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## Pansophic mirrors of the soul

#### Citation for published version:

Burton, S 2022, 'Pansophic mirrors of the soul: Comenius, Pinder and the transformation of Cusan optics', Acta Comeniana, vol. 34, pp. 9-48. <a href="https://filosofia.flu.cas.cz/publikace/581">https://filosofia.flu.cas.cz/publikace/581</a>

#### Link:

Link to publication record in Edinburgh Research Explorer

#### **Document Version:**

Peer reviewed version

#### **Published In:**

Acta Comeniana

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# Pansophic Mirrors of the Soul: Comenius, Pinder and the Transformation of Cusan Optics

#### 1. Introduction

For a long time Nicholas of Cusa has been seen as a "forgotten presence" in early modernity. While grand claims have been made for his central role in the emergence of modernity, above all by Ernst Cassirer and Hans Blumenberg, historians have struggled to substantiate these. In recent years, however, starting with the pioneering work of Stephan Meier-Oeser, things have started to change. It has become clear that Cusa's influence was highly significant, indeed perhaps just as significant as Cassirer and Blumenberg wanted to claim. While Cusa left no school to perpetuate his name, was quickly forgotten by humanists and Neo-Platonists, and later became viewed with deep suspicion by the forces of Reformation and Counter-Reformation alike, there were nonetheless many inspired by his vision of reform. Indeed, one reason why historians have failed for so long to discern his influence, was that it became quietly absorbed into the defining systems and syntheses of early modernity. To put it another way, Cusa became a victim of his own astonishing success.<sup>3</sup>

Cusa made a particularly deep impression on the early modern movement of universal reform. Indeed, in many ways, Cusa can be seen as standing at the origin of this movement, his all-encompassing reform initiatives a model for those who came after him.<sup>4</sup> Certainly, Jan Amos Comenius, perhaps the most important of the seventeenth-century universal reformers, is known to have been profoundly influenced by Cusa – something which Czech and German scholars have long realised, but which Anglophone scholarship has been slow to catch up on. For Jan Patočka, Cusan insights were the seed from which all of Comenius' philosophy unfolded.<sup>5</sup> Others such as Jaromír Červenka, Klaus Schaller and Pavel Floss concurred, demonstrating just how widespread and pervasive Cusa's influence was.<sup>6</sup> In recent years, Simon Kuchlbauer has argued that Cusa stands at the origins of Comenius' great programme of pansophia, and Petr Pavlas and Simon Burton have explored Comenius' extensive use

<sup>&</sup>lt;sup>1</sup> Stephan MEIER-OESER, *Die Präsenz des Vergessenen: Zur Rezeption der Philosophie des Nicolaus Cusanus vom. 15. Bis zum 18. Jahrhundert*, Münster 1989.

<sup>&</sup>lt;sup>2</sup> Ersnt CASSIRER, *The Individual and the Cosmos in Renaissance Philosophy*, trans. Mario DAMANDI, Oxford 1963; Hans BLUMENBERG, *The Legitimacy of the Modern Age*, trans. Robert M. WALLACE, Cambridge, MA, 1983.

<sup>&</sup>lt;sup>3</sup> See MEIER-OESER, *Die Präsenz des Vergessenen*; Simon J. G. BURTON – Joshua HOLLMANN – Eric M. PARKER (eds.), *Nicholas of Cusa and the Making of the Early Modern World*, Leiden 2019.

<sup>&</sup>lt;sup>4</sup> See BURTON – HOLLMANN – PARKER, *Introduction*, in: BURTON – HOLLMANN – PARKER, *Cusa*, pp. 30-7.

Jan PATOČKA, Comenius und Cusanus, in: Jan PATOČKA, Andere Wege in die Moderne: Studien zur europäischen Ideengeschichte von der Renaissance bis zur Romantik, ed. Ludger HAGEDORN, Würzburg 2006, pp. 238-40. See also Jan PATOČKA, Centrum Securitatis und Cusanus, in: PATOČKA, Andere Wege in die Moderne, pp. 245-56; Transcendentalia a Kategorie, in: Jan PATOČKA, Sebrané spisy Jana Patočky: Komeniologicke Studie III, ed. Věra SCHIFFEROVÁ. Prague 2003, pp. 232-42.

<sup>&</sup>lt;sup>6</sup> Jaromír ČERVENKA, *Die Naturphilosophie des Johann Amos Comenius*, Prague 1970, pp. 43-4, 59-61, 163-8; Klaus SCHALLER, *Sein und Bewegung in den Frühschriften Komenskys*, Zeitscrift für philosophische Forschung 23:1, 1969, pp. 36-46; Pavel FLOSS, *Cusanus und Comenius*, Mitteilungen und Forschungsbeiträge der Cusanus-Gesellschaft 10, 1973, pp. 172-90.

of Cusan motifs such as the coincidence of opposites, the squaring of the circle and the book of the mind.<sup>7</sup> Comenius' standing as one of the chief heirs of the fifteenth-century German reformer is reaffirmed in Floss' important new book *The Philosophy of Nicholas of Cusa*, which offers a comprehensive account of Cusan influence on the Czech polymath.<sup>8</sup>

Yet, despite all this attention, the transmission of Cusan influence to Comenius has been conspicuously neglected. Of course, it is well known that Comenius' principal, and perhaps only, direct access to Cusa's writings was through Ulrich Pinder's *Speculum intellectuale felicitatis humanae* of 1510. This Cusan *florilegium* composed by a leading sixteenth-century Nuremberg humanist and physician has well been called a "small Cusan edition" in its own right. From references in his Anti-Socinian works we know that Comenius discovered Pinder's anthology sometime before 1621. His contact with Cusa's thought thus pre-dates his important works from the 1620s and coincides with a period in which many of his most distinctive ideas were still taking shape. It is surprising therefore that scholars have paid so little attention to Pinder himself. Indeed, there has been a widespread tendency simply to mine him as a Cusan source, such that he has scarcely been considered as a Comenian influence in his own right.

While understandable, especially given Pinder's own relative obscurity, there are three problems with this neglect. The first is that Comenius clearly viewed Pinder as an important authority in his own right, worthy of citing on more than one occasion. The second is that to treat Pinder's work as a straightforward Cusan anthology is mistaken. While Cusa dominates, his is not the only voice, and Pinder draws on a number of other prominent medieval and Renaissance authorities. The third is that Pinder's anthology is not just an unsystematic collection, but a carefully-crafted treatise in which Cusan and other texts are folded into each other such that, as Catrien Santing suggests, it becomes almost impossible to distinguish author and compiler. Pinder's *Speculum* is organised around themes of vision, light and optics, which has the effect – to use his own optical metaphor – of focussing his citations of Cusa. Pinder also seeks to reframe Cusa's thought by prefacing it with an important

<sup>&</sup>lt;sup>7</sup> Simon KUCHLBAUER, Johann Amos Comenius' antisozinianische Schriften: Entwurf eines integrativen Konzepts von Aufklärung, Dresden 2011, pp. 61-89, 197-221; Simon J. G. BURTON, "Squaring the Circle": Cusan Metaphysics and the Pansophic Vision of Jan Amos Comenius, in: BURTON – HOLLMANN – PARKER, Cusa, pp. 417-49; Petr PAVLAS, The Book Metaphor Triadized: The Layman's Bible and God's Books in Raymond of Sabunde, Nicholas of Cusa and Jan Amos Comenius, in: BURTON – HOLLMANN – PARKER, Cusa, pp. 384-416.

<sup>&</sup>lt;sup>8</sup> Pavel FLOSS, *The Philosophy of Nicholas of Cusa: An Introduction Into His Thinking*, Basel 2020, pp. 323-44.

<sup>&</sup>lt;sup>9</sup> MEIER-OESER, *Die Präsenz des Vergessenen*, 402. Ewald LASSNIG, *Dürer's "MELENCOLIA-I" und die Erkenntnistheorie bei Ulrich Pinder*, Wiener Jahrbuch für Kunstgeschichte 57, 2008, p. 57 points out that Pinder sourced his *Speculum* in Martin Flach's 1488 Strasbourg edition of Cusa's *Opera*.

<sup>&</sup>lt;sup>10</sup> Jan Amos COMENIUS, *De Iterato Sociniano Irenico Iterata ad Christianos Admonitio*, Amsterdam, 1661, pp. 117-18.

<sup>&</sup>lt;sup>11</sup> Jan Amos COMENIUS, *De Rerum Humanarum Emendatione Consultatio Catholica*, Prague 1966, t. I p. 398; *De Iterato Socinano*, pp. 117-18.

<sup>&</sup>lt;sup>12</sup> Catrien SANTING, Through the Looking Glass of Ulrich Pinder: The Impact of Humanism on the Career of a Nuremberg Town Physician around 1500, in: Stephen GERSH – Bert ROEST (eds.), Medieval and Renaissance Humanism: Rhetoric, Representation and Reform, Leiden 2003, p. 222.

discussion of intellectual vision. Therefore, in light of much recent scholarship, which challenges modern, anachronistic notions of authorship and recognises a fundamental creativity in the work of compiling and anthologising, it seems a ripe time to reevaluate Pinder's influence on Comenius. <sup>13</sup> This is perhaps all the more necessary, given that the extent to which Cusa himself was a compiler of other's insights has recently become a topic of heated and controversial debate. <sup>14</sup>

In this paper we will therefore seek to investigate the influence of Pinder's *Speculum* on Comenius' developing philosophy, considering especially his reception of optical metaphors of knowledge. In order to do this we will first place Pinder's work in its medieval and Renaissance context. As a leading Nuremberg humanist and a close associate of the likes of Willibald Pirckheimer, Hartmann Schedel and Albrecht Dürer, Pinder was part of a sweeping intellectual and artistic revolution, profoundly marked by its engagement with Neo-Platonism, encyclopaedism and Christocentric mysticism. The seismic effect of this was still felt in the seventeenth century and Comenius himself hailed Dürer in his *Consultatio Catholica* as an epochal reformer. Having considered this, we will turn to an investigation of Pinderan themes in Comenius from the *Labyrinth* right through to the *Consultatio Catholica*. This will reveal Pinder as an important prototype of Comenius' *Panaugia*, and even of the pansophia as a whole. It will also suggest, to use an appropriate metaphor, that Pinder was the mirror in which Comenius read Cusa's work, the lens through which he viewed all his insights.

#### 2. Optical Theology

Pinder's *Speculum intellectuale* appeared at the culmination of a centuries-long period of reflection and theorising on light and during a period in which optics was becoming ever more closely integrated with philosophy, theology, ethics and art. The fifteenth and sixteenth centuries saw a profound "visual" turn, the influence of which turned out to be just as marked on scientific and theological disciplines, especially on notions of method, as on the visual arts. <sup>16</sup> It is certainly no coincidence that optical motifs have so often been seen as symbols invoking the thought of an entire age. <sup>17</sup>

Medieval Christians had long been fascinated by the metaphysics of light. In the thirteenth century light became central to the philosophy of the friars, especially the Franciscans, shaping their entire

<sup>&</sup>lt;sup>13</sup> See, for example, Ann BLAIR, *Too Much to Know: Managing Scholarly Information Before the Modern Age*, New Haven, CT, 2010 and Richard J. OOSTERHOFF, *Making Mathematical Culture: University and Print in the Circle of Lefèvre d'Étaples*, Oxford 2018.

<sup>&</sup>lt;sup>14</sup> David ALBERTSON, A Learned Thief? Nicholas of Cusa and the Anonymous "Fundamentum Naturae": Reassessing the "Vorlage" Theory, Recherches de théologie et philosophie médiévales 77, no. 2, 2010, pp. 351-90

<sup>&</sup>lt;sup>15</sup> Jan Amos COMENIUS, *De Rerum Humanarum Emendatione Consultatio Catholica*, Prague 1966, t. I p. 398; *De Iterato Socinano*, t. II p. 401.

<sup>&</sup>lt;sup>16</sup> Walter J. ONG, Ramus, Method and the Decay of Dialogue: From the Art of Discourse to the Art of Reason, Cambridge, MA, 1958; Charles H. CARMAN – John Shannon HENDRIX (eds.), Renaissance Theories of Vision, London 2016; OOSTERHOFF, Making Mathematical Culture.

<sup>&</sup>lt;sup>17</sup> See Karsten HARRIES, *Infinity and Perspective*, Cambridge, MA, 2001 and Johannes HOFF, *The Analogical Turn: Rethinking Modernity with Nicholas of Cusa*, Grand Rapids, MI, 2013.

understanding of cognition and science. <sup>18</sup> For Bishop Robert Grosseteste, who taught the Franciscans in Oxford, God's creation of all things can be compared to the emanation of light from a central point in the universe, setting up important analogies and correspondences between spiritual, intellectual and physical light. The English Franciscan Roger Bacon developed these ideas into the new science of perspective, fusing Grosseteste's Neo-Platonism with the insights of the Islamic scholar Alhazen. This led to the development of the influential species theory of cognition, in which all perception could be linked to the emission, reception and analysis of sensible species from an object, notably conforming all of sensation to a visual paradigm. It also gave rise to a new desire to place optics on a scientific, mathematical and empirical footing. <sup>19</sup>

From the late thirteenth century onwards the work of the perspectivists began to enter a wider intellectual and theological milieu. This is well evidenced in Bonaventure who integrated Augustinian and Neo-Platonic understandings of light and illumination into a mystical and devotional theology with a wide circulation and appeal.<sup>20</sup> It can also be seen in the metaphysical poetry of Dante and the new art of his friend Giotto, soon to be replicated in a myriad icons and altarpieces throughout Europe, in which light becomes the central symbol of the revelation of God.<sup>21</sup> Aiding this artistic and aesthetic revolution were new developments in the technology of mirrors and lenses, and all of this combined to push optical metaphors to the forefront of medieval life and culture. Yet, as Richard Newhauser and Dallas Denery have insightfully demonstrated, it is in the work of preachers and moralists such as Peter of Limoges that we see the most powerful evidence of this. For in their works the new science of vision is used to offer a probing exploration of some of the most important ethical and theological themes of the Middle Ages.<sup>22</sup>

The fifteenth century only saw an acceleration and intensification of many of these developments, with scientific, intellectual and artistic endeavours swept along in the wake of the Neo-Platonic revival. The development of new technologies of glass manufacture, silvering of mirrors and grinding of lens, combined with the establishing of new commercial and artistic guilds, led to massive advances, evidenced in the art, architecture and science of the era.<sup>23</sup> Optical experiments by Brunelleschi and the theorising of Alberti paved the way for the development of linear perspective,

<sup>&</sup>lt;sup>18</sup> Roger FRENCH – Andrew CUNNINGHAM, *Before Science: The Invention of the Friars' Natural Philosophy*, London 2016, pp. 203-55.

<sup>&</sup>lt;sup>19</sup> FRENCH – CUNNINGHAM, *Before Science*, 230-55; Katherine H. TACHAU, *Vision and Certitude in the Age of Ockham: Optics, Epistemology and the Foundations of Semantics 1250-1345*, Leiden 1988, 3-16.

<sup>&</sup>lt;sup>20</sup> FRENCH – CUNNINGHAM, Before Science, 209-12.

<sup>&</sup>lt;sup>21</sup> For Dante see Christian MOEV, *The Metaphysics of Dante's Comedy*, Oxford 2005 and for Giotto see Julia MILLER, *Symbolic Light in Giotto and the Early Quattrocento in Florence*, Notes in the History of Art, vol. 5 no. 1, 1985, pp. 7-13.

<sup>&</sup>lt;sup>22</sup> Richard G. NEWHAUSER, *Peter of Limoges, Optics, and the Science of the Senses*, The Senses and Society, vol. 5 no. 1, 2010, pp. 28-44; Dallas G. DENERY, *Seeing and Being Seen in the Later Medieval World: Optics, Theology and Religious Life*, Cambridge 2005, 75-116.

<sup>&</sup>lt;sup>23</sup> See Sarah DILLON, Seeing Renaissance Glass: Art, Optics and Glass of Early Modern Italy, 1250-1425, New York, 2018 and Vincent ILARDI, Renaissance Vision from Spectacles to Telescopes, Philadelphia, PA, 2007.

allowing the three-dimensional world to be represented with a new potency and immediacy. The artistic power to reproduce the visible world came to be seen as imitating the divine power of creation. In this way, visual understanding and transformation directly informed that central Renaissance notion of the inherent freedom and creativity of man.<sup>24</sup>

Nicholas of Cusa was at the vanguard of these insights. Themes of light, colour, vision and perspective abound in his works and shape some of his most brilliant philosophical, cosmological and theological insights. In the early *De conjecturis* the whole of reality is captured in the progression of light from God.<sup>25</sup> In his *De visione Dei*, he not only references with great admiration the perspective art of Roger van der Weyden, a leading Flemish primitive, but he goes on to use perspective to illuminate the mystical vision of God himself.<sup>26</sup> In the *De beryllo* we notably find the first recorded mention of eye-glasses for correcting myopia. The same work then goes on to construct intellectual glasses for the contemplation of God.<sup>27</sup> Finally, to give just one more relevant example, in his *Idiota de mente* Cusa used the distinctive motif of the mind as a "living mirror" to overturn the static character of scholastic exemplarism and offer his own view of the infinite scope of the human mind and its dynamic parallel with the mind of God.<sup>28</sup>

## 3. Pinder's Nuremberg

Notably, all of these optical themes from Cusanus – as well as a host of others – were taken up by Ulrich Pinder in his *Speculum intellectuale felicitatis humanae* of 1510. Indeed, the Cusan motif of the beryl glasses was a central one for the Nuremberg physician and came to shape his own reception of Cusa's philosophical and theological *oeuvre* in a profound way. In order to appreciate this it is first necessary to consider the context in which the *Speculum* was written, as well as Pinder's earlier engagement with Cusan themes. In doing so, we shall see that Pinder belonged to a milieu in which humanism, Neo-Platonism and Christocentric mysticism were all converging and giving rise to a new flowering of intellectual and artistic culture.<sup>29</sup>

<sup>&</sup>lt;sup>24</sup> Johannes HOFF, *The Analogical Turn: Rethinking Modernity with Nicholas of Cusa*, Grand Rapids, MA, 2013, pp. 33-75; Charles CARMAN, *Meanings of Perspective in the Renaissance: Tensions and Resolutions*, in: CARMAN – HENDRIX, *Renaissance Theories of Vision*, pp. 31-44.

<sup>&</sup>lt;sup>25</sup> NICHOLAS OF CUSA, *De conjecturis*, I.9.41-3, in: Raymond KLIBANSKY – Ernest HOFFMANN (eds.), *Nicolai de Cusa Opera Omnia* [hereafter *NCOO*], Leipzig 1932-, vol. III pp. 45-7.

<sup>&</sup>lt;sup>26</sup> NICHOLAS OF CUSA, *De visione Dei*, "*Praefatio*", 2; 4.10-13 (*NCOO* VI pp. 5-7, 11-12, 14-16). For further discussion see HOFF, *Analogical Turn*, pp. 116-42.

<sup>&</sup>lt;sup>27</sup> NICHOLAS OF CUSA, *De beryllo*, 1-3 (*NCOO* XI/1 pp. 3-6). For Cusa's mention of glasses see ILARDI, *Renaissance Vision*, pp. 80-2.

<sup>&</sup>lt;sup>28</sup> NICHOLAS OF CUSA, *Idiota de mente*, 5.87, 7.106 (*NCOO* V pp. 131, 158-60).

<sup>&</sup>lt;sup>29</sup> Christocentric mysticism refers to a mysticism focussed on the Incarnate Christ in which union with Christ is the final goal of the mystical ascent and not a stage to be surpassed. It frequently draws on a "Cosmic Christology" in which Christ is seen as the centre of all reality. Both Bonaventure and Nicholas of Cusa can be seen as key representatives of such a Christocentric mysticism. David ALBERTSON, *Mathematical Theologies: Nicholas of Cusa and the Legacy of Thierry of Chartres*, Oxford, 2014, p. 193 sums this up elegantly as follows: "For them the incarnate Word is the axis of the cosmic procession from and return to God, the still point of the moving world. Christ is savior, judge, and head of the church; but above all Christ is the sole nexus mediating

When Ulrich Pinder first arrived in Nuremberg at the end of the fifteenth century, the city was already famous as a leading centre of the German Renaissance. Hailed as the "Florence of the North" and the "German Athens", its political prominence, wealth and position as a leading centre of printing and engraving made it an attractive venue for humanists, scientists and artists alike. In 1471 Regiomontanus, Germany's leading scientist and mathematician, had come to Nuremberg for precisely these reasons, finding here the technical expertise needed to execute his own complex works. In 1487 Conrad Celtis, Germany's "Arch-Humanist", was crowned poet laureate in Nuremberg and for the rest of his life was a frequent visitor to the city, which became the home of the *Sodalitas Celtica* named in his honour. When Johannes Reuchlin came under attack from the Cologne scholastics it was Nuremberg humanists, led by the patrician scholar Willibald Pirckheimer, who rushed to his defence.

In intellectual terms the Nuremberg humanists were united by a deep interest in Neo-Platonism and mathematics. Thus Celtis, who saw himself as a "doctor of the threefold philosophy", offered a "spiritualized" cosmology drawing on the Albertist metaphysics of light and framed as a Platonic and mathematical ascent.<sup>34</sup> Pirckheimer too was intimately familiar with Neo-Platonism, having made an early trip to Italy to hunt down the works of Ficino and later becoming a correspondent of the nephew of Pico della Mirandola.<sup>35</sup> His friend Albrecht Dürer, the renowned artist, also spent time in Italy and was deeply influenced by Ficino. Dürer had a passion for mathematics and optics and his ground-breaking art is immersed in Neo-Platonic motifs.<sup>36</sup>

It is scarcely surprising therefore that Nuremberg should prove fertile soil for the reception of Cusa's thought. Cusa himself had been well known in the city and played a leading role in the Nuremberg diets of 1438 and 1444, taking advantage of the latter to purchase books and scientific instruments. Through the writings of Abbot Trithemius, Reuchlin, Celtis and Nuremberg's own Hartmann Schedel, he was widely regarded as the founding father of German humanism. Reuchlin's Cabalistic endeavours were deeply indebted to Cusa and he became one of many German humanists recruited by the Fabrists to hunt down manuscripts for the great Paris 1514 edition of his *Opera*. Celtis too was

between the divine One and the order of finite being, the goal and center of all creation".

<sup>&</sup>lt;sup>30</sup> Gerald STRAUSS, *Nuremberg in the Sixteenth Century*, New York 1966, pp. 231-4; Jeffrey ASHCROFT, *Black Arts: Renaissance and Printing Press in Nuremberg 1493-1528*, Forum for Modern Language Studies 45 no. 1, 2008, pp. 6-14. For a detailed discussion of Renaissance Nuremberg and its wider significance see Jeffrey CHIPPS SMITH, *Nuremberg: A Renaissance City, 1500-1618*, Austin, TX, 1983.

<sup>&</sup>lt;sup>31</sup> STRAUSS, *Nuremberg*, pp. 243-4.

<sup>&</sup>lt;sup>32</sup> STRAUSS, *Nuremberg*, pp. 245-7; Lewis W. SPITZ, *The Religious Renaissance of the German Humanists*, Cambridge, MA, 2014, p. 82.

<sup>&</sup>lt;sup>33</sup> Franz POSSET, Johann Reuchlin (1455-1522): A Theological Biography, Berlin 2015, pp. 605-7.

<sup>&</sup>lt;sup>34</sup> SPTIZ, *Religious Renaissance*, pp. 89-96.

<sup>&</sup>lt;sup>35</sup> SPITZ, *Religious Renaissance*, pp. 170-1.

<sup>&</sup>lt;sup>36</sup> LASSNIG, Dürer's "MELENCOLIA-I", pp. 51-95.

<sup>&</sup>lt;sup>37</sup> Erich MEUTHEN, *Nicholas of Cusa: A Sketch for a Biography*, trans. David CROWNER, Washington DC 2010, pp. 70-1.

<sup>&</sup>lt;sup>38</sup> ASHCROFT, Black Arts, p. 7; SPITZ, Religious Renaissance, pp. 95-8.

devoted to Cusa and showed his appreciation by publishing part of his *De li non aliud*, the only known copy of which, incidentally, had been located in Schedel's library in Nuremberg.<sup>39</sup> Dürer was likewise fascinated by Cusan themes, drawing on them extensively in his celebrated woodcut *Melencolia-I* as well as his even more famous self-portraits of 1500 and 1522. Indeed, the latter, in daringly presenting the artist as Christ, could even be seen as an embodiment of Cusan *Christiformitas*.<sup>40</sup>

Cusan influence in Nuremberg was only compounded by the evangelical revival the city was going through in the late fifteenth and early sixteenth centuries. Nuremberg was famous for its religious houses and monks, nuns and friars played a major role in the intellectual as well as spiritual life of the city. The vitality of Nuremberg religious life is evidenced by the enthusiastic welcome given to the leading Augustinian Johannes von Staupitz in 1516-17 when he preached a series of sermons on predestination considered the "high-point" of the late medieval Augustinian Renaissance. In these, Staupitz skilfully blended Augustinian themes of grace with mystical themes of union and coincidence characteristic of the Rhineland school and resonating with Cusanus himself. So popular were these sermons that a new *Sodalitas Staupitziana* was founded in order to discuss them and to further reform. It is thus scarcely surprising that Nuremberg was soon to be captivated by another Augustinian friar, Staupitz's protégé Martin Luther. Indeed, the eager reception of Luther by leading Nuremberg humanists paved the way for the city's early embrace of Lutheranism in 1525.

While not a Nuremberger by birth, Pinder came to embody many of the distinctive aspects of its Renaissance and evangelical culture. His time at the Saxon court of Elector Frederick the Wise had already exposed him to the cutting-edge of German humanism, and it was only natural that on his arrival in Nuremberg in 1491 he should quickly seek to establish his place among its leading intellectuals. As a physician, Pinder was already part of a guild deeply committed to humanism. He soon became an active member of the *Sodalitas Celtica* and many of the works of its members were printed on his own press. We thus find Pinder organising an important humanist disputation on astrology in the city, borrowing books from Schedel's lavish library, and writing important works of

<sup>&</sup>lt;sup>39</sup> James H. OVERFIELD, *Humanism and Scholasticism in Late Medieval Germany*, Princeton, NJ, 1984, p. 136; SPITZ, *Religious Renaissance*, pp. 97-8.

<sup>&</sup>lt;sup>40</sup> See LASSNIG, *Dürer's "MELENCOLIA-I"*, pp. 51-95 and Simon D. PODMORE, *The Gaze of Divine Sorrow: Envisioning Mystical Union with Dürer, Cusa and the* Theologia Germanica, in: Louise NELSTROP – Helen APPLETON (eds.), *Art and Mysticism: Interfaces in the Medieval and Modern Periods*, London 2018, pp. 246-68. Podmore points to the "Christomorphic" nature of this but in the context of Cusa's thought *Christiformitas* seems an even more appropriate term.

<sup>&</sup>lt;sup>41</sup> STRAUSS, *Nuremberg*, pp. 156-60; SPITZ, *Religious Renaissance*, pp. 160-1.

<sup>&</sup>lt;sup>42</sup> Heiko OBERMAN, *Masters of the Reformation*, Cambridge 1981, p. 76. For Staupitz's involvement with Nuremberg see STRAUSS, *Nuremberg*, pp. 157, 160 and Wendell MATHEWS, *Albrecht Dürer as a Reformation Figure*, PhD Dissertation, University of Iowa, 1968, pp. 35-9.

<sup>&</sup>lt;sup>43</sup> JOHANN VON STAUPITZ, Eternal Predestination and its Execution in Time, in: Heiko OBERMAN (ed.), Forerunners of the Reformation: The Shape of Late Medieval Thought, Cambridge 2002, 175-91.

<sup>&</sup>lt;sup>44</sup> MATHEWS, *Albrecht Dürer*, pp. 35-9.

<sup>&</sup>lt;sup>45</sup>STRAUSS, *Nuremberg*, pp. 160-79.

medical humanism. Pinder also became a friend of Dürer and the two struck up an important collaboration, with the artist's workshop providing many of the lavish illustrations and woodcuts for Pinder's own books.<sup>46</sup>

Like Dürer, there can be no doubt that Pinder was thoroughly invested in Neo-Platonism and mysticism. Indeed, Lassnig has argued convincingly that Dürer was actually indebted to Pinder's works for some of his most important Neo-Platonic motifs. Pinder's own engagement with these themes is evident as early as his *Beschlossen Gart des Rosenkrantz Marie* of 1505, a Mariological compilation which drew on Cusa's *De venatione sapientiae* and metaphysics of light. Pinder's *Speculum Passionis*, his passion-mirror, drew deeply on the work of Augustinian friars such as Simon of Cascia, Reinhard of Laudenberg and above all Jordan of Quedlinburg, and reveals Pinder's own investment in the Augustinian Renaissance of the Late Middle Ages. The work presents the Cross as the mirror of the Christian life and clearly participates in that Christological exemplarism which Eric Saak has seen as central to the entire late medieval Augustinian "philosophy of the holy". While Pinder did not live to see Nuremberg embrace the Reformation, it is perhaps not insignificant that his own press, under the aegis of his son-in-law, became a major early hub of Lutheran printing. On the control of the Christian printing.

Pinder's many published works were clearly intended to boost his humanist and Neo-Platonist credentials.<sup>51</sup> Pinder modelled himself on Ficino as a *philosophus medicus* and was convinced, like him, that medicine must be holistic, healing the soul as well as the body.<sup>52</sup> It was therefore only natural to him to turn his attention to writing a new "mirror of human happiness". Notably, the *Speculum intellectuale* appeared as one of a set of five different treatises together with the above-mentioned *Speculum Passionis* of 1507 and the *Compendium breve de valetudinis cura*, *Speculum Phlebotomiae* and a *Tractatus simplicium medicinarum* of 1510. All of these had an elegant and uniform printing style and, as Santing suggests, were likely intended as single parts of a whole. In this sense, the *Speculum intellectuale* may be seen as the culmination of a philosophical, devotional and medical encyclopaedic enterprise deeply invested in the *Theologia Platonica* and the ideal of Christian philosophy.<sup>53</sup>

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<sup>&</sup>lt;sup>46</sup> For a brief discussion of Pinder's biography see SANTING, *Looking Glass*, pp. 206-12 and LASSNIG, *Dürer's "MELENCOLIA-I"*, pp. 51-8.

<sup>&</sup>lt;sup>47</sup> LASSNIG, Dürer's "MELENCOLIA-I", pp. 51-95.

<sup>&</sup>lt;sup>48</sup> Ulrich PINDER, *Der beschlossen gart des rosenkrantz Marie*, Nuremberg 1505, IX pp. CLXXIv-CLXXIIIv; XI pp. CCLXXIIr; cf. LASSNIG, *Dürer's "MELENCOLIA-I"*, p. 80.

<sup>&</sup>lt;sup>49</sup> Eric L. SAAK, *High Way to Heaven: The Augustinian Platform between Reform and Reformation, 1292-1524*, Leiden 2002, pp. 535-41; *Luther and the Reformation of the Later Middle Ages*, Cambridge 2017, pp. 55-7. Saak does not make the link between Pinder and the "philosophy of the holy", but he does connect the latter to Jordan of Quedlinburg, the model for Pinder's *Speculum Passionis*.

<sup>&</sup>lt;sup>50</sup> SAAK, *High Way*, p. 535.

<sup>&</sup>lt;sup>51</sup> This is the principal argument of SANTING, *Looking Glass*.

<sup>&</sup>lt;sup>52</sup> SANTING, Looking Glass, pp. 212-24; LASSNIG, Dürer's "MELENCOLIA-I", pp. 53-4.

<sup>&</sup>lt;sup>53</sup> SANTING, *Looking Glass*, pp. 215-24.

#### 4. Pinder's Speculum

As the full title of the *Speculum intellectuale* proclaims, Pinder intended this as the "mirror of human happiness, by which with the light of your countenance, O Lord, signed upon us, it is able to irradiate more pressingly the shadows in our minds for seeing (*contuendum*) and knowing you God the Father through your Son for the happiness of our heart, the salvation of our souls, in the increase of our orthodox faith and perfection". For Pinder the soul itself is therefore to become the mirror in which we see God, and his title already picks up implicitly on the Bonaventuran theme of "contuition" – the co-intuition of all things in and with God – central to his entire purpose. In fact, as becomes clear from the dedication to his patron Frederick of Saxony, Pinder's understanding of his treatise as an intellectual mirror was no mere conceit or metaphor. For he compares his task as a compiler in gathering the scattered writings of learned authors into one body to that of a maker of optical instruments who fashions a convex mirror in which to collect and focus dispersed rays of light to enable people to see "more clearly and limpidly". See

Pinder is clear that the supreme mirror of God is not the human soul but Christ himself. The entire work is therefore prefaced by two biblical verses – "In the beginning (*in principio*) God created the heavens and earth" and "He who sees me sees the Father" – which already signal, from within the context of the medieval Augustinian tradition, a profound Christological exemplarism.<sup>57</sup> For Pinder it is therefore in Christ as that "great, beautiful and divine mirror" that "nearly innumerable mirrors of our salvation enfold (*complicant*)". Demonstrating that he was not untouched by the Cabalistic fervour which had been transmitted to Germany from Italy by Reuchlin and others, and which had definite Cusan overtones, Pinder significantly refers to his own intellectual mirror as "Cabala". <sup>58</sup> What he means by this enigmatic identification becomes clearer from his reference to the *Apology* of Pico della Mirandola, the great fifteenth-century Florentine Neo-Platonist and Cabalist. For Pico, the Cabala was to be seen as the zenith of all science and indeed theology. <sup>59</sup> As Pinder highlights, it

<sup>&</sup>lt;sup>54</sup> Ulrich PINDER, Speculum intellectuale felicitatis humanae [hereafter SI], Nuremberg 1510: "Speculum intellectuale felicitatis humanae quo cum illud lumen signatum super nos vultus tui domine in nostre mentis tenebras pertensius possit irradiare ad contuendum atque cognoscendum te deum patrem per tuum filium pro leticia cordis nostri per animarum nostrarum salutem in augmentum orthodoxe fidei atque perfectionis nostre". Abbreviations expanded and author's translation.

<sup>&</sup>lt;sup>55</sup> SI, p. XLIIIr.

<sup>&</sup>lt;sup>56</sup> SI, "Prologus", p. Ir. For Augustine, Christ must be seen as the summation and consummation of the divine ideas. While this idea is tacitly present in much of scholastic exemplarism, it becomes fully explicit in the Christological exemplarism of the Augustinian and Franciscan school. See, for example, AUGUSTINE, *The Literal Meaning of Genesis*, 13.29, in *On Genesis*, trans. Matthew O'Connell, New York, 2006, p. 290. Reference cited from Laela ZWOLLO, *St Augustine and Plotinus: The Human Mind as Image of the Divine*, Leiden, 2019, p. 158.

<sup>&</sup>lt;sup>57</sup> SI, "In Principio".

<sup>&</sup>lt;sup>58</sup> SI, p. Iv. For Cusa's influence on Reuchlin see MEIER-OESER, *Die Präsenz des Vergessenen*, pp. 62-8. Reuchlin refers to Cusa in Johann REUCHLIN, *De Arte Cabalistica: On the Art of the Kabbalah*, trans. Martin and Sarah GOODMAN, Lincoln, NE, 1993, p. 123.

<sup>&</sup>lt;sup>59</sup> SI, p. Iv; cf. Giovanni PICO DELLA MIRANDOLA, *Pico della Mirandola: Oration on the Dignity of Man: A New Translation and Commentary*, trans. Francesco BORGHESI, Michael PAPIO and Massimo RIVA, Cambridge 2013, pp. 261-5.

referred both to the "more secret and true" narration of the Law that Moses received on Mount Sinai as well as to the Cabalistic method that this embodied. For Pinder, this doctrine is the Pauline "eloquence of God" and relates to the "more sublime and divine" anagogical sense of the Law, "leading us upwards from sensibles to intelligibles, from temporals to eternals". As Pinder makes clear, this is an identical trajectory to that traced out in his own work by means of reasons, authorities and examples.<sup>60</sup>

Seen in its mystical nature of Cabala, Pinder's treatise is therefore a Christological enfolding of mirrors intended to enable its readers to see God in whom "the whole happiness of man consists". <sup>61</sup> In order for the soul to see clearly within itself, Pinder is emphatic, echoing Bonaventure, that it must be a mirror without stain as far as possible. <sup>62</sup> It is for this reason that he prefaces his detailed treatment of the mirrors of human happiness with three short compendia. Notably, the first two of these on "Certain wonderful things concerning vision" and "Aids for seeing well" appear to have been lifted straight from Peter of Limoges' *Moral Treatise on the Eye*. <sup>63</sup> Certainly they follow Limoges in offering a profound ethical and theological treatment of vision. In treating Pinder's *Speculum* as a mere Cusan anthology it has been easy to overlook these two little treatises, but they are in fact fundamental for all that follows.

Following Limoges, Pinder seeks to demonstrate the way in which perspective science can be applied to the intellectual and spiritual vision of the soul. <sup>64</sup> Taking up a prominent example from the *Moral Treatise*, he argues that the fact that an eye cannot see in cloudy conditions shows the need for the soul to be illuminated by divine grace in order to recognise its own sin. Likewise – to cite two more of Limoges' favourite examples – the double vision of a candle at night corresponds to the duplication of sin in the soul and a stick bent in water illustrates the perils of committing partly to spiritual things and partly to worldly ones. <sup>65</sup> Drawing such a close analogy between physical and spiritual vision, was intended to graphically demonstrate the perils of sin and reinforce the need to always look to divine light and grace. <sup>66</sup> As Pinder said in closing the first compendium, God is the centre and all spirits move around him like a circle. Our goal is through humility to come as close to the centre as possible – a Dionysian theme reprised in Cusa's *De ludo globi*. <sup>67</sup>

<sup>&</sup>lt;sup>60</sup> SI, p. Iv: "sursum nos ducens a terrenis ad coelestia: a sensibilibus ad intelligibilia: a temporalibus ad eterna".

<sup>&</sup>lt;sup>61</sup> *SI*, p. IIr.

<sup>&</sup>lt;sup>62</sup> SI, p. IIr; cf. BONAVENTURE, Itinerarium Mentis in Deum, "Prologus" 4, in: Doctoris Seraphica S. Bonaventurae Opera Omnia [hereafter BOO], Quaracchi 1891, t. 5 p. 296.

<sup>&</sup>lt;sup>63</sup> Comparing *SI*, p. IIr with DENERY, *Seeing and Being Seen*, p. 109 it is clear that he is using Peter of Limoges' exact text here. All the examples from Limoges discussed in DENERY, *Seeing and Being Seen*, pp. 103-9 are also paralleled in Pinder's *Speculum*.

<sup>&</sup>lt;sup>64</sup> SI, p. IIr.

<sup>&</sup>lt;sup>65</sup> SI, pp. IIr-IIIr.

<sup>&</sup>lt;sup>66</sup> NEWHAUSER, *Limoges*, pp. 28-44.

<sup>&</sup>lt;sup>67</sup> SI, p. IIIr; NICHOLAS OF CUSA, De ludo globi, I.4, 20, 51 (NCOO IX pp. 5-6, 23, 56-7).

The second compendium continues these themes but in a far more systematic manner. As befitting a physician, Pinder presents a detailed account of the eye, the four conditions required for it to see well (concavity, integrity, obscurity, dryness) and an account of species cognition. He then goes on to present all the impediments of vision, such as distraction, eclipse, gazing too much at bright light and blindness and defects in the eye. His main purpose, however, as we see from the intertwined physical and spiritual examples, is to present his own moral treatise of the eye. Once again Pinder's intention is to reinforce the need for divine illumination from Christ the "Sun of Righteousness". He wanted to emphasise, with Augustine and Bernard of Clairvaux, that "cognition of divine things is such that unless we are illuminated by divine light from heaven we are not able to conceive this". To

### 5. Intellectual Beryl

Just as Cusa sought to look through the spectacles of *De beryllo* in order to catch a glimpse of God as the "indivisible beginning of all things", so Pinder too peers through the intellectual lenses of the beryl in order to bring into focus Christ the centre and circumference of all reality. <sup>71</sup> Drawing extensively on passages from *De beryllo* the Third Compendium introduces and touches on some of the most important themes of the rest of the treatise. In doing so it seeks to develop the ethical and theological perspectivism of the first two compendia into a far-reaching Trinitarian and Christological synthesis.

For Pinder, as for Cusa, God is the Triune light who illuminates and irradiates his whole creation. God is therefore self-diffusing intellect who produces all things in being in order to manifest himself. For it is the essence of intellect to delight to communicate its "light of intelligence" to others. <sup>72</sup> Yet this immediately raises the question of how we can see him who is himself invisible and exceeds the grasp of our mind? Pinder's answer, reprising the opening of *De beryllo*, is that this can only be achieved by mental vision, by intuiting that which is "prior to every cognition". <sup>73</sup> One important way of achieving this can be seen through a comparison between sensible and mental vision. Just as colours serve as signs of light which is invisible in itself, so created "splendours" point towards God as that "light inaccessible to every cognition". In seeing them we therefore see God himself as the invisible light illuminating them. <sup>74</sup>

For Pinder it is axiomatic that our intellect can only have being and understand as it participates the "divine ray" itself.<sup>75</sup> In this Albertist understanding the light of the human intellect therefore shares

<sup>&</sup>lt;sup>68</sup> SI, pp. IIIr-IVr.

<sup>&</sup>lt;sup>69</sup> SI, pp. IVr-IXr.

<sup>&</sup>lt;sup>70</sup> SI, pp. IVr, VIIr: "Cognitionem tamen divinarum rerum huiusmodi esse ut nisi divino lumine coelitus illustremur illam concipere non possumus".

<sup>&</sup>lt;sup>71</sup> CUSA, *De beryllo*, 3 (*NCOO* XI/1 pp. 5-6); *SI*, pp. Xv-XIr, XXXIIIr.

<sup>&</sup>lt;sup>72</sup> *SI*. pp. IXr-v.

<sup>&</sup>lt;sup>73</sup> SI, p. IXv; cf. CUSA, De beryllo, 4-7 (NCOO XI/1 pp. 6-11).

<sup>&</sup>lt;sup>74</sup> *SI*, p. IXv.

<sup>&</sup>lt;sup>75</sup> *SI*, p. XIIv.

directly in the Triune light of the divine mind. The participation of the human mind in the divine mind means that its horizons are, in principle, boundless. Mirroring God, it seeks to encompass reality in an encyclopaedic manner. Drawing on Cusa's *Compendium*, Pinder offers a condensed account of the way in which the human mind constructs different arts and sciences. This begins with the raw material of sensible signs and species, which "shine out" in our soul, and moves on to the composition and division of these in order to generate new intellectual and artificial species. Drawing on its cognate species of "insensible virtues" such as justice and equity – which constitute the light of God in the soul – it becomes possible to combine different species to elicit a single species "complexive of many arts". Indeed, by combining the "nine species of principles" – most likely a reference to Lullist dignities in the context – it even becomes possible to frame a "general art of all knowable things". The service of the context of

In the *Compendium* Cusa holds that all the arts and sciences developed by man are for the benefit and enhancing of human life. For example, we compensate for lack of light with candles, for faults in memory through writing and through deficiency of vision with beryl spectacles. While Pinder does not cite this specific passage it clearly connects to his claim that Nicholas of Cusa invented, or elicited, a new art for giving knowledge of the First Principle encapsulated in his "intellectual beryl". Indeed, it is this that becomes our most direct mode of seeing God, catching sight of him not only in his "footprints" in the created order or in the "splendours" of the senses but in his own infinite being. As Pinder expresses this, to see the "indivisible principle let us apply the intellectual beryl to our mental eyes which has a maximum and minimum form". In doing so we will see the "maximum than which nothing can be greater" and the "minimum than which nothing can be smaller" and above all we will see their coincidence.

Extrapolating from this, Pinder fashions Cusan intellectual lenses to be worn by the eyes of our mind enabling us to see God himself. Since the infinite, absolute nature of God is beyond all comparison with the created order, it follows that we will only see God when maximum and minimum coincide. As long as we still see maximum and minimum as distinct and unequal we are not seeing equally through the maximum and minimum lens. <sup>79</sup> It is only when these perfectly coincide that we may claim to be seeing God. Such knowledge far transcends that available to Plato, Aristotle and other philosophers. Both Pinder and Cusa maintain that Aristotle was hindered by his logical principle of non-contradiction. It was for this reason, for example, that he failed to apprehend the Trinity as the coincidence of unity and plurality. This even remains true for many Christians who affirm the mystery of the Trinity but fail to grasp its intellectual ground. For, as Cusa had argued, many – including

<sup>&</sup>lt;sup>76</sup> SI, pp. IXv-Xr; cf. NICHOLAS OF CUSA, Compendium, 5.14-7.19 (NCOO XI/3 pp. 10-16).

<sup>&</sup>lt;sup>77</sup> CUSA, *Compendium*, 6.18 (*NCOO* XI/3 p. 13).

<sup>&</sup>lt;sup>78</sup> SI, p, XIIr: "Volumus autem ipsum ut principium indivisibile videre applicemus berillum intellectualem quae forma habeat maximam pariter et minimam mentalibus oculis: et videamus per maximum quo nihil maius esse potest: pariter et minimum quo nihil minus esse potest".

<sup>&</sup>lt;sup>79</sup> CUSA, *De beryllo*, 8 (*NCOO* XI/1 pp. 10-11); cf. *SI*, p. XIIr.

Albert himself as he would elsewhere complain<sup>80</sup> – interpret Dionysius' principle of the "conjunction of opposites" disjunctively. In doing so they "lean on reasons" to try and explain things which are "above reason" – a central complaint of Pinder's *Speculum*.<sup>81</sup>

#### 6. Christological Hall of Mirrors

Following the discussion of the intellectual beryl, the rest of Pinder's treatise may be seen as a kind of Christological hall of mirrors. Texts from Cusa and others are combined and folded into each other as though mirrors within mirrors. Topics frequently recur but always from a new perspective or vantage-point. While this can make the treatise rather convoluted and difficult to follow, it powerfully reinforces the sense in which Pinder could view the text itself as a mirror, with rays from all directions converging on Christ as the central focus. Adumbrated within this schema, as we will see, are the notions of sense, reason and faith and the universe, the human mind and Scripture as interconnected mirrors of Christ and the Trinity.

In the *Speculum* it is possible to distinguish seven principal mirrors, two general and five "more special", which for convenience may be identified as M1-M7<sup>82</sup>:

- 1) First Mirror of the Beryl/Third Compendium
- 2) Second Mirror of Three Maxima
- 3) Third Mirror of Father of Lights/First More Special Mirror
- 4) Fourth Mirror of Jesus Son of God/Second More Special Mirror
- 5) Fifth Mirror of Man/Third More Special Mirror
- 6) Sixth Mirror of Mind/Fourth More Special Mirror
- 7) Seventh Mirror of Number/Fifth More Special Mirror

Pinder is clear that the precise number of mirrors is important, for "number itself is a discretion or mode of understanding". §3 In fact, as he makes explicit at the end of M1 the number seven itself is of great significance. Drawing directly on Bonaventure's *Itinerarium*, Pinder thus identifies seven different kinds of number by which we are led from sensibles to insensibles and so can "ascend by degrees" to God himself. In this way, the seven different mirrors of the *Speculum* themselves come to form a ladder of ascent to God, taking us up from the ordinary numbers which structure all of reality to the divine numbers which Bonaventure and Cusa both saw as the supreme exemplar of all things. §4

<sup>80</sup> See MEUTHEN, Cusa, 30.

<sup>81</sup> SI, pp. XIIIr-v; CUSA, De beryllo, 32 (NCOO XI/1 pp. 35-6).

<sup>&</sup>lt;sup>82</sup> SI, pp. XVIv. This is particularly evident from the identification of man as the "fifth mirror". It also parallels nicely the seven additional mirrors from Antoninus of Florence which Pinder draws on at the end of the *Speculum* (SI, pp. LXXVIv-LXXIXv).

<sup>83</sup> SI, p. IIr.

<sup>&</sup>lt;sup>84</sup> SI, pp. XVIIv-XVIIIr; cf. BONAVENTURE, Itinerarium, 2.10 (BOO 5 p. 302); CUSA, De conjecturis, I.2.9 (NCOO III p. 14).

Taking its lead from the brief treatment of the coincidence of opposites in M1, Pinder's discussion in M2 focusses on the way in which this connects and binds together the three maxima of God, the universe and Christ. Pinder derives this division, as well as much of his material, from the three books of Cusa's celebrated *De docta ignorantia*. The theme of learned ignorance is central to the *Speculum* and is grounded on the late medieval axiom that there can be no proportion between finite and infinite. We can never know Truth precisely, rather our approach to it must be asymptotic, like a polygon of ever-increasing number of sides inscribed within a circle. It is for this reason that mathematics is especially valuable for knowing God. For mathematical figures can themselves serve as mirrors in which we can come to see the nature of the infinite. In fact, by beginning from finite mathematical figures, with their distinct "passions and reasons", we can extrapolate to infinite figures, and then from these "transsume" intellectually to God the "Absolute Infinity". 86

Following the pattern of the *De docta ignorantia* itself M2 thus traces a mathematical path of ascent. In God as Absolute Maximum all opposites coincide, as is well illustrated by the convergence and coinciding of geometrical figures such as a line, triangle, circle and sphere at infinity. <sup>87</sup> Indeed, just as an infinite circle can be seen as the "true exemplar of all figurable figures" – for all triangles, squares, hexagons, decagons etc. can find their exemplar in it <sup>88</sup> – so God can seen as the "universal form enfolding all forms". The universe is therefore the contraction of his Absolute Infinity, a unity-incontrariety reflecting the coincidence of opposites within God himself. In it we therefore see the nexus, or coinciding, of divine power, wisdom and will, or of God as efficient, formal and final cause. <sup>89</sup> The whole universe also coheres in Christ, the Absolute and Contracted Maximum. For it is Christ who perfectly unites the divine centre of all creation with the created circumference and thus embodies in himself the coincidence of opposites. Since human nature is said to enfold all lower natures, as a microcosm of the macrocosm, the Incarnation becomes the bond of the physical and spiritual realm. <sup>90</sup> Pinder's Christological treatment of the coincidence of opposites therefore already points forward to the anthropological focus of M5-7.

Turning to M3 we have the first of what Pinder describes as the "more special" mirrors found in God the Father of Lights, a prominent theme in both Cusa and Bonaventure. <sup>91</sup> In view here once again is the epistemology of illumination viewed now as a hierarchical chain of lights descending from God the Father. Particularising the argument of M2, God is seen as the "universal form of being" and creatures as differential contractions of this. In Albertist fashion this is compared to the simple form

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<sup>85</sup> SI, pp. XIXr-v.

<sup>&</sup>lt;sup>86</sup> SI, pp. XXIv-XXIIr.

<sup>&</sup>lt;sup>87</sup> SI, pp. XXIIr-XXIIIr.

<sup>88</sup> SI, p. LIv.

<sup>&</sup>lt;sup>89</sup> SI, pp. XXIVr-XXVIr.

<sup>&</sup>lt;sup>90</sup> SI, pp. XXVIr-XXVIIv.

<sup>&</sup>lt;sup>91</sup> BONAVENTURE, *De Reductione Artium ad Theologiam*, 1-2 (*BOO* 5 p. 319); NICHOLAS OF CUSA, *De dato patris luminum*, 91 (*NCOO* IV p. 67).

of light "descending" into a myriad of different colours. 92 From the perspective of M3 every creature is therefore a "theophany" descending from God the Father of Lights. Yet given that the Son is the "manifestation" of God, it follows that every creature is a "manifestation participating the manifestation of the Son". 93 Creatures are therefore not only theophanies but Christophanies, bringing us directly to the theme of M4, Jesus as "Light from Light". Indeed, it is entirely fitting that M4, the middle mirror of the seven, should be focussed on Christ, who is seen here as the divine centre of all created circles – a theme touched on in M2 – and also the centre of all divine illumination, in whom all the different "circles", or degrees, of vision converge and coincide. 94

For Pinder, it is also clear that faith must be understood as intellectual vision of God. 95 It is therefore the "light of the soul illuminating the mind", and without faith, all philosophy lies in shadows and darkness. 96 Drawing on Cusa's dynamic of enfolding and unfolding, Pinder recognises the most intimate relation possible between faith and intellect. While faith is the "enfolding of every intelligible", intellect is itself the "enfolding of faith". 97 Faith therefore becomes the central point not only of the Speculum but of the whole Christian life, surpassing and transcending sense and reason. Drawing powerfully on Cusa's De visione Dei, Pinder holds that it is faith which takes us beyond the wall of the coincidence of opposites, guarded by the angel of reason, into the Edenic Paradise of God. In doing so, we come to "see the faith" which the Church holds by revelation. 98 Yet this should not be taken to mean that faith is independent of revelation. Rather, Pinder insists that Scripture itself is a "ray proceeding from the Sun of Justice" himself, 99 and is presupposed in seeing God. 100 Drawing on the Carmelite poet Baptista Mantuanus, Pinder argues that the inherent and infallible authority of Scripture derives from its participation in the light of the First Truth. Through the rays emanating from Scripture we come to shine with the light of Christ. 101

In the spirit of the Franciscan tradition Pinder also argues for the tightest bond between Scripture, faith and the Incarnate Christ. Ultimately, it is through faith, hope and charity in the Uncreated, Incarnate and Inspired Word of God that the soul is able to enter paradise, become "conformed to the image of the heavenly Jerusalem" and discover Christ the "Tree of Life" at the centre of all things. 102 Indeed, "our soul would not be able to perfectly turn away from these sensibles to contuition of itself and of eternal truth in itself unless truth having assumed a human form in Christ should become a

92 SI, pp. XXVIIIr-v.

<sup>&</sup>lt;sup>93</sup> *SI*, p. XXIXv.

<sup>&</sup>lt;sup>94</sup> SI, pp. XXXIIv-XXXIIIr.

<sup>95</sup> SI, p. XXXVr: "Videre ergo fidem est videre invisibile eternum seu deum nostrum".

<sup>&</sup>lt;sup>96</sup> SI, p. XXXIVv: "Fides est sicut lux anime: illuminans mentem".

<sup>97</sup> SI, p. XXXVv.

<sup>98</sup> SI, pp. XXXVIIr-XXXIXr; cf. CUSA, De visione Dei, 9.37; 10.42 (NCOO VI pp. 34-5, 38).

<sup>&</sup>lt;sup>99</sup> *SI*. p. LIIIv.

<sup>&</sup>lt;sup>100</sup> SI, p. LXXVIIv. This is a point he takes from Antoninus of Florence.

<sup>&</sup>lt;sup>101</sup> *SI*, pp. LIVr-v.

<sup>&</sup>lt;sup>102</sup> *SI*, p. XLIIIr.

ladder of ascent for it repairing the ladder which was earlier made in Adam". <sup>103</sup> The soul reformed by Christ itself becomes a mirror in which to see, or "contuit", Christ. Indeed, Pinder goes further arguing that it is through faith formed by charity that the believer themselves comes to coincide with Christ and thus become "Christiform". <sup>104</sup> As the central mirror of the *Speculum*, Christ himself becomes the mirror in which to see all things.

It is fitting therefore that the final mirrors M5-7 should turn to human nature as a mirror in which to see God. In this section Pinder thus sounds out the great Renaissance theme of the "dignity of man", drawing directly on Pico's famous *Oration*. For Pico, the supreme dignity of man was located in his freedom to choose his own nature, as a kind of divine "chameleon" or Proteus. Finder too is clear that freedom is a divine dignity of the human soul, and elsewhere he attacks both the Neo-Platonists and Aristotelians for their necessitarianism. However, in Cusan fashion, he is also adamant that man is to be seen as a "human world" and even a "human god". Indeed, Pinder's attention is riveted not on man's freedom *per se* but on his ability to create his own worlds in imitation of God his Creator.

Running through M5-7 as a leitmotif therefore is the central Cusan theme of the dynamic parallel between the divine and human minds. In this understanding, man is the "measure of all things". Just as God is the creator of "real beings and real forms" so man is the creator of "rational beings and artificial forms". The human mind thus comes to encompass all things, like a central point of a sphere embracing and enfolding all reality within it. Transcending the scholastic understanding of cognition, the mind is said be a "living image" or "living mirror" of God capable of conforming itself more and more to its divine exemplar. It also comes to share in the Trinitarian dynamic of God's own being through its mirroring of his unity, equality and union. Following Cusa, this means there is a fundamental mathematical character to mind (M7). The "number of our mind" is thus the "image of divine number which is the exemplar of all things" – a move which brings us full circle back to M1<sup>114</sup> - and it is in ordering and numbering its conceptions, in imitation of God, that the mind becomes a "living mirror". Yet this is not a perspective divorced from Christ, as Pinder confirms

<sup>&</sup>lt;sup>103</sup> SI, p. XLIIIr; cf. BONAVENTURE, Itinerarium, 4.1-2 (BOO 5 p. 306): "Ideo non poterat anima nostra perfecte ab his sensibilibus relevari ad contuitum sui et eterne veritatis in seipsa: nisi veritas assumpta forma humana in christo fieret sibi scala reparans scalam priorem factam in Adam".

<sup>104</sup> SI, p. XXXVr.

<sup>&</sup>lt;sup>105</sup> SI, pp. LVIv-LVIIr. *Pace* Brian P. COPENHAVER, *Magic and the Dignity of Man: Pico della Mirandola and his* Oration *in Modern Memory*, Cambridge, MA, 2019 which argues that focus on the "dignity of man" is a modern, anachronistic reading of Pico.

<sup>&</sup>lt;sup>106</sup> PICO DELLA MIRANDOLA, Oration, pp. 123, 125.

<sup>&</sup>lt;sup>107</sup> SI, pp. XIIIv, LVIv.

<sup>&</sup>lt;sup>108</sup> *SI*, p. LVIIr.

<sup>&</sup>lt;sup>109</sup> SI, pp. LVIv, LXr.

<sup>&</sup>lt;sup>110</sup> *SI*, p. LVIv.

<sup>&</sup>lt;sup>111</sup> *SI*, p. LIXr.

<sup>&</sup>lt;sup>112</sup> SI, pp. LIr, LXIr, LXIIr.

<sup>&</sup>lt;sup>113</sup> *SI*, p. LVIIr.

<sup>&</sup>lt;sup>114</sup> *SI*, p. LXIIr.

<sup>&</sup>lt;sup>115</sup> *SI*, p. LXXVv.

with a concluding discussion of Cusa's *De filiatione Dei*. Rather, it is only as the mind receives the divine light and is vivified by faith in Christ that it can truly be said to take on his form. <sup>116</sup> Ultimately, to know oneself is to see oneself in God. <sup>117</sup>

Centred on Christ, Pinder's treatise presents seven mirrors in which to see God. In this, as he makes explicit at the end of the *Speculum*, a direct parallel is intended with Bonaventure's *Itinerarium*:

After therefore our mind contuited God outside itself by the vestigia and in the vestigia, inside itself by the image and in the image, above itself by the similitude of divine light shining above us and in the light itself as far as it is possible according to the state of life and exercise of our mind. And at last it came to this that it should see in Jesus Christ, the highest principle and mediator between God and men, things the like of which in creatures are by no means able to be found, and which exceed every human sight of the intellect. It remains that by gazing at this he transcends and passes away not only from this visible world but also from his very self. In which transit Christ is the way and doorway, the ladder and vehicle as though the mercy seat placed over the Ark of God, and the mystery hidden for ages. To which mercy seat whoever looks with full attention by gazing at him suspended on the Cross by faith, hope and charity ... makes the journey with him. 118

For Pinder, as for Bonaventure, the whole of the Christian life can be seen as a "journey of the mind into God". While the *Speculum* does not map precisely onto the six Bonaventuran stages of ascent – resembling more of a Cusan double-ladder fixed in the divine and human natures – it undoubtedly recapitulates his understanding of the contuition of God in the world and in the human soul, establishing its own ladder by which we may ascend through sense, reason and faith to God. Yet, as the "Epilogue" reminds us, the ascent of the soul towards the divine light must be simultaneously realised in its dying to the world and its passing over to Christ. The goal of all human knowledge and striving is revealed to be nothing less than Christiformity, and the path of ascent the way of the Cross.<sup>119</sup>

#### 7. Pansophic Mirrors

<sup>&</sup>lt;sup>116</sup> SI, p. LXXIVv.

<sup>&</sup>lt;sup>117</sup> *SI*, p. LXXVr.

<sup>&</sup>lt;sup>118</sup> SI, pp. LXXVv-LXXVIr; cf. BONAVENTURE, Itinerarium, 7.1-2 (BOO 5 p. 312): "Postquam igitur mens nostra deum contuita est extra se per vestigia et in vestigiis. Intra se per imaginem et imagine. Supra se per divine lucis similitudinem supra nos relucentem. Et in ipsa luce secundum quod possibile est secundum statum vie et exercitu mentis nostre. Ac tandem ad hoc pervenerit ut speculetur in summo principio et mediatore dei et hominum Hiesu christo ea quorum similia in creaturis nullatenus reperiri possunt. Et que omnem perspicatitatem humanam intellectus excedunt. Restat ut haec speculando transcendat et transeat non solum mundum istum sensibilem verumetiam semetipsum. In quo transit[u] christus est via et ostium scala et vehiculum tamquam propiciatorum super archam dei collocatum. Et sacramentum a seculis absconditum. Ad qd propiciatorum qui aspicit plena conversione vultus aspiciendo eum in cruce suspensum per fidem, spem et charitatem ... transitum cum eo facit".

<sup>&</sup>lt;sup>119</sup> *SI*, p. XXXVr.

Comenius lived over a century later than Pinder and in the wake of the philosophical, scientific and religious revolutions of early modernity. Since Pinder's death in 1519 optics had also gone through its own revolution. Not only had the invention of the microscope and telescope opened up new, potentially infinite, worlds, but the theories of Kepler and Descartes had inaugurated an important shift "from sight to light" leading to a new mathematisation of optical theory. <sup>120</sup> Comenius was familiar with these developments, but in many respects, as we will see, remained wedded to the Renaissance worldview of Pinder's *Speculum*. Of course, to suggest this is by no means to deny the importance of other influences. Comenius' debt to the metaphysics of light is well known and is generally traced to the influence of the Italian philosophers Francesco Patrizi and Tomasso Campanella. <sup>121</sup> Likewise, his distinctive notion of the mind as a living mirror has precedent in Ramus and Bacon. <sup>122</sup> Nevertheless, in three areas a definite Pinderan influence on Comenius becomes evident: his treatment of intellectual light, his dynamic parallel between divine and human mind, and his methodological use of the coincidence of opposites. In this way, Pinder's *Speculum* might well be seen as the matrix out of which his mature thought was formed.

We may see the beginnings of this even in his earliest writings, in which the influence of Cusa's Christocentric mysticism is plain to see. In both the *Labyrinth* and the *Centrum Securitatis* Comenius traces a journey, in fact a pilgrimage, from the circumference of the world to Christ the centre of all reality. For the young Czech, hiding in his own country, the Cusan conception of God as that circle "whose centre is everywhere and circumference nowhere" was not merely a philosophical axiom but it was a truth to be cherished in his inmost being. For it meant that wherever he went and whatever his circumstances were he would always find himself and all things centred in God. Christ Crucified,

For developments in optics see ILARDI, *Renaissance Vision* and especially A. Mark SMITH, *From Sight to Light: The Passage from Ancient to Modern Optics*, Chicago, IL, 2014.

<sup>&</sup>lt;sup>121</sup> Jan ČÍŽEK, *Patricius-Alstedius-Comenius*. A Few Remarks on Patricius' Reception in Early Modern Europe, in: Tomáš NEJESCHLEBA – Paul Richard BLUM (eds.), Francesco Patrizi: Philosopher of the Renaissance, Olomouc 2014, pp. 372-84; ČÍŽEK, Comenius' Pansophia, 357-68.

<sup>&</sup>lt;sup>122</sup> Paolo ROSSI, *Francis Bacon: From Magic to Science*, trans. Sacha Rabinovitch, London 2009, pp. 135-51 highlights methodological shifts in exemplarism in Ramus and Bacon. Jan Amos COMENIUS, *Triertium Catholicum*, Prague 1922, p. 107 connects the notion of mind as "*speculum vivum*" to Bacon.

<sup>&</sup>lt;sup>123</sup> PATOČKA, Centrum Securitatis, pp. 245-56; Jan Amo COMENIUS, *The Labyrinth of the World and Paradise of the Heart*, trans. Matthew SPINKA, Ann Arbor, MI, 1972, 5.5; 50.4 (accessed from <a href="https://czech.mml.ox.ac.uk/labyrint">https://czech.mml.ox.ac.uk/labyrint</a>; 16/12/2020).

Platonic and hermetic text the Liber XXIV philosophorum. Its use was widespread in the Middle Ages and Renaissance. There is a long-running debate over the source of Comenius' motif. Dietrich MAHNKE, Unendliche Sphäre und Allmittelpunkt. Beiträge zur Genealogie der mathematischen Mystik, Halle an der Saale 1937, 39 argues that Comenius was inspired by Hannibal Rosseli's hermetic commentary (Divinus Pymander Hermetis Mercurii Trismegisti cum Commentariis Hannibalis Rosseli, Cologne, 1630). However, F. M. BARTOŠ, Cusanus, Nikolaus a Komenský, in: ČM, XXXVII, 1943, 1–2, pp. 59–63, p. 60 argued for Cusa's De ludo globi as the source. While V. T. MIŠKOVSKÁ, Dvě poznámky k dějinám geometrického symbolu Boha, in: ČM, XXXVIII, 1944, pp. 33–39 has been right to urge some caution, Comenius' early reading of Pinder and early and prominent use of striking Cusan motifs such as the spinning top of De possest (see KUCHLBAUER, Comenius' antisozinianische Schriften, pp. 211-13 and FLOSS, Philosophy, pp. 324-7) lend support to a strong Cusan and Pinderan provenance. This is not to rule out other influences as well, and both BONAVENTURE, Itinerarium, 5.8 (BOO 5 p. 310) and Petrus RAMUS, Institutiones Dialecticae, Paris, 1543 (facsimile edition Stuttgart, 1964), pp. 41r-v must be included here.

the "centre of God's mercy", was the pole around which not only his whole life but also the whole universe revolved. In a world torn apart by war and confessional strife this was an indescribable comfort and consolation. 125

The *Labyrinth* also traces a path from the darkness of the world to the blazing light of Christ. In doing so, Comenius significantly fuses Christological centring with divine illumination in a manner thoroughly redolent of Pinder. Significantly, his deft combination of Cusan motifs derives from the *Speculum* itself and shapes his emergent understanding of Christian philosophy. Like Pinder, Comenius opens the *Labyrinth* with an account of intellectual glasses but these are false spectacles placed on the pilgrim's nose by Delusion. Their effect was to invert the true perspective on the world. Thus they had the power of "making distant objects appear near and the near distant, of the small larger and the large small, of the ugly things beautiful and the beautiful ugly, of the black white and the white black, and so on". <sup>126</sup> As Patočka insightfully realised, these glasses are a parody of Cusa's intellectual beryl. <sup>127</sup> They mimic the true coincidence of opposites just as the illusory centre of the world in Worldly Wisdom mimics and parodies its true centre in Christ the eternal Wisdom of God. <sup>128</sup>

It is only when Comenius discovers Christ that he realises he has been seeing everything upside-down. 129 It is the new glasses given him by Christ, whose rims are the Word of God and whose lenses the Holy Spirit, which restore true perspective and allow him to see the "futilities of the world" and the "consolation of my elect". 130 It is these glasses which allow him to see not only things which had previously been invisible to him but also the "ineffable glory" of God himself. 131 Along with these glasses the pilgrim is also illuminated by a "twofold brilliant inner light": the light of reason and the light of faith. 132 While those entering the chamber of Christ "must lay aside and surrender their reason, it is restored to them by the Holy Spirit purified and sharpened". For those illuminated in this way it is as if they are "full of eyes" and so "whatever they see, hear, smell, or taste, either above, beneath, or about them, they discern everywhere the footprint of God", indeed they actually see, hear, taste and touch God himself – the Bonaventuran theme of the spiritual senses reprised in the *Speculum*. 133 Beyond this, the light of faith illumines the pilgrim so brightly that he comes to see and perceive "even the intangible and unseen". By faith he therefore infallibly knows the truth of things which even

<sup>&</sup>lt;sup>125</sup> Jan Amos COMENIUS, *Centrum Securitatis*, "*Praefatio*", in *DJAK* 3, pp. 478-9; cf. PATOČKA, Centrum Securitatis, pp. 245-56.

<sup>&</sup>lt;sup>126</sup> COMENIUS, *Labyrinth*, 4.4.

<sup>&</sup>lt;sup>127</sup> PATOČKA, Centrum Securitatis, pp. 255-6.

<sup>&</sup>lt;sup>128</sup> COMENIUS, Labyrinth, 5.5.

<sup>&</sup>lt;sup>129</sup> COMENIUS, Labyrinth, 41.5.

<sup>&</sup>lt;sup>130</sup> COMENIUS, Labyrinth, 41.1.

<sup>&</sup>lt;sup>131</sup> COMENIUS, *Labyrinth*, 41.1; 51.2. This also parallels John CALVIN, *Institutes of the Christian Religion*, trans. Henry Beveridge, Grand Rapids, MI, 1989, 1.6.1) but Comenius' treatment clearly shows Cusan distinctives. Indeed, the possibility that Calvin himself adapted this image from Cusa should not be discounted, given his own close connection to the Fabrist circle

<sup>&</sup>lt;sup>132</sup> COMENIUS, *Labyrinth*, 42.1.

<sup>&</sup>lt;sup>133</sup> COMENIUS, Labyrinth, 42.2; cf. SI, pp. XLIIIr-v; BONAVENTURE, Itinerarium, 4.3 (BOO 5 pp. 306-7).

transcend the light of reason, and comes to see the whole universe as it coheres in God - a true contuition. <sup>134</sup> His soul then becomes a living image of God and of the divine virtues. <sup>135</sup>

Comenius is clear that without the light of Christ all human knowledge is in darkness. Aided by the intellectual glasses of the Word and Spirit the pilgrim therefore seeks out a new Christian philosophy, whose "true source" is the Bible, whose teacher is the Holy Spirit and whose goal is Christ Crucified. Indeed, he advocates that all learning must be directed to Christ as the centre. Reinforcing this, the pilgrim also receives from Christ himself a single book containing all the liberal arts, in which grammar consists in the contemplation of the Word of God, dialectic in faith, rhetoric in prayer, natural sciences in examining the works of God, metaphysics in delight in things eternal, mathematics in "counting, weighing and measuring" the blessings of God and ethics in the love of God and neighbour. Here, it is clear that Comenius is drawing on a long Augustinian and Franciscan tradition of Christian philosophy, newly invigorated by Ramism and encyclopaedism. Yet it is also evident that the stark contrast between the darkness of worldly philosophy and the light of the true Christian philosophy owes much to Pinder – indeed, such a sharp contrast between pagan philosophy and Christian inspiration is largely foreign to Cusa. Comenius' appropriation of it reflects Pinder's own distinctive fusion of Bonaventuran Scriptural exemplarism with late medieval Augustinian understandings of grace.

The first work in which Comenius presented a detailed outline of his new Christian philosophy of pansophia was in the *Ianua Rerum sive Totius Pansophiae Seminarium* of 1634-5.<sup>141</sup> Notably, this served as an early prototype of both the mature *Pansophia* and the *Ianua Rerum Reserata*. In relation to Comenius' early engagement with Pinder, however, what is truly significant is the extensive use of mirror imagery to frame the developing pansophia. Surprisingly, this is not a prominent feature of Comenius' much more famous pansophic works, the *Pansophiae Prodromus* and *Pansophiae Diatyposis*, despite the fact that both of these treatises abound with Cusan motifs. <sup>142</sup> Indeed, when he later returned to discourse on these themes in the *Consultatio*, he actually placed them in the

<sup>&</sup>lt;sup>134</sup> COMENIUS, Labyrinth, 42.3-4.

<sup>&</sup>lt;sup>135</sup> COMENIUS, *Labyrinth*, 37.4; 40. Comenius describes this saying that the faded, broken images of the virtues become living and moving pictures.

<sup>&</sup>lt;sup>136</sup> COMENIUS, Labyrinth, 50.4.

<sup>&</sup>lt;sup>137</sup> COMENIUS, Labyrinth, 39.5.

<sup>&</sup>lt;sup>138</sup> Jan Amos COMENIUS, *Physicae ad Lumen Divinum Reformatae Synopsis*, Leipzig 1633, "*Praefatio*" advocates a new Christian philosophy. In this he was preceded by Petrus RAMUS, *Prooemium Reformandae*, in *Petri Rami Professoris Regii, et Audomari Talaei Collectaneae* (Paris, 1577), p. 488. Ann BLAIR, *Mosaic Physics and the Search for a Pious Natural Philosophy in the Late Renaissance*, Isis 91, no. 1, 2000, pp. 32-58 offers a helpful discussion of Comenius' Christian philosophy but fails to discuss its Franciscan or Ramist roots. <sup>139</sup> CUSA, *De venatione sapientiae*, "*Prologus*" (*NCOO* XII pp. 3-4) presents the hunt for wisdom in the work of pagan philosphers.

<sup>&</sup>lt;sup>140</sup> SI, p. VIv .

<sup>&</sup>lt;sup>141</sup> Jan ČÍŽEK, Comenius' Pansophia in the Context of Renaissance Neo-Platonism, in: John F. FINAMORE – Tomáš NEJESCHLEBA (eds.), Platonism and its Legacy: Selected Papers from the Fifteenth Annual Conference of the International Society for Neoplatonic Studies, Lydney 2019, p. 357.

<sup>&</sup>lt;sup>142</sup> See BURTON, "Squaring the Circle", pp. 431-4.

*Panaugia*, rather than the *Pansophia* proper, a reminder that the *Seminarium* was originally intended as the *Praecognita Pansophica*. <sup>143</sup>

Comenius opens the *Seminarium* by signalling its role as a "universal wisdom" or a kind of omniscience. <sup>144</sup> This was a theme he had already sounded clearly in the *Great Didactic*, in a passage he repeated almost verbatim here:

Now omniscience is chief among the properties of God, and it follows that the image of this must be reflected in man. And why not? Man, in truth, stands in the centre of the works of God and possesses a lucid mind, which like a spherical mirror suspended in a room, reflects images of things that are all around it. All things that are around it, we say; for our mind not only seizes on things that are close at hand, but also on things that are far off, whether in space or in time; it masters difficulties, hunts out what is concealed, uncovers what is veiled, and wears itself out in examining what is inscrutable; so infinite and so unbounded is its power ... It is not necessary, therefore, that anything be brought to a man from without, but only that which he possesses rolled up within himself be unfolded and disclosed ... 145

For Comenius the mind is therefore a remarkable "abyss" which contains all things and is thus greater than the universe in scope. Indeed, he goes on to compare the mind to an eye (or mirror) capable of reflecting all things.<sup>146</sup>

The similarities with Pinder here need not be laboured. The notion of the human mind as infinite and unbounded, as the image of the divine archetype, as measure of all things, as the microcosm of the macrocosm, and as enfolding all things within it clearly reflect the *Speculum*, as in fact does the nascent attention offered to the conditions needed for perfect vision. <sup>147</sup> In its opening discussion of the way of constructing a "general art of all knowable things" and its concluding discussion of human omniscience as a reflection of divine omniscience and filiation, parallels with Comenius are also evident. While there can be no doubting the "Ramist roots" of Comenius' encyclopaedism, the desire for omniscience is something distinctive to his pansophic endeavour. <sup>148</sup> It seems evident that the seeds of this were sown in his early scrutiny of Pinder's *Speculum*. Further confirmation of this connection

<sup>&</sup>lt;sup>143</sup> ČÍŽEK, *Comenius' Pansophia*, p. 357. Jan Amos COMENIUS, *Pansophiae Christianae Liber III (DJAK* 14, pp. 51-2) notes that he has already covered the *praecognita*.

<sup>&</sup>lt;sup>144</sup> Jan Amos COMENIUS, *Pansophiae Seminarium*, 1.2, (*DJAK* 14).

<sup>&</sup>lt;sup>145</sup> Jan Amos COMENIUS, *The Great Didactic*, trans. M. W. Keatinge, London 1907, 5.4 (pp. 41-2).

<sup>&</sup>lt;sup>146</sup> COMENIUS, *Great Didactic*, 5.11-12 (pp. 45-6).

<sup>&</sup>lt;sup>147</sup> COMENIUS, *Great Didactic*, 5.1-12 (pp. 41-6). For a more detailed discussion of this see BURTON, "*Squaring the Circle*", pp. 421-3.

<sup>148</sup> Howard HOTSON, *The Ramist Roots of Comenian Pansophia*, in: Steven REID – Emma WILSON (eds.),

<sup>&</sup>lt;sup>148</sup> Howard HOTSON, *The Ramist Roots of Comenian Pansophia*, in: Steven REID – Emma WILSON (eds.), *Ramus, Pedagogy and the Liberal Arts: Ramism in Britain and the Wider World*, Aldershot 2011, pp. 232-5 equates pansophia with encyclopaedism but this risks missing the distinctive, Cusan, elements of Comenius' synthesis.

is provided by the *Pansophiae Christianae Liber III*, the sequel and companion to the *Seminarium*, which explicitly takes up the notion of *docta ignorantia* as central to the pansophia. <sup>149</sup>

For Comenius, true pansophia is only to be found in God who is the "Sun" of our cognition. <sup>150</sup> Compared to God all creatures are "visible shadows of the invisible light" and so often occlude or eclipse the divine light. As "sons of Eve" fallen humans have become abducted from the Creator to the creature, trapped and immersed in the visible and sensible, and can only rise if the "Father of lights" sends down new rays. Souls that are thus purified are enabled to lift themselves to God "by a more sublime sight of the mind", such that "penetrating through all things they see, touch, taste, smell God in all things". <sup>151</sup> They come to recognise the world as a "most lucid mirror of his infinite power, wisdom and goodness". <sup>152</sup> The theme of seeing the invisible God is prominent in the *Seminarium*, <sup>153</sup> and it is notable that Comenius here elegantly combines mirror imagery, the metaphysics of light and a Bonaventuran understanding of the renovation of the spiritual senses in a manner highly redolent of the *Speculum*. <sup>154</sup>

A key development in the *Seminarium* is Comenius' attempt to systematise this metaphysics of light. In the *Synopsis Physicae* Comenius had identified three principles of his new Christian philosophy – sense, reason and Scripture – which he notably derived from Campanella and the German Campanellan Tobias Adami. <sup>155</sup> In the *Seminarium* he now describes these as three books – itself a profound Bonaventuran and Cusan motif as Pavlas has insightfully demonstrated <sup>156</sup> – or, even more significantly for us, three mirrors of the pansophia. <sup>157</sup> In Pauline fashion, he holds that while one day we will see God face to face, now we see him "*per speculum et per aenigma*". <sup>158</sup> For Comenius, these three pansophic mirrors must be perceived by the three organs (or eyes) of sense, reason and faith, which he calls the "three principles of knowing". <sup>159</sup> It is these three alone which he says offer certitude, for just as God impressed truth on all things so he also impressed truth on the organs apprehending things. Connecting these three is a certain mutuality and a definite hierarchical relation. While he affirms that Scripture transcends sense and reason, <sup>160</sup> his general principle is that "every cognition begins from sense, comes forth by faith, and is perfected in reason". <sup>161</sup>

<sup>149</sup> COMENIUS, Pansophiae Christianae Liber III, canon 32.

<sup>&</sup>lt;sup>150</sup> COMENIUS, Seminarium, 1.6.

<sup>&</sup>lt;sup>151</sup> COMENIUS, Seminarium, 2.24-6.

<sup>&</sup>lt;sup>152</sup> COMENIUS, Seminarium, 2.28.

<sup>&</sup>lt;sup>153</sup> COMENIUS, Seminiarum, 2.31.

<sup>&</sup>lt;sup>154</sup> SI, pp. XLIIIr-v.

<sup>&</sup>lt;sup>155</sup> COMENIUS, *Synopsis*, "*Praefatio*". The parallel with Francis BACON, *Of the Advancement and Proficiencie of Learning*, Oxford 1640, III.1.2 (pp. 131-3) is also very notable and the *Synopsis* presents Bacon as an important source for the pansophia.

<sup>&</sup>lt;sup>156</sup> PAVLAS, *The Book Metaphor Triadized*, pp. 384-416.

<sup>&</sup>lt;sup>157</sup> COMENIUS, Seminarium, 3.41-7.

<sup>158</sup> COMENIUS, Seminarium, 3.41-7.

<sup>&</sup>lt;sup>159</sup> COMENIUS, Seminarium, 3.68-9.

<sup>&</sup>lt;sup>160</sup> COMENIUS, Seminarium, 3.60-1.

<sup>&</sup>lt;sup>161</sup> COMENIUS, Seminarium, 3.73.

Without denying the fundamental Campanellan impulse here, 162 it should be apparent that the convergence of the three mirrors of God's Word, his works and the human mind with the three eyes of sense, reason and faith parallels prominent themes in Pinder. There are, in fact, a number of clues which suggest that Comenius had Cusa in mind, as much as Campanellla, in writing the Seminiarum. His statement that the world is the "system of systems" in which all things are enfolded (complicantur), Scripture is the "book of books" in which they are unfolded and conscience the "dictum of dictums" in which they are applied immediately places this triadic schema within a Cusan dynamic of enfolding and unfolding. 163 Significantly, the relation of dynamic mutuality between Scripture, world and mind is also linked by him to the framework of divine illumination, as well as the assertion of the need of all human philosophy to be corrected by the light of revelation. 164 Echoing the Speculum Comenius can thus claim that Scripture is a "ray of God's omniscience". 165 Through the light of the Bible we are transformed into the image of God according to the "eternal harmony" which God impressed on the world and "reillustrated" in his Word. Indeed, in this highest degree of illumination it not only becomes possible to understand the mysteries of nature and Scripture, but God even transforms us into him in our inmost being. 166 Yet, as in Pinder, this motif of deification is not detached from Christ. Rather Comenius insists, citing Augustine's De magistro, that it is Christ himself who becomes our "internal teacher". 167

#### 8. Intellectual Optics

Turning to the *Panaugia* we find a reprisal of many of the same themes as the *Seminarium*, but also a greatly expanded discussion of optics. As is well known, Comenius took the title *Panaugia* from the *Nova de universis philosophia* of Francesco Patrizi. Yet while Comenius' account of light in the *Panaugia* surely owes a great deal to Patrizi, studies have located an important difference between the two philosophers: Patrizi's focus is on the physical properties of light, while Comenius' primary concern is for the spreading of intellectual, indeed universal, light. It is here that Pinder's *Speculum*, with its detailed treatment of the analogy between physical and intellectual light, must be seen as an important model for the *Panaugia*.

The fundamental concern of the *Panaugia* is the coordination and harnessing of the threefold eternal, external and internal lights. <sup>169</sup> The *Pansophiae Diatyposis* had spoken of the desire to trace the

<sup>&</sup>lt;sup>162</sup> For an extensive exploration of Campanella's influence on Comenius' pansophia see Matteo RAFFAELLI, *Macht, Weisheit, Liebe: Campanella und Comenius als Vordenker einer friedvoll globalisierten Weltgemeinschaft,* Frankfurt am Main 2009.

<sup>&</sup>lt;sup>163</sup> COMENIUS, Seminarium, 3.52.

<sup>&</sup>lt;sup>164</sup> COMENIUS, Seminarium, 3.54.

<sup>&</sup>lt;sup>165</sup> Comenius, Seminarium, 3.58; cf. SI, p. LIIIv.

<sup>&</sup>lt;sup>166</sup> Comenius, Seminarium, 3.62.

<sup>&</sup>lt;sup>167</sup> Comenius, Seminarium, 3.56.

<sup>&</sup>lt;sup>168</sup> ČÍŽEK, *Patricius-Alstedius-Comenius*, p. 375.

<sup>&</sup>lt;sup>169</sup> Jan Amos COMENIUS, *Panaugia or Universal Light*, trans. A. M. O. DOBBIE, Shipton-on-Stour 1987, 2.6-10 (pp. 3-4), in: *DJAK* 19.1, p. 193. All English translations are taken from Dobbie.

reflections and refractions of the eternal light in the created order and the *Panaugia* continues this aspiration in the hope of attaining the "splendour of universal light". The basic framework of the treatise is identical to the *Seminarium* but reveals an even more pronounced triadism. Comenius thus identifies and coordinates three kinds of light (eternal, external, internal), three mirrors (world, mind and Word), three eyes (sense, reason and faith), three modes of transmission (direct, reflected, refracted) and three faculties of the human soul (intellect, will and emotion). In doing so, he seeks to develop the metaphysics of light into a comprehensive reform programme, as Cusa and other fifteenth-century thinkers had done before him.

While the *Seminarium* tended to assume the nature of the mind, world and Word as divine mirrors, the *Panaugia* offers a deeper explanation for this:

They are called mirrors because God from his remote dwelling-place in eternity visibly represents the invisible upon them. *The world* is simply an image expressing His hidden power, His wisdom, His goodness so well-impressed upon sensible matter that these features of the Creator may be seen in all His creation as in a mirror. Since He had fashioned everything in the world according to certain ideas of number, weight and measurement, God imprinted the same ideas firmly upon *our minds* so that the reasons for everything may be reflected within them. Finally He ordered that His secret and eternal thoughts about us should be clearly expressed and entered in His *books of scripture* so that they might reflect upon us as from a *mirror*.<sup>173</sup>

As with Pinder, the mind operates as a kind of mathematical mirror, numbering, measuring and weighing all of its thoughts. In reflecting the mathematical proportions which constitute and structure all of reality the mind comes to exemplify the numbers, weights and measures of the divine ideas themselves.

This mathematical dimension of the mind is taken up and amplified further in Comenius' account of the threefold eye of the soul. Here, drawing on Francis Bacon's famous account of the threefold ray of philosophy, Comenius identifies sense, reason and faith as direct, reflected and refracted rays of intellectual light. Yet clear parallels with Pinder are also in evidence. Sense relates to the direct transmission from objects of "rays of their essence" and gives immediate perception. The species, or rays, of essence received by the soul then combine with "inborn ideas and instincts" to reveal the

<sup>&</sup>lt;sup>170</sup> Jam Amos COMENIUS, *A Patterne of Universall Knowledge*, London 1651, p. 109; *Panaugia*, 3.1 (p. 5), in: *DJAK* 19.1, p. 194. Comenius' emphasis on the harnessing of the threefold light has a definite Bonaventuran dimension reflecting his reading of Pinder. For his extensive debt to Bonaventure see Erwin SCHEDEL, *Sehendes Herz (cor oculatum) – zu einem emblem des späten Comenius*, Frankfurt am Main 2003, pp. 55-78.

<sup>&</sup>lt;sup>171</sup> COMENIUS, *Panaugia*, 2.6-10; 4.6-13; 8.3-8 (pp. 3-4, 11-12, 38-40), in: *DJAK* 19.1, pp. 193, 200, 221-3.

<sup>&</sup>lt;sup>172</sup> NICHOLAS OF CUSA, *De concordantia catholica*, I.2.9 (*NCOO* XIV pp. 34-5) offers a discourse on the metaphysics of light at the start of a work on Church reform.

<sup>&</sup>lt;sup>173</sup> COMENIUS, *Panaugia*, 4.10 (p. 12), in: *DJAK* 19.1, p. 200.

<sup>&</sup>lt;sup>174</sup> COMENIUS, *Panaugia*, 8.3-4 (pp. 38-9), in: *DJAK* 19.1, pp. 221-2; cf. BACON, *Advancement*, III.1.2 (pp. 131-3).

"numbers, weights and measurements of intelligible things". We perceive these as "general forms" or ideas by reason, or the "eye of the mind", which is an "exact image of God's eye within us". Since our mind is a "mirror reflecting everything it meets" reason does not contemplate things immediately but only as reflected in itself abstractly. In doing so, reason imitates God who sees the whole world in himself. Finally, faith comes to us as a refracted ray beyond the sphere of sense and reason and, like a transparent medium, is thus able to bring hidden things into view. 176

Comenius held that the new scientific optics had revealed the nature of light with a "mathematical certainty beyond all scientific doubt". In the *Panaugia* he seeks to offer his own intellectual optics, exploiting the "parallelism of external and internal light". The Such an aspiration clearly reflects Pinder's own intellectualising of the science of perspective. While their precise treatment of light was shaped by their very different scientific milieus, we may thus clearly see an underlying similarity in structure and goal between the two treatises. Although Comenius' treatment of intellectual optics is structured axiomatically it follows the same pattern of extrapolating directly from the nature of visible to intellectual light. Discussion of the emanation and diffusion of light is thus used to explain mechanisms of sense cognition, abstraction and the operation of reason. Degrees of intensity of light and different kinds of light transmission function as analogies for certainty in the apprehension and judgement of truth. The

In an even closer parallel, Comenius also explores the nature of the eye and the possible impairments of vision. He insists that the intellectual eye must be properly illuminated to see, that it must be pure and not "jaundiced" – otherwise everything is seen yellow as though through a film, and that it must not be watery. He holds that objects must be positioned at precisely the right distance for correct vision and compares this to the attention and focus of the mind. All of these were concerns of the perspectivists as well.<sup>179</sup> Perhaps most notably he also explores distortions of perspective and double vision – including Pinder's two examples of a stick appearing bent in water and double-vision when holding a finger between the eye and a candle – to illustrate the way the mind's cognition can be impeded.<sup>180</sup> Darkness and shadow therefore become symbolic not only of the mind's error but of sin and turning away from God.<sup>181</sup>

One final important parallel between Comenius and Pinder is evident in the attention that both thinkers give to method as an aid for vision. For Comenius, the fact that the laws of light were unchanging and could be known with mathematical certainty pointed to the fact that the "intellectual

<sup>&</sup>lt;sup>175</sup> COMENIUS, *Panaugia*, 8.5 (p. 39), in: *DJAK* 19.1, p.222

<sup>&</sup>lt;sup>176</sup> COMENIUS, *Panaugia*, 8.6 (p. 39), in: *DJAK* 19.1, pp. 222-3.

<sup>&</sup>lt;sup>177</sup> COMENIUS, *Panaugia*, 11.2 (p. 54), in: *DJAK* 19.1, p. 235.

<sup>&</sup>lt;sup>178</sup> COMENIUS, *Panaugia*, 11.4-48 (pp. 55-63), in: *DJAK* 19.1, pp. 236-46.

<sup>&</sup>lt;sup>179</sup> DENERY, Seeing and Being Seen, pp. 102-9.

<sup>&</sup>lt;sup>180</sup> COMENIUS, *Panaugia*, 11.76, 82 (pp. 69-70), in: *DJAK* 19.1, in: *DJAK* 19.1, pp. 251-2.

<sup>&</sup>lt;sup>181</sup> COMENIUS, *Panaugia*, 11.83-103 (pp. 68-71), in: *DJAK* 19.1, pp. 252-5.

light of wisdom can rightly be governed by unchanging laws of method". Like Pinder, he sees method as a primary means of enhancing intellectual vision. Thus with an implicit nod to him he holds that methodological glasses can be used to correct weak intellectual vision and enable the mind to see more clearly and distinctly. More precisely, Comenius correlates the three methods of syncrisis, analysis and synthesis with an intellectual mirror, telescope and microscope respectively. Syncrisis acts as a mirror as it enables everything to be known by comparison and so is the most appropriate method for understanding Scripture. Analysis acts as a telescope and is best suited for the investigation of the world and all its parts. Synthesis acts as a microscope and is most suitable for investigating the mind with its "inborn ideas, instincts and faculties". Method thus serves respectively for the perfecting of sense, reason and faith, the threefold eye of the soul.

#### 9. The Mirror of Coincidence

In discoursing of universal light, Comenius' desire is to find a way of combining all the lights, the eternal, external and internal, to yield that human omniscience which is the goal of the pansophia. The combining of the mirrors of world, mind and Word with the eyes of sense, reason and faith thus becomes an important means of seeing the invisible God. <sup>185</sup> In order to achieve this he holds, like Pinder, that there must be a transcending of reason itself. While evident in the early pansophic works, especially in the notion of *docta ignorantia*, this is a theme which becomes prominent in Comenius' mature thought. In the wake of his controversy with the Socinians, Comenius became convinced of the need to transcend Aristotelian logic, and especially the fundamental principle of non-contradiction, in order to truly see God. Instead, he sought to offer a "more divine logic" grounded on Scripture and the coincidence of opposites, which would seek to pass from finite to infinite in order to see how all things coincide in God himself. <sup>186</sup> Illustrating the character of this logic of "transnaturals and eternals" he drew explicitly on Pinder's *Speculum* and the Cusan examples of the coincidence of infinite line and circle and infinite motion and rest. <sup>187</sup>

For Comenius, we can be in no doubt, the scriptural eyeglasses of the *Labyrinth* have now become the intellectual beryl of Pinder and Cusa. Indeed, by the time he came to write the *Consultatio* Comenius had come to see the coincidence of opposites as symbolic of the entire pansophia – a kind of squaring of finite, created reality with the infinite circle of the divine mind. <sup>188</sup> The *Pansophia* thus traces an ascent from the internal light of the human mind to the uncreated light of God himself in which there

<sup>&</sup>lt;sup>182</sup> COMENIUS, *Panaugia*, 11.101 (p. 71), in: *DJAK* 19.1, p. 255.

<sup>&</sup>lt;sup>183</sup> COMENIUS, *Panaugia*, 12 Pr. IV (p. 73), in: *DJAK* 19.1, p. 257.

<sup>&</sup>lt;sup>184</sup> COMENIUS, *Panaugia*, 9.5-12 (pp. 42-5), in: *DJAK* 19.1, pp. 225-7.

<sup>&</sup>lt;sup>185</sup> COMENIUS, *Panaugia*, 9.5 (p. 43), in: *DJAK* 19.1, pp. 225-6.

<sup>&</sup>lt;sup>186</sup> Jan Amos COMENIUS, *De Irenico Irenicorum*, Amsterdam 1660, pp. 38-41, 72; *De Christianorum Uno Deo*, Amsterdam 1559, 13.1-3 (pp 11-13)

<sup>&</sup>lt;sup>187</sup> COMENIUS, *De Irenico Irenicorum*, 72-4; *De Iterato Sociniano*, 117-9; cf. *SI*, pp. XXIIr, XXXIv; CUSA, *De docta ignorantia*, 1.13.35-6 (*NCOO* I.25-7); *De possest*, 18-24 (*NCOO* XI/2.23-30). For extensive discussion of these figures see KUCHLBAUER, *Comenius' antisozinianische Schriften*, pp. 205-13.

<sup>188</sup> See BURTON, "Squaring the Circle", pp. 417-49.

are no contradictions, exceptions and distinctions and "all things are seen similar to all". 189 Significantly, in the schema of the *Consultatio*, the *Pansophia* follows straight after the *Panaugia*. If Pinder's *Speculum* truly was a prototype not just for the *Panaugia*, but for the entire *Consultatio* itself, then this makes perfect sense. For it was only *after* the cleansing of the soul's spiritual eye that it could come to see through the intellectual glasses of *Pansophia*.

Reflecting the pattern of the *Speculum* the *Consultatio* is arranged as a chain of seven interconnecting lights or mirrors:

- 1) Panegersia
- 2) Panaugia
- 3) Pansophia
- 4) Pampaedia
- 5) Panglottia
- 6) Panorthosia
- 7) Pannuthesia

Recalling the opening of Pinder's work, the *Panegersia* speaks of the need to gather and unite all the various dispersed rays of divine light. <sup>190</sup> From here it traces the illuminations descending from God the Father of Lights, scattering the darkness of human ignorance and sin. <sup>191</sup> In this, the three mirrors of the *Panaugia* clearly play a central role in both focussing and multiplying the threefold light of God. In the rest of the work the intellectual rays multiply further in the light of things – the universal wisdom of the *Pansophia*, the light of minds – the universal education of the *Pampaedia*, the light of nations – the universal language of the *Panglottia*, and finally the light of the Church – the universal reform of the *Panorthosia*. <sup>192</sup> Fittingly, the *Pannuthesia* closes with a plea to God to send fire on the earth and kindle the flame of a new order in which all things will be in harmony. <sup>193</sup>

Enfolded and embedded within the sevenfold mirror of the *Consultatio* is the sevenfold mirror of the *Pansophia*. In the *Pansophia* the number seven encompasses the Trinitarian progression of the light of God and its return to him. <sup>194</sup> Referencing Pinder's Bonaventuran account of number, Comenius held that the number seven was a "divine number" connecting the created universe in ascending hierarchy through man and the angels to God himself. <sup>195</sup> It was therefore the ideal number for capturing the emanation and return of all things to God. Flowing out of the Possible World (*Mundus possibilis*)

<sup>&</sup>lt;sup>189</sup> COMENIUS, Consultatio, t. I p. 188.

<sup>&</sup>lt;sup>190</sup> COMENIUS, Consultatio, t. I p. 38.

<sup>&</sup>lt;sup>191</sup> COMENIUS, Consultatio, t. I pp. 93-5, 219, 231, 262.

<sup>&</sup>lt;sup>192</sup> COMENIUS, *Panaugia*, 14.21-2 (p. 89), in: *DJAK* 19.1, p. 271.

<sup>&</sup>lt;sup>193</sup> COMENIUS, Consultatio, t. II p. 435.

<sup>&</sup>lt;sup>194</sup> Jan Amos COMENIUS, *Ianua Rerum*, c. 32, in *DJAK* 18, pp. 212-14 identifies the number seven as the second perfect number flowing out of the ternary as the first perfect number. For Comenius, the number seven therefore perfectly captures Trinitarian progression or unfolding.

<sup>&</sup>lt;sup>195</sup> COMENIUS, Synopsis, "Epilogus" (pp. 219-23); Consultatio, t. I p. 398.

captured by God's Triune being, Comenius therefore recognises an unfolding of the *Pansophia* into seven further "worlds":

- 1) Ideal or Archetypal World (Mundus idealis seu archetypus)
- 2) Intelligible-Angelic World (Mundus intelligibilis angelicus)
- 3) Material or Corporeal World (Mundus materialis seu corporeus)
- 4) Artificial World (Mundus artificialis)
- 5) Moral World (Mundus moralis)
- 6) Spiritual World (Mundus spiritualis)
- 7) Eternal World (*Mundus aeternus*)

Confirming this mathematical orientation, the express goal of the *Pansophia* is thus to reduce all of reality to number, weight and measure in imitation of God himself.<sup>196</sup> Recalling the *Panaugia*, Comenius suggests that this will be achieved when the *Pansophia* brings everything back to the Triunity of God, reducing the threefold (*trinum*) fount of light – the mind, world and Word – to the unity and harmony of a single system.<sup>197</sup> The whole of the *Pansophia* is therefore intended to serve as a Trinitarian mirror of God, the universe and the human mind. Together the eight worlds make up a mystical octave, expressing the nature of God as "all things in all things".<sup>198</sup>

In seeking to be the "living image" of both God and the universe, the pansophia significantly takes its starting point from the human mind as the "mirror of mirrors". <sup>199</sup> It begins therefore with the realm of pure thought, or in Cusan terms pure possibility, which forms the infinite horizon of both the divine and human minds. This is the possible world, a "systematic coordination of thoughts", which becomes the "key or norm for measuring all things". It is the world which takes shape in the mind of God and becomes reflected in the mind of man. In this world God is revealed as the exemplar of all reality, just as an infinite circle is the exemplar of all finite forms – to recall a central trope of the *Speculum*. Indeed, drawing on Pinder, Comenius is clear that everything in the universe can be seen as a finite "contraction" of the infinite God. <sup>200</sup> In seeking to conform to its divine exemplar, the *Pansophia* thus becomes a mirror of coincidence in which all of reality is viewed.

Given its origin in God the possible world also participates in the Trinitarian dynamic of God's own being. We may see this in a central passage of the *Pansophia*:

<sup>&</sup>lt;sup>196</sup> COMENIUS, Consultatio, t. I p. 179.

<sup>&</sup>lt;sup>197</sup> COMENIUS, Consultatio, I. I p. 182.

<sup>&</sup>lt;sup>198</sup> Jan Amos COMENIUS, Naturall Philosophie Reformed by Divine Light, London, 1651, pp. 238-42.

<sup>&</sup>lt;sup>199</sup> COMENIUS, Consultatio, t. I p. 180.

<sup>&</sup>lt;sup>200</sup> COMENIUS, Consultatio, t. I p. 202.

The mind from itself, through itself and in itself existing is God, eternal thought, speech and act. (For whence would these three be in created minds, if not rivulets flowing from their eternal font?). By thinking inside himself whatever he was able to, was knowing and was willing to be thought, he found the possible world and foresaw all things which were able to be with order and truth. By speaking with himself (eternal Wisdom with eternal Power and Love) concerning these things he created the eternal laws of things, or the ideal world. By acting outside himself he produced the real world separately existing.<sup>201</sup>

In this Trinitarian progression we begin to discern a programmatic outline of the pansophia itself, with the possible world correlating with divine possibility, the ideal world with divine knowing and the real world with divine will – that nexus of Power, Wisdom and Love which Comenius found in Pinder as well as Campanella. The "world conceived in the mind of God, is formed in the angelic world and then comes to be in the visible world.<sup>202</sup> The whole universe therefore becomes an unfolding of the Triune light of God and a mirror of his Triune Power, Wisdom and Love.<sup>203</sup>

Significantly, the process of return mirrors the process of emanation, but in reverse. It is centred not on the divine mind but on the boundless, possible world of the human mind. In what both Giglioni and Čížek have rightly identified as the most distinctive and innovative feature of the *Pansophia*, Comenius insists that the human mind has the ability to create and bring into being "new worlds" of its own. Yet while this is often taken as unique to Comenius, it is clearly grounded on the Cusan insight that man is the living image of God who moves himself according to the motion of his divine archetype.<sup>204</sup> Following the pattern of Pinder's *Speculum* he thus seeks to map out a Trinitarian correspondence between the mind of God and the mind of man. Indeed, Comenius is explicit that the three worlds of eternity (ideal world), aeviternity (mental world) and time (corporeal world) become inversely mirrored by the artificial, moral and spiritual worlds emanating from the human mind and encompassing the whole universe in their scope. As he puts it, our "trine artificial world" mirrors the "trine world of God" but in a retrograde fashion.<sup>205</sup> The *Pansophia* significantly concludes with a

<sup>&</sup>lt;sup>201</sup> COMENIUS, Consultatio, t. I p. 219: "Mens a seipso, per seipsum, in seipso existens, Deus est, aeternum Cogitans, aeternum Loquens et Agens. (Unde enim tria illa in nobis creatis Mentibus essent, si non rivuli a suo aeterno fonte fluerunt?). Cogitando enim intra Seipsum quicquid cogitari poterat, sciebat, volebat, invenit Mundum Possibilem, praevisa scilicet omnia quae esse poterant cum Ordine et Veritate sua. Loquendo autem de his cum seipso (Sapientia aeterna cum Potentia et Amore aeterno) condidit Rerum leges aeternas, sive Mundum Idealem. Agendo vero extra se quicquid agi potuit, produxit Mundum Realem seorsim existentem."

<sup>&</sup>lt;sup>203</sup> COMENIUS, *Consultatio*, t. I pp. 220-1. This is a strongly Campanellan theme but there are also notable parallels to be observed with Bonaventure and Cusa here.

<sup>&</sup>lt;sup>204</sup> Guido GIGLIONI, *The Darkness of Matter and the Light of Nature: Notions of Matter in Bacon and Comenius and their Theological Implications*, AC 17, 2003, p. 21; ČÍŽEK, *Comenius' Pansophia*, pp. 361-3; cf. COMENIUS, *Panaugia*, 4.15 (p. 13), in: *DJAK* 19.1, p. 201; *Seminarium*, 3.67; *Consultatio*, t. I pp. 421-3. FLOSS, *Philosophy*, 330-8 also connects this breakthrough to Cusa.

<sup>&</sup>lt;sup>205</sup> COMENIUS, *Consultatio*, t. I pp. 421-2.

vision of the union between these trine worlds, in the dawn of eternal light in which redeemed humanity and the whole universe come to fully reflect the Triune glory of God.<sup>206</sup>

Looking at the *Pansophia* as a whole we thus find the Triune worlds of God and man meeting in the Triune world of the universe. In what could easily serve as a motto for the entire pansophia, indeed the entire *Consultatio*, Comenius remarks that "you find in yourself the image of God, in the image of God you find God and in God you find all things". <sup>207</sup> This not only adumbrates the central Pinderan (and Bonaventuran) theme of contuition, but it also points towards the implicit Christological shape of the *Consultatio*. For the *Pansophia* makes clear that the true point of convergence between Creator and created is Christ himself. <sup>208</sup> For Comenius, Christ is the "bond of eternity and time" who "alone joins all opposites in himself." As in the Anti-Socinian works, it is Christ who becomes the paradigm for the coincidence of opposites. <sup>209</sup> Christ is therefore the true mirror of coincidence, the intellectual beryl, in which we must learn to see both God and the universe itself. Ultimately, to see pansophically is thus to come to see all things with the eyes of Christ himself; or, to put it in terms which Pinder or Cusa would have doubtless appreciated: *Pansophia* is *Christiformitas*.

<sup>&</sup>lt;sup>206</sup> COMENIUS, *Consultatio*, t. I pp. 742-3.

<sup>&</sup>lt;sup>207</sup> COMENIUS, Consultatio, t. I p. 201: "Veni ergo experire, An inventurus in Te sis Imaginem Dei, et in imagine Dei Deum, et in Deo omnia".

<sup>&</sup>lt;sup>208</sup> COMENIUS, Consultatio, t. I p. 634.

<sup>&</sup>lt;sup>209</sup> COMENIUS, Consultatio, t. II p. 482.