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Jacob Boehme's Divine Substance *Salitter*: its Nature, Origin, and Relationship to Seventeenth Century Scientific Theories

LAWRENCE M. PRINCIPE* and ANDREW WEEKS†

The Century between the death of Copernicus (1543) and the birth of Newton (1642) witnessed a major reshaping of traditional ways of viewing the universe. The Ptolemaic system was challenged by Copernican heliocentrism, the Aristotelian world was assailed by Galilean physics and revived atomism, and theology was troubled by the progressive distancing of God from the daily operation of His creation. Besides earning this era the title of 'the Scientific Revolution', the intellectual ferment of these times offered many world systems as successors to the throne of crumbling Aristotelianism.

During these years of change the notion of a divine substance out of which the world and its operations arise attracted a number of thinkers. The idea of such a substance drew upon diverse currents of thought: alchemy, Hermeticism, mysticism, Renaissance Neoplatonism, as well as mathematics and astronomy. Bruno and Spinoza are the more famous proponents of a divine substance.

The German mystic and philosopher Jacob Boehme (1575–1624) must be included among the preeminent proponents of a divine substance. In Boehme's first book manuscript, *Aurora (Morgenröte im Aufgang)*, 1612), the shoemaker of Görlitz introduced his notion of *Salitter*. For Boehme, the *Salitter* designated the embodiment of the total force of the divinity, the compendium of all forces operating in nature and in the human psyche. The substance *Salitter* is a matrix of forces that are identified with sensible 'qualities'. The latter interact by means of fundamental oppositions and affinities. Accordingly, the spirit forces operating within *Salitter* are discernible in many objects of speculation: in the deity, in sensory experience, in vegetable growth, and in the objects of geology, astronomy, and meteorology. *Salitter* animates the supersensible and the sensible; it is the common denominator of what is conscious and alive and of what *appears* inanimate and inert. *Salitter* is the embodiment of a world conceived in organic terms.

Previous analyses of Boehme's mystical metaphysics have ignored or glossed over the significance of the *Salitter*. It has been dismissed as an example of Boehme's ignorance of proper alchemical terminology.¹ However, we argue that Boehme's choice of *Salitter* as

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1 Will-Erich Peukert, *Pansophie, ein Versuch zur Geschichte der Weißen und Schwarzen Magie*, Berlin, 1979, pp. 385–386. Peukert is highly critical of Boehme's use of the terms *Salitter* and *Mercurius*. Adolf von Harleß, *Jacob Böhme und die Alchemisten; Ein Beitrag zum Verständnis Jacob Boehmes*, Leipzig, 1882. Cf. Ernst Bloch, *Leipziger Vorlesungen zur Geschichte der Philosophie*, Vol. 4, Frankfurt on the Main, 1985, pp. 223 ff. Bloch glosses *Salitter* as a vague Hermetic term, perhaps 'sulphuric acid'.

the paradigm of divine power is neither random nor uninformed. Rather, his choice indicates a considerable understanding of practical alchemy, and strongly suggests a link between Boehme and an influential alchemist of the early seventeenth century.

When Boehme raptly characterizes the angels as embodiments of *Salitter*, this perception places his thought, for us, squarely on the side of visionary mysticism. Yet the equivalent of *Salitter* remained a focal point in the discussion of the natural world for decades after Boehme's time. The Lusatian cobbler and autodidact was an early participant in the seventeenth century discussion of nitre.

Boehme's *Salitter* is identified with the corporeal determinacy of things, with their origin or 'seed', and with the powers of fertility in them:

The corporeal drying is to be called in this book the Divine SALITTER. For the seed of the entire Divinity is in it, and it is like a mother which receives the seed and bears the fruit again and again, in accordance with all qualities of the seed.²

Moreover, the *Salitter* is a matrix of forces that generate life and awareness: 'The dry (*herb*), sour, and sweet qualities are the *Salitter* which pertains to the corpus, from which the corpus is formed.'³

Boehme's postulation of an all-encompassing divine substance is predicated upon three aspects of his view of the cosmos. The first is his belief in the mystical omnipresence of God: 'For you cannot say: "Where is God?" Listen you blind human, you live in God and God in you . . .'⁴ A second pre-condition stems from Boehme's early heliocentrism. Heliocentrism necessarily rejects the Aristotelian notion that the cosmic order can be held together by the 'aspirations' that lay within the four elements.⁵ If the earth was not the centre of the universe, then the notion of 'natural place', stemming from the geocentric hierarchy of elements, had to be revised. In Boehme's system, the *Salitter*, as the presence of the divine omnipotence, and serving as the vehicle of God's power, preserved the order of the cosmos. Finally, his passionate rejection of the doctrine of *creatio ex nihilo* required the existence of a 'prime matter' out of which God created the world:

From what sort of *materia* or force did the grass, vegetation, and trees proceed? What sort of substance and circumstance [*Gelegenheit*] was involved in this creation? The simple person says that God made everything from Nothing; but he does not know this God, and does not know what He is. When he beholds the earth together with the depths above the earth, he thinks "that is not God, there is not God". He has formed the notion that God dwells only above the blue heaven of the stars . . .⁶

Along with alchemy, Paracelsianism and Neoplatonism, heliocentrism is one of the major ingredients of the speculative system of *Aurora*. Convinced that 'the earth revolves and turns with the other planets as in a wheel around the sun', Boehme ranks as an early

2 Jacob Boehme, *Mörgeröte im Aufgang (Aurora)*, In: *Sämtliche Schriften*, vol. 1 (ed. Will-Erich Peukert), Stuttgart, 1955, p. 137.

3 Ibid., p. 89.

4 Ibid., p. 327.

5 Aristotelians maintained that the elements sought (or 'aspired to') their 'natural places' thus preserving order in the cosmos. Earth, the heaviest element, had its place at the centre of the world, water above it, air yet higher, and fire, the lightest of all, uppermost. Thus earth always falls through air or water to reach its natural place, fire rises through air to reach its natural place, and so on.

6 Ibid., p. 308.

proponent of the Copernican system.⁷ In one passage of *Aurora*, the problems posed by a spinning earth are solved by the 'inner birth', which is said to prevent the seas from being sloshed off the planet, thus insuring that the earth will not dry out nor be pulverized by its motion. The implications which Boehme derived from heliocentrism are expressed in mystical analogies: the central sun is the material likeness of Christ; the force that proceeds from the sun is like the Holy Spirit. The sun is the 'heart' of all the forces in this world and has been fashioned of all the stars. The sun stands 'amidst the planets'—

And just as the other six planets are generals alongside the sun, and give their will over to the sun, so that it can rule over them and act in them, the angels give their will over to the King...⁸

Although the mystical heliocentrism of *Aurora* is not developed systematically,⁹ it is nonetheless an important element in the larger context of the *Salitter*. Just as the central sun rules the revolving planets, *Salitter*, the matrix of all forces, holds the world together in its entirety. *Salitter* embodies the divine forces: it is the matrix and completion of the seven source-spirits or qualities at work in nature. The first of the seven source-spirits expresses itself in the quality called *herb*—a raw, or sour, or dry taste or texture. This quality and spirit contracts or pulls together in the fluid medium of the spirit world. In a kind of chain reaction, this leads to a variable series of further forces or qualities, which gradually renders the inchoate substrate more and more charged with tensions, more animate, or more sensate, until finally the seventh quality, *Corpus*, lends the conflation of forces body, tangibility, or determinacy (*Begreiflichkeit*). The fact that the source-spirits are seven in number betokens their correspondence to the seven days of the scriptural Creation, and to the seven planets at work in the continual creation. (The correspondences can be extended to the seven metals, the seven salts and the seven liberal arts.) The number seven therefore both extends the domain of the primal qualities—and, at the same time, encourages a reduction and systematization of all possible forces. After *Aurora*, Boehme continued to see nature as a conflation of animating forces, but he dropped or de-emphasized the term *Salitter*. In his final great treatise, the divine substance resurfaced under the name '*Mysterium magnum*'—a term derived from Paracelsian natural philosophy.

Before expounding further upon Boehme's *Salitter* and its place in the nitre discussion, it is worth considering how the cobbler of Görlitz could have become involved in such a discussion. Boehme's Görlitz, a medium sized city of about 10 000 inhabitants in the German territory and Bohemian crownland of Lusatia (*die Lausitz*) was a centre of alchemical, mystical and astronomical speculation. Just north of Bohemia, Görlitz was on the road that led to Prague, where Rudolph II presided over his court of astronomers and alchemists around 1600. Bartolomäus Scultetus, the mayor of Görlitz, was a man of very broad interests. He had studied mathematics at the universities of Leipzig and Wittenberg, where he knew the famous Danish astronomer Tycho Brahe. Scultetus and

⁷ Boehme, op. cit. (2), p. 376. The acceptance of heliocentrism is a surprising position for a Lutheran of Boehme's time, for Luther himself had harshly condemned Copernicus and his system.

⁸ Boehme, op. cit. (2), pp. 76, 77, 80, 148.

⁹ Cf. Pierre Degaye, 'Dieu et la Nature dans l'*Aurore naissante* de Jacob Boehme,' in Antoine Faivre and Rolf Christian Zimmermann, *Epochen der Naturmystik*, Berlin, 1979, pp. 125–156.

other citizens of Görlitz followed the latest developments in the new astronomy. Scultetus had written (albeit with little success) on the nature of comets,¹⁰ and had corresponded with Johannes Kepler. The latter visited Görlitz in 1607 and recruited a young amanuensis to copy the *Astronomia nova*.¹¹ Moreover, the mayor and most of the medical doctors of the city were Paracelsians. Scultetus himself edited and published one of Paracelsus' treatises on the plague.

Another citizen of Görlitz was a theosophist by the name of Abraham Behem.¹² Behem (a variant of 'Boehme') influenced the important German speculative mystic Valentin Weigel. It is possible that Behem may have been an older kinsman of Jacob Boehme (the name was too common in Upper Lusatia to permit a certain conclusion). It appears that the obscure Behem was one of the medical doctors who were once questioned by the city council under suspicion of belonging to the '*secta Paracelsi*.'¹³ What is certain is that his notion of a celestial or supercelestial 'birth'—a kind of Neoplatonic emanation—is also found in the writings of Jacob Boehme.

Nitre, variously known as saltpetre (*sal petrae*), sal nitre (*sal nitri*), earth salt (*sal terreae*), or in Boehme's German, *Salitter*, figured importantly in several scientific theories of the seventeenth century. This salt, which systematic chemistry now calls potassium nitrate, had been studied by alchemists for centuries before Boehme. *Salitter* had also revolutionized warfare by its use in the manufacture of gunpowder. In the seventeenth century nitre acquired a new significance. Not only was its importance increased by findings in the still infant field of modern chemistry, but it also became central to some important theories of natural phenomena.

Boehme's use of the term *Salitter* falls squarely in the alchemical tradition. In alchemy, the three principles Mercury, Sulphur and Salt are considered to be the essential ingredients of all materials. These principles are not to be confused with the common substances of the same names (quicksilver, brimstone and common salt). The principles are designated 'Mercury', 'Sulphur' and 'Salt' because the common substances have roughly analogous properties.¹⁴ By the same measure, Boehme names the divine force *Salitter* not because it is actual saltpetre, but rather because common saltpetre manifests properties that are analogous to the divine substance (*vide infra*).

Aurora draws an important distinction between two types of *Salitter*, one celestial and the other earthly; the former is pure and clear, the latter is dark, stinking and poisonous. Out of the former, the angelic creatures are shaped. Transparent and sexless, they

10 Ernst-Heinz Lemper, *Jacob Böhme; Leben und Werk*, Berlin, 1976, pp. 39–45, 120–125.

11 Ernst Koch, 'Moscowiter in der Oberlausitz und M. Bartolomäus in Görlitz' (pts. 1 and 2), *Neues Lausitzisches Magazin* (1907), 83, 1; (1910), 86, 1.

12 Winfried Zeller, 'Naturmystik und Theologie bei Valentin Weigel,' In: *Epochen der Naturmystik: Hermetische Tradition im wissenschaftlichen Fortschritt*, Berlin, 1979, pp. 120–121.

13 Koch, NLM (1907), 83, 75 ff.

14 Each material has its own proper Mercury, Sulphur, and Salt. Whatever part gives the whole fusibility or metallicity (for example) would be called its Mercury (quicksilver is liquid and metallic); whatever gives inflammability or colour would be called its Sulphur (brimstone takes fire readily and is bright yellow); and whatever gives solidity or brittleness would be called its Salt (common salt is hard and brittle). The Mercury–Sulphur–Salt triad also presented a material analogy to the human Spirit–Soul–Body trichotomy, as well as to the Divine Trinity.

are immaterial embodiments of the manifold qualifying forces of a divine 'all-force' (*All-Kraft*). The divine forces bring forth celestial fruits, flowers, and vegetation; the earthly forces vainly strive to follow suit. But debased though it is, the earthly *Salitter* can dimly attest to the power of its divine counterpart by producing all sorts of useful and pleasant fruits and plants.¹⁵

The heavenly-earthly duality of *Salitter* recalls the double existence of objects in the Platonic doctrine of Ideas. This doctrine, that objects perceptible to the senses are only material reflections of their immaterial Ideas, was adapted into aspects of both Medieval Christian theology and alchemy. Material objects are not considered only *per se*, but rather as beings-in-becoming; that is, all material creation is in a state of being perfected, approaching its ideal state. In theology, man constantly strives to overcome the limitations of a nature corrupted by Original Sin, and so to approach perfection.¹⁶ In alchemy, metals grow and mature in the earth, and are gradually purged of impurities and 'superfluities', increasing in perfection until they become gold. Likewise, Boehme's 'earthly stinking' *Salitter* is only a material reflection, a crude copy, striving to imitate the immaterial 'celestial, pure' *Salitter*. (An eschatological touch is added to this transcendent purity by Boehme's references to the 'crystalline sea' at the end of the world, an allusion to Revelation 4:6.)

However, there exists another level of analogy, for the two types of *Salitter* also correspond to stages in the production of saltpetre.¹⁷ Before the discovery and exploitation of the enormous mineral nitrate deposits in South America, saltpetre was obtained by extracting 'nitrous earth'. This nitrous earth was soil gathered from stables and slaughterhouses, where bacterial action had oxidized animal matters, especially nitrogen-rich urine, into nitrates.¹⁸ The nitrous earth was first boiled with water to remove the water-soluble compounds; when evaporated, the extracts yielded a brown residue of crude nitre, called, at this stage, *sal terrae*.¹⁹ Since the nitrous earth contained putrescent animal matters which were partially drawn off in the aqueous extraction, this *sal terrae* was indeed a 'stinking' substance. This crude nitre was then purified by treatment with wood ashes, whereby potassium carbonate in the ash converted calcium nitrate (formed by reaction of lime with the bacterially produced nitrate) to potassium nitrate and insoluble calcium carbonate. The ashes simultaneously absorbed much of the organic

15 Boehme, op. cit. (2), p. 55.

16 Boehme writes that 'the devil infected and spoiled the *Salitter* from which Adam was made.' Op. cit. (2), p. 55.

17 See the excellent study, 'The Production of Saltpeter in the Middle Ages' by A.R. Williams, *Ambix*, (1975), 22, 125.

18 Starting in the fifteenth century artificial nitre beds were being constructed. These beds consisted of piles of earth, dung and lime, generally watered frequently with urine. The contents of these piles, after being subjected to natural bacterial action for many months, would be artificial 'nitrous earth'.

19 The saline residue at this point would have consisted of several salts, with calcium, sodium, and potassium nitrates and sodium chloride predominating.

matter, and after filtration, a pure liquor was obtained. Its fractional crystallization yielded saltpetre in the form of white, transparent crystals.²⁰

A complex set of interrelationships among the various 'nitres' presents itself. First, Boehme's *Salitter* is analogous to chemical saltpetre—through this analogy the divine substance received its name. Second, within divine *Salitter* there exist two analogous forms, a lower 'earthly' *Salitter* and a higher 'heavenly' *Salitter*. Finally, this duality in Boehme's *Salitter* (heavenly-earthly) is analogous to a duality in chemical saltpetre (purified-crude).

Boehme's choice of saltpetre as the paradigm for divine power is made clearer by a consideration of the chemical and physical properties of the material saltpetre, potassium nitrate. When treated in various ways, this salt gives rise to diverse properties and powers. After its isolation and purification, saltpetre appears as a white crystalline material. In this form it feels cold and astringent on the tongue by virtue of its negative heat of solution; it was therefore often termed a 'frigorific salt'. However, upon being heated strongly in a retort (often with vitriol, i.e., ferrous or cupric sulphate), it gives forth red fumes (nitrogen dioxide) as a 'fiery spirit' (*aqua fortis*, or nitric acid) collects in the receiver. This acid, combined with 'spirit of common salt' (hydrochloric acid), gives *aqua regia*, a fuming liquid of such great solvent power that it can dissolve gold, the indestructible *rex metallorum*. When mixed with spirit of wine (ethanol), corrosive nitric acid yields a 'dulcified spirit of nitre' (ethyl nitrite) which is non-corrosive and has the pungent aroma of sweet apples. Boehme states that the qualities of cold and astringent, sweet, and bitter like a 'hellish fire' arise from the divine *Salitter*.²¹ Thus, potassium nitrate can give rise to the kind of qualities that infuse and animate Boehme's divine substance.

Other properties of this salt also correspond to mystical forces in Boehme's system. When thrown upon a burning coal, nitre violently deflagrates in a flash, a correlative of Boehme's *Schrack* or flash that elevates things to a higher level of being. Applied to plants, saltpetre exerts a powerful fertilizing effect, thereby imitating the creative powers of the divine *Salitter*. The most prevalent use of nitre was, of course, in the preparation of gunpowder. The earliest Western references (mid-thirteenth century) to black powder are found in the *Liber ignium* of Marcus Graecus and the *Opus maius* of Roger Bacon. Bacon was impressed by the awesome power of *sal petrae*:

By a device made of a size as small as a human thumb, by the force of that salt called *sal petrae*, such a horrible noise is produced in the rupture of such a small thing as a little parchment that it is felt to surpass the noise of violent thunder, and its light surpasses the greatest flashes of lightning.²²

20 Since the difference in the solubility of potassium nitrate in cold water versus boiling water is much greater than the difference for the other salts present, fractional crystallization is an efficient means of separation. Even after the Chilean nitrate deposits were exploited, fractional crystallization was still employed in the manufacture of saltpetre. The native material (predominantly sodium nitrate, often called 'sodanitre') was dissolved in boiling water together with an equimolar quantity of potassium chloride, and upon cooling, potassium nitrate crystallized out leaving sodium chloride in solution.

21 Boehme, op. cit. (2), pp. 85–88.

22 Roger Bacon, *Opus maius* (ed. J. H. Bridges), 3 vols, Oxford, 1897–1900, vol. 2, p. 218.

Three centuries later, Paracelsus attributed the detonation of thunder to saltpetre and compared the flash of lightning to Christ's second coming.²³ Thus, the divine power frequently associated with thunder and lightning was manifest in saltpetre.

The widespread natural occurrences of saltpetre probably added impetus to its incorporation in Boehme's system as an image of the omnipresent divine power. Its apparent ubiquity is noted by several authors. Robert Boyle, observing that nitre is to be 'found in so great a number of Compound Bodies, Vegetable, Animal, and even Mineral,' calls it 'the most Catholick of Salts.'²⁴ The source of saltpetre appeared to be the air itself, for earth from which all the nitrate had been extracted would yield a new quantity of the salt after remaining untouched by anything save air for several months.²⁵ By the shores of the Neusiedler Lake, southeast of Vienna, saltpetre was collected by the bushel from the surface of the ground, where it mysteriously 'descended like dew' during the night, and vanished again 'into the air' shortly after sunrise.²⁶

To the historian of science, the most significant 'nitre system' is not Jacob Boehme's but John Mayow's. In 1674, Mayow published his *Tractatus quinque medico-physici*, which contained the tract 'De sal nitro et spiritu nitro-aereo'. In this work Mayow endeavoured to show that combustion and respiration are dependent upon an active ingredient in the air, which he termed the 'nitro-aerial spirit'. This spirit is not saltpetre itself dispersed throughout the air, but rather an ethereal particulate material joined to inert air particles. This same substance is also fixed in saltpetre; hence its characteristic properties of supporting combustion in a vacuum, and of deflagrating with flammable substances.

Henry Guerlac has pointed out that theories dealing with a nitrous substance in the air were 'widely current in the seventeenth century.' Guerlac has cited convincing evidence that the inspiration for these systems (including Mayow's) lies in the treatise *Novum lumen chymicum*, written by the Scottish alchemist Alexander Seton, but published under the name of Michael Sendivogius in 1604.²⁷ Just as Mayow noted that the nitro-aerial particles must be present in the air for the maintenance of animal life, Seton wrote of a 'hidden food of life' contained in the air.²⁸ Significantly, Seton connected this

23 Paracelsus, *Sämtliche Werke*, III, Jena, 1930, pp. 950–954. For Paracelsus on nitre see the study by Allen G. Debus, 'The Paracelsian Aerial Niter,' *Isis*, (1964), 55, pp. 43–61.

24 Robert Boyle, 'A Physico-Chymical Essay, containing An Experiment with some Considerations touching the differing parts and Redintegration of Saltpetre,' In: *Certain Physiological Essays*, London, 1661, pp. 107–108.

25 The extracted earth would still retain any insoluble organic matter, and thus further bacterial action would produce new nitrates.

26 This practice of collecting nitre (for use in saltlicks and for curing meats) is recounted with awe by Anton Kirchweger (*Microscopium Basilii Valentini*, Berlin, 1790). The nitre in the area is now somewhat depleted by generations of collecting and changes in the watertable, but in earlier centuries the fenny soil around the lake was saturated with nitrates. At night when the temperature fell, the salts crystallized out of solution and appeared as an efflorescence on the ground. Shortly after daybreak, as the temperature rose, the salt deposits redissolved, thus appearing to vanish miraculously by the warmth of the sun.

27 Henry Guerlac, 'John Mayow and the Aerial Nitre,' *Actes du Septième Congrès International d'Histoire des Sciences*, Jerusalem, 1953, pp. 332–349; 'The Poets' Nitre,' *Isis*, (1954), 45, p. 243.

28 *Creatus homo de terra, ex aere vivit: est enim in aere occultus vitae cibus*, . . . Michael Sendivogius (Alexander Seton) *Novum lumen chymicum*, In: *Musaeum hermeticum*, Frankfurt, 1678, p. 579.

aerial substance to saltpetre, claiming that the vital part of the air is also found fixed in saltpetre. Seton stated that

when rain is produced, it receives that power of life from the air and joins it to the sal niter of the earth—because the sal nitre of the earth is like calcined tartar (potassium carbonate) which, drawing air to itself by its own dryness, converts the air into water²⁹—the sal nitre of the earth has a similar power of attracting, for it was once air, and is now joined to the fatness of the earth.³⁰

Mayow wrote in a very similar way that

(nitre) seems to consist of salt of three kinds, of which one, the most active, is derived from the air, and it has an ethereal and fiery nature.³¹

The other two kinds of salt in nitre (according to Mayow) are the 'saline vehicle' for the nitro-aerial particles and the 'fixed salts of the earth' with which the former two combine. These latter two salts may well be equated with Seton's 'sal nitre of the earth' and 'fatness of the earth', respectively.

Boehme's *Salitter*, although more metaphysical in nature than Seton's 'food of life' or Mayow's completely physical 'nitro-aerial spirit', is clearly part of this current of thought. What could have drawn the cobbler of Görlitz into the nitre discussion? We have already noted the importance of Görlitz as a centre of alchemical and mystical speculation. We also know that Alexander Seton travelled through Central Europe during 1602–1603, stopping in Zürich, Basel, Strasbourg, Frankfurt on the Main, Cologne, Hamburg, Munich and finally Dresden, where he was imprisoned and tortured in late 1603.³² Everywhere he went, Seton argued and demonstrated in favour of his alchemical art. His whereabouts between his departure from Munich and his arrival in Dresden are not known. Perhaps he stopped in Görlitz and related his ideas on nitre to the Paracelsian doctors of the city. Thus, Boehme could have heard of Seton's theory of nitre directly or indirectly. Reflecting on the properties of nitre, he could have concluded that it was a clear likeness of the divine power.

We cannot prove conclusively that Seton influenced Boehme in this manner; yet the contact would explain the cobbler's knowledge of nitre, his subsequent choice of *Salitter* as the divine substance, and the similarity between his and Seton's notions of nitre. Seton's sal nitre exists both in the air, where it is the 'power of life', and fixed in saltpetre. Analogously, Boehme's divine *Salitter* maintains the life and order of the macrocosm, while the terrestrial *Salitter* dimly reflects its divine counterpart.

29 Potassium carbonate, originally produced by strongly calcining potassium bitartrate (tartar, a deposit found in wine barrels), is a highly hygroscopic salt, and is thus capable of attracting enough water vapour from the air to dissolve itself. This process, seen with alchemical eyes, was considered a transformation of air into water.

30 . . . *quando pluvia fit, accipit ex aere illam vim vitae, & conjugit illam cum sale nitro terrae, (quia sal nitri terrae est instar calcinati Tartari, sua siccitate aerem ad se trahens, qui aer in eo resolvitur in aquam: Talem vim attrahendi habet ille sal nitri terrae, qui etiam aer fuit, & est conjunctus pinguedini terrae).* Sendivogius (Seton), *Novum lumen*, p. 581.

31 John Mayow, 'On Sal Nitrum and the Nitro-aerial Spirit,' in *Medico-Physical Works*, Alembic Club reprint no. 17, London, 1957, p. 33.

32 See John Ferguson, *Biblioteca chemica*, Glasgow, 1906, vol. 2, pp. 374–376 for an account of the life of Seton, and numerous references.

In conclusion, Boehme's choice of *Salitter* as the paradigm of divine creativity is not haphazard: it demonstrates a knowledge of both theoretical and practical alchemy. The role of *Salitter* as a 'life-force' classifies Boehme's metaphysical system with the physical nitre theories of Seton, Sendivogius, Thruston, Mayow, Hooke, Ent and Digby, which attributed the maintenance of life to a nitrous substance in the air. We have suggested the possibility of Seton's presence in Görlitz in 1603 and of his influence upon Boehme. Although Boehme's *Aurora* recalls the sixteenth century works of men such as Bruno and Paracelsus, its divine substance, *Salitter*, continued to play a role in seventeenth century scientific theories. Accordingly, Boehme's notion of the *Salitter* bridges the gulf between Hermetic naturalism and mechanistic science.

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