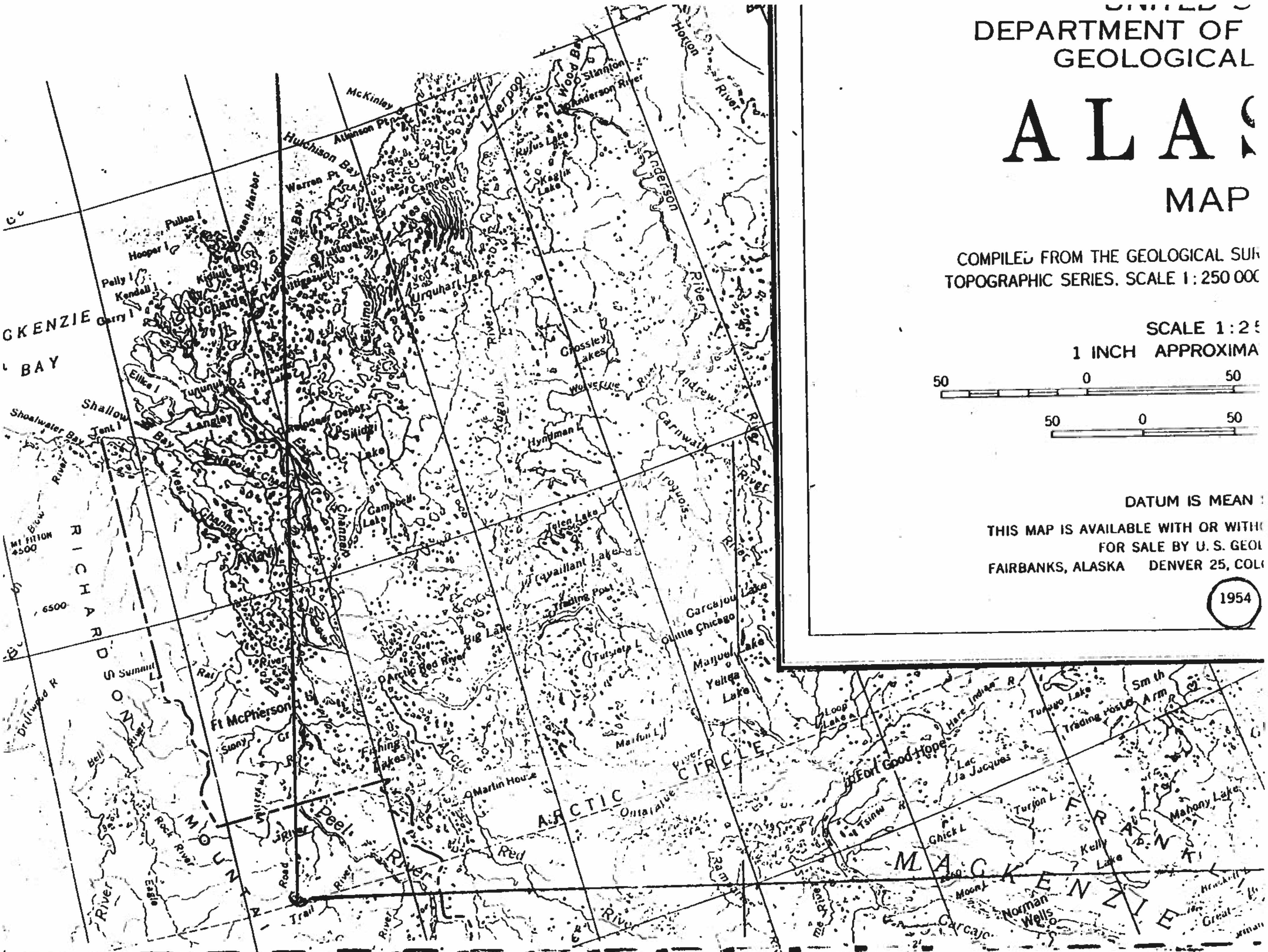


Figure III.

Map showing area of old polar cap and present day river drainage system. Stippled areas show extent of kettle lakes and also the drift



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FOR SALE BY U.S. GEOL
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Shallow Bay
Shoalwater Bay
RICHARDSON MOUNTAINS
ARCTIC CIRCLE
MACKENZIE
FRANKLIN
Ft McPherson
Aklavik
Peel River
Norman Wells
Fort Good Hope
Eskimo Lakes
Liverpool Bay
Wood Bay
Anderson River
Hutchison Bay
Warren Pt
McKinley
Atkinson Pt
Pullen I
Hooper I
Pelly I
Kendall I
Garry I
Ellice I
Tent I
Langley
Kugaluk
Campbell
Carnwath
Andrew
Crossley Lakes
Urquhart Lake
Hyndman L
Travaillant Lake
Trading Post
Big Lake
Arctic Red River
Martin House
Carcajou Lake
Manuel Lake
Yeltea Lake
Tutsieta L
Mafun L
Ontaratue
Loon Lake
Hare Indian R
Lac la Jacques
Turfon L
Chick L
Kelly Lake
Mahony Lake
Tunago Lake
Smith Arm
Fishing Lakes
Rat River
Stony
Driftwood R
Bell River
Rock River
Eagle River
Road
Trail
Mt Fitton 4500
6500
Horton River
Iroquois
Wolverine
Reindeer Depot
Sitidgi Lake
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Tuktoyaktuk
Kaglik Lake
Husky Lakes
Stanton
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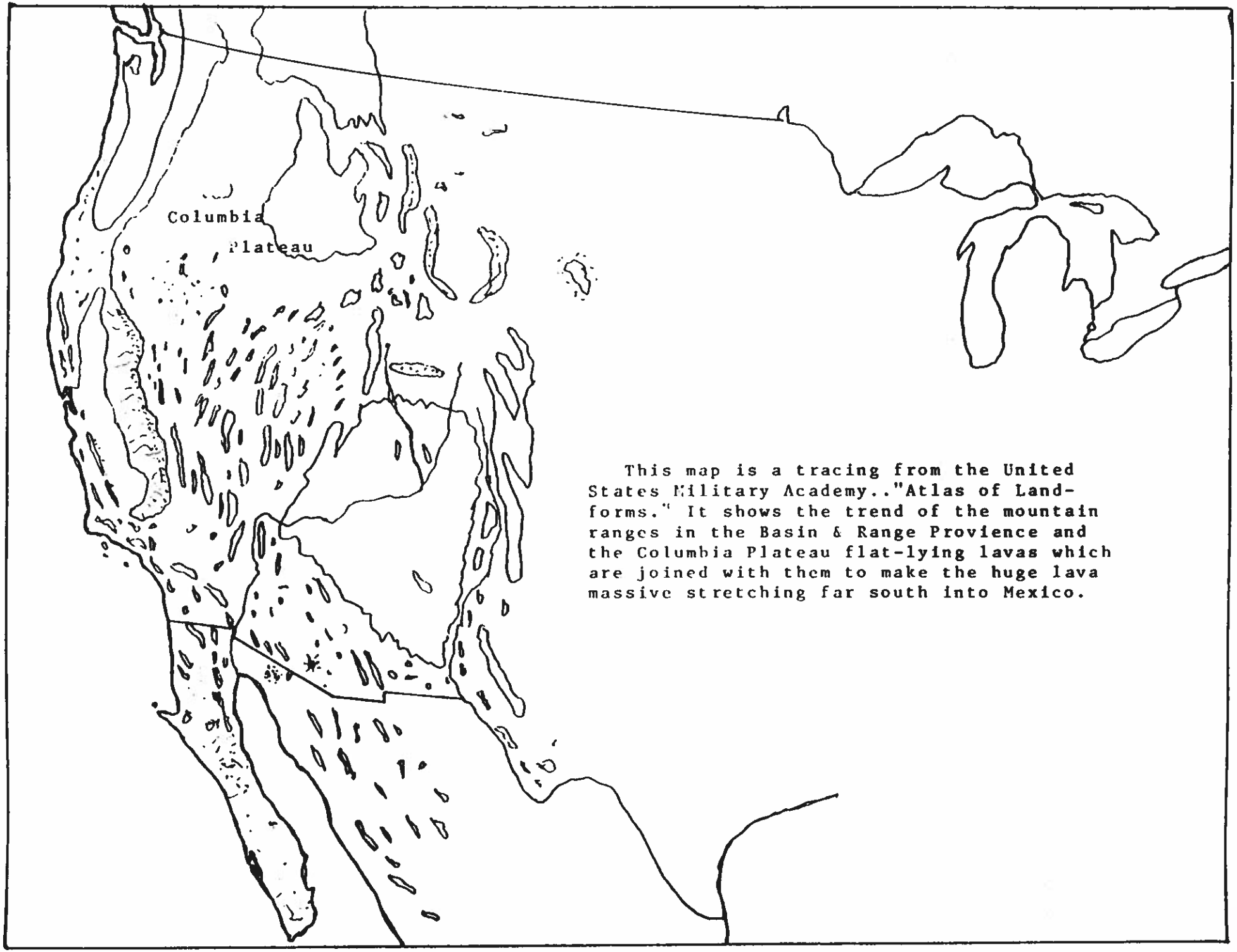


This map is a tracing from the United States Military Academy.."Atlas of Land-forms." It shows the trend of the mountain ranges in the Basin & Range Provience and the Columbia Plateau flat-lying lavas which are joined with them to make the huge lava massive stretching far south into Mexico.

BLUNDERING THROUGH THE COSMOS.
OR
A CRITICAL LOOK AT FRED HOYLE'S NEW BOOK---
FRONTIERS OF ASTRONOMY.

BY

ALLAN O. KELLY, OCT.1955.

Here is a book that is going to stand out as a pioneer work in the field of cosmology, for Fred Hoyle is not afraid to think for himself and he thereby provides food for thought for others. Those who refuse to think lest they be found in error, provide nothing. FRONTIERS OF ASTRONOMY offers a wealth of information, poses many questions, and attempts to find andwers to problems that most scientists in the field have found too difficult to think about. For this he should be commended.

My greatest critism of Hoyle's work is that he quotes without reference to book or page.

The first two chapters dealing with the earth as a part of the cosmos, is sometimes contradictory and often seems week in logic. For example: In discussing the Ice Ages, he follows the old theory that the world's climate was once much warmer and remained so for millions of years. He arrives at that conclusion as have the others by the fact of tropical plant and animal fossils found in polar regions, apparently assuming that there were no ice caps and that it was warm enough at the pole to support tropical life forms. Later, he points out that the poles may have wandered forming ice caps in both Africa and South America near the present equator, but he fails to se that at that time coral and coal could have flourished in Greenland which would then have been near the equator.

Like most astronomers and geologists, Hoyle sees the earth's ear history as a period filled with catastrophic collisions in which the primordial planet gathered unto itself much of the loose debris scattered around through the solar system, but there he stops. Why the sessation of collision as a factor in the later history of the earth? Is it not possible that more recent collisions of large meteorites with the earth could have caused the change of polar axis, the extension of life forms, the submarine canyons, the uplifting of continents and mountain ranges, and the other unexplained phenomena whic he mentions. Likewise he agrees to small collisions on the moon but disagrees with Urey and others that the Maria on the moon are ~~large~~ large craters made by large bodies striking the moon. Later in the book we read that there is very good evidence to show that whole galaxies are in collision. Why then, ths disbelief in collisions of intermediate size that could have produced catastrophic conditions o the earth or moon?

In a further discussion of the changing axis he offers what he calls "The Toppling Over of the Earth." in a series of arguments tha seem most illogical. First he dismisses the theory of continental dri as impossible because he says the earth's crust is far to thick and ridgid to move in this fashion. Then, on the next page (13) he offe what to me seems ~~to me as~~ a still more impossible theory by imaginin

the earth as a sphere of butter through which a skewer is stuck as its axis. By holding the skewer in a fixed position and slowly turning th butter, he gets the polar caps in a new position relative to the fixed axis. Is the whole earth then, less rigid than the relatively thin shell of crust?

Like the advocates of continental drift, he provides no source of power to have produced this gigantic movement, except to suggest that small irregularities such as mountains on the earth's crust, might have cause the earth to re-adjust itself to get in balance. What caused the earth to get out of balance in the first place, he does not say, but he does conclude that whatever changed the earth's axis was a--- "force of outstanding potency snd much more effective than the process of uplift of great mountain ranges."

In his explanation of "Bold's Pore Theory" about the structure of the interior of the earth, Hoyle gets tangled again in the web of fact and theory. First, he claims that the heavy iron and nickel have sunk through the lighter rocks to form the core of the earth. Later, he sa that the lighter rocks have been squeezed upward to the surface and still later he supposes that "The molten material in the thin veins circulate a few miles below the crust." All this, supposedly, under the force of gravity. On page 29 we read, "Indeed it seems that this extension(theory)may provide us with an explanation for the outburst of volcanoes, the incidence of earthquakes, the origin of the oceans, the formation of mineral deposits, and perhaps even the origin of continents."

His explanatin that the lighter rocks would be forced upward is indeed logical, but I doubt that this would happen without some outside force to jar the liquid body, especially,with the heavy lid of th earth's crust on the pot. Most lava is very light, containing only traces of the heavier elements, which bears out his theory, but we doubt that such a mixture would un-mix itself under gravity alone.

Another "Pore Theory" is that earthquakes are caused bylava movi out of a pore and leaving an open space which later may collapse to cause a sudden shock. At once the thought occurs, why did the lava leave the pore unless under pressure, and if under pressure, the wall of the pore wouldfill the pore simultaneous with the upward movement of the lava and cause little if any shock. Thousand of earthquake occ along faults and under mountains without lava being ejected to the su Where does the lava go if it moves out of a pore and dosen't get to t surface? It seems more likely that earthquakes are caused by drag an rebound along faults and by the cooling and shrinking of rocks deep within the earth.

The idea that iron or other heavy element can sink through, and separate from the lighter rocks simply by the force of gravity workin through time, is contradicted by the stony-iron meteorites. These sponge-like masses of rock and iron called palasites or siderites, a accorging to their mineral content, prove that iron and rock can inte mingle, cool and crystalize, in some section of the planet's crust.

There is no proof that the heavy elements can separate from the

light merely by heat and pressure, working through any length of time. If this were so, there would be an acceleration of movement due to the extra production of heat through the friction produced by the light rock moving up, against the heavy metal moving down. Such a system would "feed upon itself" and soon heat up the earth to a point where al the elements would arrange themselves in shells according to their pla in the atomic scale. No rock would appear on the surface, only oceans oil covering the oceans of water.

In his case of the origin of oil, Hoyle concludes that because Dr. Urey found..."certain small concentrations of hydrocarbons in meteorites"....that the deeper parts of the earth's crust may still co tain vast stores of oil, and that the oil found in the upper layers o crust came from this source rather than from fish. This bit of evidence seems very meager indeed, compared to that which has been compiled for the fish theory over the years. The reaching of such conclusions based upon such minor evidence, makes one wonder about other conclusions in the later and more difficult chapters of the book..

On Page 38 we find the continents growing steadly from the constant accumulation of lighter rock beaneath their bases, and all the oceans filling with more and more water. This theory that all the continents must be rising at once like bread dough in a pan, is a little far-fetched. Why don't the ocean floors rise too? And what about the voids (pores) left between, when the continents rise and the iron sin Do the continents lift themselves by their boot straps?

Very good 1984

Most any farm boy can tell uou that if you mix a bushel of wheat with a bushel of oats, that they will not unmix by themselves, but th if you jiggle them all the way to town in an old farm wagon, most of t oats will rise to the top but the grain level will not rise in the bo The same holds true for the earth. The oceans may have been generate out of the hydrogen and oxygen impresioned in the rocks, and the ligh elements may rise to the surface with some jarring of the molten magm but this cannot increase the diameter of the earth.

Perhaps some will think that we are quibbling about minor points and reading into the text, meanings that Hoyle did not intend. If so our reply is that if <u>any criticism is to have real value it must be critical.</u>

In the first two chapters of this book the author deals with pro lems of a geologic nature but the latter 18 chapters are concerned wi atomic physics, astronomy and cosmology. Because much of this latter is based upon speculation, and theory upon theory,, it is difficult criticise without getting into the same rut. And because so many of these statements seem to be of a contradictor nature, and so many conclusions are put off until later in the book; the reader becomes impatient for a condensation of theory, if not of matter. Hoyle finally does wind up in what he calls his "Continuous Origin of Matter" or, "Steady-State Theory."which, if I understand i correctly, means a steady creation of matter in an ever-expanding Universe.

Perhaps I am only perverse, but his conclusions only arouse in

a desire to support what he referes to as the"Condensation Theory." I would call it the Cyclic Theory of Condensation and Expansion; set forth as follows:

The one thing that he seems to prove most certainly, is the everythin in the Universe operates in a cycle. From the very small to the very large. The evolution of the elements in the stars, the novae and super-novae, the galaxies and the super galaxies, all seem to point to the fact that birth, life and death is the central theme of every unit of the Universe, whether large or small...everything moves in a cycle. The cycle of time may be a fraction of a second to billions of years.I all the parts of the whole follow a cycle, why not the Universe itse If we have an expanding Universe now, then someday it must contract. There must be a limit to which it can expand and another limit to whi it can contract

How do we know that the far outer clusters of galaxies are not e now, rushing toward us at some phenominal speed such as 40,000 miles per second that they were speeding away from us some two billion year ago. Obviously, we do not know what is going on in our own galaxy, as of now, let alone the outer clusters of galaxies. We only know what was happening two billion years ago. We can only judge the whole by parts, and we know that the parts expand and contract in a sort of li cycle.

Now, at this point,let me break into the cycle of the Universe at a time when Hoyle suggeststhat it was without solid form, only hy gen gas scattered through space. Let us agree with him then, and foll his path cycle of condensation. until we reach the point in time whe we are now, or think we are, as we peer through our telescopes. From this point onward let us suppose that the stars continue to grow mor dense, the galaxies and clusters to contract and wind themselves ev tighter, and the cluster s of galaxies to contract and merge in coll All is now rushing toward the canter of the Universe. Before, everyt was expanding until it became so rarefied that it could not be drive further by the pressure of light. Then it stopped. Gradually, the f of gravitation began to take over, slowly, at first,and then faster the stars and gaseous mebula rush toward the center again. Collisio become more numerous, and their explosions held back the charging st to some extent, but the forces of gravity could not be denied. Final all of the matter in the Universe was gathered into one vast sphere. Hydrogen, Helium, and the lighter elements were long gone, having be burned in the evolutonary process of forming the heavier elements.

Gradually, the rotation of this lone, gigantic sphere slowed and contracted still farther. It slowly cooled upon the surface and ces to radiate light. Finally, after millions of years, there was utter darkness and rotation stopped. There being no rotation, there was r centrifugal force to oppose gravity. At that instant in time,densit of the sphere was suddenly increased to the crtical point and the whc thing went off in a super explosion at the speed of light.

All the matter in the Universe was suddenly released and reborn again as separate proton, neutrons and electrons. As the Universe

expanded, the electrons began to gather, each around a neculeous, and hydrogen was born again.

Thus we complete the cycle of the hydrogen atom in the Universe. It is not according to Hoyle, but it is condensed.

QUESTIONS_____

Does the light of the Universe slow down as it speed into space, thus causing the "RED SHIFT?

In other words---is it possible that the "RED SHIFT" is not a continuous speeding up of the stars, thus causing them to appera more red but actually a slowing down of the stars and light itself. If light canbe bent by the gravitational force and possibly the magnetic field of the sun, can it not be pulled back again to the gravitational center of the Universe?

Allan D. Kelly

Oct. 20, 1955

I still like this paper in 1989!

A.O.K.

SEA FLOOR SPREADING: FACT OR HOAX?

9-12-1970.

The hypothesis of sea floor spreading seems to have originated with Dr. Robert S. Dietz and a colleague, Dr. Harry Hess of Princton

It was first published in NATURE in 1961, in an article called "Continent and Ocean Basin Evolution by Spreading of the Sea Floor." Dr. Dietz was the author of this article and he later elaborated on the concept in an article appearing in AMERICAN SCIENTIST, March 1964, called "Origin of Continental Slopes." Now comes his latest effort to convince the world of this megafantasy, an article in the SCIENTIFIC AMERICAN called "The Breakup of Pangaea" by Robert S. Di and John C. Holden.

This hypothesis took hold quickly, probably because of the statu of the originators and because earth scientists had been looking fo a power vehicle for continental drift since the time of Wegener. The physical evidence for continental drift had always been con- vincing but the source of power had always been lacking. So when tw leading scientists proposed this fantastic idea, all the institutic of learning in this field, began at once to look for supporting evidence and to find it. Practically all of the deep sea investiga ions were found to support continental drift but to some of us, the power source, the mechanical means and the time element as propose by Dietz and others, seemed fantastic beyond belief, for hand in h with sea floor spreading went the still more fantastic concept of convection currents as the motive power. These two fabulous twins of modern mythology were visualized as carrying the continents abo on their broad shoulders much as Hercules carried the earth.

Both these ideas must be taken on faith because both violate Natural Laws; something analogous to the pulling of a white rabbit

out of a silk hat, we see the end result and we reason in reverse, from effett to cause. The continents have moved; the sea floor has spread; all massive forces come from the interior of the earth, so we dream up convection cells as starting convection currents, which break up the continents, spread the sea floors and so on and on in a never ending cycle, all of this movement so slow that it cannot be measured except by dividing time by distance moved. These latter tw elements are real and measurable but they tell us nothing of how fast the continents moved.

The temptation then, has been to fit this jigsaw puzzle of continents together in one great pancake and give it a name, Pangaea. The name is important! Given a name and a faith, the acolyte can the go forth and discover evidence that will prove his faith, for faith alone, can overcome the edicts of Natural Law.

Since geology is perhaps the oldest of the sciences, a large body of nomenclature and dogmatic theory has grown up and been ingrained in geological teaching. One of these is the theory of Uniformity. Another, is the theory that all forces of a massive nature affecting the rise and fall of land masses must come from the interior of the earth and since even unknown forces must be given a name, this one has been given the name of Tectonics. And so it is that over long years of academic study and writing, the word becomes the cause and Tectonics becomes a natural force, at least in the minds of men. Thus the geologist insists on finding his source of power within the earth, the while ignoring the only other possible source of power, astronomical.

Another way in which the professional geologist deludes himself and his readers, is the use of drawings and illustrations that are

out of scale, often by a factor of ten. By this method, concepts like sea floor spreading can be made to look reasonable when if drawn to scale, (both horizontal and vertical) they would appear absurd. (See Figure 1) In this drawing of the earth on a 1 inch equals 100 miles scale, the pencil line that inscribes the surface the ocean also indicates the floor of the ocean three miles below. In other words, the pencil line is 3 miles thick and 1700 miles lo as it shows the cross section of the South Atlantic ocean from the Mid Atlantic Ridge to the coast of Africa. The Moho discontinuity is only 1/10 of an inch below the ocean floor and the continent of Africa, some 30 miles thick becomes a very thin pancake in relatic to the rest of the earth. In this drawing we see the earth as it not as an artist's conception of what the geologist described to h One wonders if these advocates of sea floor spreading and convecti current theory ever took the trouble to make a scale drawing of th plan or to think the thing through. The articles they have publis are all much too simplistic.

The concept of sea floor spreading based upon convection curre violates three universal laws, ___the law of gravity, the law of c servation of angular momentium and the second law of thermodynami First, a convection cell will not start because hot rock will not rise against gravity so long as heat can rise by conduction throu the rock without loss to gravity or mechanical friction. Therefo heat is rising to the surface of the earth everywhere, ambiant he that can be measured. It rises to the surface in greatest volumn where the crust is thinnest, in places like the Mid Atlantic Ridg or along the axis of the East Pacific Rise.

Some will ask why volcanic lavas reach the surface. The answer

that lava is extruded to the surface by lateral pressures in the earth's crust, probably due to continental block movements that are still going on to a limited extent. Lava may also be extruded by isostatic pressures which operate to bring the earth's crust into equilibrium, but all of these volcanic lavas are not now, and never have been, more than a tiny fraction of the amounts envisioned in sea floor spreading and convection currents.

The law of conservation of angular momentium is violated because the earth spins on its axis and under the convection current concep vast curtains of lava began rising to the surface of the earth unde the ancient continent of Pangaea. This would have thrown the earth out of balance and caused it to slow its rotational speed to conser its energy.

This megafantasy also requires that all of the radioactive heati occurred in one hemisphere of the mantle and that all of the convec cells began to operate at once, in violation of natural law.

Now let us visualize how a group of convection cells might have operated, since ocean floor spreaders refuse to go into these detai Ignoring all interaction between cells, along boundaries and at corners, explained away by Dietz and Holden with one word, "megashe we see the ascending curtains of lava breaking up the continent of Pangaea into seven sections. These sections or continents begin moving away from each other very slowly, perhaps a few feet per yea Into what? Here the sea floor spreaders loose the picture and char the subject. However, if we are not mistaken, those seven continer would have had to move into a solid crust of earth just as thick ar as rigid as it is today, for that was only 200 million years ago,

and we know that the earth had a solid crust at least 500 million years ago. This would have prevented all drift and caused the curtains of lava to rise through the cracks in Pangaea and build long continuous mountain ranges of lava. To complicate matters still more, these rising curtains of lava must divide and turn into long rollers moving away from each other and these rollers gradually elongate into endless belts or sheets of lava forming the spreading sea floor. Since they move so slowly, they must cool on the upper surface into a rigid crust(as we now find them) and at the same time be hot and plastic on the lower side. This poses problems of tensil strength but no matter, the advocates can coin a word to solve that problem. Getting on to more dynamic visions: According to Dr. Dietz and his followers, these endless belts or sheets of sea floor, by some miraculous means left un-named, change into crustal plates carrying the continents. These plates are thought to be rectangular in shape and are divided by something called a "megashear." They s the continent of India riding on a rectangular plate some 2000 miles wide and 6500 miles long. Dietz describes them thus: "We can visua the continents as being passively rafted over the surface of the globe as embedded plateaus of sialic (granite-like)rock resting on the even larger and thicker crustal plates." At some point in time quite unclear, and by some legerdemain still more obscure, the plat disappear and sea floor spreading takes over again. At some point the continent was dumped off the plate and the sea floor started bending down under the continent and thrusting its cold, brittle rock into the hot and plastic mantle, thus continuing the convectio cycle.

The second law of thermodynamics states that heat must always flow toward a colder area, never, toward a warmer area. But here we have cold rock flowing into hot rock. Nothing daunted, our semantics men get around this one by having the cold blanket of rock pulled down under the continent. One is reminded of the old gag.....the chinese description of the street car...."no pushy no pully, go like helly."

Another remarkable claim of the sea floor spreaders is that the deep ocean trenches along the continental coasts, such as South America's west coast, are not tensional in origin but caused by the down-bending of the sea floor. This is hardly good reasoning and one is forced to ask why there are no trenches along the matching coast of Africa? Nor did they explain why; a more or less ridgid sea floor ten miles thick and 2000 miles long, did not follow the path of least resistance and bend upward into a mountain range still higher than the Andes, which mountains, they tell us, were bulldozed upward by the the drifting continent of South America. These observors of Nature should observe the lowly Pocket Gopher who, in building his h and den, does not try to push the extra dirt into the earth but bull dozes it out with his chest and places it on the land surface above.

One might go on and on, filling the gaps in this scientific fantasy, but more important is the question, the psychological questi Why all this effort to prove such an outrageous set of speculations? Are these well known scientists so naive, or just pullling our leg, just trying to prove that scientists and laymen alike are now so accustomed to the great and marvelous things accomplished by scienc that they now accept the wildest ideas proposed by the big names without even bothering to question? Is sea floor spreading just a h

Allan D. Kelly

Dec. 16, 1952.

Dr. Merlin L. Neff, Book Editor
Pacific Press Publishing Assoc.
Mountain View, California

Dear Dr. Nell:

Your kind letter of several days ago was followed by one today from Dr. Price. He offered several suggestion about getting it out in mimeograpy form or perhaps a 1000 copies in a cheap paper cover. This he thinks would get it into circulation and bring forth friendly criticism.

Dr. Price read my old manuscript in 1949 and gave me considerable help and constructive criticism. He is a very fine and able manand it is remarkable how he still retains a sharp and clear-thinking mind at his advanced age.. Dr. Price, in my opinion, will one day be considered one of the greatest geologist of his time. He stood alone, an independent thinker in the field of geology; the onl one who dared differ with the Bourbons of Science. He knew his geology as well as they did, and pointed out the weaknesses in their agruments. Dr. Price's book "The New Geology" brought home to me how many unexplained problems the Uniformitarian geologists face. Now I have found that one can write a book by merely subscribing to the Journal of Geology and other periodicals, reading about their troubl with the theory of Uniformity, and explaining them by Collision Geo-logy. A hundred years ago, Lyell and his uniformity friends, thoug their problems would be solved as men gradually learned more about earth-science, and explored the earth more fully, buttime has only increased their problems. Recently, Guttenberg, of Cal Tech, made the statement that "the unsolved problems of geology are increasing with the increase of factual data, rather than decreasing. Shepard, authority on submarine canyons, in the final sentance of his book, says that--"there is something missing from our basic theory of Geo

Collision geology isbest proved by the very problems which orthodox geology cannot solve by uniformity. We have no quarr with their interpertation of the modern forms of sedimentation, erosion and vulcanism, but to project these forces into the past an say that this uniformity always prevailed is foolish, as they are finding out, but slowly. To them, Uniformity is a holy word, a religion, and they dare not let it go. They cannot loose face and loose money from their pocket books too. <u>There only hope is to igr collision geology and take it over slowly under an assumed name.</u>

The new manuscript is much better than the one Dr. I saw. It contains much new information and was edited carefully by Dachille to eliminate all questionable material from a scientific viewpoint and all sharp personal criticism.

Dachille added considerable new material on the chemis and mathematics of collision and I have greatly enlarged the geolo section. With the continuing stream of new problems being disclos in articles in the periodicals, I have collected quite a bit of

additional material since last July when we finished our manuscript and sent it to McGraw-Hill..

We have been severely criticised for trying to expand "a hunch"(our theory not being given recognition as a hypothesis) into a theory explaining all the problems in the field and others near It is true that we have claimed to solve all the questions they canno solve, by collision and flood, but that is exactly what they have tried to do with Uniformity and failed. It is obvious, that collision on such a tremendous scale as we postulate, is going to affect the who earth, not just one small section or problem. Orthodox geology does the work in the field, around the world. It finds the problems, col- lision geology offers the answers. Example: A recent article in the Journal of Geology tells of geologists from the University of Chicago investigating boulders in Wyoming. These boulders, some of them 20 feet in diameter, had been carried by water,(not ice) fifteen miles out from the foot of the mountains and deposited on a 1% grade. How a small stream could have carried such gigantic boulders to such grea distances over nearly level terrain, is beyond the scope of Uniformi but not collision geology.

Modern scientists have tried to specialize their fields to divorce one science from another, geology from Astronomy, an astronomy from Chemistry etc. But the earth is a cosmic body, a part of the solar system and the universe. A study of the physical featur of the earth cannot be divorced from astronomy any more than we can separate sedimentation from erosion. Yet modern geology ignores col sion. It tries to separate geology from astronomy by projecting our present conditions into the indefinite past, as if the solar syste itself, might be explained by erosion and vulcanism.

Collision geology is so "pat", so perfect, so all inclu so obvious, that one wonders why someone did not think of it years a But God somehow hands a new key of knowledge to someone who least expects it or deserves it.

Dachille has the No. 1 copy of our manuscript and I ha loaned the No. 2 to a neighbor to read, but I will get in touch wit Dr. Price and see whether he cares to read our new MS and make a re condemnation to you. Neither Dachille or I are in a position to sp money on publication at this time, and so we are trying to find son publishing house, foundation or Society that will do the job.

Sincerely

Allan O. Kelly

Re-copied from the origional carbon copy.

AOK--1987.

October 16,1952

Dear Allan:

Received yours of 10th and 13th. See that waiting is hard for you too. "Seismicity" must have had a strong impression on you. If Gutenberg and Richter have so much, and Dietz did so well, it is a wonder that anyone can maintain a resistance to the reality of collision.

I did not send those additional paragraphs of Epilogue to H.H.. Thought it might be best to do so after they give indication of accentance. Dr. Cassidy and I spent a little time with it Sunday, and he really surprised me with his full acceptance. Claims that it falls right in with the whole purpose of the book. He is going so far as to start thinking of life processes in men while way out in non-gravitational space! He has read Von Braun's article, thinks it is more encouragement for us.

Our discussions of world shifting and safety I believe will come closer to being realized than most of the rocket stuff of the imported scientists. That jackass who proposed colonizing a planet about some other star, involving a rocket trip that would require 30 generations of men and women living and dying on the way must have been trying to establish some kind of record. The New York Times devoted quite a bit of space to him in a serious tone. I firmly believe we should devote ourselves more to good old battered Ma Earth.

Kinninger is being quite catty in chiding you for not visiting Carolina Bays. Has he been to Australia or North Quebec to see the meteor craters there?

Have written for a copy of Geology of Florida for you. You should get more out of it than I. A small sample of white sand, almost pure quartz, should be on way to you. My color slides did not do so well but shall post some to you along with yours.

Hope those crazy oil men strike oil with Bumblebee luck. May give you a chance to look at Carolina Bays.

Regards,

Frank Dachille

See IMPACT GEOLOGY (Allan O. Kelly 1985)pages 170 to 173, [illegible]

AOK

THE GIGANTIC CONE STRUCTURES OF THE SIERRA NEVADA.

Jan. 20, 1972.

My interest in giant cone structures began in 1965 when the Meteoritical Society, meeting that year in Odessa, Texas, sponsored a field trip to the Sierra Madera Structure to search for "shatter cones" and to view that ancient impact scar on site. After an interesting day of hiking and looking for shatter cones we returned to the bus on the highway and while waiting there, Dr, H, H. Nininger, pointed out that at a distance of about three miles(from where we stood) the central peak of the structure, which is about 1500 feet high, appeared to be a giant cone-on-cone structure made up of a number of peaks each two to three hundred feet high, mounting up one upon another to the top and, as he said, duplicating almost perfectly the cone-on-cone hand specimens we had found on our hike up the canyon of the central peak. I was greatly impressed with this suggestion and a few months later wrote a paper on the subject entitled, A Water-Impact Hypothesis for the Sierra Madera Structure in Texas. (See METEORITICS, Vol. 3, No. 2, Nov. 1966)

It has been generally known for more than ten years now, that major meteorite impact can produce shatter coning in the basement rock around and below its crater basin; that the cones are made by high velocity shock waves penetrating the solid rock under and around the walls of the crater and that these

cones point toward the center of impact or more precisely, the point at which explosion took place, whether at ground zero or above or below the surface and to some extent, the direction from which the striking body came. Because shatter cones could not be produced by laboratory experiment, geological authorities were long in doubt about the impact theory and had given these structures the name "cryptovolcanic", but when shatter cones were produced at the Atomic Proving Grounds in Nevada, all doubt was laid to rest, for volcanic explosion does not have the capability. With this information at hand, shatter cones became the generally accepted means of identifying major impact scars where long-continued erosion had removed crater rims and other surface features and now some 20 of these gigantic scars called "astroblemes" are reported from various parts of the world. (See Shatter Cones in Astroblemes, R. S. Dietz, METEORITICS, Vol.5 No. 4, 1970)

It should be pointed out that shatter cones are not spread uniformly around and under a crater basin but are likely to be found in irregular patches, some areas being entirely free of these.indicators. This is true of the Malbaie crater in Quebec an ancient crater basin some 27 miles in diameter with a centra peak over 2000 feet in elevation. The Meteoritical Society visited this crater on a field trip in 1968 where we were shown shatter cone striations in limestone and at a point along the road several miles distant, other more coarse striations in a metamorphosed granite. Other exposures of rock along the road

cuts were barren of shatter cones but our guide assured us that there were many other locations out of reach by bus.

With this rather long introduction to the subject, I come to a description and discussion of the giant cone structures of the Sierra Nevada. These giant cones line the wall of the Sierra for a distance of over 100 miles, beginning just north of the town of Inyokern and continuing northward to the foot of Levining grade, north of Bishop, California. They are not continuous along the Sierra wall but interspaced with typical canyon and ridge topography where none are seen. In elevation they appear to emerge from the mountain wall just above the valley floor, about 5000 feet, and they fade out at about 10,000 feet. Above this elevation, the Sierra crest is lined with a series of glacial cirques that are in turn, topped by rows of narrow pinnacles that have been formed by the weathering out of the vertical fractures in the granite. (See Photos 1, 2 & 3) To the west of the crest, this great batholith is seen as a vast blanket of domes and valleys, cut by a few deep canyons, but practically devoid of sharp cones or pinnacles.

The interesting question is this: Why do the giant cones appear along the eastern face of the Sierra while the western slope remains barren, except for those unique examples in the Yosemite Valley known as the "Three Brothers?" There may be other examples of these giant cone structures in the deep canyons of the Kern and Kings rivers but if so, I have not seen or heard of them. (See Geology Illustrated by John S. Shelton,

1966, pages 384 to 390....aerial photos of Sierra batholith)

The obvious answer is that these giant cones may be scattered in patches under all of the vast granite blanket covering the western slope, and given sufficient time, many more of these cones could be uncovered by erosion, just as they have been in the Yosemite Valley. The reason that they are seen in such numbers on the eastern wall is that the Sierra batholith was tilted around a north and south hinge line so that the eastern side was exposed as the western side sank, the latter now being buried under the thick sediments of the San Joaquin Valley.

But how can one prove that these giant cones are of asteroid or cometary impact, you ask?

Well, first we must consider the cause of fracturing,____ how a granite batholith deep below the surface of the earth where the mother rock has never been attacked by weathering, could have been cut or broken by so many tiny fracture lines?

Geology textbooks, for some reason, rarely discuss this problem of fracture origin in granite batholiths. In fact, a search of 12 modern textbooks, including the United States Military Academy Atlas of Landforms, revealed only two books, (Principles of Geology, 2nd. Ed., 1959, Gilluy, Waters & Woodford) and(Physical Geology, 1962 by Longwell & Flint) that even mentioned how such deep fracturing in granite might occur. Instead, all lay great stress on how weathering shapes the rocks,___how water, ice and plant acids, penetrate the fracture

planes causing faster erosion and decomposition along these planes and so produce, boulders, domes, wedges, pinnacles and other rock forms. The two textbooks mentioned above did call attention to lateral pressure in the earth's crust as the probable cause of vertical faulting and Flint reasons that the cause of layered fracturing in the domes and flats of the western Sierra slope was the unloading by water and ice erosion of great quantities of rock and sedimentary debris as well as the ice load, so that the batholith expanded upward. This is good reasoning, but nothing is said about cone fracturing. Apparently, these giant cones on the eastern wall, if noticed at all, have been considered as merely the product of weathering, for the deeper problem is easily overlocked.

It seems quite obvious that lateral pressure in the earth's crust, whatever the source, could not produce cone fractures in a granite batholith with the cones pointing upward. The earth is a sphere and lateral pressure could only produce vertical faults pointing toward the center of the earth like the cuts of a pie. Also, lateral pressure would be less at the surface of the earth than at depth so that any opposing pressures would produce wedge faults pointing down, not cones pointing upward. There are, of course, plenty of examples where once flat sedimentary strata have been folded so sharpl that they have broken into wedge shapes pointing both up and down but nowhere in these rocks do we find giant cones on a similar scale that can be attributed to lateral pressures.

If the reader is still unconvinced, then try to imagine how lateral pressure could have produced the jumble of giant cones on the eastern wall of the Sierra Nevada. Let him draw the vector fields of pressure that would form these giant cones mounting up one upon another. It is not possible!

The answer then, must lie in massive collision, a collision of such size that it projected shock waves through the earth's crust and into the upper mantle, thus causing the giant cone structures. They are large because made by a very large impact event and the cones are in scale with that event. Lesser impacts have produced lesser cones in scale.

It seems quite certain too, that a collision of this size would have produced a lava pool of a size and depth rivaling that of Mare Imbrium on the moon and would have penetrated through the crust into the mantle, assuming the crust to have been as thick as it is now, 20 to 30 miles.

The rebound from the compression of impact, would have started the formation of the batholith and it would begin to rise in a wide, flat, dome structure. As it moved slowly upward toward the surface, erosion, as slowly, removed the overburden of lava and sediments that must have accumulated over the millions of years of time. As this gigantic mass moved upward, it tilted somewhat to the west, probably because of the sedimentary overloading on that side and also because of another cataclysmic event that produced the San Andreas Rift across its western side. The western side of this continental

plate may be over-riding the Sierra batholith and pushing it down somewhat, as it slips to the north in occasional quakes.

What we see now of the Sierra Nevada batholith is its upper portion (less that part removed by erosion) from which all shock fracturing was removed by heat from the lava pool above. The vertical and lateral fracturing seen in the granite of the western slope is nodoubt due to the release of pressure and the batholith expanding, just as Flint conjectured.

The giant cones exposed along the eastern wall of the Sierra and those still hidden under the blanket to the west, represent the original giant shock wave pattern made at a depth well below the bottom of the lava pool. Here, the mantle rock was already hot but still rigid enough to fracture and deep enough so that the fractures were not removed by partial melting.

I have looked for shatter cone striations in the granite outwash boulders that line highway 395 but have not found any as yet, however, it may be that none will be found of a size we now look for in astroblemes. We may need to look for striations in scale with the giant cones. Finally, it may be that all granite batholiths are of impact origin, whether large or small, and that each must differ from the others in some respects, because of the great differences in the dynamics of origin.

In conclusion I would like to stress one point: That giant conical fracturing could not have originated from any forces coming from within the earth.

Signed 
Allan O. Kelly.

University of San Diego

June 6, 1973

Mr. Allan O. Kelly
4675 El Camino Real
Carlsbad, California 92008

Dear Allan,

I was extremely pleased to receive your letter. Since leaving Scripps I seem to have lost contact with so many people.

I read your paper with the same interest I have always had in your work. As usual you pose an argument that will be most difficult to counter. I hope my own papers show the same adherence to logic, and that my arguments in support of my own controversial ideas in the field of archaeology will pose the same difficulties for opponents.

I like your theory regarding the preference for the top of passes for occupational sites. My own experiences here in southern California support this.

Thank you very much for the excellent slides you sent. I will gratefully use them in my classes. Good illustrative material is so hard to come by..

I am going to take you at your word and if you will be available in the Fall I will call you and, if you agree, I will bring by some of my students some Saturday morning in the late Fall.

Again, it was a pleasure to hear from you. I have enclosed a collection of my publications. I hope you find some of them interesting.

Sincerely,

James Robert Moriarty, III
Professor
History and Archaeology

JRM:ncm
Encls.

OBSERVATIONS OF POSSIBLE GRAVITATIONAL FISSION IN WESTERN AMERICA, MEXICO AND THE SEA OF CORTEZ. DECEMBER, 30, 1976.

My main purpose in taking this island-hopping trip down the Gulf with the University of California Extension Service, was to study the islands in the Gulf and the shore of the peninsula---not from my usual impact point of view, but to look for possible evidence of gravitational fission and crustal disruption. I had not expected to find any evidence of major impact craters, for I had flown over the peninsula several time and studied high altitude photographs of the area so that I was quite certain that impact was not the answer to the origin of the Gulf or the peninsula of Baja. Also, I was well acquainted with the widely accepte theory that the peninsula and, the upper California area west of the Sa Andreas Fault, was part of a continental plate split off from the North American plate, and still moving along that plate to the northwest. Wha interested me more was the possibility that gravitational disruption ha been the moving force; that this was a part of a much greater area including the west coast of Mexico, part of Arizona, and all of the Great Basin up to the Canadian Boundary, a theory that had occupied my mind since studying the photographic evidence that had been returned by the Mariner 9 probes of Mars.

The possibility of gravitational disruption as a dynamic force in earth history, first came to me in 1973 following the Mariner 9 probes. I saw the difficulties of trying to explain the giant canyon, Corporate or the huge volcano, Olympus Mons, ___features at least ten times as gre as any features of similar kind on earth. The volcano, 15 miles high and 300 miles across, with a mighty escarpment around its perphery ove two miles high. The canyon, Corporates,was variously reported in the news media as measuring 2200 miles long, 150 miles wide, and from 5 to 15 miles deep. "Another inigma wrapped in an anomaly."

When the first good maps of Mars became available, it was seen tha these gigantic features were only a part of the features in a pathway angling across the equator of Mars for a distance of over 7,500 miles, more than half way around the circumference of Mars with an average

FOOTNOTE : This paper was written to eliminate the log part and concentrate on the scientific speculations.

AOK:1987

width of about 2,000 miles. The remainder of the Martian surface, excepting the polar caps, was covered as completely as the moon with impa craters, and no volcanic craters to be seen anywhere excepting those in the pathway. The pathway itself, was almost devoid of impact craters except for a scattered few small and recent ones. Along the edge of this pathway(featureless plain) was a border of half crater rims simila to those seen on the edges of the great crater-seas on the moon.

What was the origin of this 7,500 mile pathway, these outsized volcanoes, this huge canyon? What force within or on the surface of Mars could have gouged out this canyon and removed from sight, some 2 to 3 million cubic miles of rock, ___and right next in line---build a volcano 15 miles high. It came to me then, that only some super-gigantic force like gravitational force coming from a body much larger than Mar and probably moving nearly parallel to the Martian orbit, could have ripped off this canyon crust and carried it away into space or, could have sucked up lava from the interior of Mars, to form the huge volcan Or, could have erased the old impact craters that had once covered thi surface of Mars; certainly not erosion or vulcanism as we know it on e

So I wrote a paper called: The Gravitational Disruption of Planets Earth and Mars: A Speculation. That was in May of 1973. Then, in Dec. of 1976, following the Viking I and II probes, I wrote another paper based on new and better information. This 1976 paper was called: "The Gravitational Disruption of Mars: Speculation, Theory or Fact? Neithe of these papers was offered for publication because a similar one whic I had written in 1974,___Introduction to Impact and Gravitational Disruptive Theory was turned down without comment by both geological and astronomical publications, and I.decided the time was not ripe.

Then in March and April of 1976, I made a trip to Kitt Peak in Arizona, and other trips to eastern California, Nevada and Idaho. It was on the trip to Kitt Peak that I began to see the anomalies that could not be explained by orthodox geology, impact geology or plate tectonics. I had suspected Kitt Peak of being a central rebound peak from a very ancient impact whose crater rim had been largely eroded aw Then I began to see that there was no reasonable explanation for all o

the lava plains and mountain ridges scattered across southwestern Arizona and down into Mexico, and up through Nevada, Oregon, Washington and Idah to the Canadian border. How could all of this vast area of volcanics with its parallel ranges of mountains, have come into being without volcanoes? Here is an area of approximately 600,000 square miles that is predominately lava and metamorphic rocks, with only small remnants o sedimentary rocks and scattered granite outcroppings like Kitt Peak. There are many small cinder cones and lava flows along the margins of this vast area, including the Columbia Plateau (called scablands) that covers and area of nearly 10,000 square miles of flat beds or flows tha resemble the huge lake-like impact scars on the moon called the maria. These flat-lying beds of lava have no relation to the row of true volcanoes that range north from Mt. Shasta to the Canadian border. Where did all of this lava come from? Could there have been a gravitational encounter far back in the earth's history when the crust was stripped off down to the Moho Layer, where the tensil strength of the rocks was deminished by heat to the point of giving away to the gravitational pu or what? Did this moving gravitational pull string out the mountain ranges of the Great Basin in their north and south direction, and on down into Mexico?

The above questions and more, I considered in a paper entitled, "L of a Trip to Kitt Peak." I finished this paper March 23, 1976, and sen copies to Dr. H. H. Nininger, and his son-in-law, Glenn Huss, director of the American Meteorite Laboratory in Denver, Col., who accompanied me on this trip.

Then in October of 1976, I added another five pages to the March 1 paper pointing out that Kitt Peak was a giant cone-on-cone structure of granite surrounded by level lava plains, and, referring to a paper wrote in Janurary of 1972 (The Giant Cone Structures of the Sierra Ne I proposed that these giant cone structures are the result of massive impact, and that there is no orthodox geological explaination for the I also pointed out that this vast area of possible gravitational fiss which I had called the Mexican-American-Massive, was bounded on eithe side by upturned blocks of crust. That the mountains on the west sid from the Canadian border to the tip of Baja California, were tilted u

toward the east, and that on the other side of this long strip, the sedimentary rocks of the Colorado Plateau were tilted up toward the west not as uniform or as regular as those on the west side, but strongly marked by the tilt of the Hurricane Fault as seen in southwestern Utah and on down into Arizona. Aerial photos showremnent blocks of the Colorado Plateau just west of the Hurricane Fault that have slumped down well over 1,000 feet. Orthodox geology sees these blocks as good evidence of downfaulting or slumping but they do not offer a reasonable explanation, either for the blocks or the whole basin. How could the crus of the earth opened up and the two sides moved away from each other for and average distance of 400 miles---and with an average slump of only about one mile? Time is not the answer, it ignores erosion and sedimentation.

That the crust of the earth is under compression due to gravity, is very evident in the fact that earthquakes are the product of strong lateral pressures, that cause one side of a major fault to move against the other in sudden jerks. Earthquakes of what ever size, do not cause the plates to separate and to move apart for more than a second or two. Man has never seen the earth open up with long strips falling in to form Grabens like the Owens Valley of California, and there is no evide that this could happen in any length of time, gravitationis too great. Everything indicates that the crust of the earth is under strong compression, otherwide there would be much bumping and jostling about, amor the plates, with endless earthquakes.

All the evidence indicates that the earth is in near perfect equiliburim, due to gravitational and rotational forces, together with the forces of erosion, sedimentation and isostacy,___all continually working together to bring the earth into a more perfect balance. Only the extra terrestrial forces of cosmic collision and gravitational fission can alte this movement toward a more perfect sphere, and perhaps the radio-active elements within the earth---to some small degree.

It was with these ideas and speculations in mind that I wanted to take the island-hopping trip down the Gulf of California, so with this long preamble on WHY, let me recount what I saw.

The whole peninsula of Baja California and the Gulf, fit the picture

We know that the crust of the earth moves. But how? If pressed, the advocates of plate tectonics offer a two word answer___seafloor spreading. If pressed more we get two more words---convection currents- a movement of magma in the mantle, and if pressed for more detail we learn that radioactive elements, deep within the crust have arranged themselves in long, narrow lines where the plates are joined together. Why? Well---new facts start as speculation, and we must have faith. Now faith, we know, moves mountains so why not continents? But how, one may ask, can any or all of the plates move if packed together so tightl; Where is the vacant space into which some plate may drift??

Suppose, for analogy, we have a pond frozen over with thick ice, an suppose we crack that ice into several plates by some method. Will the plates of ice drift? The answer is no, but if we remove one plate, then the rest may move about if unstuck from the banks of the pond.

The continents move, we know, but the advocates of Plate Tectonics have never figured out how to remove one plate. Could gravitational fission have ripped off the crust and releived the compression?

To apply gravitational disruption theory to the Gulf of California and the Baja Peninsula---as part of the Mexican-American Massive described earlier: Suppose an object many times as massive as the ear passed by at a distance sufficient to raise a circular mound of cru some 500 miles across or about the extreme width of the Great Basin. Suppose that it pulled away the center of this mound as the earth turn on its axis under the focus of attraction 400 miles wide; that this central part was pulled away into space and the 50 mile wide strips on either side broken up but tilted upward, the center broken up and shaken as by a giant earthquake, and as the focal point passed, the mountain sized blocks let down again with all of the lesser debris, the whole wedging together again and tilted in various directions. This is what one often sees in traveling across the Great Basin or down the Gulf among the islands. The high escarpment that forms the eastern side of the peninsula has been lifted and broken up into elon ated sections that have slid down into the Gulf, some tipping north and some south and some having slid out into the Gulf to form the isl Isla Angel de laGuardia, for example, is a long narrow island with de canyons coming out of a high ridge that reaches elevations of over 3,

feet. It lies about ten miles off shore in deep water, and in cruising along the eastern shore close in to the cliffs, we saw only a few small beaches at the mouths of canyons. We dropped anchor off one of these and our tour guide took a party on a hike up the canyon to show us the elephant trees that grow there. A herd of sealions were hauled out on this little beach basking in the sun. A few barked their displasure at our intrusion but the pups swam out to greet us.

The eastern shore of the Gulf is quite flat for many miles inland and very different from the high escarpment along the other shore. This might indicate that the proposed gravitational ripoff, not only tore out the Gulf but tilted the peninsula and pushed it to the west. The rock material coming out of the Gulf being carried away into space. It would seem logical, that any force sufficient to break loose the crust of the earth, would have the power to carry it away into space against the pull of the earth's gravity.

The long history of the earth may be better explained by a series of gravitational ripoffs. The deep oceans may have had their origin in such gravitational encounters, and this may be the reason that there is so lit evidence of large impact craters on the earth. Craters of 50 to 100 mile and with central peaks to match, like those we see in such abundance on Mercury, Mars and the Moon. It may be that our ocean basins are of the same origin as the featureless plains on Mars except on a more gigantic scale to match the larger size of the earth as compared to Mars.

Granted that most of the above observations are speculation, and shoul be taken as such; it is also true that much of present day theory about Plate Tectonics and seafloor spreading is equally speculative. Both are based upon physical evidence that can be seen and tested, and compared as time marches on, and more and more data are gathered.

THE TRIP TO SUDBURY CRATER IN QUEBEC, CANADA
August 10, 1978.

My son-in-law, Marvin Sippel, drove me to San Diego to catch the United Airlines to Los Angeles. I was lucky---got a free ride around the terminal by a Canadian girl who showed me the way to Canada Air.

Took off for Toronto on a wide-bodied D.C. 10. Got an outside seat by a window. This plane has two aisles, two seats on each side and four seats in the middle. Sat near a couple from Windsor Canada who were going home from a two week trip to Hawaii, had quite a talk with him a good Canadian Scotsman. Windsor is just across the river from Detroit.

The trip had been toohazy to see much of anything over the deser and the Grand Canyon area was covered with clouds, and did not see land again until we looked down on Lake St.Clair. Arrived in Toronto about 4:00 PM, their time.

I got through customs without a hitch except that the girl in San Diego did not get my suitcase beyond Toronto so lost about 2 hours getting this matter cleaned up, then took off on Air Canada flight 378 to Sudbury on Boeing 727---more coffee---much needed. We had had a real good luncheon on the morning flight---three lamb chops, tuna fish salad, green peas and biscuits.

Arrived in Sudbury at 6:00 PM, got limosene out to the College about 25 miles. The driver took all the Canadian passengers to the homes. The ride cost me $4.00 and was given a phone number to call for my return trip.

Took some late evenig shots of Lake Erie as we passed over.

Got my room number OK but could not find it until finaly---a chineese girl student told me how to get there, my number M-17-4. M is the floor, 17 is the section, and 4 is one of four single roo with single bed, bath, closet, desk, bureau, chair and reading ligh One small window that could not be opened and double sheet of glas Laurnchine University is a new university completed in 1960 with very fine buildings. It represents the merger of the Catholic, th Luthern and the State University of Ontario who joined forces to build a top quality university.

Already I have seen thousands of acres of glacial polish and a beautiful lake northwest of the University.

NEXT DAY

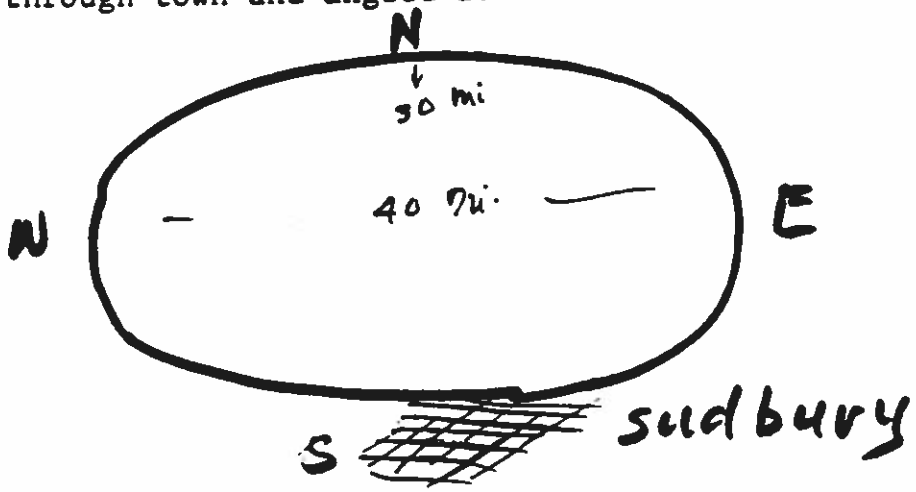
Spent all day roving around the campus learning were things were located. Went up to the 11th floor of the library, tallest building on the campus, and took pictures. Then to the science building where I met some of the professors who were working on the program for the following day. Went to cafateria for lunch and looked for shatter cones in the rock walls and took pictures of the shatter cone in them. Went back to the library and the girl at the desk gave the key to the roof, so I went up and took more pictures of the surrounding country. The smogg had blown away.

Back to my room where I met a young French Canadian scientist,--Denis Roy in the room next door. He is a teacher in a college in northern Quebec near Lake St. Johns; a very able and friendly young scientist.

Frank & Lilly Dachille showed up about this time. They already knew Roy and we got invited to dinner by Lil, she had brought along food to cook in the kitchin they had in their room. After dinner we went down town with Frank & Lilly---shopping in the big food mart until closing time-- 9 Oclock.

SATURDAY: First day of field trips--Breckfast with Lilly. Took bus to the library building at 8:00 AM. Met two geologists. One works for INCO, and the other, Michal Denice "Dense" is a State Geologist who has investigated nearly all of the impact craters of Canada. A fine young man--good sense of humor, and a good impact geologist.

We went through town and angled across the crater basin to the north rim



We made about four stops along the big 4 lane highway to look at rock formations in the cut banks as we crossed the several folds in the south rim. Then they took us on a hike to see some features and structures where there was no trail or road, we just hiked through the brush and scrub trees. scrambled over broken rock and up glacial polished outcropings to the top of a small mountain and down the other side and across a vale hip-high with ferns and goldenrod. Up another steep mountain, down the other side and into a canyon that led back to the highway. Lunch at 1:30. Tired and foot-sore? YES! Lil made it all the way with a little help from Frank. It must have been at leas two miles & hot and humid---everybody wringing wet with ~~aw~~ sweat.

We made several more bus stops in the afternoon, one of which was a 1½ mile hike over fairly good ground and only a little uphill to th top of a dome where we could look at a certain strata and overlook th west side of the crater basin. Home by six oclock and dead tired! Got half-hot bath and changed cloths, and lil got us all a steak supp with her own home-grown vegetables. And was it GOOD. What a gal! We talked until 11:00 oclock.Roy was included in this supper. Lilly finally chased us all off to bed. I couldn't sleep!

Next morning had breckfast at Lil's and off to bus at 9:00. Not big a day. Went across the basin to look at some structures on the N side, and then headed south. We only had one small hike this day an Lil stayed in the air-conditioned bus. It was up and down some very steep climbs alongside of some old abandoned mine shafts, about a mi hike and back to the bus for lunch at 12:30. Plenty of beer and a sack lunch like yesterday---3½ sandwitches, a can of Fiesta, a Chocl cake and an apple.

After lunch drove to south end of basin, which is 40 miles long about 30 miles wide. Its crater rim was probably much greater We stopped at the southwest end of the basin where the river drains ou through a channel perhaps 250 feet deep and into a lake. Here we h for impact glass breccia which is the same in origin as the impacti on the small craters. These tan colored balls about 18 inches in d (the biggest we saw) were to be found in the glacial gravels where they had been dropped by the melting glacier. We stopped on the wa back to look at another formation where the ice-polished breccias

looked like leopard spots---saw lots of shatter coning in the rocks in the cuts along the highway. Two stops back along the highway we were shown the best exposure of large shatter cones to be seen in the Sudbury Structure. Some are four and five feet tall and half as much across the base. Took lots of pictures but could not find a good hand speciminé, the ridges and troughs between are to big to see plainly.

Lilly climbed over the rocks too, but no long hikes this day. It rained hard for about a half hour while we were returning to the colleg

Monday: Up early, (Dennis knocked on my door) and we went down to the second floor apartment of Frank & Lil were we had breckfast. Got down to Science Building at 9:00 for first session. I forgot to say that we went to a reception last night on the 11th floor of the Library where we met the new arrivals and had drinks and d'oeu-vres. New arival included Bob Dietz who seemed really glad to see me. Also, Paul Barringer and wife and Glenn and Margaret Huss, also young Huss, a college boy giving a paper. Glenn is not well, all crippled up with arthritis, has had to have an operation on his wrist and hand to scrape the bone. Margaret too, is afflicted with it. Glenn looks old for his age.

Also shook the hand of Dr. Ralph Baldwin. He knew me at once but did not seem very happy to se me.. Next, several other old friends that I have not known very well in our meteoritic society. Bob Dietz told everybody how rich I was and suggested that I finance an expiditi to Algeria to see another possible meteor crater. He has grown older, his hair is getting grey but he is still strong of body. Many new faces among the young scientists but only two or three who impressed meas being more than average. Had much friendly talk with my fellow amateur scientist--Oscar Monig(Texas department store owner)who is sti able to hike over the hills at age 76. Finished the morning on comets and asteroids, went to lunch at the cafateria and back for the afternc session. Had dinner with Frank, Lil and Roy, then went for a walk and so to bed.

Tuesday--15th. Up at 6:00 AM had breckfast with Frank & LIl. Ther went to first session at 9:00 but couldn't stand the big word strain. Went for a ride with Glenn & Margaret in their new Toyota to see abou fixing something--drove all over town found a garage but the man said there was nothing the matter with his car.. I think he is just proud

Back to the session at !!:00 listened to some dull papers and then went to lunch. After lunch I had a talk with Dr. Baldwin and told him about the Carlsbad Astrobleme but hedidn't seem impressed.

Frank had the first paper after lunch--gave a very good talk on impact electro-magnetic-effects---separation of heavy iron from electro and that the force of impact causes a electronic force that builds a magnetic field in bodies like the moon and mercury. Dietz & Company tried to throw cold water on Frank's theory. Then Fudeli made a good report on a glass filled crater in Tasmania---small but extraordinary of black glass. These were the only talks I could understand, all oth were so mumbled or jumbled by language or diction that I could not understand. Dennis Roy was clear but I did not think much of his subject. Back to my room for rest and then went to the Annual Dinner at 7:00. I talked arm off of an astronomer--old man knox, a Canadian. A big dinner with wine and roast beef.

French Canadian president made a 45 minuite welcome speech of whic I didn't understand a word (but I was told)was about the great acheiv ments of the medal winner. Then, after more introducts, Baldwin was the featured speaker---a full 1:15 minuites with slides at the end--- a complete history of meteoritics. He mentioned everybody but Kelly & Dachille and TARGET:EARTH. Harvey Nininger did get some small mentior but not what he deserves. Just big deal about what Baldwin had done. He should get the medal next year. Baldwin gave much credit to Dietz who was glowing with pride, and a few others but not Anders or O'Keef

Sat with Monig, Dachellies, the Husses and one other couple. And it was HOT! HOT! HOT! Took shower and so to bed---after writing up this log.

Tomorrow we go to Lake Huron. Allan B. Hall

Comments on Manuscript "A New Approach to Geology"
By Mr. A. O. Kelly

The author seems to have misunderstood two very important principles. First the principle of sedimentation, second certain principles of dynamics. I shall discuss these in the order stated.

Principles of sedimentation. At several places in the manuscript it is evident that the author believes that large sedimentary deposits were formed very quickly following the collision of a body of asteroidal dimensions with the earth. Such a deposit would certainly be of extremely coarse material with very little rounding of the sharp corners of the fragments. Even the fine sand would not be held in suspension long and could hardly form the well stratified beds of sandstone that make up such a large fraction of the known sedimentary series. According to the author's idea, most such deposits would be of the character of flood deposits on a huge scale. In contrast with this view, coarse conglomerates form a very small percentage of the total of geological strata. Without going into details, this difficulty appears inmany of the statements made in the first five pages and also in a statement on page 12 concerning deposits left by great icebergs. Such berg deposits would inevitably be the unsorted morainal type of material and not the well stratified gravels that the author mentioned.

Dynamical difficulties. On page 13 the author's statement that the gravitational pull of the earth would sort out the large and small meteors is incorrect. The gravitational pull would affect all alike. On page 14 there seems to be a misunderstanding of the principle of relative motion. It does not matter whether the earth moves or not, the collision with a given relative speed and relative direction would be all that would determine the result. On page 20 the explanation involving a scale model of the earth contains a fallacy that would be obvious to any engineer. The author has failed to realize that as linear dimensions increase the mass increases as the cube of those dimensions. To take a simple analogy, one might have a steel cable long enough to break

under its own weight and yet a 1/100th scale model of the same cable and built of the same material would be perfectly safe.

Other Comments. The author refers to the smooth peneplanation as caused by enormous waves due to planetoidal collision. Such a sudden flood could not produce a smooth surface but would scour out the weaker materials leaving the harder projecting as hills. Only long continued erosion could insure the leveling off of all the irregularities of the surface. Explanation of mountain folding by such a collision would seem to require a very special arrangement of ridges. Around the point of impact there should be an approximately circular ring of disturbed strata. Such an arrangement, of course, is observed in the mountainous ring around the Pacific but it does not account at all for the intensely folded belt which was produced at the same time through the Himalayas and the Mediterranean region. Going farther back to the Appalachian disturbance, the folds of the same age which cross Europe do not form a circular arc in continuation of the Appalachians.

On pages 7 to 9, his discussion of lunar topography appears acceptable. The ideas expressed seem to have a considerable following among astronomers. If such features were ever present on the earth they seemed to have been obliterated by erosion. Since the features of the moon can not be dated relatively to geologic time, it does not seem possible to use them in any way as an argument.

Note unsigned by

Prof. Pettyjohn
University of Chicago

AOK.
3/5/87

Carlsbad, Calif.
May 25, 1981.

THE EDITOR

Re: Plate Tectonics Questioned.

We have seen a continual stream of articles and references to Plate Tectonics in the news media and in the scientific journals having to do with the earth sciences. Practically 100 % of this news accepts the theory without question, which, may only indicate how little interest in depth, most of the scientists have in the subject. The lay people, of course, accept the theory without question for who wants to make himself a laughingstock by criticising the authorities.

Science is supposed to be in the business of searching out the truth but in recent years the method seems to have turned into jump-on-the-bandwagon for some speculation that soon becomes a theory and then into dogma which, in a few years, becomes truth.

Plate tectonics has become a dogma and all the reasons why it is unsound and unworkable are being shoved under the rug. The basic laws like gravity and the second law of thermodynamics are ignored and hundreds of millions of dollars are being spent in researching the minutia of every kind...any fact or feature no matter how distantly related to the subject.

Why is this so, you may ask? What is the reason?

The great bulk of scientists today work for some governmental agency university or college and are thus supported by public funds. Private research goes on, of course, but the great bulk of scientists now work for the taxpayer....government subsidy, especially in some fields.

Plate tectonics, once known as "Continental Drift" is one that is almost entirely supported by public funds and, with good reason, for it encompasses the whole earth and all of the natural sciences. This means bandwagons for all. Everybody is finding relevant facts support plate tectonics, no matter how frail the evidence.

Geologists, who are the main backers of plate tectonics, call upon radio-active elements within the earth for the fantastic amounts of energy required to move the continents (plates) but they are only speculating that these elements are in such abundance somewhere within the earth. From this speculation they conjure up another.....that the heat thus generated produces convection currents that start slowly very slowly, to rise to the surface of the earth along the cracks between plates, mostly on the ocean floors. This speculation then turns out another called "sea-floor-spreading. This one is within reach of our scientists. They can sample the ocean floor, take pictures and drill wells to get cores of the suboceanic crust, but we notice that whatever they find, it is claimed to support their theory or, if it doesn't support, is left unmentioned and awaiting a solution. After all, the main purpose is to keep the grants coming.

Astronomers and physicists who know the basic laws of celestial mechanics, must know that all this talk about sea-floor-spreading and convection currents is a lot of propaganda to keep the research grants flowing but many of them are on the same ~~same~~ gravy train, and..... besides, it is not considered professional to criticise those in some other discipline.

These scientists know that the earth is a sphere with a tremendousl strong crust that is held in place by gravitation pulling toward the center; that there is no vacant space between the plates into which they can move. So we ask, ___how does one plate seem to move in one dir ection and another plate in another?

Suppose that a surge of radio-activity does start between two plate and sea floor spreading begins to move; gravity having pulled all of th other plates solidly together...the whole crust of the earth must move If this is east and west as much of the evidence indicates in South America and Africa, then it moves against rotational force. This mea that the sea-floor-spreading must work with rotation as the earth tur to the east and against it to the west. If convection currents were powerful enough to perform this miracle while spinning at a thousand miles per hour, then the crust would stand still and the much more massive mantle would turn under it. The friction caused at this point contact would produce heat far beyond that of the radio-active elemen and cut off the magma flow up through the crack between plates.

If the above problems are not enough to stop the geologists, then l us look at the dynamics of sea-floor-spreading: According to the the the hot magma comes to the surface of the sea floor (along a crack a few thousand miles in length) and spreads out to left and right. As moves it slowly cools and when it gets to the coast of South America (as it spreads from the Pacific Rise) it dives under the Andes in wh they call a subduction zone; it dosen't just turn up in the air, the path of least resistance or merely slide under the continent of Soutl America, it turns down into the mantle, turns back upon itself and returns to the point of beginning, forming a convection cell. This on for hundreds of millions of years, according to the theory, so th must be a breeder reactor down there somewhere to generate a continu supply of fuel.

"Time is of the essence!"

When geologists run into a blank wall they always call upon time. unlimited time, to solve the problem. Its like lifting one's self b the boot straps....if you pull long enough and hard enough you will lift off. The geologists do better than this, they overcome gravity the second law of thermodynamics(which states that a cold ocean floc cannot move down into a hot mantle) and finally the law of the conse vation of angular momintum.

In spite of all this, we know that the continents have moved and twisted around on the surface of a turning sphere, presenting new edges to each other and breaking up into smaller islands. But sudd under the laws of celestial mechanics, not over millions of years.

Geology, since the time of Darwin, has been closely allied with evolution and evolution is based on nearly endless time, so time has become their handmaiden, their crutch. This in spite of the fact that most of the powerful forces on the earth work quickly.....like tornados earthquakes and volcanic eruptions.

Moving out into the solar system and the universe, we see the same explosive events on a grand scale, so why not on the earth?

Objects large enough to penetrate the earths crust and even move the earth's rotational axis in relation to the sun are known to be possible and may have happened. Could this kind of event have moved the continents?

Gravitational events are possible too, where a much larger body passing close to the earth may have torn away the crust on one side. Theres no explanation for the Pacific Ocean basin otherwise, and this could have caused the crust on the other side of the earth to break up and drift toward the pacific side to compensate for the loss in weight. Rotational force and gravity would work together to reach a new equilibrium.

Mars is now known to have a grand canyon over 2000 miles long that stretches across its equator at a long angle. This canyon is near the center of a pathway of destruction some 2000 miles wide and the canyon is as much as 250 miles wide and possibly ten miles deep. Ther can be no other explanation for this martian feature other than a gravitational rip off. The rest of the martian surface is covered wit impact craters.

It would seem that the natural scientists could give up their un-natural plate tectonics and apply for some government grants to research the possibilities of asteroidal impact and gravitational rip off.....a project big enough for <u>all</u> the disciplines.

Allan O. Kelly
IMPACT GEOLOGY
Post Office Box 1065
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Phone: 438-0668

Dec. 7, 1986

Letter to the Editor
GEOTIMES
4220 King Street
Alexandria, Va.22302-1507

Dear Sir: I see by my files that I sent you a copy of my new book Impact Geology on March 12, 1985, but have never received a reply of any kind. Apparently, you have no answer, for I find this lack of acknowledgment almost universal among all of the scientific publications, colleges and universities. It is becoming quite clear that there is no reasonable reply, no good answer. These institutions can no longer deny catastrophic impact and oceanic flooding , nor can they suddenly change the lives and fortunes of hundreds of thousands of people all over the world who are involved.

The history of Unifromitarian Geology is a fine example of how a theory slowly changes into a dogma, and how that dogma gradually changes and grows into hundreds of branches and in so-doing, becomes much more difficult to abandon. It cannot be done quickly. It can only be abandoned slowly by keeping all of the old orthodoxy that can be retained, because Uniformity is still with us. The problem is to accept the new catastrophism where it fits and makes sense.

With the above in mind, I have just been researching the want adds for "Positions wanted, and for Positions open,"---to find out who wants what and how impact theory is doing in the free world of science and this is what I find: Out of 352 adds in the last two issues of SCIENCE (Nov.28/86 & Dec.5/86) only four colleges were wanting earth-science teachers. Of the nine who placed adds for jobs, only one was looking for a earth-science job. Note: The word geology is seldom use

It turned out that the great bulk of the adds for "Positions open" (about 90%) were from colleges and universities needing to fill positi in the great variety of their Biology disciplines. Apparently, most of these new branches of biology are so trivial, poorly paid or so little needed by the public, that those with the PhD in these subjects are going into other jobs where there is a better future. Have they tried impact geology? Heavens no, but it is in the news constantly. After a war of words for 153 years---intergration comes slowly.

Think how frustrated all of these people must be who have worked so hard to get a PhD for a higher salary and a better standard of living---finding there is no future in some academic discipline that the public won't buy because there is no real need for it.

Just today, I searched the want adds in your December issue of GEOTIMES, and found that much the same situation prevailes in geology. Out of 47 adds, 36 were for "Positions open" and 11 for"Positions Wanted." Most of the 36 positions open were from colleges that demand the PhD, but at a salary not mentioned,or lower than business world.

I happen to be a director on our local water Department Board and I have in front of me a list of our job classifications. There are 23 of these people and their jobs sound like---Systems Foreman,Engine Technician II, Inspector I,Warehouse Supervisor. Executive Secretary, etc. Most of these people are college graduates with some kind of degree but not the PhD. All of the 23 except the bottom four are getting more money than most of the colleges are offering for teachin jobs. Of course, our people don't get tenure.

It would seem that these people with the PhD and MS, are fed up with all the trivial disciplines, and have their eyes on the coming rejuvenation of catastrophism and all of its implications for Holocer geology. A new book, THE NEMESIS AFFAIR "a story of the death of the dinosaurs and the Ways of Science"by David M. Raup, is a good example of this new and vital interest in impact theory. I inclose a zerox of the back cover for a better introduction to Raup. In his first chapt he outlines the steady growth of impact articles in the scientific magazines and news media---from 1980 through 1985, but even he, and outstanding paleontologist, does not see the potential. I have found that the great majority of geologists and professors of earth-scienc do not know that the billions and trillions of tons of oceanic flood gravel scattered all over the earth, exist, because it was not in th text books. They don't know that it has been censored for150 years. It has been censored because Lyell and his followers saw all this ev of oceanic flood they could not explain by Uniformity and, thinking it would support their enemies, the Clerics, they left it out of the books. Searching for scientific truth was a secondary consideration

The facts are that any great truth can be watered down and obfuscate by hundreds of half-truths and trivia, and this will probably happen to asteroidal impact theory as time goes on, for it is a fact of human nature. One needs only to consider the history of great religions to understand this characteristic of mankind.

A personal example of this is the fact that after studing geology for 40 years and writing several books and many papers---I didn't know that Holocene geology was taboo, that all geology textbooks and land form atlasses end with the end of the ice ages, 11,400 years BP plus o minus 200 years. I followed the rest,and in Impact Geology, called all of this anomalous gravel---Pleistocene instead of Holocene or Rece not realizing that the word Pleistocene refers to the last million yea

Uniformity is a very significant word. It fits all disciplines, no just the one.

Sincerely,

Allan O. Kelly

'68

November 7, 1980

Dr. Richard A. Kerr
SCIENCE RESEARCH NEWS
1315 Mass, Ave. NW
Washington D. C.20005

Dear Dr. Kerr

I read your new report on the criticism of the Alveraz theory of dinosaur extinction by major asteroid impact with considerable interest because I have been in communication with them too.

I am in general agreement with most of the negative criticism but what interests me more, is the apparent inability of these people to see or to understand that an impact of this size in thedeep ocean,(their assumption) would cause a world wide oceanic flood that would wipe out a great percentage of all life forms, in the lower elevations of the earth's surface. None of the scientist you quoted , considered this possibility.

After some 35 years of trying to convince the scientific world of the reality of asteroidal impact, I hAve become convinced that education and specialization, are the culperts, the means by which the the student is brain-washed into believing that all truth is to be found in text books, and in the lecture hall---that unless one learns the jargon, field geology is a waste of time. The young geologist goes forth to study the landscape; he sees vast deposits of gravel in the most unlikely places that cannot possibly be explained by the ordinary forces of erosion and sedimentation. He dosen't stop to consider how it got there for he knows at once that this is --- Pleistocene gravel and colors his map accordingly. This leads to a good grade and eventually to a degree, and a round robin of non-thinking. Field geology is ignored for the laboratory, and the laboratory leads to the electron microscope---to chemistry and parts per billion---a kind of socialized science, in short, the kind that the Alvarez group is doing..

Most certainly, a layman who criticises the world of education and science in this fashion, does not endear himself to the world, and no more to his lay peers,who see him as an outrageous egotist.

Alternative??????

Impact and oceanic flood constitute the greatest revolution in earth history since the change from a flat to a round earth. The Alvarez group have seen the possibility of the results of major impact and have started, naturally, from the little end of the horn.

Sincerely,

Allan Hatley

Copy to Dr. Walter Alvarez

No reply to this as of 3/3/81. AOK

Allan O. Kelly & K. Cordes

approximate word count = 2154
first serial rights

-----YES: THERE NEVER WAS AN ICE AGE!----
December 1988
Allan O. Kelly & K. Cordes

Yes indeed! We are saying to you right now and to all the world, there never was an ice age, only the movement or rocking of the whole Earth[1] under asteroidal impact so that the rotational axis of the earth was suddenly changed to a new location relative to the rays of the sun. When this sudden cataclysmic event happened, the ice of the old polar cap melted away and a new ice cap was formed around the pole of the new axis of rotation. This last great cosmic event occurred about 11,000 years ago, when a large asteroid stuck in the Mid-Atlantic Ocean at a long angle to the south and at a slightly following motion to the rotation of the earth -- which may have increased the rotational velocity of the earth to some extent. With the tremendous velocity of the asteroid, the old polar caps were instantly shattered by the terrific shock and the ice caps along with the oceans, because of their inertia, hesitated momentarily and then with a violence beyond the wildest imagination -- rose up and rolled over the moving crust of the Earth in the opposite direction. The whole Atlantic Ocean and that part of the ice cap not vaporized moved to the north in the direction from which the asteroid came. The old ice cap covering the Canadian Shield was thoroughly shattered by the shock, at least in the southern half and a good deal of it did actually move to the north as the early geologists made plain. They discovered the north aligned groves in the basement rocks, but could never understand why the thick glacial ice moved to the north into a colder region. On the other side of the Earth, the waters all moved in the southerly direction -- because the whole surface of the Earth turned as a unit under all of the ice and waters of the oceans and lakes. This may be difficult to understand, but it happened as evidenced by of all the physical structure left for man to see today.

Geological science has always required long stretches of time to explain the anomalies, but the impact theory requires almost instantaneous motion of a violence nearly impossible to imagine. Within minutes, the Earth stopped rolling under the impact and the waters kept moving, coming and going like gigantic tides for perhaps several months.[2]

The Antarctic ice cap was about 80% over the deep ocean with the balance over the high part of the Antarctic Continent, so little physical evidence is to be found there and that is in the southern part of Australia discusse later. The north polar cap, however, covered most of western Canada, the northern part of the United States, Greenland and nearly touched the British Isles. This left a tremendous volume of physical evidence that surely proves our point -- that there never was an ice age -- as the theory of Uniformity demands.

This great cataclysmic event of only 11,000 years before the present left not only the physical features of its immensity and violence, but the bodies of tens of thousands of living things. Thousands of bodies of mammoths have been found frozen or as skeletons along the Siberian coast. Some frozen so completely and quickly that the grass that they were eating is still evident in the stomachs. If this area was under an ice cap as the "ice age theory" demands, where did they get the grass? This area was in a temperate climate some 2500 miles from the old arctic circle. On the other side of the old arctic circle Alaska also has revealed its thousands of Pleistocene animals that were frozen and buried in the debris of that last great oceanic flood. These frozen bodies and the discovery of the C14 method of dating has established the time of this great cataclysm quite accurately at 11,400 years BP, plus or minus 200 years.

The size of the striking body, its shape, mineral content, velocity, angle of approach, amounts of energy going into different heat sinks, etc. can only be estimates or speculations, so we shall confine ourselves to describing the actual physical evidence that exists today.

The most important and most gigantic piece of evidence is the movement of the old polar axis from it former location to its present one, a change of approximately 30 degrees on the surface of the Earth. The reality of this change is best illustrated by inscribing an arctic circle on the globe of all of the known glaciated areas of North America, Greenland, Iceland, Norway and the British Isles. The center of this circle, the old north pole, was at a point about 100 miles off the tip of Labrador at what is now 60 degrees north latitude. Now, if we draw a line from the present north pole and through the old north pole and continue that line, we come to what is called the great undersea Bermuda crater. The center of this crater is near the island of Bermuda. This hugh undersea crater, which is some 2,000 miles in diameter, does not show a complete rim because of the angle of approach of the striking body and because it was in the deep ocean the returning waters, going and coming, removed most of the rim and filled in most of any crater basin that was made by the impact. It did leave a deep trench along the coasts of Cuba, Haiti and Puerto Rico. There is apparently a great body of heavy metals buried in this area that causes the largest variations in the Earth's magnetic field. This area is referred to as the Bermuda Triangle. In addition, recent measurements from high altitude orbiters has actually shown a depression in the ocean's surface that may be caused by the increased gravitation affect of the heavy metals below.

Another major physical feature supporting impact and oceanic flood is seen in the tens of thousands of ice formed kettle lakes found along the arctic shores and river deltas of the northern hemisphere and lesser numbers in the southern hemisphere along the south coast of Australia. The main large areas in the north are:

1. The whole north coast of Alaska north of the Brooks Range, 400 miles wide and 50 miles inland. The huge delta of the Yukon River with 400 miles of ocean frontage plus thousands of square miles in the upper basins of the Yukon watershed.
2. Several thousands square miles of kettle lakes on the eastern tip

that all were based upon the theory of Uniformity - but one. A retired army officer, Major Chapman Grant believed that they were probably made by large schools of fishes fanning their tails in the shallow water. He visited the Bays and when he returned, furnished Allan O. Kelly with the key to the problem. He said that the slow melting of the ice cakes was the only way the oval shape of all these lakes could be explained. Allan was already an advocate of the impact and oceanic flood theory and saw at once the correct answer. Two years later with coauthor Dr. Frank Dachille, he published a book on collision geology called TARGET:EARTH. This book contained a chapter on "The Origin of the Carolina Bays and the Oriented Lakes of Alaska" which stopped all further debate on the subject.

Australia was the only land mass in the southern hemisphere close to the old Antarctic Circle. It is the only part of the southern world to have stranded sea ice cakes that melted and left the thousands of "salt pans" along the southern coast. All the physical evidence shows that this Australian glaciation is very fresh and of the same age as that in the northern hemisphere. Apparently the old ice cap was over the western end of the Nullabor Coast for a few miles inland where the elevation is about 1,000 feet. (see Figure 2) Everywhere the granite is polished and the salt pans glisten in the sunshine. All of the salt came from the sea ice because there is not a single stream crossing the Nullabor road for over 400 miles. This is very dry desert and appears to be lacking altogether in summer thunderstorms because such storms would have eroded the soft clay and sand material into thousands of channels and cut the low walls of the salt pans into "badlands" like the deserts in others parts of the world. Any drainage that exists, small as it is, is toward the inland or North and not toward the ocean. This explains the adjacent large dry lakes that are similar to those found in California, Nevada and Utah - the currently most famous of which is used for the Orbital Shuttle landings.

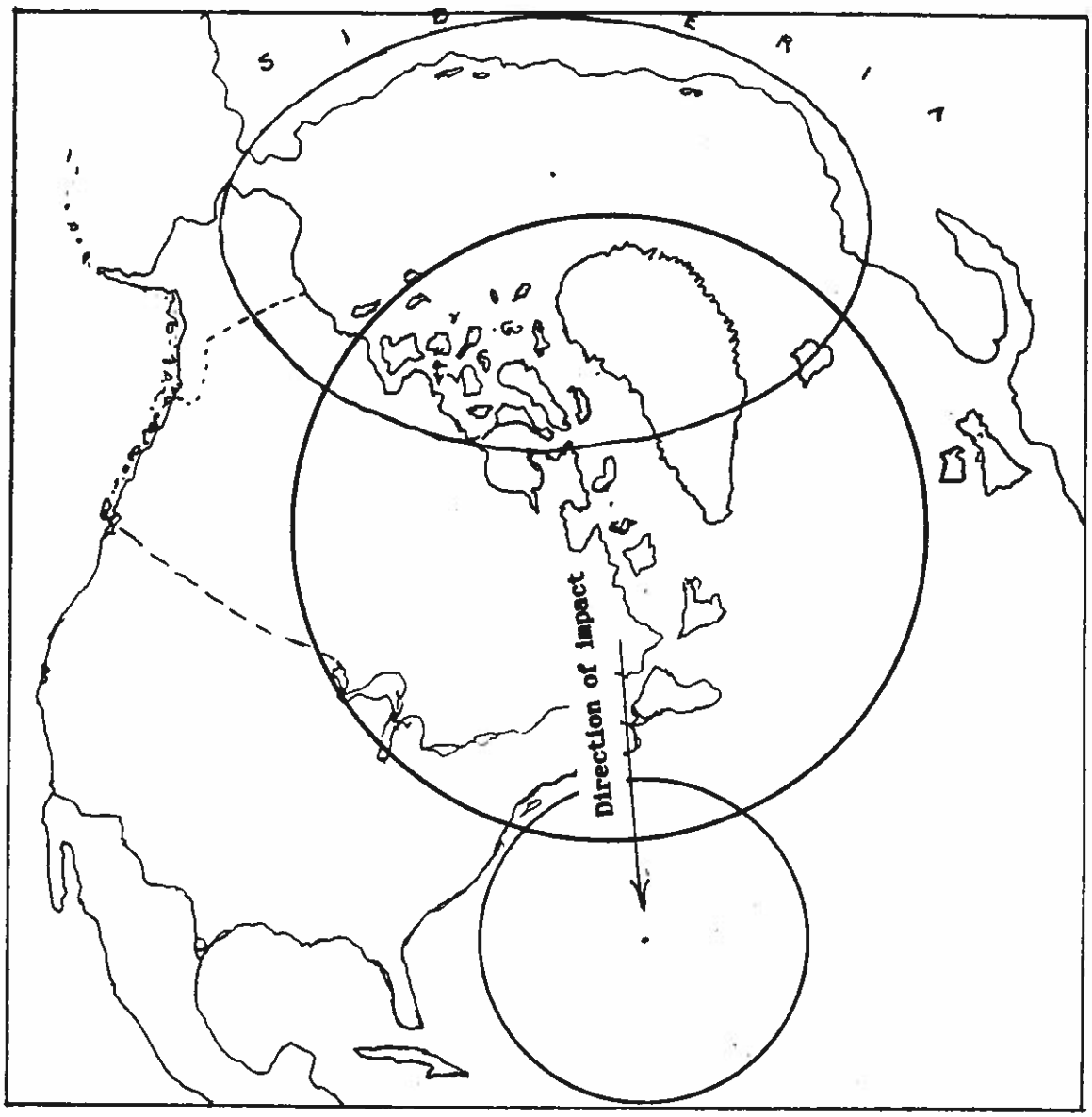
There is no mystery here! The evidence is so powerful and so plain to see that one wonders why all the geologists have not embraced the fact that "there never was an ice age".

The evidence of an impact oceanic flood is much more vast that described in this short paper and can be studied in more detail in IMPACT GEOLOGY written by Allan O. Kelly and available by writing to Impact Geology, P.O. Box 1065, Carlsbad, CA 92008.

1. Earth is most commonly not capitalized, but since we feel it is a proper name the same as Mars, Venus, Moon, Sun, etc. that Earth should also be capitalized.

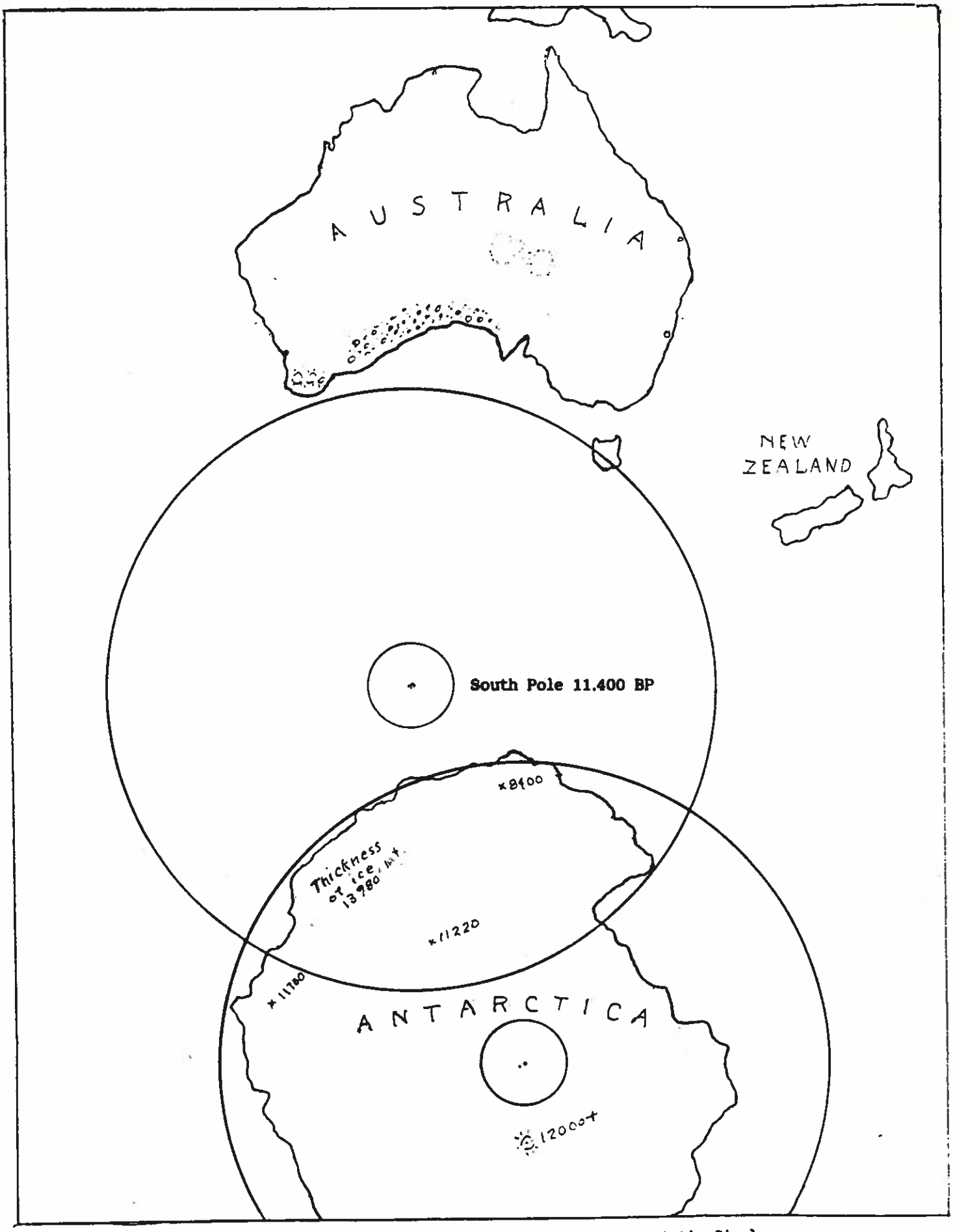
2. The Latin Vulgate Bible and the Talmud both say that the waters were going and coming for 150 days during Noah's flood.

Figure 1

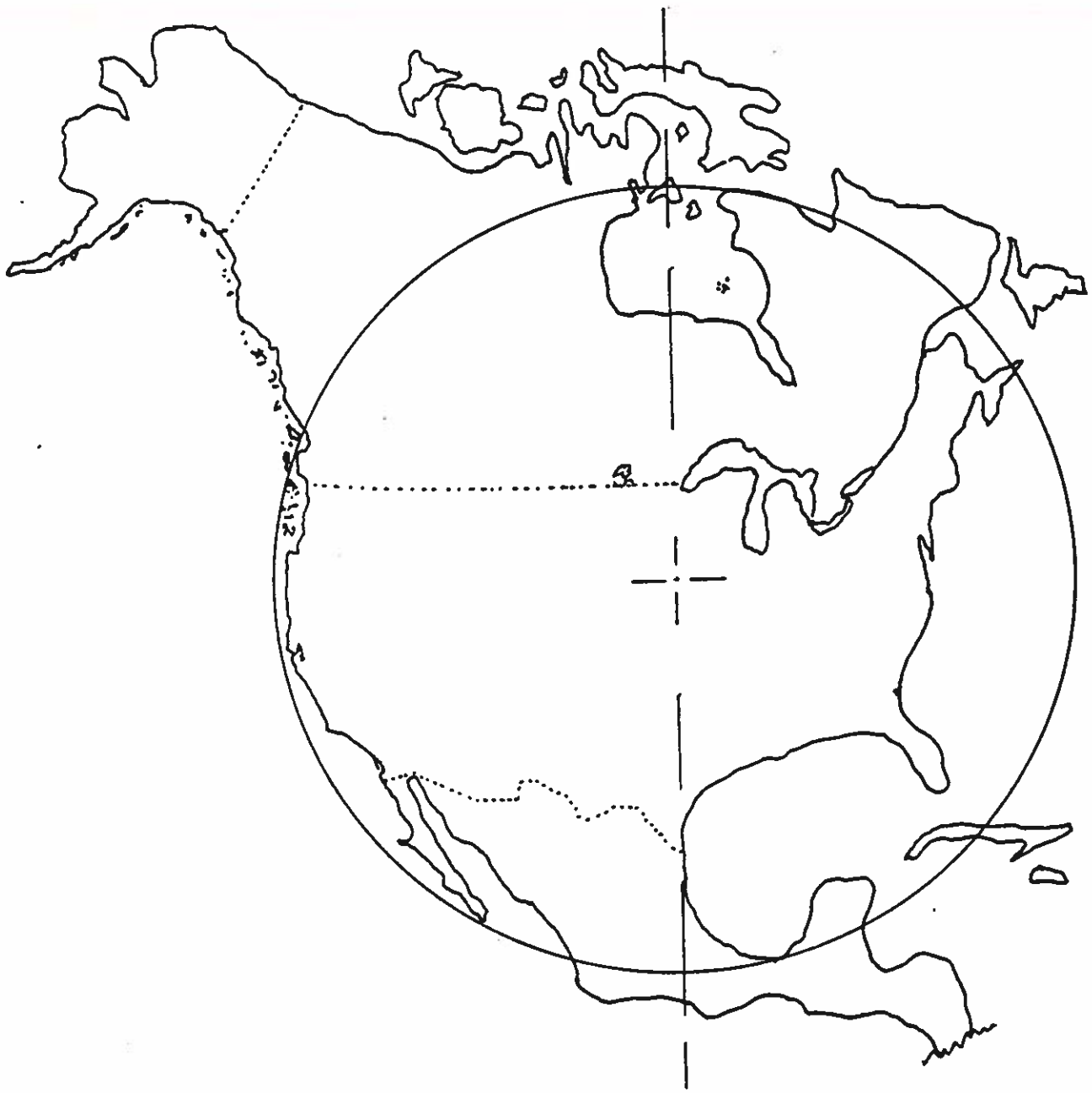


The present Artic Circle
The Pleistocene Artic Circle
The Bermuda Impact Crater

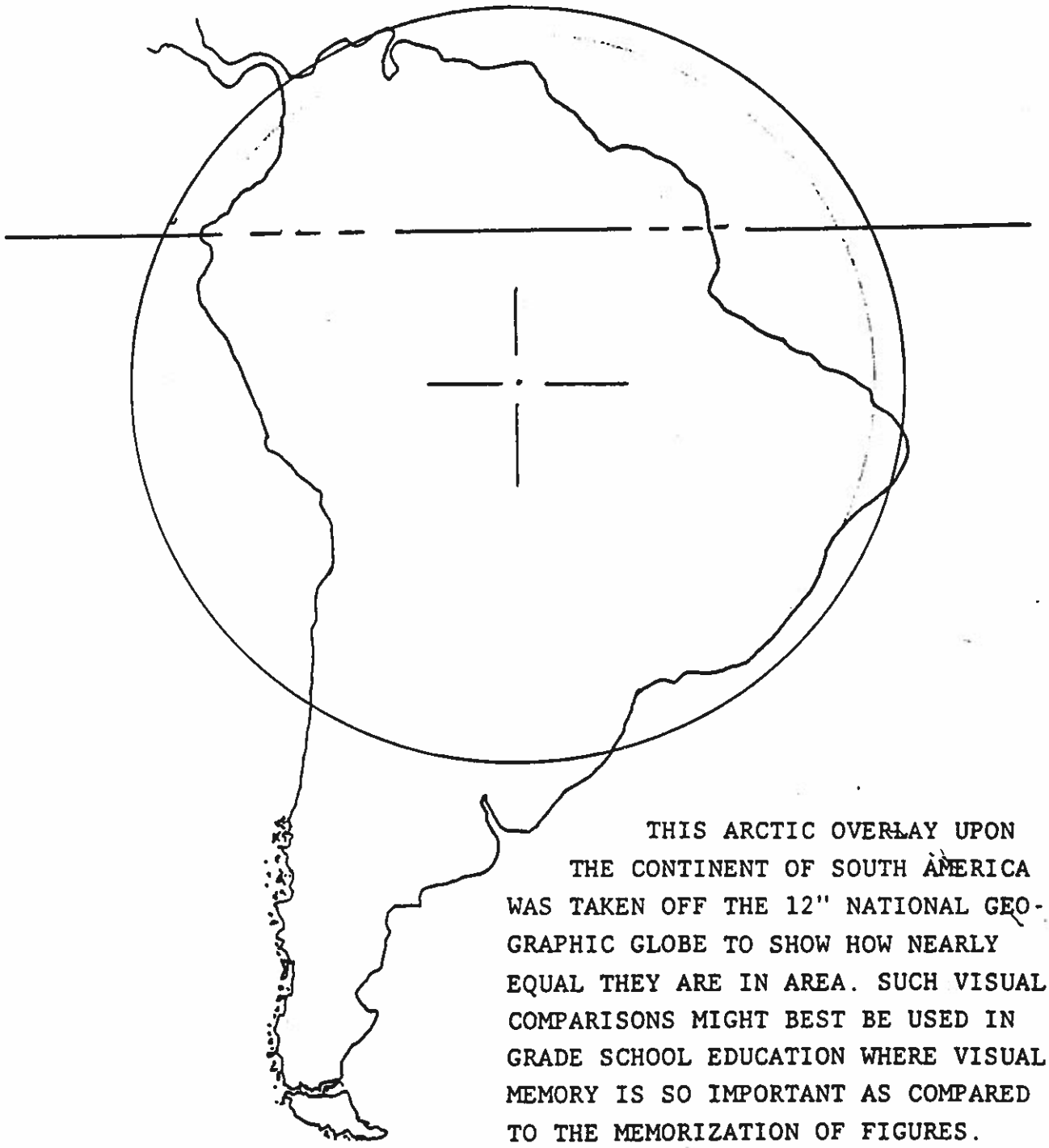
Figure 2



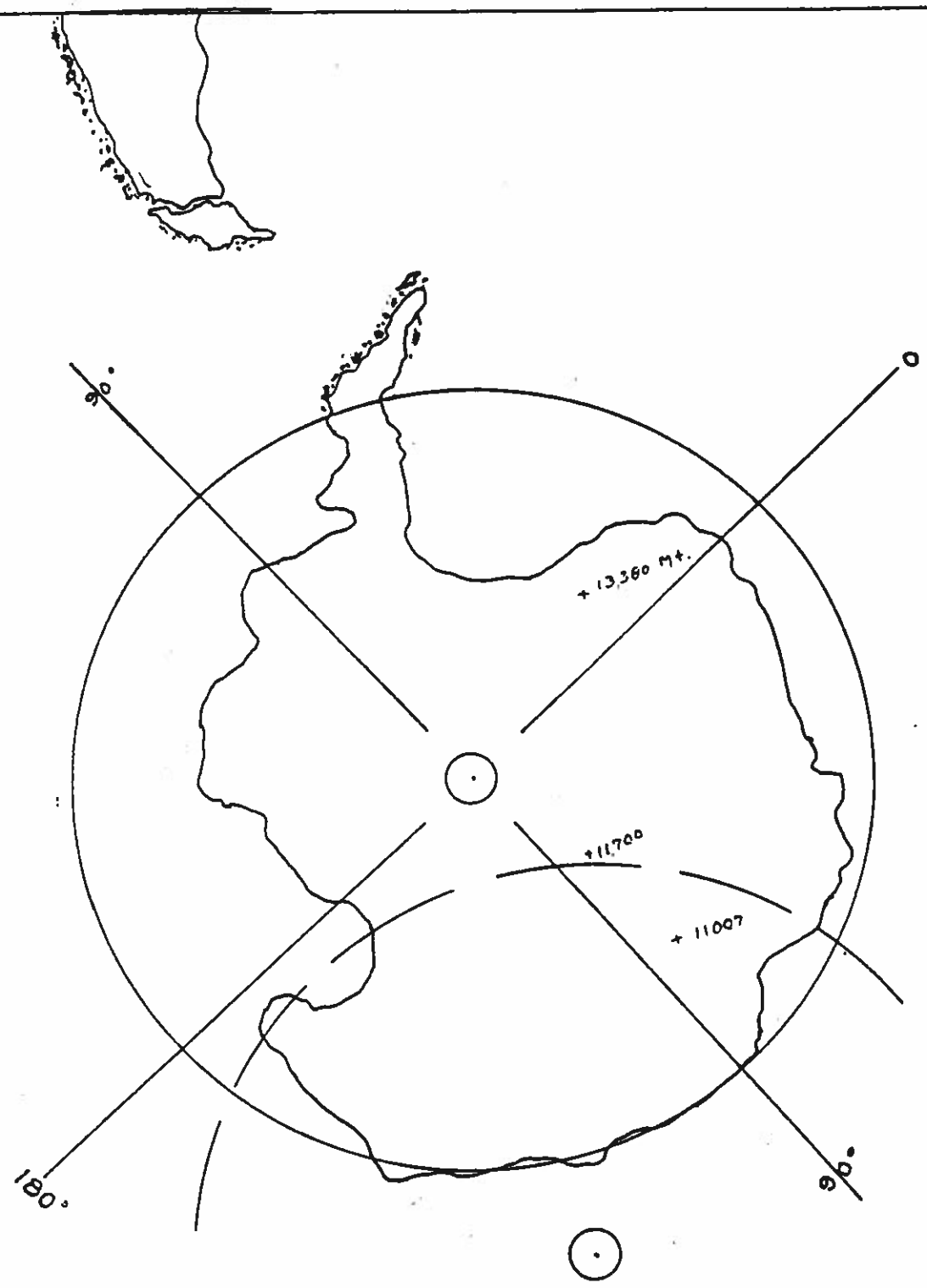
The present Antarctic Circle & The Pleistocene Artic Circle



THIS ARCTIC CIRCLE OVERLAY ON NORTH AMERICA WAS TAKEN OFF A 12" NATIONAL GEOGRAPHIC GLOBE TO SHOW THE GREAT SIZE OF THE POLAR CAPS IN RELATION TO THE SIZE OF THE WHOLE CONTINENT, THE POLAR CAPS BEING FAR BEYOND OUR EXPERIENCE AND OUR KNOWLEDGE OF THAT AREA, IT COMES AS QUITE A SHOCK. THE AREA OF THE ARCTIC CIRCLE IS --- 8,295,787 SQUARE MILES.



THIS ARCTIC OVERLAY UPON THE CONTINENT OF SOUTH AMERICA WAS TAKEN OFF THE 12" NATIONAL GEOGRAPHIC GLOBE TO SHOW HOW NEARLY EQUAL THEY ARE IN AREA. SUCH VISUAL COMPARISONS MIGHT BEST BE USED IN GRADE SCHOOL EDUCATION WHERE VISUAL MEMORY IS SO IMPORTANT AS COMPARED TO THE MEMORIZATION OF FIGURES.



ANTARCTIC CIRCLE OVERLAY OF ANTARCTIA SHOWING THE OVERLAP OF THE OLD ARCTIC CIRCLE AND WHY THE ICE AVERAGES MUCH THICKER IN THIS AREA. THE AREA OF THE CONTINENT IS ABOUT 68% OF THE AREA OF THE ANTARCTIC CIRCLE, AND THE ELEVATION OF THE ICE CAP ABOVE SEA LEVEL PROBABLY AVERAGES HIGHER THAN ANY OTHER CONTINENTAL MASS.

YES! THERE NEVER WAS AN ICE AGE!

Yes indeed! We are saying to you, and to all the world, there never was an ice age, only the movement of the earth's axis by asteroidal impact, so that the old ice caps were melted and new ice caps formed. The "Ice Age" theory was only a figment of the human imagination, dreamed up to explain away, the Bible story of the Flood, and to maintain and support Sir Charles Lyell's book, Principles of Geology. This book of 655 pages, set forth a new theory of earth history that has been called the theory of Uniformity. This theory laid down in one sentance, the entire history of the earth as men knew it in that day---1833: "That nothing has ever happened to change the surface of the earth, that is not now going on under the eyes of man." Lyell meant by this, the forces of erosion, sedimentation, glaciation, volcanics, earthquakes, and the ordinary climatic forces of weathering.

The theory of Uniformity, now better described as the dogma of Uniformity, is 155 years old, and only now, we hear some few men of science grudgingly admitting the possibility of major asteroidal impact upon the earth and other planets. This slow and hesitant approach to reality might be better understood by the phrase "Signs of the Times."

One important Sign of the Times, is the constant reports in the news media of catastrophic events that are supposed to account for extinction of the dinosaurs and other prehistoric animals, and, always by asteroidal impact---sometimes in the ocean and sometimes on the land, but whatever the location, there is little if any objection or argument from the college professors who continue to teach the theory of Uniformity in a somewhat subdued fashion.or not at all. Basic theory is being set aside for the study of minutia in the laboratory, while field geology is ignored by all except the Oldtimers who are still out there in the field.

A second Sign of the Times bearing this out, was the organization a few months ago (the date not made clear) of some 33 young earth-scientists who set out to examine all the minutia that might give support to the theory of Uniformity. None of the 33 were names that had been in the news for their work in this field before.

Each of the 33 produced a paper which was given before the organization at a meeting held for that purpose. A month or more later, a rather gentle criticism was given in SCIENCE of the whole proceedings, but no conclusion or recomendations.'

A third Sign of the Times: A few weeks ago, a meeting was held at Snowbird, Colorado, at which nearly a 100 earthmen were in attendence. They had come to Snowbird to try and settle the long-standing' debate that had been going on between small groups or person to person argument about the merits of this earth-science problem---- Uniformitarian geology versus Impact geology. This Snowbird debate went on for several days, and when time was up a show of hands was called for, and the following estimate was reported,(by a well known science writer) that about 70% of the hands were for Impact.Apparently, the rest were either undicided or for Uniformity.

Other Signs of the Times are legion for this problem is a growing one, an important one,with a scope that covers the earth as well as the sky.

A further Sign of the Times is found in the "Positions Open" as advertised in SCIENCE and other magazines in the field. In November 1988, SCIENCE carried 214 adds for positions open in various fields, and not a single one on geology. The december issue, just arrived, gave an account of 177 open and still no demand for a professor of geology,__or even an individual looking for a job in geology.

All of the Signes of the Times seem to indicate that the world of earth-science is waiting for a signal,an act of God---perhaps an impact on the Antarctic ice cap, that will produce a deluge of rain of 40 days and 40 nights that will really lay that old dogma to rest in a waterly grave,and set the impact advocates free.

YES! THERE NEVER WAS AN ICE AGE!

Dec. 5, 1988. Allan Hully.

The Jan.27, 1989, SCIENCE, carried 130 openings--none for geology.

I M P A C T G E O L O G Y

Dear Reader:

> Through the millenniums, folklore has passed down tales of the great flood and spectacle that accompanyed it. Chinese astronomers claimed the moon, sun and stars rose and set in new locations. Tales of colossal meteorites and shifting polar caps are legend.

Why would we not assume that the Earth in its lifetime of four or five billion years has not been struck by giant asteroids. Our moon clearly shows evidence of craters formed by cosmic bodies of greatly varying form and sizes. Why then would Earth, a much larger target with its greater gravitational pull, escape such forces. Yet the prevailing theories of the Earth's geological evolution hardly touches upon the effects of meteoritic impact.

Could it be possible that modern geology, as it is taught today, could ignore that cataclysmic effect that "Impact Geology" could have on our planet? It's not only possible, it's fact. Modern geologists embrace the theory of "Uniformity"--a slow evolution of the Earth's outer structure--sometimes referred to as the "Onion Coat" theory, and dismiss the evidence of "Impact Geology". This concept holds that succeeding impacts spaced million of years apart, laid down the layers of sedimentary rocks(Onion Coats) as we see them today.

In the recently published book entitled IMPACT GEOLOGY you'll find countless evidence of the scientifically observed geological phenomena from around the world. Evidence that is all around us to see--from the locations of oil and metal deposits, to kettle lakes, continental drift and quick-frozen mammoths. None of this is new. It's been there for centuries for all to see.

> In IMPACT GEOLOGY you will find a staggering array of 205 photographs in full color of land forms from the four corners of the Earth, building a case methodically, step by step, to support the concept until the conclusion is inevitable. The surface of the Earth has been struck by meteors and asteroids that radically changed the Earth's course , its temperatures and surface structure.

IMPACT GEOLOGY is one of the greatest breakthroughs in the scientific annals of the century. There is no arguing with the thousands of facts that are meticulously laid before us. IMPACT GEOLOGY challenges the geological dogma of the world's institutions--and in doing so, shakes many other dependent sciences to the very foundations.

This is one of several introductions written for IMPACT GEOLOGY but discarded. He was a physicist who strongly supported the theory but did not wish to sign his name. A.O.K.