## John Dudley

# Plato's Concept of Chance

#### John Dudley Plato's Concept of Chance

ABSTRACT. The aim of the article is to show, firstly, how Plato integrated into his philosophy the most prevalent view of chance (*tyche*) from Homer to Socrates. This is "divine chance", meaning unexpected intervention by the gods in human affairs. Due to its irresistibility it is a manifestation of fate (*moira*). A second aim is to show that Plato also made use of the non-divine necessary chance found in Heraclitus, Empedocles and Democritus, namely in the *Timaeus* where matter (chaos) does not participate in order before the intervention of the Demiurge except occasionally by chance, and again to account for random outcomes where Reason cannot fully prevail over Necessity. The article also analyses briefly the numerous prephilosophical usages of chance by Plato. Plato's view of divine chance later proved highly influential, since it was adopted by the Stoics and was the source of the most important medieval view of chance, namely that of St. Augustine.

KEYWORDS: chance (tyche), fate (moira), Plato.

Plato's concept of chance has received relatively little attention.<sup>1</sup> The subject is nonetheless of considerable importance, not only within Plato's philosophy, but also because it includes the most important incorporation into philosophy of a tradition that goes back to the Homeric period, and is the basis of the most important interpretation of chance throughout the Middle Ages, which is influential even today.

It should be noted at the start, however, that Plato gave no definition of chance. Aristotle was the first philosopher to define chance, although a number of his predecessors had their own understanding of chance, notably Empedocles, Democritus, and Plato.<sup>2</sup> In the *Corpus* 

<sup>©</sup> J. Dudley (Louvain). jajdudley@yahoo.co.uk. Université catholique de Louvain. Платоновские исследования / Platonic Investigations 9.2 (2018) DOI: 10.25985/PI.9.2.04

<sup>&</sup>lt;sup>1</sup>The most comprehensive account is Zimmermann 1966.

<sup>&</sup>lt;sup>2</sup> Cf. Dudley 2012: Chapter 4.

*Platonicum* we find a definition of chance only in the spurious work *Horoi* (411b11–12).

Plato's understanding of certain chance events as unexpected interventions by God in human affairs is his most striking and characteristic view of chance. Because chance involves the intervention of God, it is referred to as 'divine'. Plato first refers to chance as 'divine' in *R*. IX.<sup>3</sup> There are some 25 other passages in which he refers to 'divine chance' (θεία τύχη) or 'divine good luck' (θεία εὐτυχία) or implies that chance and good luck are due to divine intervention in human affairs. All but four of these passages are found in the *Laws* and the 7th and 8th *Letters*.<sup>4</sup> Thus it appears that Plato gave greatest emphasis to the working of divine providence in his old age.

Plato's most characteristic understanding of chance belongs to a tradition that goes back to the earliest times in Greece. Chance from the remotest period was understood as a deity or a supernatural force sent by the gods and is referred to in a wide range of areas of Greek thought,

<sup>4</sup> Lg. VI, 757e, 759c, VII, 798a: θεία εὐτυχία; Ep. VII, 327e: θεία τινὶ τύχῃ, 336e: θεία τις τύχη, 337e; Ep. VIII, 353b; Lg. V, 732cd; XII, 946b. The τύχη of 709d and 710cd is, of course, also the τύχη referred to in 709b, likewise τύχη in R. VI, 499b, Ep. VII, 326a, 326e (providence - cf. Zimmermann 1966: 91-3). E. Berry (1940: 73-4) holds that  $\tau \dot{\nu} \chi \eta$  and  $\kappa \alpha \iota \rho \dot{\rho} \zeta$  in 709b are distinct from  $\theta \epsilon \dot{\rho} \zeta$  and definitely subordinated, and that  $\tau \dot{\nu} \chi \eta$  is therefore 'pure chance' and not  $\theta \epsilon i \alpha \tau \dot{\nu} \chi \eta$ . However, it seems that  $\tau \dot{\nu} \chi \eta$ is precisely  $\theta \epsilon (\alpha)$  because it is subordinated. Cf. Cioffari 1935: 42–3, Buriks 1948: 51, and Zimmermann 1966: 84–7. Cf. the implication that both  $\tau \dot{\nu} \chi \eta$  and  $\kappa \alpha \iota \rho \dot{\rho} \zeta$  have a divine origin in Lg. III, 702b (cf. Euthd. 272e: κατὰ θεὸν γάρ τινα ἔτυχον; cf. κατὰ θεόν in Lg. III, 682e, R. IV, 443b, Lg. XII, 946b, IV, 722c), also Ep. VII, 327e, 340a: εὐτυχῶς... θεόν; R. VI, 492a: θεῶν τύχη. – On the expression τῆ θεία τύχη in Lg. VI, 759c cf. infra n. 25. – On Ep. VII, 326b cf. Van Camp, Canart 1956: 397: "nous verrons donc ici dans θεία μοῖρα l'équivalent de la θεία τύχη qui revient fréquemment dans les Lettres... il faut y voir l'intervention de la divinité par le truchement des impressions humaines inexplicables, des faits contingents, du hasard. Θεῖος renvoie à cette divinité dont la nature n'est précisée nulle part avec exactitude." - On Ep. VII, 327e cf. ibid. 398: "il est très probable que θεῖος insinue... l'intervention d'une divinité dirigeant le cours des événements." – On  $\theta \epsilon i \alpha \tau i \chi \eta$  they conclude *ibid*. 403: "Un hasard qui a toutes les apparences et peut-être la réalité d'une providence, voilà la  $\theta \epsilon i \alpha \tau i \chi \eta$ , lorsqu'elle dépasse la portée d'une simple locution populaire." - On the providential background to  $\dot{\alpha}\gamma\alpha\theta\dot{\eta}\tau\dot{\eta}\gamma\eta$  in Plato see below.

<sup>&</sup>lt;sup>3</sup> R. IX, 592a: θεία τύχη.

notably in epic and lyric poetry, tragedy, and history. Thus in Hesiod and the Homeric hymn to Demeter Chance ( $T\dot{\nu}\chi\eta$ ) is found respectively in the list of the daughters of Okeanos and Thetis and as a companion of Persephone.<sup>5</sup> In Delphi the first question before one requested an oracle was: "O Tyche and Apollo, will you answer this request?"<sup>6</sup> Chance or Tyche is here the form of manifestation of Apollo. Besides being a deity,  $\tau\dot{\nu}\chi\eta$  also means good fortune granted, for example, by the goddess Athena.<sup>7</sup> If we ask why chance was seen from the earliest times as a manifestation of divine intervention in human affairs, the answer would seem to be firstly that the surprise aspect of a chance event was seen as not due to natural causes and as characteristic of divine activity,<sup>8</sup> and secondly because the Greeks were convinced of the intervention of the gods both in the order in the world and in human affairs and believed that the world is perfect, or at least that this is the best possible world.<sup>9</sup>

This interpretation of chance is continuous and widespread in Greek thought from the earliest times. Thus Archilochus (c. 680 - c. 640 BC) writes in a significant fragment:

Chance and Fate, O Pericles, give all things to man.<sup>10</sup>

Here he implies that chance (the unpredictable) and fate, in which it is manifested, determine human life. In the 6th century Theognis writes:

Do not pray for virtue ( $\dot{\alpha}\rho\epsilon\tau\dot{\eta}$ ) or wealth, son of Polypaus; Whatever comes to man is chance ( $\tau\dot{\nu}\chi\eta$ ) (*Eleg.* 129–130 Diehl).

<sup>&</sup>lt;sup>5</sup> Respectively in Hes. *Th.* 360 and *Hy.* 2 (Demeter) 420.

<sup>&</sup>lt;sup>6</sup> Simp. In Ph. (CAG 9: 333.16): ὦ Τύχη καὶ Λοξία, τῷδέ τινι θεμιστεύεις;

<sup>&</sup>lt;sup>7</sup> Hy. 11 (Athena) 5: Χαῖρε θεά, δὸς δ' ἄμμι τύχην εὐδαιμονίην τε.

<sup>&</sup>lt;sup>8</sup> It is striking that there are many biblical parallels for the surprising and unpredictable nature of divine actions.

<sup>&</sup>lt;sup>9</sup> Cf. Dudley 2001: 161–178.

<sup>&</sup>lt;sup>10</sup> Stob. *Ecl.* 1.6.3 = fr. \*8 Diehl: Πάντα Τύχη καὶ Μοῖρα, Περίκλεες, ἀνδρὶ δίδωσιν. On this passage cf. Buriks 1948: 10; Wilamowitz-Moellendorff 1932: 300; Jaeger 1943: 124–5; Herter 1963: 2.

The phrase is found also in a saying of Solon (Hdt. 1.32.4). Thus (divine) good fortune is the most important factor in achieving happiness, and neither virtue nor riches will avail if chance is not favourable. For Pindar  $\tau \dot{\nu} \chi \eta$  is godsent and divine. In human fate ( $\mu o \tilde{\rho} \alpha$ ) the decisive element is good luck, as success in our efforts comes through something which is incalculable and divine in power.<sup>11</sup> Aeschylus associates  $\mu o \tilde{\rho} \alpha$  and  $\tau \dot{\nu} \chi \eta$  and does not differentiate clearly between them (*Eu*. 476; *Th*. 505–6). Good luck is attributed to Zeus.<sup>12</sup> What happens by chance is necessary.<sup>13</sup> For Sophocles  $\tau \dot{\nu} \chi \eta$  is sent by the gods.<sup>14</sup> This  $\theta \epsilon i \alpha \tau \dot{\nu} \chi \eta$  has the same meaning as  $\theta \epsilon i \alpha \mu o \tilde{\rho} \alpha$ , meaning fate sent by the gods.<sup>15</sup> In numerous passages of Euripides, likewise, the gods send chance or  $\tau \dot{\nu} \chi \eta$ .<sup>16</sup> The same view of chance is found in history, in the work of Herodotus,<sup>17</sup> and in Xenophon.<sup>18</sup> We may say, then, that this

<sup>18</sup> Cf. e.g. *Eq. Mag.* 5.14: "I advise you to act with God so that chance (τύχη) may also favour you, the gods being propitious." As in Herodotus, an exceptional piece of good fortune must be referred to divine providence, but Xenophon prefers to refer to a divine decree (θεία μοῖρα, meaning the same as θεία τύχη), cf. *HG* 7.5.10. Similarly

<sup>&</sup>lt;sup>11</sup> Cf. Pi. fr. 38: "in deeds fortune prevails, not strength" (ἐν ἔργμασιν δὲ νικῷ τύχα οὐ σθένος). — Thus μοῖρα and τύχη are closely connected. It was even said that Pindar made Tyche one of the Moirai and gave her power over her sisters. Cf. Paus. 7.26.8 = Pi. fr. 41. Man is powerless in the hands of these divine forces. In *Pythian* 8.95–6 Pindar expresses most strongly the nothingness of human life: "man is but the dream of a shadow" (σκίας ὄναρ ἄνθρωπος).

<sup>&</sup>lt;sup>12</sup> A. *Ch.* 783; *Th.* 625. In the *Choephori* good luck is even said to be god and more than god. But this expression is not to be taken as an expression of Aeschylus' theology. A similarly unusual case is *Pr.* 515–8, where the subordination of Zeus to Moira is due to exceptional reasons.

<sup>&</sup>lt;sup>13</sup> A. Ag. 1042: εἰ δ' οὖν ἀνάγκη τῆς δ' ἐπιρρέποι τύχης.

<sup>&</sup>lt;sup>14</sup>S. Ph. 1316–7. Cf. Ant. 158 and OC 1505–6.

<sup>&</sup>lt;sup>15</sup> Cf. S. fr. 197 Nauck (= 196 Jebb).

<sup>&</sup>lt;sup>16</sup> E. Ion 67 ff; HF 1392-3; Hipp. 371 ff; El. 890 ff.

<sup>&</sup>lt;sup>17</sup> For example, the θεῖον which governs all things manifested itself in the θεία τύχη, the birth of Cyrus (Hdt. 1.126). When one does something that turns out to be very fortunate, one is considered to have divine fortune, that is, one's action is viewed as providential (3.139). Instead of θείη τύχη Herodotus also uses θείη πομπῆ with the same meaning in speaking of divine intervention (1.62, 3.77, 4.152, 8.94). He also uses σὺν θεῷ with the same meaning as θείη τύχη (1.86, 3.153). Cf. θειοτέρως in 1.122 and κατὰ δαίμονα in 1.111. In 9.91 there is κατὰ συντυχίην θεοῦ ποιεῦντος where συντυχίη is a coincidence brought about by the deity.

divine and deterministic view of chance is found in a wide range of areas of Greek thought from the earliest times, but not in philosophy.

Socrates is the first philosopher to emphasize the intervention of a providential god in the world. He believed that the gods have ordered the whole of nature to serve the well-being of human beings.<sup>19</sup> Divine fate or providence ( $\theta\epsilon i\alpha \mu o \tilde{\rho} \alpha \text{ or } \delta \theta \epsilon \delta \varsigma$ ) is a power found everywhere, and known to be divine because it is so powerful and mysterious. He believed that he had a divine mission sent by it.<sup>20</sup> Part of divine providence is divine chance, that is chance events sent by the gods (X. *Mem.* 1.1). However, Socrates held that he did not depend on it, but rather on the  $\delta \alpha \mu \delta \nu i \sigma \sigma$  or particular manifestation of divine providence.

Plato integrated divine chance into philosophy. However, this divine chance means the unexpected aspect of divine fate, as in Pindar, Aeschylus and Sophocles. In the *Meno* the virtue (ἀρετή) of the statesman is neither a gift of nature nor something taught, but is given by divine fate (θεία μοῖρα) to those who have it. This θεία μοῖρα takes the place of the operation of intellect (νοῦς), and hence its possessors cannot teach virtue. Statesmen, like prophets and soothsayers, are divine and inspired (*Men.* 99b–100b). Similarly in the *Laws* good Athenians are said to be good "spontaneously, by divine fate" (αὐτοφυῶς, θεῖα μοῖρα), thus not due to νοῦς or ἐπιστήμη.<sup>21</sup>

If ever a man is born who would prefer the public interest to his own private good, this is because he has a good nature so exceptional that it must be due to divine fate ( $\theta \epsilon (\alpha \mu o \tilde{\rho} \alpha)$  (*Lg.* IX, 875c). Thus 'divine fate' not only influences behaviour, but also human nature.

Where someone is badly educated, the outcome will be bad unless

in *Mem.* 2.3.18 a pair of hands are made by  $\theta \epsilon i \alpha \mu o \tilde{i} \rho \alpha$  (divine providence) to help one another.

<sup>&</sup>lt;sup>19</sup>X. *Mem.* 1.4; 4.3. This view of Socrates possibly inspired Aristotle to hold that nature made all of the animals for the sake of man (*Pol.* 1.8, 1256b15–22), although it is out of character with the rest of his teleology, which is theocentric. Cf. Dudley 2017.

<sup>&</sup>lt;sup>20</sup> *Ap.* 28e, 30a, 31a, 33c. Ἐνύπνια and μαντεῖα are examples of the manifestation of divine providence (cf. *Ap.* 33c).

<sup>&</sup>lt;sup>21</sup> Lg. I, 642c; cf. R. VI, 492e: θεοῦ μοῖραν.

some god happens to help (thus by θεία μοῖρα) (*R*. VI, 492a). If anyone turns out well in the present condition of society, that can only be due to divine fate (θεοῦ μοῖρα) (*R*. VI, 492e–493a).

The ideal state will not come to be until either the philosophers are by chance ( $\dot{\epsilon}\kappa \tau \dot{\nu}\chi\eta\varsigma$ ) compelled ( $\dot{\alpha}\nu\dot{\alpha}\gamma\kappa\eta$ ) to become rulers or a true love of true philosophy comes upon the present rulers or their sons by divine inspiration ( $\ddot{\epsilon}\kappa \tau \iota \nu \circ \varsigma \theta \epsilon i \alpha \varsigma \dot{\epsilon} \pi \iota \pi \nu \circ i \alpha \varsigma$ ) (*R*. VI, 499bc). The chance in question is the traditional necessary divine chance that intervenes in the world.<sup>22</sup> Divine inspiration is the same as that which inspires the poets and soothsayers through the soul.

The ideal man will take part in politics, "at least in his own city, however possibly not in his native land, unless some divine chance occurs (ἐἀν μὴ θεία τις συμβῃ̃ τύχη)" (*R*. IX, 592a). Here too it is clear that Plato is speaking of traditional necessary divine chance, as in 499b.

In his latest years Plato shows increased interest in the divine, though paradoxically greater pessimism as to the possibility of realising the ideal world on earth. He strongly opposed the idea that all things are controlled by pure chance ( $\tau \dot{\nu} \chi \eta$ ), since this is opposed to the doctrine of divine providence that he inherited from Socrates. Thus the Athenian stranger puts forward the view "that God controls all things and together with God chance ( $\tau \dot{\nu} \chi \eta$ ) and opportunity ( $\kappa \alpha \iota \rho \dot{\sigma} \zeta$ ) govern all human affairs."<sup>23</sup>

Plato takes over the widespread notion that casting lots was a way of leaving a decision to god or the gods who are the source of good luck (ἀγαθὴ τύχη).<sup>24</sup> The chance outcome comes about by good fate and luck (ἀγαθῃ μοίρϕ καὶ τύχῃ).<sup>25</sup> Thus Plato combines τύχῃ with θεία μοῖρα.

 $^{\rm 25}$  Lg. XII, 946b. Cf. the expression  $\tau\tilde{\eta}$  θεία τύχη in Lg. VI, 759c and Van Camp,

<sup>&</sup>lt;sup>22</sup> In *Ep*. VII, 326b the phrase used in the same context is: ἕκ τινος μοίρας θείας.

<sup>&</sup>lt;sup>23</sup> Lg. IV, 709ab: Ώς θεὸς μὲν πάντα καὶ μετὰ θεοῦ τύχη καὶ καιρός τἀνθρώπινα διακυβερνῶσι σύμπαντα, ἡμερώτερον μὴν τρίτον συγχωρῆσαι τούτοις δεῖν ἕπεσθαι τέχνην... He modifies this view by adding that τέχνη collaborates with καιρός.

<sup>&</sup>lt;sup>24</sup> Lg. VI, 757e–758a (cf. Lg. III, 690c); Lg. XII, 945b (to be connected with 946b). In Lg. IX, 903c–905d the Athenian stranger describes God as the great draughts-player in the universe (the πεττευτής) who moves the lots of souls based on the moral transformation of which they are the cause, while taking account of a throw of the dice. Cf. further Macé 2018: 286–292.

In addition Plato believed that any good outcome, which through lack of understanding is attributed to chance, has in fact a divine or supernatural cause.<sup>26</sup> It is striking that good fate (ἀγαθὴ μοῖρα) and divine chance (θεία τύχη) (337e) are synonyms (the latter being a particular manifestation of the former) and likewise divine chance (θεία τύχη) clarified by θεός (353b). Divine fate (θεία μοῖρα) conveys the idea of a lot assigned by divine decree, whereas divine chance (θεία τύχη) implies that that which appears to be chance is in reality godsent fortune.

Unqualified τύχη can also mean a superhuman evil force or fate, as shown in a striking passage in the 7th Letter.<sup>27</sup>

Besides divine chance, Plato also believed in a second kind of supernatural chance, namely  $\delta \alpha \mu ovi\alpha \tau \dot{\upsilon} \chi \eta$ .<sup>28</sup> This  $\tau \dot{\upsilon} \chi \eta$  was felt not to

<sup>26</sup> For Plato's use of τύχη in this sense cf. R. IX, 592a: θεία τύχη; Lg. VI, 757e, 759c, VII, 798a: θεία εὐτυχία; Ep. VII, 327e: θεία τινὶ τύχῃ, 336e: θεία τις τύχῃ, 337e; Ep. VIII, 353b; Lg. V, 732cd, XII, 946b and supra n. 4.

<sup>27</sup> For τύχη as a superhuman evil force (fate) cf. *Ep.* VII, 337d. On this passage cf. Zimmermann 1966: 97: "Es wäre damit der τύχη – wenigstens hier im 7. Brief einmal – ebenfalls eine bemerkenswerte dämonische Mittel- und Mittlerstellung zugewiesen, in der sie offensichtlich die edelsten menschlichen Pläne durchkreuzt und für den Augenblick κακά hervorruft, und im ganzen lassen sich – wiewohl Platon sich selbst fragt, wem er den negativen Einfluß effektiv zuzuschreiben hat – der δαίμων τις, der ἀλιτήριός τις und die τύχη τις ἀνθρώπων κρείττων auf Grund ihres Wirkens parallelisieren." Cf. *Ep.* VII, 336b: τις δαίμων ἤ τις ἀλιτήριος.

<sup>28</sup> For δαιμονία τύχη in Plato cf. *Hp. Ma.* 304c: δαιμονία τις τύχη; *Ti.* 25e: δαιμονίως ἕκ τινος τύχης, with which cf. *Euthd.* 272de, 291a. *Ti.* 25e confirms the authenticity of *Hp. Ma.* 304c. Wilamowitz-Moellendorff 1932: 301 incorrectly denied the existence of

Canart 1956: 363: "Θεῖος s'explique par θεῷ. Si tirer au sort revient à laisser le choix au dieu, c'est que le sort est ici le mode par excellence d'expression de la volonté du dieu, lui est parfaitement subordonné. Il n'y a plus hasard (τύχη) qu'en apparence. Platon revient sur ce point à l'ancienne notion de τύχη manifestation constante d'intervention divine." On this passage cf. also Berry 1940: 75: "the feeling that by the use of the lot a problem was referred to divine guidance for solution was general in Greece; indeed this was the older attitude toward the lot, and its attribution to *tyche* seems to be a rather later development." A well-known later example is the selection of Matthias by lot (*Acts* 1.24–26; cf. also *Lk.* 1.9; 1 *Sam.* 14.41 and many other passages). However, the casting of lots does not lead to the guidance of the chance outcome by Providence if the intention is lacking, as appears from *R.* V, 460a, X, 619d, 620c; cf. 604cd; *Plt.* 300a; *Ti.* 18e (for a biblical example of the absence of Providence from the outcome of the casting of lots cf. *Jn.* 19.24; *Ps.* 22.18).

come from the gods, but from intermediary supernatural beings, who are not opposed to the gods. This  $\delta \alpha \mu ovi\alpha \tau \dot{v} \chi \eta$  is also rare in Plato, but at the same time occurs in sufficient passages to establish it as part of his thought.

Aristotle gives a list of the different views about chance held by his predecessors in *Physics* 2.4. He tells us that some people believe that there is no such thing as chance, others that for everything said to occur by chance some other cause can be found. He attacks Empedocles for being superficial and Democritus for holding that the order in the universe in due to chance. Finally he writes a single sentence which runs as follows: "There are some who think that chance ( $\tau \dot{\nu} \chi \eta$ ) is a cause, on the one hand, but is unclear to the human mind, as if it were something divine ( $\theta \epsilon \tilde{\iota} \dot{\delta} \tau \tau$ ) and rather daimonic ( $\delta \alpha \mu \rho \upsilon \dot{\omega} \tau \epsilon \rho \sigma$ )" (*Ph.* 2.4, 196b6–7). It is remarkable that none of the commentators up to now have recognised that Aristotle is referring here to Plato's view of divine and daimonic chance.<sup>29</sup> Aristotle reserves the last place on his list for

<sup>29</sup> Commentators have suggested that Aristotle was referring to Anaxagoras, Democritus and Socrates. This view was incorrectly ascribed to Democritus by Cherniss 1935: 248. W.D. Ross 1936: 515 thinks that the phrase ἄδηλον αἰτίαν ἀνθωπίνῷ λογι-

δαιμονία τύχη in Plato. – On Ti. 25e cf. Zimmermann 1966: 45–6: "Ihm [sc. Kritias] scheint bei der Erzählung irgendeine τύχη die Hand 'dämonischerweise' im Spiele gehabt zu haben. Es ist damit wieder der Zwischenbereich zwischen den menschlichen und göttlichen Kräften herangezogen und für diese unerklärliche, aber für das Dialogthema fruchtbare Tatsache verantwortlich gemacht. Man wird sich dabei genausogut der Daimonen und ihrer 'Mittel'-stellung, ebensogut auch des sokratischen Daimonions erinnern müssen, unter dessen Einfluß Sokrates handelt, wie auch der fügenden  $\tau \dot{\nu} \chi \eta$ , die, wie in anderen Fällen, bei der Klärung von markanten Punkten innerhalb der platonischen Philosophie etwas glücklich fügt, wobei sie selbst in einem eigenartig unbestimmten Dunkel bleibt." – On Hp. Ma. 304c cf. Zimmermann 1966: 19: this τύγη is "eine unbestimmbare, innere, übermenschliche Kraft, die den Sokrates offensichtlich in ihrer Gewalt hat." - In Lg. IX, 877a2-3 it also seems that the intending murderer's "not altogether bad luck" (οὐ παντάπασιν κακὴν τύχην) is due to (although not synonymous with) the daimon that prevented him from succeeding, likewise 877a5. - Cf. Zimmermann 1966: 111: "Die 'dämonische Tyche' ist somit nicht als eine Antagonistin zu einer θεία τύχη, nicht als böses Prinzip im Widerstreit zu einem guten, zu fassen... so kann auch das Verhalten der ambivalenten dämonischen Mächte bei der Verwirklichung von Gutem störend auftreten. Der Grund dafür ist, daß sie nicht reine Götter sind, sondern wie die Menschen mehr oder weniger mächtige Begierden haben."

the most important of the views of his predecessors. His motivation was doubtless that he considered Plato's view to be unphilosophical and had no sympathy for it, since he did not believe in an interventionist God. His major concern was to refute the interpretation of Democritus and that of the other Presocratic philosophers. However, it is striking and seemingly anomalous that he places the view of Plato and the most important view of chance in the last place on his list.

While Plato's most important view was that of "divine" chance coming from the gods, it is important to note that he also refers to and himself makes use of chance in a way not related to God or the gods, namely in the same sense as Heraclitus, Empedocles and Anaxagoras. These Presocratic universal determinists attributed certain necessarily caused occurrences to chance without any question of divine intervention, and they saw no contradiction in holding that a necessary event occurred by chance. Thus for them chance appears to refer to the subjectively unexpected nature of certain necessary events.

Plato refers to this view in a well-known passage of *Lg*. X, where he argues against unidentified thinkers who wish to reduce all causality to nature (φύσις), chance (τύχη) and art (τέχνη):<sup>30</sup>

Fire and water and earth and air all exist by nature ( $\phi \dot{\upsilon} \sigma \epsilon_i$ ) and by chance ( $\tau \dot{\upsilon} \chi \eta$ ), they say, and none of them by art ( $\tau \dot{\epsilon} \chi \upsilon \eta$ ). And in regard

 $<sup>\</sup>sigma$ μῷ may refer to Anaxagoras, as stated by Ps.-Plutarch (Aët. *Plac.* 1.29.7 Diels) and Theodoret (*Affect.* 6.15). But in reality the phrase goes back to Aristotle. For a detailed explanation cf. Dudley 2012: 69, n. 39.

<sup>&</sup>lt;sup>30</sup> This theory is attributed to Archelaus by Bury, to Prodicus by Diès, to Empedocles by O. Gilbert 1907: 121; W. Gundel 1914: 23–4; Buriks 1948: 14, and R. Sorabji 1980: 18; to followers of Empedocles by DK 31 A 48; to the atomists by J. Ferguson 1971: 100–1; to a mixture of the teachings of several Presocratics such as Leucippus, Democritus and Empedocles, possibly as represented by contemporaries of Plato, by Zimmermann 1966: 54; to the atomists, Empedocles and Anaxagoras by A. Aravantinou 2005: 37, n. 28. It would appear that Plato is referring to views current in the mid-fourth century, which tended to undermine the existence of the gods and had existed for a long time past (τούτων πάλαι παρεσκευασμένων, 890b). It should be noted that these views were taken over partially by Aristotle, as he rejected the gods, and held already in his early works that the three sources of generation are φύσις, τύχη, and τέχνη – cf. *Protrep*. B 11 Düring; *APo* 2.11, 94b27–95a9; *Rhet.* 1.10, 1368b32–37.

to the bodies that come after these, the earth, the sun, the moon and the stars, they hold that they come into existence through the former, although these are entirely inanimate. It is by chance (τύχῃ) all these elements move, according to their respective tendencies, and according as they meet together and combine fittingly, — hot with cold, dry with moist, soft with hard, and all such necessary (ἐξ ἀνάγκης) mixtures as result from the chance (κατὰ τύχην) combination of these opposites in this way and by these means engendered the whole heaven and all that is in the heaven, and all animals and plants as well, all seasons then being engendered from these elements; and all this, as they assert, not due to intellect (διὰ νοῦν) nor to any god or art (οὐδὲ διὰ τινα θεὸν οὐδὲ διὰ τέχνην), but, as we have said, by nature (φύσει) and chance (τύχῃ) (*Lg.* X, 889bc).

In this passage Plato refers to necessary (ἐξ ἀνάγκης) mixtures resulting from the chance (κατὰ τύχην) combination of opposites, thereby showing that for the thinkers who held the view in question a necessary occurrence could also be regarded as a chance occurrence, in the sense of a random (i.e. unforeseen or unpredictable) occurrence.<sup>31</sup>

Plato himself held that the order in the universe could only be explained as due to the intervention of the Demiurge and hence did not accept that it could be due to chance. However, it is important that he did not view chance and necessity as necessarily divine. Thus in the *Timaeus* he writes that necessity and chance are inherent in the material cause (matter or chaos) with which the Demiurge has to work. Reason (as represented by the Demiurge) has to prevail over Necessity

<sup>&</sup>lt;sup>31</sup> Buriks 1948: 14–15 holds that the necessity referred to by Plato arises from the inevitable intervention of Strife (νεῖκος) and (later in the cycle) of Love in the universe of Empedocles, i.e. that the general framework of the course of history is predestined, whereas individual events are haphazard, i.e. the elements meet and mix in a random and unpredictable way. The view she attributes to Empedocles is doubtless correct, as appears from the picture ἐπὶ τῆς φιλότητος in *Ph*. 2.8, 198b30–32 (cf. Dudley 2012: 86, n. 47, and 158–160) and *Metaph*. A.4, 985a23–29. But Plato in this passage is not referring to a single thinker, and one cannot use the passage to determine Empedocles' views on chance. Aristotle also accepts that the general framework of events on earth is absolutely necessary, but that individual events are contingent. Cf. Dudley 2012: 275. (It may be noted that the Stoics would later reject this view and hold that if the general framework is necessary, then all events in history are also necessary and repetitive.)

(the resistance to order in matter) (Ti. 47e-48a). Reason cannot, however, fully prevail over Necessity, and the outcome is chance results, without order, which just happen.<sup>32</sup> Likewise, prior to the intervention of the Demiurge matter did not participate in order except occasionally by chance.<sup>33</sup> The chance formations that arose were, of course, also necessary, given the necessity in matter. Thus here we find in Plato chance referring to the subjectively unexpected nature of certain necessary events. The use of chance here (τύχη, τὸ τυχόν, τὸ ὅπῃ ἔτυχεν) is to be distinguished from Plato's most characteristic view of  $\tau \dot{\nu} \gamma \eta$  with a divine origin. The significant difference between the  $\tau \dot{\nu} \gamma \eta$  (pure chance or the haphazard) he accepts in *Ti*. 46e and 69b and rejects in the passage referring to unknown thinkers in *Lg*. X quoted above (888e–889c) is that in Ti. 46e he is referring to side effects of the intervention of the Demiurge and in 69b, to the situation prior to the intervention of the Demiurge, whereas the Demiurge is excluded from a role in the account of the order in the universe given by those who support the views in the passage of the Laws. It is of great importance that Plato not only understood chance in the sense of necessary but non-divine chance as used by Heraclitus, Empedocles and Anaxagoras, but even

<sup>&</sup>lt;sup>32</sup> Ti. 46e: λεκτέα μὲν ἀμφότερα τὰ τῶν αἰτιῶν γένη, χωρὶς δὲ ὅσαι μετὰ νοῦ καλῶν καὶ ἀγαθῶν δημιουργοὶ καὶ ὅσαι μονωθεῖσαι φρονήσεως τὸ τυχὸν ἄτακτον ἑκάστοτε ἐξεργάζονται. Cf. Phlb. 28d: Πότερον, ὡ Πρώταρχε, τὰ σύμπαντα καὶ τόδε τὸ καλού-μενον ὅλον ἑπτροπεύειν φῶμεν τὴν τοῦ ἀλόγου καὶ ἐἰκῇ δύναμιν καὶ τὸ ὅπῃ ἔτυχεν, ἢ τὰναντία, καθάπερ οἱ πρόσθεν ἡμῶν ἔλεγον, νοῦν καὶ φρόνησίν τινα θαυμαστὴν συντάττουσαν διακυβερνᾶν; On ἀνάγκη in the *Timaeus* cf. W. Kullmann 1985: 209. It may be noted that Plato's material chaos moved by a mindless inner necessity bears a certain resemblance to Democritus' world-view. Cf. *Cael.* 3.2, 300b8–25. For necessary chance in Plato cf. also *Lg.* VII, 806a; *R.* VI, 499b (implicitly also divine chance), IX, 579c. On chance in this sense cf. also W.K.C. Guthrie 1965: 163–4, E. Moutsopoulos 2005: 63. The older commentators Gilbert 1907: 121 and Gundel 1914: 23 did not grasp this prephilosophical meaning and hence claimed that Empedocles was inconsequent in admitting necessary chance.

<sup>&</sup>lt;sup>33</sup> *Ti*. 69b: ὅσον μὴ τύχῃ. Semblances of order occasionally occurred without design in the chaos. On this passage cf. Zimmermann 1966: 47–9, 105–6. Plato clearly appears to agree in this context to some extent with Empedocles' account of chance. Cf. *Cael.* 3.2, 300b25–31.

accepted this meaning in the *Timaeus* and found a place for it in his own system, namely in regard to matter or chaos.

Besides the philosophical meanings of chance I have examined, Plato also uses the term prephilosophically with a number of other meanings. These can be divided broadly into three, a "neutral", a negative and a positive meaning. In the neutral sense there are numerous passages in Plato in which  $\tau \dot{\nu} \chi \eta$  or  $\tau \dot{\nu} \chi \alpha \iota$  refer to events that "just happen" (as it were, "pure" chance). Between these a number of distinctions could be introduced. However, this task goes beyond the scope of the present article.<sup>34</sup>

Secondly, τύχη in Plato can have the prephilosophical meaning of 'misfortune', where it is synonymous with  $\sigma \nu \mu \varphi \circ \rho \dot{\alpha}$ , a 'mishap/disaster'.<sup>35</sup> In *R*. X the plural τύχαι occurs and means misfortunes which

<sup>35</sup> E.g. Cri. 43c; Mx. 243c; 247cd; 248c; Phd. 117c; R. III, 399b.

<sup>&</sup>lt;sup>34</sup> Cf. e.g. Criti. 120e; Lg. IX, 879b; IV, 709a, where τύχαι are synonymous with συμφοραί; Men. 99a (where τύχη means 'haphazardly' with an implication of 'unexpectedly'); εὐτυχία and δυστυχία in Lg. I, 632a; II, 655d (τύχαι); IV, 709ab: τύχαι (twice), meaning 'pure chance (events)' (cf. Schöpsdau 2003: ad loc.); Tht. 175ab; Prt. 323c where τύχη is synonymous with τὸ αὐτόματον (323c) and means 'the way things are' (Aristotle's material cause); Grg. 448c. Cf. Sph. 265c, where an αἰτία αὐτομάτη is the opposite of a divine cause. Τύχη in Plato can mean simply an 'event', Cri. 46b (cf. also 44d ὅτι αν τύχωσι and Burnet 1924: ad loc.); 'circumstances' or 'situation', Smp. 203c; 'lot' or 'situation' (opposed to συμφορά, a 'mishap/disaster'), Phd. 84de; in Lg. XI, 922b τύχαι means 'the (accidental) situation'; in Lg. X, 899e τύχαι refers to the 'lot' or 'fortunes' of the wicked (who seem to fare well); in Phd. 58a túyn means a 'coincidence' (cf. Burnet 1911: ad loc., and Burnet 1924: ad Euthphr. 5e6); in Ep. VII, 324c τύχαι means '(chance) circumstances'; in Ep. VIII, 356b τύχαι means the 'vicissitudes of chance'; in Ep. III, 316d the passage is not altogether clear, but chance is not divine chance. -On τύχη with the prephilosophical meaning described above cf. Zimmermann 1966: 103-4: "An einer sehr großen Anzahl von Stellen meint 'Tyche' nichts anderes als eine konkrete Situation, die sich irgendwie ergibt oder ergeben hat... Zu dieser wenig aufschlußreichen Bedeutungsgruppe gehören auch die τύχη-Stellen, die das Wort im Plural aufweisen:  $\tau \dot{\nu} \gamma \alpha \iota$  sind jeweils die Summation von Einzelsituationen. – Unberücksichtigt bleibt in diesen Fällen die Frage, wie diese Tyche verursacht ist. Es ist dort lediglich eine 'Tyche-Situation' konstatiert und als gut oder auch ungünstig markiert... Dem Geschehen, das dorthin führt oder geführt hat, sowie dieser eingetretenen Situation steht der Mensch hilflos gegenüber: sie ist von außen über ihn gekommen..." On τύχαι in the Laws cf. ibid. 70.

are expressly stated to occur in life haphazardly, like the throwing of a dice.<sup>36</sup> Similarly in *Lg*. XI τύχαι refers to sickness, old age and all the misfortunes in life.<sup>37</sup>

Finally, τύχη can also refer to good fortune.<sup>38</sup> Most frequently good fortune is expressed in a wish, where the phrase evinces a wish for better fortune.<sup>39</sup> The expression τύχῃ ἀγαθῃ̃ is found in a number of passages. The basic meaning is 'may it be with good luck'.<sup>40</sup> However, various other turns of phrase can also be required in English according to the context, e.g. 'may it be for the best' (*Cri.* 43d); 'let us go and may good luck be with us'<sup>41</sup>; or 'good luck to you'.<sup>42</sup> The notion of a divine origin is always present behind the concept of good luck in Plato.<sup>43</sup>

 $^{38}$  Lg. I, 640d; [Ps.-Plat.] Epin. 979a; 992a; 976e ("a god himself rather than some good fortune" — cf. Tarán 1975: 234).

<sup>39</sup> Lg. IX, 878a: ἐπ' ἀμείνοσι τύχαις, and XI, 924a: ἐπὶ τύχαις ἀμείνοσι; likewise IX, 856e: τύχῃ ἀμείνονι; VII, 813a: μετὰ τύχῃς εὐμενοῦς 'with the help of kindly fortune'; Ep. VI, 322c.

<sup>&</sup>lt;sup>36</sup> *R*. X, 603e, X, 604d, where the plural τύχαι occurs and means misfortunes which are expressly stated to occur in life haphazardly, like the throwing of a dice, 604c.

<sup>&</sup>lt;sup>37</sup> Lg. XI, 922d. Cf. Lg. V, 732c (cf. X, 887e); XI, 926e (where τύχη is synonymous with συμφορά) and 928a, where τύχη refers to the lot or misfortune of being an orphan; XI, 924a, where τύχη refers to the 'lot' of an early death; 924d ἀπροσδοκήτῷ τύχῃ χρησάμενος, a man who dies unexpectedly; similarly XI, 920d; VI, 774e; IX, 873c; V, 747c: χαλεπὴ τύχῃ; IX, 877a5: ἐπάρατον τύχῃν καὶ συμφοράν (where τύχῃ and συμφορά are a hendiadys); IX, 881e: ἀλιτηριώδους τύχῃς; X, 905c: δυσδαίμονα τύχῃν; Ep. VII, 325b, where τύχῃ means 'twist of fate' (misfortune); Hp. Ma. 295b, where τύχῃ means 'lot', 'I shall accept my lot'; Euthd. 279e: 'risks'.

<sup>&</sup>lt;sup>40</sup> Smp. 177e; similarly Phlb. 57e; Lg. XI, 919d.

<sup>&</sup>lt;sup>41</sup> Lg. I, 625c: ἴωμεν ἀγαθῆ τύχῃ.

<sup>&</sup>lt;sup>42</sup> Ti. 26e (Jowett), 'ik wens je veel succes' (Opsomer).

<sup>&</sup>lt;sup>43</sup> Cf. esp. *Lg.* V, 732cd (cf. *supra* n. 4); less clear examples of good fortune coming from the gods are to be found in *Cri.* 43d; *R.* X, 619c; *Phdr.* 262c, 265c; *Sph.* 217b; *Lg.* V, 732d. In *Cra.* 394e and 395e τύχη means 'inexplicably', but with a shade of 'providentially'. However, chance itself is not an agent. Thus certain persons are also said to acquire goods (financial means) 'by chance' (ὑπὸ τύχης, τύχῃ), as if chance were an impersonal agent, which it is not (as in Aristotle): *Lg.* IV, 718a; V, 744e (in the sense of 'good luck'). Likewise, the Athenian inquires what kind of chance (τύχη) destroyed such a confederacy (*Lg.* III, 686b), as if chance were a blind, irrational force, which, however, it is not (*Lg.* III, 695e–696a).

### Conclusion

From the earliest times the Greeks believed that fate and chance played an important part in human life. Divine fate ( $\theta \epsilon i \alpha \mu o \tilde{i} \rho \alpha$  means the idea of a lot assigned by divine decree, whereas divine chance ( $\theta \epsilon i \alpha$  $\tau \dot{\nu} \chi \eta$ ) implies that that which appears to be chance is in reality godsent. The Greeks believed in freedom and responsibility, but they believed that their freedom and responsibility were limited by fate and chance sent from above. The importance of Plato is that he was the first philosopher to integrate this concept of divine chance into philosophy. However, he also integrated the non-divine, but necessary chance of Heraclitus, Empedocles and Anaxagoras into his philosophy in the Timaeus, a fact that has not previously been recognised. The Demiurge cannot fully prevail over Necessity or matter, and the outcome is chance results, without order, which just happen. Likewise, prior to the intervention of the Demiurge matter did not participate in order except occasionally by chance. The chance formations that arose were, of course, also necessary, given the necessity in matter. Thus in the Timaeus Plato finds a place in his thought for non-divine necessary chance in combination with his more important view of divine chance.

It is his view of divine chance that proved most influential, since it was later adopted by the Stoics, who likewise understood it as part of divine fate.<sup>44</sup> Furthermore, at a later period it was the source of the most important Christian view of chance. In St. Augustine, for example, the term 'chance' (*fortuna*) refers to an unknown cause, although there is a definite and determining cause of everything said to occur by chance, namely divine providence.<sup>45</sup> The notion that unexpected events are due to divine providence is still widespread at the present time. Thus Plato's

<sup>44</sup> Cf. Dudley 2012: 141-2. Cf. also Simp. In Ph. (CAG 9: 333).

<sup>&</sup>lt;sup>45</sup> Aug. *Retract.* 1: *Contra Academicos libri tres* 1.2: "Sed in eisdem tribus libris meis non mihi placet *totiens me appellasse fortunam*, quamvis non aliquam deam voluerim hoc nomine intelligi, sed fortuitum rerum eventum vel in corporis nostri vel in externis bonis aut malis. Unde et illa verba sunt, quae nulla religio dicere prohibet: forte, forsan, forsitan, fortasse, fortuitu, quod tamen totum ad divinam revocandum est providentiam. Hoc etiam ibi non tacui dicens: *Etenim fortasse quae vulgo fortuna nominatur, occulto quodam ordine regitur; nihilque aliud in rebus casum vocamus, nisi cuius ratio et* 

view of chance is important not only within his own philosophy, but also due to its enormous influence over many centuries and up to the present time.

### References

- CAG = *Commentaria in Aristotelem Graeca*, edita consilio et auctoritate Academiae Litterarum Regiae Borussicae. Berolini: G. Reimeri, 1882–1909.
- Aravantinou, A. (2005), "Necessity and Chance in Democritus' Cosmology", in *Hasard et nécessité dans la philosophie grecque*, 30–49. Académie d'Athènes, Centre de recherche sur la philosophie grecque.
- Berry, Edmund Grindley (1940), *The History and Development of the Concept* of *OEIA MOIPA and OEIA TYXH down to and including Plato.* Chicago: University of Chicago Libraries.
- Buriks, Agatha Anna (1948), ΠΕΡΙ ΤΥΧΗΣ, De ontwikkeling van het begrip tyche tot aan de Romeinse tijd, hoofdzakelijk in de philosophie. Leiden: Luctor et Emergo.
- Burnet, John, ed. (1911), *Plato's Phaedo*. Edited with Introduction and Notes. Oxford: Clarendon Press.
- Burnet, John, ed. (1924), *Plato's Euthyphro, Apology of Socrates, and Crito.* Edited with Notes. Oxford: Clarendon Press.
- Cioffari, Vincenzo (1935), Fortune and Fate from Democritus to St. Thomas Aquinas. New York: Privately printed.
- Cherniss, Harold (1935). *Aristotle's Criticism of Presocratic Philosophy*. Baltimore: Johns Hopkins Press (repr. New York: Octagon Books, 1983).
- Dudley, John (2012), Aristotle's Concept of Chance. New York: SUNY Press.
- Dudley, John (2017), "Aristotle's Three Teleologies", in Valery V. Petroff (ed.), The Legacies of Aristotle as Constitutive Element of European Rationality.

*causa secreta est.* Dixi quidem hoc; verumtamen penitet me sic illic nominasse fortunam, cum videam homines habere in pessima consuetudine, ubi dici debet: hoc Deus voluit, dicere: hoc voluit fortuna." Cf. also *Quaest. Hept.* 1.91: "haec ipsa tamen, quae fortuita videntur, causis occultis divinitus dentur." For Aquinas *S.C.G.* 3.92 chance also refers to a cause unknown to man, which may be either an angel or God (divine providence). Cf. *S.T.* 1.103.7 *ad* 2 referring to Aug. *Diver. quaest.* 24 (*PL* 40.17). Cf. also *S.T.* 1.116.1 and *In Metaph.* 1216. While these influential Christian authors felt called upon to see divine providence even in the working of chance, it may be noted that in the parable of the good Samaritan Jesus uses the term 'chance' manifestly without any implication of divine providence (*Lk.* 10.31).

Proceedings of the Moscow International Conference on Aristotle. RAS Institute of Philosophy, October 17–19, 2016, 175–186. Moscow.

- Dudley, John (2001), "Is it a Perfect World? Spinoza and the Principle of Perfection", in A. Tourneux (ed.) Liber Amicorum Raphaël de Smedt, Vol. 4: Litterarum Historia, 161–178. Leuven: Peeters.
- Ferguson, John (1971), "ΔΙΝΟΣ", *Phronesis* 16: 97–115.
- Gilbert, Otto (1907), *Die meteorologischen Theorien des griechischen Altertums*. Leipzig: B.G. Teubner (repr. Hildesheim, 1967).
- Gundel, Wilhelm (1914), Beiträge zur Entwicklungsgeschichte der Begriffe Ananke und Heimarmene. Diss. Universität zu Giessen.
- Guthrie, W.K.C. (1965), A History of Greek Philosophy, Vol. 2: The Presocratic Tradition from Parmenides to Democritus. Cambridge University Press.
- Herter, Hans (1963), "Glück und Verhängnis: Über die altgriechische Tyche", *Hellas* 4: 1–10.
- Kullmann, Wolfgang (1985), Notwendigkeit in der Natur bei Aristoteles, in Jürgen Wiesner (ed.) Aristoteles, Werk und Wirkung: Paul Moraux gewidmet, Vol. 1: Aristoteles und seine Schule, 207–238. Berlin; N.Y.: Walter de Gruyter.
- Jaeger, Werner (1943), *Paideia: The Ideals of Greek Culture*, Vol. 1: *Archaic Greece. The Mind of Athens.* Trans. by G. Highet. Oxford University Press.
- Macé, Arnaud (2018), "La justice cosmique selon les Lois. Platon lecteur d'Homère et d'Anaxagore", in M. Crubellier, A. Jaulin, P. Pellegrin (eds.), *Philia et Dikè. Aspects du lien social et politique en Grèce ancienne*, 277–296. Paris: Classiques Garnier.
- Moutsopoulos, E. (2005), "Hasard, nécessité et kairos dans la philosophie de Platon", in *Hasard et nécessité dans la philosophie grecque*, 60–69. Académie d'Athènes, Centre de recherche sur la philosophie grecque.
- Ross, W.D., ed. (1936), *Aristotle's Physics*. A Revised Text with Introduction and Commentary. Oxford: Clarendon Press.
- Schöpsdau, Klaus, ed. (2003), *Platon. Nomoi.* Buch IV–VII. Übersetzung und Kommentar. Göttingen: Vandenhoeck & Ruprecht.
- Sorabji, Richard (1980), Necessity, Cause and Blame: Perspectives on Aristotle's Theory. Ithaca, New York: Cornell University Press.
- Tarán, Leonardo (1975), Academica: Plato, Philip of Opus, and the Pseudo-Platonic Epinomis. Philadelphia: American Philosophical Society.
- Van Camp, Jean; Canart, Paul (1956), *Le sens du mot*  $\theta \tilde{\epsilon} i \circ \varsigma$  *chez Platon*. Louvain: Publications Universitaires de Louvain.
- Wilamowitz-Moellendorff, Ulrich von (1932), *Der Glaube der Hellenen*. Bd. 2. Berlin: Weidmannsche Buchhandlung.
- Zimmermann, Arnd (1966), Tyche bei Platon. Diss. Bonn.