Even a remove of nearly five-hundred years has done little to dampen scholarly interest in this signal episode of the intellectual history of the 1500s. What so clearly focused attention at the time was the great fear aroused by the singular alignment of the major planets expected to occur in the sign of Pisces that supposedly portended the coming of a second great flood in February 1524. Indeed, the writings of so many eminent Renaissance scholars even in our own time, a list far too numerous to include in this brief summary of those forebodings for the intellectually curious but non-specialist reader, are a constant reminder of the historical import ascribed to them now, as then.

Few would deny that astrology was a serious pursuit of natural science and, more generally, held in high esteem by the educated elite throughout the 1500s and beyond. In effect, it seemed to account as much for changes in the political and social winds as it did for the outbreak of war, famine, pestilence, atmospheric events, the rise of new religions and the fall of old ones, and much else besides. As the Polish historian Krzysztof Pomian has put it: “Until the XVIth century the existence of a connexion between celestial and terrestrial bodies and between celestial and terrestrial events was admitted by everyone as self-evident. But on the nature of this connexion there was no agreement. The augustinian current considered celestial events as signs of terrestrial ones. The former announce the latter, because God conferred upon them such a meaning. And this meaning can be truly understood only by those who are looking on the skies guided by the divinely inspired scriptures. To such an attitude expressed with particular vigour by William of Auvergne, the aristotelians opposed their conviction that celestial events are causes of terrestrial ones. In order to understand their action one has therefore to inquire into their powers in conformity with the principles of natural science. Between these two poles lay an entire spectrum of intermediate positions which tried to reconcile or to synthesize Augustine with Aristotle, theology with physics and astronomy, significance with causality, prophecy with prediction. The most influent among them was that of Aquinas.”(1)

In a world view shaped by a natural philosophy much imbued with, and indebted to, astrology, the theory of great conjunctions, which was originally formulated by the Arab scholars Messehala (Masha’allah) and al-Kindī and more fully articulated thereafter by Albumasar (Abū Ma’shar) in his *De magnis coniunctionibus*, played a particularly important role. It was this latter version that subsequently enjoyed such wide currency among a number of European scholars, including most notably Peter of Abano (Pietro d’Abano) and cardinal Pierre d’Ailly.

The most important of these conjunctions involved the more slowly revolving planets—Jupiter and Saturn. According to Giuseppe Bezza, “…the doctrine of planetary conjunctions is based on the alignment of the superior planets, especially Saturn and Jupiter. As formulated by Abū Ma’shar, the conjunctions of Saturn and Jupiter are determined by their median movements (moti) and evince a regular pattern of alignments. Early on in *De magnis coniunctionibus*, Abū Ma’shar states that every 360,000 years Saturn completes 18,138 and Jupiter 30,352 revolutions, the numerical difference between them being 12,214. It therefore follows that their median conjunctions are repeated every 12,214/18,138 x 360° = 242.42144 degrees of the zodiac, i.e. the ninth sign from the initial sign of their conjunction, and that their temporal interval is given by 360,000/18,138 = 19 years, 314 days, 14 hour, 23 minutes and several seconds, which is why it is commonly
said they have a 20-year conjunction. Thus, if their conjunction occurs within the first degree of the zodiacal sign (i.e. $56' 33'' 18''' 48'''$), the two planets repeat their 20-year conjunctions in signs of the same triplicity (trigon) but every 13 years in the same trigon if conjunction occurs beyond this limit. At the end of these repeated 20-year conjunctions, the two planets go from one triplicity to another until moving through all four trigons of the zodiac at the approximate rate of $2 \times (12 + 13) \times 20 = 1,000$ years. Thus, in accord with their median movements, Saturn and Jupiter reproduce their coniunctio maxima about once every thousand years. [...] Since the initial, critical moment of this great cycle is generally acknowledged to be the moving of the conjunctions from one triplicity to another, according to the regular sequence fire-earth-air-water, which is known by the Arabic term intiqal, or permutatio, (a term also connoting “migration” and “death”), cardinal d’Ailly discerned and named magna coniunctio which is repeated about every 60 years and rules over the excellence, or not, of kings.” (2)

Lynn Thorndike argued that the triple conjunction of Mars, Jupiter and Saturn in March 1345 in the sign of Aquarius was viewed by many to be ‘responsible’ for the great plague pandemic, i.e. the Black Death, which devastated Europe beginning in 1347-1348: “… prout eo scripsi anno christi 1345” (‘thus was it writ in the year of our Lord 1345’) noted the Englishman John of Ashenden commenting on this tragic event in his Summa iudicialis de accidentibus mundi.

Little wonder, then, that the attention of astrologers was drawn to the powerful planetary alignment even many years before it would supposedly take place in the watery house of Pisces in February 1524. But this time not only would Mars, Jupiter and Saturn unite in celestial embrace, they were also to be joined in a far more massive display by the Sun, Mercury and Venus, viz. six of the then seven known planets.

The first notes of alarm were sounded in 1499 by two renowned German astrologers, Johann Stöffler and Jakob Pflaum, in their Almanach nova plurimis annis venturis inserviens. However, while they in fact did not explicitly predict a new deluge, rumours were soon rife throughout Europe about the effects to be wrought by the 15 conjunctions predicted in Stöffler’s ephemeris. Here is the passage in question: “In this year we shall see eclipse neither of sun nor moon. But in this year will occur positions of the planets well worthy of wonderment. For in the month of February will occur twenty conjunctions, small, mean and great, of which sixteen will occupy a watery sign, signifying to well nigh the whole world, climates, kingdoms, provinces, estates, dignitaries, brutes, beasts of the sea, and to all dwellers on earth indubitable mutation, variation and alteration such as we have scarce perceived for many centuries from historiographers and our elders. Lift up your heads, therefore, ye Christian men.” (3)

Thorndike also believed he heard an amplified echo of the widespread worry about the disastrous effects of this massive planetary array in Agostino Niño’s De falsa diluvii pronosticazione dated 1517, although it had actually been printed at Naples on 24 December 1519 and drew for inspiration upon an earlier treatise of the Dutchman Albert Pigghe. Yet credit for tracking down the actual genesis of the debate about the ‘great flood’ goes to the unparalleled detective work of Paola Zambelli, who traced its origin to a pamphlet of 1512 by Luca Gaurico bearing a dedication to the Marquis Francesco Gonzaga. (4) She notes: “Nothing more is needed to demonstrate that Gaurico’s compendium not only falls squarely within the ambit of predictions about the deluge but is in fact the source. It is in fact the first to single out and emphasise this passage from the [Stöffler’s] ephemeris, which until then had been neglected, and upon it Gaurico spins his web of fearful
prophecies alluding to disasters natural and spiritual. Indeed, it was Gaurico’s pronouncements, far more than the prediction of the Fleming Jaspard Laet, a widely acclaimed astrologer even in France but unknown in Italy, or Pigghe’s pointed criticism of him that informed Nifo’s view, that gave Nifo licence to utter in 1519 that “…public opinion already knew the deluge was coming.”(5)

Nor was it long before the panic spread far and wide. On 20 March 1523 a libel bearing the imperial seal was published in Vienna by the court astrologer Georg Tannstetter, who noted that “…this rumour [about the impending flood] has already taken root everywhere, in every sense, creeping into everyone’s mind: it has provoked the wise and the learned to heated debate, and in some it has caused such consternation that they can no longer manage their affairs properly: they sell their lands, fields and other properties, or refuse to purchase those for sale, because they believe it will be easier to convey money up to the mountains than castles and farms. Others still postpone weddings, rescind contracts, refuse holy orders, listlessly tend to their crops while exclaiming (if I understand rightly): what good are riches if in a few years no one will be able to enjoy them?”(6)

The Spanish astrologer and theologian Pedro Ciruelo, a man of vast erudition who was widely acclaimed in his own time, wrote an analysis in Spanish of the 1524 conjunction that was later translated into Latin, Italian and German. He even advises his readers at a certain point about precautionary measures they might take: “those of means should store provisions of flour, oil, wine, firewood, salted beef, dried fish, […] so that if any watery event were to occur in the months hither, everyone shall have their store and can go with it to a safer place.” For the poor who cannot afford such provisions, Ciruelo recommends that their needs be seen to at public expense. He also suggests that peasants refrain from sowing lowland fields and that shepherds and cowherds drive their animals to highland pastures where forage is abundant.

But what were these ‘diluvian’ prophecies announcing? An embarrassment of riches is there for the choosing. The Jupiter-Saturn conjunction of February 1524 proved a stimulus to industry—about sixty Renaissance authors penned more than 160 pamphlets, an invaluable trove uncovered by the passionate curiosity and analysed through the perseverance of Gustav Hellmann, Lynn Thorndike and Paola Zambelli.

Johannes Carion, court astrologer to Joachim I, Kurfürst von Brandenburg, published at Leipzig in 1521 his Prognosticatio und Erklärung der grossen Wesserung, which went through three editions over the following year. He predicts: “…never have waters risen higher than those that will come in ’24, which will be accomplished on 1 March and last to the third, then recede for one or half a day and commence anew thereafter. They will not cause damage in the lowlands or highlands except to wash away some chattels. But one must be mindful that in places not entirely surrounded by hills the water may flood in everywhere. Accordingly, towns on the coast and areas under the signs of Pisces and Virgo must be watchful as the most fearful influence of these signs will obviously be upon them. Indeed, because of the flood waters, the damaged lands will not be fertile the following years: great famine and misery shall be upon the land for the poor. And this inundation of rising waters shall shroud the earth in great mists such that after the summer phase of the Sun a pestilence, sudden and deathly, shall stalk the land in autumn.”(7)

In his Pratica Teütsch published on 11 November 1521 by the University of Heidelberg press, Johann Virdung of Hassfurt feared an “…excess of waters destroying the fruits of
the earth and ships at sea... [He believed] there will be a small partial deluge like that in Achaea in the time of the patriarch Jacob, or in Thessaly at the time of Moses, when men fled to the slopes of Parnassus, but not a universal flood like that in the days of Noah, nor even so large as to inundate an entire kingdom.” (8)

Niccolò Peranzone (who Paola Zambelli called a “mediocre commentator of Petrarch” and “middling and muddled schoolmaster” but who, according to P. Marchetti in his Biografie di uomini illustri di Montecassiano was “lecturer at Ragusa and Venice, barrister in Rome, orator, poet, mathematician and astronomer,” (9) published at Ancona in 1523 a Vaticinium de vera futuri diluvii declaratione cum una et viginti inundationibus memorabilibus. Here is a sample in Thorndike’s summary comments: “He then enumerates the various astrological factors in 1524 making for a flood. The conjunction of Saturn and Jupiter which will last for several days will pour down continuous inundations of waters and particular floods over almost the entire northern part of the world. The conjunction of the three superior planets on February 4 at 13.38 p.m. portends earthquakes, imprisonments, search for treasure and alchemical quests, building of edifices, investigation of hidden things, administration of inheritances, and very great floods with rivers at high water mark. Their renewed conjunction on February 5 at 7.17 p.m. signifies numerous other ills and will increase the floods of water. The conjunction of Jupiter and Venus on February 2 will also produce rain. So will that of Mars and Venus on the sixteenth, of the Sun and Mercury on the seventeenth, and of Saturn and Mercury on the nineteenth of the same month. Of four other conjunctions three will cause winds and the fourth bring rain.” (10)

Yet alongside the apocalyptic view there also flourished a tempering literature of consolation, its leading proponent being Agostino Nifo. Calling upon no less an authority than Albertus Magnus, he claimed in his 1519 tract entitled De falsa diluvii prognosticatione that any foreseeable flood would be of moderate extent and locally circumscribed. Indeed, this treatise, which was divided into three books, enjoyed wide circulation in many printings and in various translations.

A companion view in similar vein was taken by the Dutchman Paul of Middelburg, a renowned astrologer, professor of astronomy at the University of Padua, personal physician to the Duke of Urbino and bishop of Fossombrone from 1494. A pre-eminent figure in the reform of the calendar taken up at the Lateran Council of 1512-1517, Paul, who had long refrained from publishing any predictions, was finally persuaded to a change of heart by the tightening grip of anxiety and fear throughout Italy and published in 1523 his Prognosticum, which was addressed to Pope Clement VII and refuted any possibility of either a universal deluge or a more local flash-flood.

Even the physician and mathematician Georg Tannstetter, distinguished imperial astrologer in Vienna, railed against “...the opinion which now for some years has been spreading from the divination of certain astrologasters as to a future deluge and many other dreadful dangers for the year 1524...” in his 1523 Libellus consolatorius. (11) Unfortunately, Tannstetter pointedly aimed some of his critical barbs at Johannes Stöffler by name. This grand old man of seventy-two, who until then had remained in dignified silence, reacted with vehement disdain, publishing in the same year a book whose lengthy title leaves little doubt as to the view he takes in it—Johannis Stoefleri Iustingensis qui et Ephemeridum autors expurgatio adversus divinationum XXIII anni suspiionea a quibusdam indigne sibi offusas nominatim autem a Georgico Tannstetter Collimitio Lycoripensi Medico et Matematico in eo libello quem ipse consolatorium inscrispit. (12) Indeed, Stöffler, after having
repeatedly faulted Tansetter on scientific grounds, denies ever having predicted a deluge or, for that matter, of ever having encouraged in any way superstitious astrology.

What, then, really happened in that much feared February of 1524? As luck would have it, a record has survived in a diary kept by Andrea Pietramellara, son of Giacomo the distinguished professor of astrology at the University of Bologna. Andrea carefully recorded the year’s events as they unfolded in Bologna up to December. A glance at Thorndike’s summary account of its contents shows that 1524 was not a particularly dry year, pace such 16th-century sceptics as Gabriel Naudé and Pierre Bayle who would have us believe otherwise from their “bald-faced and irresponsible” a posteriori assertions. Indeed, it was so unseasonably wet that the city’s bells tolled the tocsin on more than one occasion and rites both religious and of public supplication were repeatedly celebrated.

Europe thus breathed a sigh of relief, and Pietro Aretino could brandish the nib of his poisoned pen against Gaurico, calling him “...a prophet after the fact...” and “...a buffalo-brain like the other errant ox-headed astronomers.”(13) Yet astrology itself came away relatively unscathed if we are to judge by such illustrious and ardent post-1524 practitioners as Cardano, Giuntini, Kepler, Galileo and Campanella.

NOTES

4. This is the Prognosticon ab Incarnatione Christi anno MDIII usque XXXV eiusdem elaboratum.
6. Ibid., p. 309.
7. Ibid., p. 345.
11. Ibid., p. 221.
12. “In defence of Johannes Stöffler of Justingen, author as well of Ephemerides, against alleged predictions for the year XXIII, unworthily attributed to him by one Georg Tansetter Collimitio Lycoripensi, Physician and Mathematician, in that pamphlet which he himself entitled consolatory.”