## Chronological Table

1596	Born at La Haye (now Descartes) near Tours at his maternal grand-mother's house, on 31 March, third surviving child of Joachim Descartes, Councillor at the Parliament of Brittany, and Jeanne Brochard.
1597	Mother dies on 13 May. Brought up by maternal grandmother, Jeanne Sain, at La Haye, with his elder brother and sister.
1600	Father remarries. Descartes and his brother and sister remain with Jeanne Sain.
1606	Begins as a boarder at the Jesuit college of La Flèche at Anjou, where his elder brother was probably already a student.
1607	Father moves with his new family and Descartes' sister to Châtelleraut.
1610	Jeanne Sain dies (late 1609 or 1610).
1614	Leaves La Flèche, where from 1607 he has been looked after by the rector, Father Charlet, who has acted 'as a second father' to him.
1614–1615	Moves to a house just outside Paris, shutting himself off from others and quite possibly suffering a nervous breakdown.
1615–1616	Studies law, and perhaps some medicine, at the University of Poitiers, taking his baccalaureate and licence in civil and canon law in November 1616.
1616-1618	Descartes possibly spends late 1616 to the middle of 1618 in Paris.
1618	Goes to the Netherlands in the summer of 1618 and joins the army of Prince Maurice of Nassau as a gentleman soldier. In November he meets Isaac Beeckman, who rekindles his interest in scientific matters. He completes his Compendium Musicae, and presents it to Beeckman as a New Year's gift.
1619	Begins the year working intensely on mathematical and mechanical problems under Beeckman's encouragement and guidance. Extant writings from this period include fragments on the mathematical description of free fall, and an important treatment of hydrostatic paradoxes, which represents Descartes' first excursion into micromechanical explanation. Descartes leaves the army of Maurice and plans a journey through Germany to join the army of Maximilian of Bavaria, setting out in March. Early in 1619 he studies proportional compasses, and begins to formulate a theory of proportional

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magnitudes which will ultimately lead him in the direction of algebra. Various notes from this period are collected in the fragmentary Cogitationes Privatae. During the course of 1620 Descartes has contact with Rosicrucians, including the Rosicrucian mathematician Johannes Faulhaber. He begins a mathematical treatise, The Thesaurus Mathematicus of Polybius Cosmopolitanus, which is soon abandoned, but it is likely that it was to be concerned with a 'universal mathematics', and an early draft of Rule 4 of the Regulae was probably composed at this time. He spends the later part of the year stationed at Ulm. Here he begins to formulate a general theory of method. Sometime in November he probably has a nervous breakdown, as well as his three famous dreams.

The first six months of 1620 are probably spent at Ulm, but his movements after that are not known. He begins work on his Regulae, completing the first eleven Rules, then abandoning the project. In the course of 1620 he works intensively in geometry, probably completing a work on polyhedra and figurate numbers, De Solidorum Elementis, and in optics. In November he makes what he later refers to as 'a wonderful discovery', which is prob-

ably his solution of all problems resolvable in terms of cubic or quartic equations by means of a circle and a parabola.

Returns to France, his whereabouts in the intervening period unknown. On his arrival in Paris, he is challenged to defend himself against charges of being a Rosicrucian. He sells his property, left to him by his mother, in the process losing seigneurial rights and the title 'Seigneur du Perron', which he has held up to this time. The proceeds from the sale provide a regular but modest income. He considers a legal/administrative career. The Studium bonæ mentis may date from this period.

On 22 March 1623, he sets out on a journey to Italy, probably spending some considerable time in Venice. He returns in May 1625, and again considers (for the last time) a legal and administrative career.

Settles in Paris on his return from Italy. He has regular contact with Mersenne, who has published detailed criticisms of naturalism and is advocating mechanism as the appropriate natural philosophy for the new physics. In collaboration with others, Descartes works on geometrical optics, and he may have discovered the law of refraction as early as 1626.

Resumes work on the Regulae, possibly in the first instance by reworking Rule 8, and then going on to the new Rules, from 12 onwards. Here some of the philosophical consequences of his work in optics and algebra are explored, and the focus is now on questions of the mechanistic construal of perceptual cognition, together with the problem of legitimating mathematical operations. Probably in 1628, Descartes finally abandons the Regulae. During 1628 he makes visits to the Netherlands, with a view to settling there.

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In November, he attends a meeting on Aristotelian philosophy at the residence of the papal nuncio and gives a public announcement of his own work on method; he is encouraged in his researches by Cardinal Bérulle. At the end of 1628, he leaves for the Netherlands, where he will remain for the next 20 years, albeit with constant moves and intense secrecy about his address.

1629-1630

Begins work on a number of metaphysical questions, as well as devising a machine for grinding hyperbolic lenses. From August 1629 onwards, other projects are gradually abandoned as he tries to explain the meteorological phenomenon of parhelia (multiple suns), which by the end of 1629 has grown into an attempt to account for 'the whole physical world'. In October 1630 he writes a long abusive letter to Beeckman, accusing him of claiming the credit for being his teacher in the early years, and breaks off relations with him.

1630-1632

Descartes moves to Amsterdam at the end of 1630, lodging with his friend Villesbressieu but generally avoiding visitors. The Dioptrique and the Météors are completed in draft, and Descartes makes what will be his last major contribution to mathematics, the solution of Pappus' locus problem. While in Amsterdam he visits butchers' shops daily to retrieve pieces for dissection. In May 1632 he moves to Deventer, partly to avoid interruptions to his work and partly to be near his first disciple, Henry Reneri. He is reconciled with Beeckman. He works intensely on physical optics, the laws of motion, and the outlines of a cosmology. The unfinished draft of the Traité de la lumière that has come down to us probably dates from late 1632.

1632-1633

Descartes turns to the *Traité de l'homme*, setting out a mechanistic physiology and a theory of the body as an automaton. Between July and November 1633, he prepares his treatises for publication, only to hear in November of the Inquisition's condemnation of Galileo, at which point, in obvious despair, he abandons plans to publish. In December 1633 he moves back to Amsterdam.

1634-1636

He prepares final drafts of the *Dioptrique* and the *Météors*, and starts to work on a preface to them, which will become the *Discours de la méthode*. In the Spring of 1635 he returns to Utrecht, where Reneri is about to provide the first institutional teaching of Cartesian natural philosophy. In August of 1635 his daughter, Francine, is born, her mother having been a maid at the house where Descartes stayed in Amsterdam. The *Discours* is written over the winter of 1635/6 and the *Géometrie* is put together from earlier drafts while the other treatises are being printed.

1637-1639

Descartes moves to Leiden in March 1636 to supervise publication of the *Discours* and the three *Essais*, which appear in June 1637. In August he moves to the coastal area around Haarlem, where he remains until November 1639. This is one of the happier periods in his life, the *Discours* and *Essais* having been generally well

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received. He begins to take an interest in and possibly even spend time with his daughter.

1639-1640

Descartes works on the *Meditationes*, and begins to get involved in an acrimonious and very public dispute with Voetius, which raises a number of religious and ideological questions of the kind that he was always concerned to avoid. This is to be the first of a number of such public disputes that will dog him throughout the 1640s. He returns to Leiden in April 1640 to supervise a preliminary printing of the *Meditationes*. In September, Francine dies of a fever.

1641-1643

The Meditationes are published in 1641, together with six sets of objections and replies. Descartes moves to Endergeest, near Leiden. After giving up the idea of writing a dialogue (La Recherche de la verité), and setting out his metaphysics and natural philosophy in the form of an extended commentary on a standard scholastic textbook, he begins work on a comprehensive exposition of his philosophy in textbook form, the Principia, at the end of 1641. The second edition of the Meditationes, with a seventh set of objections and replies and a letter to Dinet, in which Descartes defends himself against attacks on the orthodoxy of the Meditationes, appears in 1642. In response to Descartes' long attack on him in the Epistola ad Voetium, published in May 1643, Voetius succeeds in having the council of Utrecht summon Descartes, and he is threatened with expulsion and the public burning of his books. He seeks refuge in the Hague, where is he able to use his influence to get the Prince of Orange to intervene on his behalf. In May 1643, he moves to Egmond du Hoef.

1643-1646

Descartes starts an affectionate and fruitful correspondence with Princess Elizabeth of Bohemia, focusing on his account of the passions. The *Principia*, four parts of its originally projected six complete, is published by Elzevier in middle of 1644. In May 1644 he travels to France, returning in November to the Egmond area, where he will be based until 1649. A good deal of his time is taken up with dissection of animals and studying the medicinal properties of plants. By 1646 he has a draft of the *Passions de l'ame* complete. Elizabeth moves to Berlin in August 1646, and Descartes is never to see her again, although their correspondence continues. At the end of 1646, Queen Christina of Sweden initiates a correspondence with Descartes through Chanut, a French diplomat attached to the Swedish court.

1647-1649

Descartes is condemned by Revius and other theologians at the University of Leiden in March and April 1647, and he travels in France from June to September 1647. While there he meets Hobbes, Gassendi, and Pascal. French translations of the *Meditationes* and the *Principia* are published in 1647, and his attack on his erstwhile disciple Regius, the *Notae in Programma*, appeared at the beginning of 1648. On 16 April 1648, he is interviewed on his philosophy by

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1649-1650

a young Dutch student, Burman, who keeps an invaluable record of the interview. In May 1648 he returns to Paris yet again, this time to take up a pension from the king, but Paris is in the middle of political turmoil, and he returns to the Netherlands in August. At the end of February 1649, Descartes is invited to Sweden, to the court of Queen Christina, and he finally accepts in July, embarking on 31 August. The Passions de l'âme appears in November 1649. Early in the new year he contracts pneumonia, from which he dies, in Stockholm, on 11 February 1650.

# Descartes

# An Intellectual Biography

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