

PART II

Mars

CHAPTER 1

Amos

ABOUT seven hundred fifty years passed after the great catastrophe of the days of the Exodus, or seven centuries after the cosmic disturbance in the days of Joshua. During all this time the world was afraid of the recurrence of the catastrophe at the end of every jubilee period. Then, starting about the middle of the eighth century before the present era, a new series of cosmic upheavals took place at intervals of short duration.

It was the time of the Hebrew prophets whose books are preserved in writing, of Assyrian kings whose annals are excavated and deciphered, and of Egyptian pharaohs of the Libyan and Ethiopian dynasties; in short, the catastrophes which we are now about to describe did not take place in a mist-shrouded past: the period is part of the well authenticated history of the lands of the eastern Mediterranean. The eighth century also saw the beginning of the nations of Greece and Rome.

The seers who prophesied in Judea were versed in the lore of heavenly motion; they observed the ways of the planetary and cometary bodies and, like the stargazers of Assyria and Babylonia, they were aware of future changes.

In the eighth century, in the days of Uzziah, king of Jerusalem, there occurred a devastating catastrophe called *raash* or "commotion."¹ Amos, who lived at the time of Uzziah, began to predict a

¹ *Raash* is translated "earthquake," which is incorrect here; cf. Jeremiah 10 : 22: "a great commotion [*raash*] out of the north." "Earthquake" is rendered in the Scriptures by words derived from the roots *raad*, *hul*, *regoz*, *hared*, *palez*, *ruf*, and *raash* (commotion).

cosmic upheaval before the *raash* took place, and after the catastrophe, Isaiah, Joel, Hosea, and Micah insisted unanimously and with great emphasis on the inevitability of another encounter of the earth with some cosmic body.

The prophecy of Amos was made two years before the *raash* (1 : 1). He declared that fire sent by the Lord would devour Syria, Edom, Moab, Ammon, and Philistia, as well as the far-off countries, "with a tempest in the day of the whirlwind" (1 : 14). The land of Israel would not be exempted; "great tumult" would be on its mountains, and "great houses shall have an end" (3 : 15). "He will smite the great house with breaches, and the little house with clefts" (6 : 11).²

Amos warned those who invited the day of the Lord and waited for it: "Woe unto you that desire the day of the Lord! To what end is it for you? The day of the Lord is darkness, and not light . . . even very dark, and no brightness in it" (5 : 18-20).

Amos, the earliest among the prophets of Judah and Israel whose speeches are preserved in writing,³ reveals the concept of Yahweh in that remote period of history. Yahweh orders the planets. "He who maketh [ordains] Khima and Khesil,⁴ and turneth the shadow of death into the morning, and maketh the day dark with night, and calleth for the waters of the sea, and poureth them out upon the face of the earth, the Lord [Yahweh] is his name: He strengtheneth the spoiled against the strong" (5 : 8-9).

Amos prophesied: The land "shall rise up wholly as a flood; and it shall be cast out and drowned, as by the flood of Egypt. And it shall come to pass in that day, saith the Lord God, that I will cause the sun to go down at noon, and I will darken the earth in the clear day" (8 : 8-9).

The "flood of Egypt" mentioned by Amos may be a reference to the catastrophe of the day of the Passage of the Sea; but more proba-

² *Rsisim*, translated as "breaches," is not strong enough; it would be better to say, "smite great houses into pieces." Hebrew words translated as "breach" in the King James Version are *bedek*, *bkia*, *peretz*, *shever*.

³ Some rabbinical authorities regard Hosea as the oldest among the prophets of that time (Hosea, Amos, Isaiah).

⁴ The material for the identification of Khima as Saturn and Khesil as Mars will be presented in a subsequent part of this work.

bly it refers to an event within the memory of the generation to which Amos spoke.

In the reign of Osorkon II of the Libyan Dynasty in Egypt, in the third year, the first month of the second season, on the twelfth day, according to a damaged inscription, "the flood came on, in this whole land . . . this land was in its power like the sea; there was no dyke of the people to withstand its fury. All the people were like birds upon it . . . the tempest . . . suspended . . . like the heavens. All the temples of Thebes were like marshes."⁵

That it was not a seasonal inundation of the Nile is clear from the date. "This calendar date for the high level of inundation does not at all correspond to the place of the calendar in the seasons."⁶

On the day of the approaching catastrophe, Amos says, there will be no place of escape, not even on Mount Carmel, rich in caves. "Though they climb up to heaven, thence will I bring them down. And though they hide themselves in the top of Carmel, I will search and take them out thence" (9 : 2-3).

Earth will melt and the sea will be heaped up and thrown upon inhabited land. "And the Lord God of hosts is he that toucheth the land, and it shall melt. . . . He that calleth for the waters of the sea, and poureth them out upon the face of the earth" (9 : 5-6).

Amos was persecuted and killed. The catastrophe did not fail to come at the appointed time. In anticipation and in fear of it, King Uzziah went to the Temple to burn incense.⁷ The priests opposed his appropriating their functions. "Suddenly the earth started to quake so violently that a great breach was torn in the Temple. On the west side of Jerusalem, half of a mountain was split off and hurled to the east."⁸ Flaming seraphim leaped in the air.⁹

Earthquakes act suddenly, and the population has no means of knowing about them in advance in order to flee. But before the *raash*

⁵ Breasted, *Records of Egypt*, IV, Sec. 743. Cf. J. Vandier, *La Famine dans l'Égypte ancienne* (1936), p. 123. "The water reduced the land to the same state as when it was still covered with the primeval water of creation."

⁶ Breasted, *Records of Egypt*, IV, Secs. 742-743. ⁷ II Chronicles 26 : 16 ff.

⁸ Ginzberg, *Legends*, IV, 262. ⁹ *Ibid.*, VI, 358.

of Uzziah the population escaped from the cities and fled into caves and clefts between the rocks. Many generations later, in the post-Exilic period, it was remembered how the population "fled from before the *raash* in the days of Uzziah king of Judah."¹⁰

The Year -747

If the commotion of the days of Uzziah was of global character and was brought about by an extraterrestrial agent, it must have caused some disturbance in the motion of the earth on its axis and along its orbit. Such a disturbance would have made the old calendar obsolete and would have required the introduction of a new calendar.

In -747 a new calendar was introduced in the Middle East, and that year is known as "the beginning of the era of Nabonassar." It is asserted that some astronomical event gave birth to this new calendar, but the nature of the event is not known. The beginning of the era of Nabonassar, otherwise an obscure Babylonian king, was an astronomical date used as late as the second Christian century by the great mathematician and astronomer of the Alexandrian school, Ptolemy, and also by other scholars. It was employed as a point of departure of ancient astronomical tables.

"This was not a political or religious era. . . . Farther back there was no certainty in regard to the calculation of time. It is from that moment that the records of eclipses begin which Ptolemy used."¹ What was the astronomical event that closed the previous era and gave birth to a new era?

According to retrospective calculations, there was no eclipse of the sun in the region of Assyro-Babylonia between the years -762 and -701,² if the earth has revolved and rotated uniformly since then, which is taken for granted.

¹⁰ Zechariah 14 : 5.

¹ F. Cumont, *Astrology and Religion among the Greeks and Romans* (1912), pp. 8-9. To be correct, the earliest eclipse Ptolemy calculated is dated March 21, -721.

² T. von Oppolzer, *Canon der Finsternisse* (1887).

Uzziah reigned from about -789 to about -740.³ The last few years of his reign, beginning with the day of the "commotion," he spent in seclusion, having been pronounced a leper. It was apparently the upheaval in the days of Uzziah that separated the two ages. Time was counted "from the commotion in the days of Uzziah."⁴

If this conclusion is correct, the upheaval took place in -747. The computation, according to which the era started on the twenty-sixth day of February, must be re-examined in the light of the fact that further cosmic disturbances occurred during the decades that followed -747. It is worth noting, however, that the ancient inhabitants of Mexico celebrated their New Year on the day which corresponds, in the Julian calendar, to the same date: "The first day of their yeere was the sixe and twentie day of February."⁵

The chronographer and Byzantine monk, Georgius Syncellus, one of the chief sources of ancient chronology, synchronized the forty-eighth year of Uzziah and the first year of the first Olympiad.⁶ But according to modern calculations, the first year of the first Olympiad was -776.⁷ The Olympiads most probably were inaugurated by some cosmic event. The text of the ancient Chinese book of Shiking refers to some celestial phenomenon in the days of the king Yen-Yang, in -776: the sun was obscured.⁸ If the occurrence of -776 was of the same nature as that of -747, then Amos' prophecy was a prognostication based on an earlier experience.

³ K. Marti, "Chronology," *Encyclopaedia Biblica*, ed. by Cheyne and Black.

⁴ Cf. Amos 1 : 1; Zechariah 14 : 5.

⁵ J. de Acosta, *The Natural and Moral History of the Indies* (transl. E. Grimston, 1604; re-edited, 1880).

⁶ Georgius Syncellus (ed. G. Dindorf, 1829), II, 203.

⁷ S. Newcomb, *The American Nautical Almanac*, 1891 (1890).

⁸ A. Gaubil, *Traité de l'astronomie chinoise*, Vol. III of *Observations mathématiques, astronomiques, géographiques, chronologiques, et physiques . . . aux Indes et à la Chine*, ed. E. Souciet (1729-1732); J. B. du Halde, *A Description of the Empire of China* (1741), II, 128-129.

Isaiah

According to Hebrew sources,¹ Isaiah began to prophesy immediately after the "commotion" of the days of Uzziah, even on the same day. The destruction in the land was very great. "Your country is desolate, your cities are burned with fire. . . . Except the Lord of hosts had left unto us a very small remnant, we should have been as Sodom, and we should have been like unto Gomorrah" (1 : 7 ff.). The very horizon of Jerusalem was disfigured by the splitting of the mountain on the west; and the cities were filled with debris and mutilated bodies. "The hills did tremble, and . . . carcasses were torn in the midst of the streets" (5 : 25).

This was the event that kindled in Isaiah the prophetic spirit. During his long life—he prophesied in "the days of Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah"—he did not cease to foretell the return of the catastrophes. Isaiah was skilled in the observation of the stars, and he apparently knew that at periodic intervals—every fifteen years—a catastrophe occurred, caused, he believed, by the messenger of God. "His anger is not turned away, but his hand [sign²] is stretched out still. And he will lift up an ensign to the nations from afar" (5 : 25-26).

Isaiah drew an apocalyptic picture of swiftly moving hostile troops. Was he prophesying a cruel and mighty people of warriors, or a host of missiles hurled from afar when he spoke of the army that would come swiftly from the end of the world, called by the Lord? Their horses' hoofs would be like flint, and their wheels like a whirlwind. "If one look unto the land, behold darkness and sorrow; and the light is darkened in the heavens thereof" (5 : 30).

It is not the Assyrians on horses and in chariots that are compared to the flint and the whirlwind, but the flint and the whirlwind that are likened to warriors.³ The darkness at the end of the picture discloses that which is the object of comparison and that to which it is compared.

¹ Seder Olam 20. ² *Yad* is "hand" as well as "sign."

³ See *infra* the Section, "The Terrible Ones."

The catastrophe of the days of Uzziah was only a prelude: the day of wrath will return and will destroy the population "until the cities be wasted without inhabitant" (6 : 11). "Enter into the rock, and hide thee in the dust" (2 : 10)—all over the world caves in the rocks were regarded as the best places of refuge. "And they shall go into the holes of the rocks, and into the caves of the earth, for fear of the Lord, and for the glory of his majesty, when he ariseth to shake terribly the earth" (2 : 19).

Isaiah appeared before King Ahaz and offered him a sign, on the earth or "in the height above." Ahaz refused: "I will not ask, neither will I tempt the Lord" (7 : 12).

Then Isaiah faced the people. "And they shall look unto the earth; and behold trouble and darkness, dimness of anguish" (8 : 22). Nevertheless, he said, the dimness will not be as great as on two former occasions when "at the first he lightly afflicted the land of Zebulun and the land of Naphtali, and afterward did more grievously afflict her by the way of the sea, beyond Jordan, in Galilee of the nations" (9 : 1). He calculated that the next catastrophe would cause less harm than had been caused on previous occasions. But soon thereafter he changed his prognostication and became utterly pessimistic.

"Through the wrath of the Lord of hosts is the land darkened, and the people shall be as the fuel of the fire" (9 : 19). His rod will lift the sea up "after the manner of Egypt," as on the day of the crossing of the Red Sea (10 : 26). "And the Lord shall utterly destroy the tongue of the Egyptian sea; and with his mighty wind shall he shake his hand [sign] over the river, and shall smite it in the seven streams" (11 : 15). Nor will Palestine be spared. "He shall shake his hand [sign] against . . . the hill of Jerusalem" (10 : 32).

Thus, a war of the heavenly host, commanded by the Lord, was proclaimed against the nations of the earth. And the nations of the earth were aroused by the expectation of Doomsday. "The noise of a multitude in the mountains, like as of a great people; a tumultuous noise of the kingdoms of nations gathered together: the Lord of hosts mustereth the host of the battle" (13 : 4). This multitude comes

"from the end of heaven, even the Lord, and the weapons of his indignation, to destroy the whole land" (13 : 5).

The world will be darkened. "The stars of heaven and the constellations thereof shall not give their light: the sun shall be darkened in his going forth [in the forenoon], and the moon shall not cause her light to shine" (13 : 10).

The world will be thrown off its axis: the heavenly host "will shake the heavens, and the earth shall remove out of her place, in the wrath of the Lord of hosts, and in the day of his fierce anger" (13 : 13).

The nations "shall flee far off, and shall be chased as the chaff of the mountains before the wind, and like a rolling thing before the whirlwind" (17 : 13).

Isaiah, on his vigils, watched the firmament, and in "appointed times" expected "from the north a smoke" (14 : 31).

"All ye inhabitants of the world . . . see ye, when he lifteth up an ensign on the mountains; and when he bloweth a trumpet, hear ye" (18 : 3). The eyes of all "dwellers of the earth" were directed toward the sky, and they listened to the bowels of the earth.

Inquiries were sent to Jerusalem from Seir in Arabia: "Watchman, what of the night?" From his watchtower ("Prepare the table, watch in the watchtower") Isaiah gave his forecasts to inquirers (21 : 5; 21 : 11).

Nervous tension grew with the approach of the "appointed time," and a rumor sufficed to drive the population of the cities to the housetops. "What aileth thee now, that thou art wholly gone up to the housetops?" (22 : 1).

Much of the city of David was damaged and many structures had fissures from almost continuous earth tremors (22 : 9). The seer frightened the population with his constant warnings of "a day of trouble . . . and of perplexity by the Lord God of hosts," with "breaking down the walls, and of crying to the mountains" (22 : 5). But many among the population took the attitude of those who before Doomsday say: "Let us eat and drink; for to-morrow we shall die" (22 : 13).

Joel, who prophesied at the same time, also spoke of "wonders in the heavens and in the earth, blood, and fire, and pillars of smoke. The sun shall be turned into darkness, and the moon into blood, before the great and the terrible day of the Lord come" (Joel 2 : 30-31).

Micah, another seer "in the days of Jotham, Ahaz, and Hezekiah, kings of Judah," warned that the day was close when "the mountains shall be molten . . . and the valleys shall be cleft, as wax before the fire" (Micah 1 : 4). "Marvelous things" will be shown, as in the days when Israel left Egypt: "The nations shall see and be confounded at all their might . . . their ears shall be deaf . . . they shall move out of their holes like worms of the earth" (7 : 15-17).

Joel, Micah, and Amos warned in similar terms of "a day of thick darkness" and "the day dark with night." Astronomers, who thought that all this refers to a common eclipse of the sun, wondered: "From -763 down to the destruction of the First Temple in -586 no total eclipse of the sun was visible in Palestine."⁴ They took it for granted that the earth revolves along exactly the same orbit and on a slowly rotating axis, and so they questioned: Why did the prophets speak of eclipses when there were none? However, other descriptions of the world catastrophe in these prophets do not accord with the effects of an ordinary eclipse, either.

The word *shaog*, used by Amos and Joel, is explained by the Talmud⁵ as an earthshock, the field of action of which is the entire world, whereas a regular earthquake is of local character. Such a shaking of the earth, disturbed in its rotation, is visualized also as a "shaking of the sky," an expression found in the Prophets, in Babylonian texts, and in other literary sources.

Then the prophecy was fulfilled. Amid the catastrophe Isaiah raised his voice: "Fear, and the pit, and the snare [pitch⁶] are upon thee, O inhabitant of the earth . . . for the windows from on high

⁴ Schiaparelli, *Astronomy in the Old Testament*, p. 43. Oppolzer and Ginzel arranged canons of the solar eclipses in antiquity on the premise that there was no change in the movement of the earth or the moon.

⁵ The Jerusalem Talmud, Tractate Berakhot 13b.

⁶ *Pah* in Hebrew originally meant "bitumen" or "pitch," as can be inferred from Psalms 11 : 6.

are open, and the foundations of the earth do shake. The earth is utterly broken down, the earth is clean dissolved, the earth is moved exceedingly" (24 : 17-19).

The catastrophe came on the day on which King Ahaz was buried. There was a "commotion": the terrestrial axis shifted or was tilted, and the sunset was hastened by several hours. This cosmic disturbance is described in the Talmud, in the Midrashim, and referred to by the Fathers of the Church.⁷ It is related also in the records and told in the traditions of many peoples. It appears that a heavenly body passed very close to the earth, moving, as it seems, in the same direction as the earth on its nocturnal side.

"Behold, the Lord maketh the earth empty, and maketh it waste, and turneth it upside down. . . . The inhabitants of the earth are burned, and few men left" (Isaiah 24 : 1, 6).

The Argive Tyrants

In *Ages in Chaos* I shall present proof that the large, raw stone structures of Mycenae and Tiryns on the Argive plain in Greece are the ruins of the palaces of the Argive tyrants, well remembered by the Greeks of subsequent centuries, and date from the eighth century before the present era. If the material remains of the palaces of Mycenae and Tiryns are ascribed to the second millennium, then nothing has been found on the Argive plain that can be ascribed to the Argive tyrants, although they are known to have built spacious palaces.

Thyestes and his brother Atreus were of these Argive tyrants. Living in the eighth century, they must have witnessed the cosmic catastrophes of the days of Isaiah. Greek tradition persists that a cosmic catastrophe occurred in the time of these tyrants: the sun changed its course and the night arrived before its proper time.

Men should be prepared for everything and not wonder at anything, wrote Archilochus, since the day that Zeus "turned midday into

⁷ Tractate Sanhedrin 96a; Pirkei Rabbi Elieser 52; Hippolytus on Isaiah. Cf. Ginzberg, *Legends*, VI, 367, n. 81.

night, hiding the light of the dazzling sun; and sore fear came upon men."¹

Many classical authors referred to the occurrence. I give here Seneca's description. In his drama, *Thyestes*, the chorus asks the sun:

"Whither, O father of the lands and skies, before whose rising thick night with all her glories flees, whither dost turn thy course and why dost blot out the day in mid-Olympus [midday]? Not yet does Vesper, twilight's messenger, summon the fires of night; not yet does thy wheel, turning its western goal, bid free thy steeds from their completed task; not yet as day fades into night has the third trump sounded; the ploughman with oxen yet unwearied stands amazed at his supper hour's quick coming. What has driven thee from thy heavenly course? . . . Has Typhoeus [Typhon] thrown off the mountainous mass and set his body free?"²

This picture reminds us of the description of the day of Ahaz' burial.

Seneca relates the fear of world destruction experienced by those who lived at the time of Atreus and Thyestes, the tyrants of the Argive plain. The hearts of men were oppressed with terror at the sight of the untimely sunset. "The shadows arise, though the night is not yet ready. No stars come out; the heavens gleam not with any fires: no moon dispels the darkness' heavy pall. . . . Trembling, trembling are our hearts, sore smit with fear, lest all things fall shattered in fatal ruin and once more gods and men be overwhelmed by formless chaos; lest the lands, the encircling sea, and the stars that wander in the spangled sky, nature blot out once more."

Will the seasons be ended and the moon carried away? "No more" shall the stars "mark off the summer and the winter times; no more shall Luna, reflecting Phoebus' rays, dispel night's terrors."

After the catastrophe of the days of Atreus and Thyestes, the luminaries crossed their former paths obliquely; the poles were shifted; the year lengthened—the orbit of the earth became wider. "The Zodiac, which, making passage through the sacred stars, crosses

¹ Archilochus, Fragment 74. ² Translated by F. J. Miller (1917).

the zones obliquely, guide and sign-bearer for the slow moving years, falling itself, shall see the fallen constellations."

Seneca describes the change in position of each constellation—the Ram, the Bull, the Twins, the Lion, the Virgin, the Scales, the Scorpion, the Goat, and the Wain (the Great Bear). "And the Wain, which was never bathed in the sea, shall be plunged beneath the all-engulfing waves." A commentator who wondered about this description of the position of the Great Bear wrote: "There was no mythological reason why the Wain—otherwise known as the Great Bear—should not be bathed in the Ocean."³ But Seneca said precisely this strange thing: the Great Bear—or one of its stars—never set beneath the horizon, and thus the polar star was among its stars during the age that came to its end in the time of the Argive tyrants.

Seneca also says explicitly that the poles were torn up in this cataclysm. The polar axis now is turned toward one of the stars, the North Star, of the Little Bear.

In the face of the cataclysm, when humanity was overwhelmed with awe, the heartbroken Thyestes, longing for death, called upon the universe to go down in utter confusion. The picture was not invented by Seneca: it was familiar because of what had happened in earlier ages.

"O thou, exalted ruler of the sky, who sittest in majesty upon the throne of heaven, enwrap the whole universe in awful clouds, set the winds warring on every hand, and from every quarter of the sky let the loud thunder roll; not with what hand thou seekest houses and undeserving homes, using thy lesser bolts, but with that hand by which the threefold mass of mountains fell . . . these arms let loose and hurl thy fires."

Again Isaiah

Time passed after the death of Ahaz, and the fourteenth year of King Hezekiah approached. Again the frightened world anxiously anticipated a catastrophe. On its two previous approaches, the celestial missile had come very close, indeed. This time the end of the

³ A note by F. J. Miller to his translation of *Thyestes*.

world was feared. After the cataclysms of the days of Uzziah and of the funeral day of Ahaz, one did not have to be a prophet to foretell a new cosmic catastrophe. The earth will move out of its place, a scorching flame will devour the air, hot stones will fall from the sky, and the waters of the sea will mount and descend upon the continents.

"Behold, the Lord hath a mighty and strong one, which as a tempest [cataract] of hail and a destroying storm, as a flood of mighty waters overflowing, shall cast down to the earth with the hand" (Isaiah 28 : 2).

"The mighty and strong one" was a heavenly body, a missile of the Lord. Once more it was destined to scourge the earth. "The overflowing scourge shall pass through" (28 : 18), was Isaiah's new prognostication. Although the people of Jerusalem hoped that "when the overflowing scourge shall pass through, it shall not come unto us" (28 : 15), Jerusalem had no covenant with death.¹

There will be no safe place of refuge. "The waters shall overflow the hiding place" (28 : 17). "A consumption even determined upon the whole earth" (28 : 22).

"For the Lord . . . shall be wroth as in the valley of Gibeon, that he may do his work, his strange work; and bring to pass his act, his strange act" (28 : 21).

What was the "strange act" in the valley of Gibeon? In that valley the host of Joshua witnessed a rain of bolides and saw the sun and the moon disturbed in their movement across the firmament.

"At an instant suddenly" the land will be invaded with "small dust" and with "the multitude of terrible ones," and it will be visited "with thunder, and with earthquake, and great noise, with storm and tempest, and the flame of devouring fire" (29 : 5-6).

"A devouring fire" and "an overflowing stream" shall "sift the nations" with "tempest and hailstones" (30 : 27-30).

The prophet, reading the signs of the sky, took upon himself the role of sentinel of the universe, and from his watchtower in Jerusalem he spread the alarm:

¹ Cf. Psalms 46 : 5: "God is in the midst of her [Jerusalem]; she shall not be moved: God shall help her."

"Let the earth hear. . . . For the indignation of the Lord is upon all nations . . . He hath delivered them to the slaughter" (34 : 1 ff.).

Then follows the desolate picture of the destroyed earth and dissolved sky (34 : 4 ff.):

And all the host of heaven shall be dissolved,
and the heavens shall be rolled together as a scroll:
and all their host shall fall down. . . .
For my sword shall be bathed in heaven. . . .
And the streams . . . shall be turned into pitch,
and the dust into brimstone,
and the land shall become burning pitch.
It shall not be quenched night nor day;
the smoke shall go up for ever.

Isaiah referred his readers to the "Book of the Lord": "Seek ye out of the book of the Lord, and read: no one of these shall fail" (34 : 16). This book probably belonged to the same series as the Book of Jasher, in which the records of the days of Joshua at Gibeon were preserved; old traditions and astronomical observations must have been written down in the Book of the Lord, no longer extant.

Maimonides and Spinoza, the Exegetes

Ego sum Dominus, faciens omnia, extendens caelos solus, stabiliens terram, et nullus mecum. Irrita faciens signa divinatorum, et ariolos in furorem vertens. Convertens sapientes retrorsum: et scientiam eorum stultam faciens.

—PROPHETIAE ISAIAE
44 : 24-25 (Vulgate)

Here, before I go on to the description of the day on which the prophecies of Isaiah, pronounced after the death of Ahaz, were fulfilled, I should like to present the common view of generations of commentators. The books of the Mayas have come into the hands of only a few scholars; likewise the papyri of Egypt and the clay

tablets of the Assyrians. But the Book of Isaiah and other books of the Scriptures have been read by millions during many centuries in hundreds of languages. Is the way in which Isaiah expressed himself obscure? It is a kind of collective psychological blind spot which prevents the understanding of the clearly revealed and scores-of-times-repeated description of astronomical, geological, and meteorological phenomena. The description was thought to be a peculiar kind of poetic metaphor, a flowery manner of expression.

Even a modest attempt to review the various commentaries on Isaiah would burst the frame of a book larger than this one. Therefore it should satisfy the orthodox and the liberal reader alike if the opinions presented by two great authorities in the world of thought are given here, and the thousands of commentators not quoted at all.

Moses ben Maimon, called Rambam, also Maimonides (1135-1204), in his *The Guide for the Perplexed*,¹ expressed the opinion that a belief in the Creation is a fundamental principle of Jewish religion, "but we do not consider it a principle of our faith that the Universe will again be reduced to nothing"; "it depends on His will," and "it is therefore possible that He will preserve the Universe for ever"; "the belief in the destruction is not necessarily implied in the belief in the Creation." "We agree with Aristotle in one half of his theory. . . . The opinion of Aristotle is that the Universe being permanent and indestructible, is also eternal and without beginning."

With this theosophic approach to the problem at large, Maimonides was averse to finding any word or sentence in the Prophets or elsewhere in the Bible that would suggest a destruction of the world or even a change in its order.² Each and every such expression he explained as a poetical substitute for an exposition of political ideas and acts.

Maimonides says: "The stars have fallen,' 'The heavens are overthrown,' 'The sun is darkened,' 'The earth is waste and trembles,'

¹ English translation by M. Friedlander (1928).

² Maimonides apparently follows Philo, the Greek-writing Jewish philosopher of the first century, who in his *The Eternity of the World* was of the opinion that the world was created but that it is indestructible; however, Philo admitted changes in nature caused by periodic floods and conflagrations on a large scale and of cosmic origin.

and similar metaphors" are "frequently employed by Isaiah, and less frequently by other prophets, when they describe the ruin of a kingdom." In these phrases the term "mankind" is used occasionally; this is also a metaphor, says Maimonides. "Sometimes the prophets use the term 'mankind' instead of 'the people of a certain place,' whose destruction they predict; e.g., Isaiah, speaking of the destruction of Israel, says: 'And the Lord will remove man far away' (6 : 12). So also Zephaniah (1 : 3-4), 'And I will cut off man from off the earth.'"

He maintains that Isaiah and other seers of Israel, when examined by the realistic method of Aristotelianism, were persons inclined to exaggerated forms of speech, and instead of saying, "Babylon will fall," or "fell," they spoke in terms of some fantastic perturbation in the cosmos above and beneath.

"When Isaiah received the divine mission to prophesy the destruction of the Babylonian empire, the death of Sennacherib and that of Nebuchadnezzar, who rose after the overthrow of Sennacherib,³ he commences in the following manner to describe their fall . . . : 'For the stars of heaven and the constellations thereof, shall not give their light' (13 : 10); again, 'Therefore I will shake the heavens, and the earth shall remove out of her place, in the wrath of the Lord of hosts, and in the day of his fierce anger' (13 : 13). I do not think that any person is so foolish and blind, and so much in favour of the literal sense of figurative and oratorical phrases, as to assume that at the fall of the Babylonian kingdom a change took place in the nature of the stars of heaven, or in the light of the sun and moon, or that the earth moved away from its center. For all this is merely the description of a country that has been defeated; the inhabitants undoubtedly find all light dark, and all sweet things bitter: the whole earth appears too narrow for them, and the heavens are changed in their eyes."

"He speaks in a similar manner when he describes . . . the loss of the entire land of Israel when it came into the possession of Sennacherib. He says (24 : 18-20): '. . . for the windows from on high are open, and the foundations of the earth do shake. The earth is

³ Nebuchadnezzar lived a century after Sennacherib.

utterly broken down, the earth is clean dissolved, the earth is moved exceedingly. The earth shall reel to and fro like a drunkard.’”

The subjugation of Judah by Assyria was joyless, but what was so bad, from Isaiah’s point of view, in the destruction of Babylon that the stars should not give their light?

A reading of the literature indicates that no exegete has ever been “so foolish and blind” as to read sky for sky, stars for stars, brimstone for brimstone, fire for fire, blast for blast.⁴ Referring to the quoted verses—Isaiah 34 : 4–5—Maimonides writes: “Will any person who has eyes to see find in these verses any expression that is obscure, or that might lead him to think that they contain an account of what will befall the heavens? . . . The prophet means to say that the individuals, who were like stars as regards their permanent, high, and undisturbed position, will quickly come down.”

Maimonides quotes Ezekiel, Joel, Amos, Micah, Haggai, Habakkuk, and Psalms, and in verses similar to those cited from Isaiah, he finds incidentally a description of “a multitude of locusts,” or a speech appropriate for the destruction of Samaria or the “destruction of Medes and Persians,” spoken “in metaphors which are intelligible to those who understand the context.”

In a settled world nothing alters the given order. To sustain this doctrine, the prophecies were translated into metaphors, for, in the opinion of Maimonides, if the world does not change its regimented harmony, true prophets would not declare that it does. “Our opinion, in support of which we have quoted these passages,” writes Maimonides, “is clearly established, namely, that no prophet or sage has ever announced the destruction of the Universe, or a change of its present condition, or a permanent change of any of its properties.” This standpoint of Maimonides, as far as a change of conditions in the Universe is concerned, is a deduction, not from the texts he interprets, but from a philosophical a priori approach. Prophets might err

⁴ But for what they were taken may be illustrated by the exegesis of Augustine. He writes: “Hail and coals of fire (Psalm 18): Reproofs are figured, whereby as by hail, the hard hearts are bruised.” To the words, “And He sent out His arrows, and scattered them (Psalm 15),” Augustine writes: “And He sent out Evangelists traversing straight paths on the wings of strength.” St. Augustine, *Expositions on the Book of Psalms*, ed. Ph. Schaff (1905).

in their prophecies, but it could hardly be that in saying "stars" they meant "persons." The reading of subsequent chapters in Isaiah (36-39) and parallel chapters in Kings and Chronicles, as well as the Talmudic and Midrashic fragments (concerning the time of Sennacherib's invasion), makes it apparent that this time the prophets did not err, and that a change in harmonious conditions did occur in the lifetime of these very prophets, in the days of Hezekiah.

Maimonides asserts that Joel's prophecies referred to Sennacherib, but he is puzzled: "You may perhaps object—how can the day of the fall of Sennacherib, according to our explanation, be called 'the great and the terrible day of the Lord?'"

In the following pages it will be shown that on the very day which preceded the night when Sennacherib's army was destroyed, the order of nature was upset. The speeches of the seers must be interpreted not apart from, but in the light of, the description of these changes as they are preserved in the Scriptures and in the Talmud. There was keener insight during the times prior to Maimonides, and to these more ancient interpreters he referred when he wrote:

"The Universe [ever] since continues its regular course. This is my opinion; this should be our belief. Our Sages, however, said very strange things as regards miracles; they are found in Bereshith Rabba, and in Midrash Koheleth, namely, that the miracles are to some extent also natural."

Baruch Spinoza proceeds from the premise that "Nature always observes laws and rules . . . although they may not all be known to us, and therefore she keeps a fixed and immutable order." "Miracles" merely mean events of which the natural cause cannot be explained. "In so far as a miracle is supposed to destroy or interrupt the order of Nature or her laws, it not only gives us no knowledge of God, but, contrariwise . . . makes us doubt of God and everything else." "What is meant in Scripture by a miracle can only be a work of Nature."⁵

All these premises are philosophically true and no objection can be

⁵ *Tractatus Theologico-Politicus* (1670), Chap. VII. The quoted sentences are translated by J. Ratner in his *The Philosophy of Spinoza*.

raised against them. Of course, they are true only as long as the philosopher does not insist that the laws of nature as known to him are the real and only laws.

Discussing instances in the Scriptures to which the quoted principles should be applied, Spinoza insists that the subjective apperception and the peculiar manner of expression of the ancient Hebrews are the only reasons for the accounts of unnatural events.

"I will content myself with one instance from Scripture, and leave the reader to judge of the rest. In the time of Joshua the Hebrews held the ordinary opinion that the sun moves with a daily motion, and that the earth remains at rest; to this preconceived opinion they adapted the miracle which occurred during their battle with the five kings. They did not simply relate that the day was longer than usual, but asserted that the sun and moon stood still, or ceased from their motion."

The deduction made is: "Partly through religious motives, partly through preconceived opinions, they conceived of and related the occurrence as something quite different from what really happened." "It is necessary to know the opinions of those who first related them . . . and to distinguish such opinions from the actual impression made upon our senses, otherwise we shall confound opinions and judgments with the actual miracle as it really occurred; nay, further, we shall confound actual events with symbolical and imaginary ones."

The Book of Isaiah is offered by Spinoza as another example, and the chapter on Babylon's doomed destruction is quoted: "The stars of heaven . . . shall not give their light; the sun shall be darkened in his going forth, and the moon shall not cause her light to shine." The philosopher writes: "Now I suppose no one imagines that at the destruction of Babylon these phenomena actually occurred any more than that which the prophet adds: 'For I will make the heavens to tremble, and remove the earth out of her place.'" "Many occurrences in the Bible are to be regarded as Jewish expressions." "The Scripture narrates in order and style which has most power to move men and especially uneducated men . . . and therefore it speaks inaccurately of God and of events."

Asserting a subjective apperception on the part of the witnesses,

a deliberate intention to impress the reader or listener with exciting descriptions, a peculiarity in the mode of expression of Hebrew penmen, Spinoza nevertheless arrives at a *non sequitur*: "Now all these texts teach most distinctly that Nature preserves a fixed and unchangeable order. . . . Nowhere does Scripture assert that anything happens which contradicts, or cannot follow from the laws of Nature," and he supports his view with a theological argument: in the Book of Ecclesiastes it is written: "I know what God does, it shall be for ever."

The events were called miracles and were explained as subjective apperceptions or as symbolic descriptions because they could not be otherwise accounted for. But apart from the events themselves, which this study endeavors to establish as historical, the words of Isaiah and of other seers and penmen of the Old Testament do not leave any room for doubt that by "stones falling from the sky" were meant meteorites; by brimstone and pitch were meant brimstone and pitch; by scorching blast of fire was meant scorching blast of fire; by storm and tempest, storm and tempest; by a darkened sun, by the earth removed from its place, by change of time and seasons, were meant just these changes in the regular processes of nature. Where is the basis for the "sure knowledge" that the earth must move without perturbation at a time when every body in the solar system more or less perturbs every other one? Until the fall of meteorites in 1803, science was sure that stones falling from the sky occurred only in legends.

The "no one imagines" of Spinoza is no longer true. The author of this book does so imagine.