

The Centre of Nature: Baron Johann Otto von Hellwig between a Global Network and a Universal Republic

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Abstract

A large network of alchemical agents spread from the tiny, land-locked duchy of Saxe-Gotha-Altenburg outward across Europe. At its centre, Duke Friedrich I (1646–1691) meticulously documented his interactions with many alchemical personalities during the 1670s and 1680s. The story of one such personality illustrates the changing meanings of distant alchemical knowledge both to the inner circle of courtly alchemists and to a larger alchemical republic. Born near Gotha, Johann Otto von Hellwig (1654–1698) built his pan-European career on a youthful stay on Java. To some, this indicated his access to exotic *naturalia* which might be imported to a centre of collection, such as Gotha. For others, Hellwig could access a wisdom hidden abroad since ancient Egypt, which should be disseminated among widely dispersed adepts. These viewpoints indicate different functions for distant knowledge, as well as differing desired trajectories for this knowledge.

Keywords

empiricism, Hermetism, *prisca sapientia*, Johann Otto von Hellwig, Gotha, Royal Society, Academy of the Curious about Nature, public, network

Introduction: The Centres of *Prisca Sapientia* and Global Empiricism

Whether one considers Indonesia or Europe the “fringe” of alchemy depends upon the location of alchemy’s centre. The alchemical career

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of Johann Otto von Hellwig, or Helbig (1654–1698), in Indonesia and Europe illustrates how the centre might be viewed from two different perspectives.¹ To the ducal court in land-locked Gotha, that centre lay in the middle of the information network which supplied the ducal library, museum, and secret archives with materials from around the world. To the self-proclaimed defenders of the “Hermetic Republic,” the alchemical centre lay hidden in the universal *prisca sapientia*, available to all adepts dispersed through space and time, but perhaps best accessed beyond the confines of Europe. These different ideas concerning alchemy’s “centre” point to differences in how alchemical knowledge should be searched for, located, proven, and communicated.

Prisca sapientia, the belief in an ancient, divine wisdom communicated to the Egyptians before Moses, was under attack from various quarters in Hellwig’s time.² Nevertheless, Christian concepts apparent in the purportedly pre-Mosaic works continued to inspire some Protestant reformers throughout the seventeenth century. The idea that a facade of cultural and religious difference concealed a fundamentally united and pristine truth offered hope for a divided Europe. Christian seekers of ancient wisdom, such as the authors of the Rosicrucian pamphlets, located pristine knowledge in Arab-speaking, Muslim lands.³ As Avner Ben-Zaken has described, early modern scholars considered Pythagoras’ travels through Egypt, Babylonia, Persia, and India as an

¹ On Hellwig, see Joachim Telle, “Hellwig, *Helbigius*, *Helbig*, *Helbigk*, Johann Otto von,” Wilhelm Kühlmann, ed., *Killy Literaturlexikon*, 13 vols. (Berlin, 2008–2012), 5: 249-50; Jürgen Strein, “Alchemie und Hofkultur oder Eine Million bar in Händen. Zu den Briefen des Arzthalchemikers Johann Otto von Hellwig (1654–1689) an Herzog Friedrich I. von Sachsen-Gotha,” in Christoph Friedrich and Joachim Telle, eds., *Pharmazie in Geschichte und Gegenwart* (Stuttgart, 2009), 433-56.

² Anthony Grafton, “Protestant versus Prophet: Isaac Casaubon on Hermes Trismegistus,” *Journal of the Warburg and Courtauld Institutes*, 46 (1983), 78-93; Nancy Siraisi, *History, Medicine, and the Traditions of Renaissance Learning* (Ann Arbor, MI, 2007), 243.

³ Nabil Matar, *Islam in Britain, 1558–1685* (Cambridge, 1998), 73-119. The *prisca sapientia* and natural philosophy more generally also offered a counterpoint to contemporary politics and means for demonstrating universal mastery. See R.J.W. Evans, *Rudolf II and his World: a Study in Intellectual History, 1576–1612* (Oxford, 1973); Thomas DaCosta Kaufmann, *The Mastery of Nature: Aspects of Art, Science, and Humanism in the Renaissance* (Princeton, NJ, 1993).



Figure 1: Johann Alexander Böner after Cornelis Suythoff. Johann Otto von Hellwig, 1681. Engraving, 26 × 18 cm (Graph. Sig. P_0820, Universitätsbibliothek Heidelberg). By permission of the Universitätsbibliothek Heidelberg.

itinerary for “recovering a synthesis of ancient wisdom.”⁴ Hellwig’s 1682 edition of *Centrum naturae concentratum, oder, Ein Tractat Von dem Wiedergebohrnen Saltz* (The Concentrated Centre of Nature, or a Treatise on the Reborn Salt) by one “Ali Puli,” a supposedly Arab-speaking convert to Christianity, appealed to an audience seeking a unified wisdom preserved and concealed abroad. This “centre of nature” lay hidden, but remained potentially available to all.

The centre of Hellwig’s career as an information-collecting agent for the court in Gotha, however, was perhaps at odds with the universal centre of *prisca sapientia*. A century of growing political empiricism had stressed the accumulation of diverse particulars rather than the search for a unified truth. In the sixteenth century, confessional divides had disrupted the presumption of unity among Christian princes. Travel furthered the idea of essential differences between peoples.⁵ According to the late sixteenth-century political theory of reason of state, increased access to information entailed political advantages. The late seventeenth-century mobilization of information for profit by servants of the princely *Kammer*, or cameralists, further accentuated the utility of competing to collect information.⁶ And, as Lissa Roberts has discussed, the development of “centres of accumulation” of global commercial networks intersected with centres accumulating natural knowledge.⁷

This commercial and empirical attitude also affected courtly alchemy. The political primacy placed upon manufacture by alchemists and cameralists such as Johann Daniel Kraft (1624–1697), Johann Joachim

⁴ Avner Ben-Zaken, *Cross-Cultural Scientific Exchanges in the Eastern Mediterranean, 1560–1660* (Baltimore, MD, 2010), 67.

⁵ Justin Stagl, *A History of Curiosity: The Theory of Travel, 1500–1800* (Chur, Switzerland, 1995); Joan Pau Rubiés, “Christianity and Civilization in Sixteenth-Century Ethnological Discourse,” in Henriette Bugge and Joan Pau Rubiés, eds., *Shifting Cultures: Interaction and Discourse in the Expansion of Europe* (Münster, 1995), 35–60.

⁶ Alix Cooper, *Inventing the Indigenous: Local Knowledge and Natural History in Early Modern Europe* (Cambridge, 2007); Vera Keller, “Mining Tacitus: Secrets of Empire, Nature, and Art in the Reason of State,” *British Journal for the History of Science*, 45 (2012), 189–212.

⁷ Lissa Roberts, “Centres and Cycles of Accumulation,” in Lissa Roberts, ed., *Centres and Cycles of Accumulation in and Around the Netherlands during the Early Modern Period* (Berlin, 2011), 3–27.

Becher (1635–1682) and Wilhelm von Schroeder (1640–1688) encouraged princes to merge the longstanding model of the courtly laboratory with the primarily commercial craft laboratory.⁸ It was the “business of alchemy” to offer heads of state a competitive edge,⁹ and von Schroeder and Veit Ludwig von Seckendorff (1626–1692) developed competitive commercial ideas at Gotha.¹⁰ In such a setting, alchemy did not provide a refuge from the divided world of politics. Rather, it helped establish divides between political entities by conferring economic advantages on particular information-collecting centres.

Johann Otto von Hellwig worked and wrote for several alchemical centres. For an audience supporting the idea of *prisca sapientia*, the marrow of alchemy had always been available to adepts, but special portals to this universal centre might be found by travellers in the East. Hellwig also funnelled information to the centre in Gotha from peripheries around Europe and the world. Finally, Hellwig courted the approval of the medical society, *Academia Naturae Curiosorum* (The Academy of the Curious about Nature). As an individual establishing a career between a variety of centres, Hellwig served as one focus for a debate about the proper centre of alchemy in the 1680s, in the pages of the Academy’s journal and in pamphlet publications from Gdańsk to London.

Hellwig Between a Hermetic Republic and a Courtly Centre

Duke Friedrich I and his father Duke Ernst I (1601–1675) supported global voyages and international agents whose discoveries filled the

⁸ On craft, courtly, and academic laboratories, see Ursula Klein, “The Laboratory Challenge: Some Revisions of the Standard View of Early Modern Experimentation,” *Isis* (Focus), 99 (2008), 769-82.

⁹ Pamela Smith, *The Business of Alchemy: Science and Culture in the Holy Roman Empire* (Princeton, NJ, 1994).

¹⁰ Veit Ludwig von Seckendorff, *Teutscher Fürsten-Stat* (Frankfurt am Main, 1656); Wilhelm von Schroeder, *Fürstliche Schatz- und Rent-Cammer* (Leipzig, 1686). See Sophie Reinert, “Cameralism and Commercial Rivalry: Nation building through Economic Autarky in Seckendorff’s 1665 *Additiones*,” *European Journal of Law and Economics*, 19 (2005), 271-86; R.J.W. Evans, *The Making of the Habsburg Monarchy, 1550–1700: An Interpretation* (Oxford, 1979), 370.

castle's secret archives, library, and *Kunstammer*. Despite their lack of marine or overseas territories, the two Dukes competed and communicated with better equipped seafaring locales, such as England and the Dutch Republic. For instance, Duke Ernst had patronized Caspar Schmalkalden (1616–1673), who was born near Gotha, but who travelled to Batavia, Taiwan, and Japan with the Dutch East India Company. Schmalkalden exploited his Asian knowledge in establishing a career as collector of Indian rarities for Duke Ernst's museum.¹¹ Duke Ernst also communicated with London-based German-speaking intelligencers, such as Samuel Hartlib and Henry Oldenburg. He proposed an exchange of curiosities and intelligence with the Royal Society, and called on its Fellows to draw up a query list for the trip to Ethiopia of his courtier, Hiob Ludolf.¹²

Hellwig's acquaintance with Arabic and Indonesian alchemy, medicine, and *naturalia* fit into Ernst's long-standing program of global empiricism and Friedrich's new emphasis on alchemy.¹³ Hellwig hailed from the town of Kölleda in Thuringia. However, only after travelling to the Dutch colony of Batavia on Java did he gain international renown in Heidelberg, London and Denmark, and, in turn, an invitation from

¹¹ Dominik Collet, "The Museum Predicament. Representing Cultural Encounter in Historical and Contemporary Collections," in Sünne Jüterzenka and Gesa Mackenthun, eds., *The Fuzzy Logic of Encounter: New Perspectives on Cultural Contact* (Münster, 2009), 53-74.

¹² On Ernst, see Allmuth Schuttwolf and Uta Wallenstein, eds., *Ernst der Fromme (1601–1675): Bauberr und Sammler* (Gotha, 2001); Roswitha Jacobsen and Hans-Jörg Ruge, eds., *Ernst der Fromme (1601–1675): Staatsmann und Reformier* (Jena, 2002). For Ludolf's correspondence with the Royal Society, see Dominik Collet, *Die Welt in der Stube: Begegnungen mit Außereuropa in Kunstkammern der Frühen Neuzeit* (Göttingen, 2007), 66; Henry Oldenburg, *The Correspondence of Henry Oldenburg*, ed. A. Rupert Hall and Marie Boas Hall (Madison, WI, 1965–1966), I: 179-80, 345 and II: 109.

¹³ For Friedrich I's personal alchemical correspondence, notebooks, and diaries, see the Thuringian State Archive, Geheimes Archiv, E.XI, Nrs. 69, 70, 71, 71a, 72, 73, 73*, 73**, 74, 75, 76. These are catalogued in Oliver Humberg, *Der alchemistische Nachlaß Friedrichs I. von Sachsen-Gotha-Altenburg* (Elberfeld, 2005). See also E.XII.79 and Friedrich I of Saxe-Gotha-Altenburg, *Die Tagebücher 1667–1686*, ed. Roswitha Jacobsen, 3 vols. (Weimar, 1998–2003).

the Duke to return to Thuringia.¹⁴ Hellwig's appeal to Friedrich was not that he was a native Thuringian, but that his global identity had already been recognized by other European powers, and that he might continue to act as an information gatherer among them.

A purely correspondence-based society, the Academy lacked a stable centre, although Pressburg (modern Bratislava/Pozsony), home to the journal's founder Philipp Jakob Sachs von Lewenhaimb (1627–1672), was one of its centres. Sachs is well known for having suggested to Henry Oldenburg that members of the German Academy could never compete with the English Royal Society. The Royal Society enjoyed a privileged position as a centre of accumulation for global knowledge. The German Academy, by contrast, lacked both access to the far corners of the world as well as its own centre. The Academy itself was dispersed:

Seafaring leaves all corners of the earth open to you. We Germans know only narrower limits, magnates with slenderer purses, and a shortage of grand patrons. Our college is scattered hither and yon. . . .¹⁵

Sachs attempted to use the journal to overcome this lack of centre. When Hellwig sent a collection of observations, *De rebus variis Indicis* (*On Various Indian Things*), from Batavia to the Academy's journal in 1678, he offered the dispersed and often land-locked members of the Academy a prized glimpse of first-hand Asian natural history and medical practice.¹⁶

Hellwig's Asian travels also attracted the attention of a "Hermetic Alliance" in Pressburg. The Hermetic Alliance drew upon the earlier idea of an informal "Republic of Alchemy" which paralleled the larger

¹⁴ John Ferguson, *Bibliotheca Chemica: A Catalogue of the Alchemical, Chemical and Pharmaceutical Books in the Collection of the Late James Young of Kelly and Durris*, 2 vols. (Glasgow, 1906), I: 378.

¹⁵ Cited in Cooper, *Inventing*, 130-31.

¹⁶ *Miscellanea curiosa* (Pressburg [Bratislava], 1680), 9 and 10: 453-464. On the Academy, see Mason Barnett, "Medical Authority and Princely Patronage: The *Academia Naturae Curiosorum*, 1652–1693," Ph.D. dissertation (University of North Carolina, Chapel Hill, 1995).

Republic of Letters.¹⁷ The Alliance used the Academy's journal as a vehicle for communicating between geographically dispersed alchemists. In an appendix to Sachs' journal, the Alliance published an open call for applications to join their association in 1680. They supplied a fill-in-the-blank application letter and a suggested encrypted alchemical language in order to coordinate the activities of far-flung practitioners.¹⁸ In another open letter published in 1681, they invited Hellwig in particular, as well as other "leading Hermetic men," to gather in a virtual "Hermetic Senate" in order to debate what "was in the interest of the Hermetic Republic."¹⁹ The Hermetic Alliance attempted to use print culture to create a new virtual centre for the dispersed and informal Republic of Alchemy.

Both Gotha's efforts to build and maintain itself as a centre and the Hermetic Alliance's proposal of a universal, dispersed public contrast with Sachs's fatalistic view of a fragmented Germany. From the viewpoint of the Hermetic Alliance, dispersal away from a single European centre might broaden the Hermetic Alliance and open new doors to the universally shared Hermetic legacy. Meanwhile, the Gotha court showed how purposeful, state-motivated information collection might serve in place of the more *ad hoc* networks which ocean-going trade helped to forge for other states, such as the Dutch and English.²⁰

¹⁷ For the "Republic of Alchemy," see Didier Kahn, *Alchimie et Paracelsisme en France à la fin de la Renaissance (1567–1625)* (Geneva, 2007), 259; Walter Woodward, *Prospero's America: John Winthrop, Jr., Alchemy, and the Creation of New England Culture, 1606–1676* (Chapel Hill, NC, 2010).

¹⁸ Hermetic Alliance, "Epistola Buccinatoria, qua inaudita conjuratio adeptorum in chemia philosophorum," *Appendix anni noni et decimi ephemeridum medico-physicarum naturae-curiousorum in Germania*, (Pressburg [Bratislava], 1680), 1-49; "Polygraphia Hermetica, sive Steganographia Universalis," *ibidem*, 51-93.

¹⁹ Chrysantus Leonagnus, *Magnum Interest Totius Reip. Hermeticae, Sive Epistola II. Buccinatoria Ad Clarissimos Viros, Joan. Otton. Helbigium, M.D. Joan. de Monte Hermetis anonymum, ac caeteros magnates Hermeticos, data a Duumviris Hermeticis Federatis: qua respondetur XII quaestionibus Helbigianis, interpellatur Hermes a Monte, cum toto Senatu Hermetico, ut mature despiciant, qui Reipublicae Hermeticae intersit* (Gdańsk, 1681).

²⁰ David Lux and Harold Cook point to the benefits of loose ties versus the closed circle in "Closed Circles or Open Networks? Communicating at a Distance during the Scientific Revolution," *History of Science*, 36 (1998), 179-211. Howard Hotson

Hellwig's Local and Foreign *Personae*

The choice of an alchemical *persona* suggests how alchemists in a particular time or place might have conceptualized an ideally authoritative adept.²¹ In fashioning his *persona* as a global alchemist, Hellwig appealed to both those seeking global particulars and those desiring a universal *prisca sapientia*. He knew that his access to overseas knowledge would be particularly prized by the German Academy. He not only sent his *On Various Indian Things* directly to its journal in 1678, but also addressed his *Introitus in veram atque inauditam physicam* (*Introduction to a True and Unheard of Natural Philosophy*) to the Academy. This work drew on local Indonesian natural phenomena and supposedly Arabic terminology, and had a tantalizingly distant place of composition. Hellwig signed it, "From my study in Batavia, on the island of East Indian Java, the last month of 1678."²² This was first published in the Dutch colony of Batavia in 1678 and then in 1680 in Latin in Hamburg, Frankfurt, and Heidelberg, and in a French translation in London in 1682.²³ The work spread quickly from its site of Batavian composition to its European print readership. Hellwig also brought an imprint of another Batavian publication, Herman Nicholas Grim's Dutch *Laboratorium chymicum* (1677), from Java and presented it to the future President of the Academy, Dr Johann Georg von Volckamer of Nürnberg.²⁴

argues that competition between Central European fragmented principalities in fact augmented the patronage of natural knowledge in *Commonplace Learning: Ramism and its German Ramifications, 1543–1630* (New York, 2007). Harold Cook showcases the role informal trade networks played in creating Dutch global information networks in *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age* (New Haven, CT, 2007).

²¹ Tara Nummedal, *Alchemy and Authority in the Holy Roman Empire* (Chicago, IL, 2007), 40-72.

²² Johann Otto von Hellwig, *Introitus in veram atque inauditam physicam* (Heidelberg, 1680), 48: "Ex Musaeo Bataviae, in Insula Indiae Orientalis Java Majore ultimo Anni 1678 mense."

²³ There appear to be two surviving Batavian imprints in the National Library of South Africa in Cape Town, which I have been unable to consult. Johann Otto von Hellwig, *Introitus in veram atque inauditam physicam epistola ex India Orientali in Europam ad ... Academiam Naturae Curiosorum transmissa apertus* (Batavia, 1678).

²⁴ Bavarian State Library, Munich, M.med. 389 t.

In addition to offering recent eyewitness accounts of *naturalia*, Hellwig stressed his access to sources of long-lost wisdom. A 1681 engraving of the portrait painted of Hellwig on Java by Rembrandt's son-in-law, Cornelis Suythoff, praised Hellwig's possession of "wisdom found in the south, west, and east," and specifically, among the Brahmins (see fig. 1). In 1682, Hellwig published an alchemical work, *The Concentrated Centre of Nature*, of "Ali Puli," "an Asiatic Moor," supposedly originally written in Arabic, then translated into Portuguese, and finally into German by Hellwig. The work appears to be a contemporary fabrication, perhaps by Hellwig himself, yet one which supported the idea of a universal ancient wisdom. In a heavily Christian text, "Ali Puli" claimed to have discovered the universal centre of all nature, the "Tessa," known to the ancient Egyptians.²⁵ "Tessa" was also the name Hellwig gave to his own "salt of nature" in his *True and Unheard of Natural Philosophy*, and is only one of many similarities between the two texts. Even if "Ali Puli" strikes modern readers as a typical late seventeenth-century *persona*, his international pedigree made the work highly appealing to readers of the time and aided its future travels. It was further translated into Dutch, and from Dutch into English.²⁶ After Hellwig's death, his younger brother Christoph continued to issue collections advertised as gathered by Hellwig from the "Indian Brahmins or sages, as well as the Germans, Spaniards, Italians, English, Dutch, Danish, French and other prominent men . . . during his twenty years of wide-ranging travel."²⁷

Ironically, it was after the development of this global identity that local Thuringian legends began accreting around Hellwig. According to a work published in 1710, when the soldiers of the Archbishop-

²⁵ Ali Puli, *Centrum naturae concentratum* (s.l., 1682), 84.

²⁶ *Centrum naturae concentratum* (Amsterdam, 1694); *Centrum naturae concentratum* (London, 1696).

²⁷ Johann Otto von Hellwig, *Arcana Maiora oder curiöse und nützliche Beschreibung vieler warhaften Physicalischen, Medicinischen, Chymischen, Alchymischen, Chyrurgischen, und Oeconomischen Geheimnisse. Aus Weltberühmter Leute, so wohl Indianischen Braminen oder Weltweisen, als auch Teutschen, Spanier, Italiäner, Engelländer, Holländer, Dänen, Frantzosen, und andere vortreflichen Männer Manuscriptis, und Correspondentzen, auch eigener Erfahrung, auf seinen zwanzig jährigen weitläufigen Reisen, mit sonderbaren Fleiss collegiret* (Frankfurt and Leipzig, 1712).

Elector Johann Phillip von Schönborn were building the new fortifications on the citadel overlooking Erfurt, the Petersburg, in 1664, they found a manuscript hidden within an underground vault. The young Hellwig, at the time a student in the Jesuit college in Erfurt, supposedly realized that this manuscript was Basil Valentine's, but one very different from the printed version of Valentine's works. According to legend, Basil Valentine had been a fifteenth-century monk in the massive Romanesque Benedictine Abbey on top of the Petersburg.²⁸ Fearing that his Jesuit teachers would take this treasure from him, Hellwig fled Erfurt and shipped with the Dutch East India Company to India, where, with the help of a certain Indian and Valentine's manuscript, he perfected the art.²⁹ These legends recall many other stories in which Basil Valentine's legacy, long hidden within the Erfurt monastery, was stolen either by the Catholic troops of von Schönborn or of Queen Christina of Sweden.³⁰ If Valentine's manuscripts, known and treasured across Europe, symbolized a source of local power and prestige, then the stories of their discoveries and thefts tell us about the imagined foreign and Catholic threats to local power, from the Swedes, from Mainz, or from the Jesuits.

These legends point to a period of intense relocation of library and *Kunstkammer* collections around Europe during the Thirty Years' War. Duke Friedrich's father, Duke Ernst, had built his enormous collections partially through booty captured from Catholic powers such as Mainz.³¹ The depredations of Queen Christina's Swedish troops upon RudolFINE alchemical collections in Prague in 1648 were well known.³² If alchem-

²⁸ DSB, 13 (1976), 558-560; Hans Gerhard Lenz, "Der hessische Paracelsist Johann Thoelde," *Salzburger Beiträge zur Paracelsusforschung*, 23 (1982-1983), 89-99; Claus Priesner, "Johann Thoelde und die Schriften des Basilius Valentinus," in Christoph Meinel, ed., *Die Alchemie in der europäischen Kultur- und Wissenschaftsgeschichte* (Wiesbaden, 1986), 107-19.

²⁹ Christian Juncker, *Commentarius de vita et scriptis Jobi Ludolphi* (Leipzig, 1710), 149.

³⁰ Georg Wolfgang Wedel, *Programma propempticon inaugurale de Basilio Valentino* (Jena, 1704), 6-7.

³¹ Jill Bepler, "Early Modern German Libraries and Collections," in Max Reinhart, ed., *Early Modern German Literature 1350-1700* (Rochester, NY, 2007), 699-736.

³² As Eric Mauritius reported to Johann Christian von Boineburg, Herzog August Bibliothek, MS. 84.12, fol. 280v.

ical knowledge represented power to prince-practitioners such as Rudolf and Christina, then the location of alchemical knowledge in one's own collection or the collection of one's enemies was a matter of political importance.³³

These legends further suggested a local setting embroiled in intense interstate competition, and not in a harmonious alchemical republic. The far-off Archbishopric of Mainz had technically long controlled half of Erfurt, but not until the Counter Reformation under von Schönborn did Mainz begin to exercise real power. Hellwig's version of the legend, in which he saved the manuscripts from both the Mainz soldiers and the Jesuits, and perfected Valentine's processes with the help of an Indian, situated Erfurt as a node of global power. Erfurt became a place from which knowledge exited and to which it returned.

Hellwig, German Alchemy and Indonesian Nature

Hellwig reframed European alchemy within tantalizingly global terms. He positioned himself both as a purveyor of Indonesian alchemical theory and of distant *naturalia*. In the *True and Unheard of Philosophy* he recounted how, in Halle in 1675, he had made mercury from Hessian vitriolic and sulphuric earth (otherwise referred to as *minera martis solaris*, *bergvitriol*, or pyrite).³⁴ In *On Various Indian Things*, Hellwig described finding this Hessian mineral in India.³⁵ Throughout the 1680s, Duke Friedrich I would employ several agents in an attempt to obtain rights to international mines of *bergvitriol*.³⁶ He also collected alchemical samples from the East Indian House in Amsterdam which remain in the archive.³⁷

Global empiricism naturally intersected with the sourcing of alchemical raw materials. The German doctor of the Dutch colony at Batavia, Andreas Cleyer, in whose Batavian laboratory Hellwig worked alongside

³³) On Christina's alchemical practice, see Susanna Åkerman, *Queen Christina of Sweden and her Circle: The Transformation of a Philosophical Libertine* (Leiden, 1991).

³⁴) Hellwig, *Introitus*, 28.

³⁵) *Miscellanea curiosa* (Pressburg [Bratislava], 1680), 9 and 10: 464.

³⁶) E. XI. 70, 93-104.

³⁷) E. XI. 73*: "Probier Zettel aus dem Oost Indianischer Haus in Ambsterdam."

the Danish doctor Herman Nicholas Grim, later sent in many letters to the Academy, printed from 1683–1700, concerning Chinese and Japanese botanicals such as ginseng, tea, moxa, and camphor.³⁸ Cleyer's letters would become a major source for Asian natural history and medical practice in Central Europe.³⁹ This was a practice forged first by Hellwig, however, in 1678, with alchemical interests in mind.

Perhaps even more important than access to global resources was Hellwig's ability to test how alchemical theory worked abroad. For instance, Hellwig defined fire as the "praeternatural motion of the salt of nature," produced either through a strong external motion or an internal ferment. An example of the former "among the Europeans" was the friction of flint and iron, while "our Indians" produced sparks through a hard grass named "Bambu." The Sumatran pepper, which caused the ship carrying it to burst into flames and sink, offered an example of fire through internal ferment.⁴⁰

Although Hellwig identified himself with "our Indians," throughout his work he related the natural phenomena he observed abroad to the latest alchemical theories published in German-speaking lands. Like others of his generation, Hellwig was searching for a chemical "magnet" which could attract the universal spirit of the world out of the air. His experience of Indian nature gave him a privileged position from which to argue that his vision of the universal magnet matched a truly global nature. While Hellwig critiqued other theories of the universal magnet propounded by various Academicians, he also showed his respect for the Academy by mentioning his many friends who were members, including Dr Volckamer of Nürnberg, Professor Georg Franck von

³⁸ Wolfgang Michel, "Ein 'Ostindianisches Sendschreiben.' Andreas Cleyers Brief an Sebastian Scheffer vom 20. Dezember 1683," *Dokufutsu Bungaku Kenkyū*, 41 (1991), 15-98.

³⁹ Cook, *Matters*, 362; Georg Eberhard Rumpf and E.M. Beekman, *The Ambonese Curiosity Cabinet* (New Haven, CT, 1999).

⁴⁰ Hellwig, *Introitus*, 22: "Externae motionis exempla sunt, lapis cum ferro, aut lapides cum lapidibus collisi apud Europaeos, nostris Indianis durrissimae crassaeque arundines, nomine Bambu, fortiter fricatae, scintillas, maximae Salis copiae causa, edunt," and 23: "Praetoria navis ab Insula Sumatra piper vehens reversa, ab aromatis se ipsum per fermentationem accedentis flamma penitus peribat."

Frankenau at Heidelberg, and Professor Georg Wedel at Jena.⁴¹ He dedicated the work as a whole to the Academy, as a group to whom the “new truth” (“nova veritas”) he unearthed might be agreeable.⁴² Even in Batavia, Hellwig was preparing for the career that awaited him in German-speaking lands at home.

Not everyone, however, considered Hellwig’s Indonesian sources so desirable. Hellwig included in his 1680 edition a response to a critical review of his work, *Vis aliena Tessae* (*The Foreign Power of Tessa*). His opponent described Hellwig’s work as having been previously printed in 1678 in Batavia and reprinted in 1680 in Hamburg, while his own work was printed “a few months ago” in Heidelberg. *The Foreign Power of Tessa* criticised Hellwig’s use of foreign words, such as “Tessa,” arguing that one should be able to obtain alchemical truth in Germany, without travelling to India.⁴³ Tellingly, Hellwig described reading this critique, “while returning to Germany a few days ago from Africa.”⁴⁴ Such careful references to the time and place of reading and writing alchemical literature show that Hellwig was not only practising global alchemy: his global alchemy was delivered fresh. Despite the great distances involved, these rejoinders apparently traversed the globe with ease, allowing readers to feel that they had their fingers on the pulse of international alchemical knowledge.

Hellwig returned from Java, first to Amsterdam, before continuing on to England. He became an honorary professor and counsellor at Heidelberg, and was later created a baronet by Charles II of England. He also became acquainted with Robert Boyle, who, as Director of the East India Company and an alchemist, would doubtless have been intrigued by Hellwig’s account of Asian alchemy.⁴⁵ It was only after

⁴¹ Ibid., 48.

⁴² Ibid., 10-17.

⁴³ “Vis Aliena Tessa,” in Hellwig, *Introitus*, 60: “Gavisus tamen non minus, quod veritatem in Europa & Germania nostrâ [DEI gratiâ] nacti sumus, nec eam ex India exspectare necessè habemus.”

⁴⁴ Hellwig, *Introitus*, 68: “Legi aliquot ab hic diebus ex Africa in Germaniam, laus Deo, reversus epistolium Tuum.”

⁴⁵ Robert Boyle, *The Correspondence of Robert Boyle, 1678–83*, ed. Michael Hunter (London, 2001), V: 435-36. For Boyle’s alchemical career, see Lawrence Principe, *The Aspiring Adept: Robert Boyle and his Alchemical Quest* (Princeton, 1998).

Hellwig established this international reputation that Duke Friedrich invited Hellwig to Gotha as an alchemical advisor, agent, and first councillor within his Secret Council. Hellwig only spent five months in Gotha, from March to July 1684, but from the first, Friedrich planned on using Hellwig not only in the local setting, but as one of his many international agents. In his contract with Friedrich (signed March 25, 1684), Hellwig was described as an “English Knight of the royal-English Order” who would serve the Duke not only in Gotha, but in various courts abroad.⁴⁶

Hellwig Queries the Rosicrucians and the Hermetic Alliance Responds

Despite the renown Hellwig gained in these courtly settings, he agitated some supporters of the “Hermetic Republic.” The 1680 edition of Hellwig’s *True and Unheard of Philosophy* included an open letter from Hellwig to the Rosicrucians.⁴⁷ Hellwig’s letter was inspired by the *Explicatio Centri in Trigono Centri* (*Explanation of the Centre in the Triangle of the Centre*), a 1680 work by a self-proclaimed Rosicrucian, John of the Hermetic Mount.⁴⁸ Hellwig challenged the Rosicrucians, if they existed, to respond to his letter, and to prove their knowledge by answering the twelve questions he posed. These questions queried the Rosicrucians’ claim to global knowledge, by asking where in the world the best and worst water, air, earth, and medicine could be found, and also enquired about Kabbalist beliefs.

Hellwig’s global *persona* attracted attention from the so-called Hermetic Alliance of two alchemists from Pressburg, and from S.A. von L., a friend of the Alliance in Gdańsk, who claimed to have spent a week in their company following a lengthy correspondence.⁴⁹ In 1681, the Alliance responded to the recent publication of “John of the Hermetic Mount” and that of Hellwig, whom they admired as “a philosopher

⁴⁶ E. XI, 83: “Engelländischen Ritter des königlich-Englischen Ordens.”

⁴⁷ Hellwig, *Introitus*, 82-87.

⁴⁸ Johann de Monte Hermetis, *Explicatio Centri in Trigono Centri per Somnium* (Ulm, 1680).

⁴⁹ S. A. von L., *Chrysopoeiae Magister* (Gdańsk, 1685), 1-2.

famous throughout Europe & India.”⁵⁰ They offered their own answer to the queries Hellwig had posed to the Rosicrucians. Hellwig was unimpressed, and in 1683 responded with his own *Judgment* to the Alliance’s responses.⁵¹ In the *Judgment*, Hellwig showcased the admiration his own alchemy had elicited on his recent trip to London, where both Prince Rupert of the Palatinate and Robert Boyle witnessed his processes.⁵² The Hermetic Alliance retaliated in 1684, their opinion of Hellwig now decidedly changed.⁵³ At first, they had believed that Hellwig’s trip to the Dutch colony of Batavia and his translation of a work of an Asian Muslim alchemist, “Ali Puli,” supported their own belief in an ancient and universal alchemical knowledge. S.A. von L., in his turn, defined Hermetism as the pursuit of the knowledge of the ancient Egyptian adept, Hermes Trismegistus. Modern theories, such as the antimonial way of Philalethes, or that of the “vitriolists,” “should be called chemical rather than hermetic, since they were recent inventions.”⁵⁴

It was only after realizing that Hellwig’s motivations for international travel were rather different to theirs that the Hermetic Alliance grew critical of Hellwig. S.A. von L. discussed Hellwig in the context of criticizing another Gotha-linked alchemist and cameralist theorist, Wilhelm von Schroeder, the son of Duke Ernst’s chancellor of the same name, and a Fellow of the Royal Society. According to S. A. von L., the Hermetic Alliance was not familiar with Baron Schroeder personally, and they severely doubted that he was a member of the Royal Society of England as he claimed, for surely he was not deserving of such an honour by such a famous society.⁵⁵ Furthermore, although Schroeder laid claim to the Society’s motto “nullius in verba magistri,” he built his argument upon the *Judgment* of Hellwig, even though Hellwig was

⁵⁰ Chrysantus Leonagnus, *Magnum Interest Totius Reip. Hermeticae, Sive Epistola II. Buccinatoria* (Gdańsk, 1681), 6: “nominatissimum per Europam & Indiam Philosophum.”

⁵¹ Hellwig, *Judicium* (Jena, 1683).

⁵² Hellwig, *Judicium* (Amsterdam, 1683), 12.

⁵³ *Federatorum Hermeticorum Amica Responsio* (Gdańsk, 1684), 14.

⁵⁴ S.A. von L., *Chrysopoeiae*, 63: “Nec Hermetica sed Chemica debet appellari, utpote prostremis [sic] seculis inventa.”

⁵⁵ *Ibid.*, 8.

no “author classicus” and nobody had testified to his real knowledge of *chemia* (“auch niemand von seiner würrcklichen Wissenschaftt in Chemia Zeugniß giebet”).⁵⁶ S.A. von L. did not think that Schroeder was a true adept, and he bemoaned the fact that Schroeder neither asked the Royal Society to review his work before publication, nor employed experiments (“*experimenta*”) in the way the Society did.⁵⁷

Like Hellwig, S.A. von L. was eager to show that his alchemical beliefs were approved by and agreed with the alchemical practices of the Royal Society. However, the Royal Society meant something different to him than it did to Hellwig. S.A. von L. had asked the Hermetic Alliance whether the ancient, universal, and Egyptian way of alchemy was known to the Royal Society. A member of the Alliance could not verify that, but he was certain that the Hermetic, Egyptian way was known to Francis Bacon, “the first founder of that Society,” and to other Englishmen, including John Dee.⁵⁸ According to the Hermetic Alliance, Francis Bacon envisioned the Royal Society as a brotherhood much like their own: that is, as a collaboration furthering the recovery of the *prisca sapientia* from around the world. The fact that they chose to publish their open letters in the pages of the German Academy’s journal suggests that they thought of that Academy in similar ways, despite the many structural differences between the two societies. The Hermetic Alliance did not see learned societies as founded for the purposes of global empiricism, but as a fellowship united in the quest for universal wisdom. Yet the Gotha court also identified itself with the Royal Society, as a centre funnelling into itself desired materials from around the globe.

Conclusion: Seen from Abroad

While Gotha, like larger sea-going states, sought to accumulate global knowledge at its courtly centre, the Hermetic Alliance claimed to sup-

⁵⁶ Ibid., 9. S. A. von L. claimed there that he would discuss Hellwig further on another occasion.

⁵⁷ Ibid., 39.

⁵⁸ Ibid., 63: “tamen mihi certò constat, & in praefato Opere demonstratur, sapientissimo illi Viro Francisco Verulamio, Societatis illius primo Fundatori apprime perspectam fuisse Materiam Hermeticam Veterem; ut taceam alios Anglos, quos inter est Jo: Dee Londinensis &c.”

port a dispersed, universal republic. These differences in the desired trajectories of alchemical communication point to a larger divergence in the function of foreign knowledge at the Gotha court on the one hand, and the “Hermetic Republic” on the other. The Hermetic Alliance at first saw in Hellwig a kindred seeker of the universal, ancient wisdom hidden abroad since the time of the ancient Hermes. In other words, they looked far afield to find further testimony to the unity of the *prisca sapientia*, just as ancient Greek philosophers legendarily travelled to the Brahmins. The alchemical idea that, across time and space, “all the sages agree” dated at least to the *Turba philosophorum*.⁵⁹ This idea eased the integration and movement of diverse alchemical sources, especially those that travelled to Latin from Arabic, such as the *Turba* itself. In a period of rapidly proliferating new natural historical information and eclectic new philosophies, the Hermetic Alliance suggested building virtual institutions, much like the German Academy, to produce a purported universal agreement. In short, Gotha’s network of global empiricism collected diverse particulars, while the Hermetic Alliance sought to uncover unity.

Despite the occasional complaints of some of the pamphleteers surveyed here, Hellwig generally succeeded in parlaying his minimal experience in distant Java into a lengthy career which appealed to both these concepts of the alchemical centre. It was distance itself which allowed Hellwig to deploy his global experience in two different ways. As Mario Biagioli has described in *Galileo’s Instruments of Credit*, distance has often seemed simply an obstacle to historians of science. In their efforts to produce reliable global knowledge, networks of empirical observers sought ways to circumvent distance, doing their best to erase its effects. Galileo, Biagioli has argued, did the opposite, and used distance as part of his strategy of negotiating a higher status for himself and assent for his scientific theories and observations. By diverting attention from his

⁵⁹ Julius Ruska, *Turba philosophorum: Ein Beitrag zur Geschichte der Alchemie* (Berlin, 1931); Martin Plessner, *Vorsokratische Philosophie und griechische Alchemie: Studien zu Text und Inhalt der Turba philosophorum* (Wiesbaden, 1975); Didier Kahn, “The *Turba philosophorum* and its French Version (15th C.),” in Miguel López Pérez, Didier Kahn and Mar Rey Bueno, eds., *Chymia: Science and Nature in Medieval and Early Modern Europe* (Newcastle-upon-Tyne, 2010), 70-114.

rather weak local position, Galileo gained space to project an image of himself as he hoped to be, and went some way towards making that image a reality.⁶⁰ Hellwig's peripatetic career likewise allowed him to negotiate a successful career between a global network and a universal republic.

⁶⁰ Mario Biagioli, *Galileo's Instruments of Credit: Telescopes, Images, Secrecy* (Chicago, IL, 2006).