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Paracelsus, his *Herbarius*, and the relevance of medicinal herbs in his medical thought

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Abstract:
This article aims at reassessing the significance of Paracelsus’ *Herbarius*, a work deemed a loose collection of field notes and juvenilia by Karl Sudhoff, Paracelsus’ most famous editor and scholar. By comparing it to *Von den natürlichen Dingen*, another treatise that overlaps extensively with the *Herbarius* (four of the six Gewechse discussed in the *Herbarius* are also dealt with in *Von den natürlichen Dingen*), this research suggests that both texts, although unfinished, must be read as well-crafted treatises rather than mere drafts. It also examines two hypotheses concerning the relationship between the two treatises: the *Herbarius* will alternatively be read as a simplified version of *Von den natürlichen Dingen*, written concomitantly in order to be understandable by the “common man” (gemeine Mann); and as its preliminary version, further elaborated upon by Paracelsus several years after he wrote the *Herbarius*. By tracing the early reception of the *Herbarius*, we attempt more broadly to understand its relationship to the several writings that were deemed by the followers of Paracelsus to be part of a supposedly larger Paracelsian herbal centered on the doctrine of signatures: to them, the *Herbarius* was undoubtedly a mere excerpt of Paracelsus’ *Herbarius spiritualis sidereus*, a concept investigated in the present paper.

Keywords:
Paracelsus – Paracelsians – *Herbarius* – *Von den natürlichen Dingen* – Medical botany – Doctrine of signatures – Herbal healing

1. *Introduction*

Theophrastus Bombast von Hohenheim (1493/94-1541), better known as Paracelsus, is more famous for his incorporation of remedies of mineral origin into the *materia medica* of his time than for his writings about medicinal herbs. His innovative use of minerals has often been celebrated as a salutary shift away from medieval physicians’ heavy reliance on the
herbal lore and, as such, as a decisive step towards the birth of modern medicine and its mostly chemical pharmacopoeia. Paracelsus is never listed among the authors who contributed to the profound transformations undergone by the field of botany in the age of the so-called “Great Herbals” – namely Otto Brunfels (1488-1534), Hieronymus Bock (1498-1554) and Leonhart Fuchs (1501-1566), – despite the fact that his *Herbarius* was written at around the same time and in the same language as theirs, with the same intent of developing a local medicine based on German *Gewechse*. Worse, in her seminal book about herbals, Agnes Arber called him a “quack” whose conceptions “cannot be said to have furthered the science to any appreciable extent”. This, added to the opinion of Karl Sudhoff (1853-1938), one of Paracelsus’ main editors, who called the *Herbarius* a random compilation of “elaborations” about the vegetal world which had “remained completely fragmentary” (*völlig fragmentarisch gebliebenen Ausarbeitungen*), led to the long-term exclusion of Paracelsus from the field of the history of botany. The *Herbarius* was supposedly a draft of a treatise started by Paracelsus in his youth and quickly abandoned as his interest for more complex remedies grew. Under these circumstances, the *Herbarius* would stand for a curiosity, that is, a treatise both marginal within Paracelsus’ works and peripheral to the history of medical botany as a whole.

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1 Pagel, 1982: 149.
2 Arber, 1912: 205.
3 Sudhoff, II, vii. Some articles focused on specific plants in Paracelsus’ writings however exist (Reeds, 2012; Bussler, 2016), as well as an English translation of the *Herbarius* (Moran, 1993). Specific aspects of Paracelsus’ thought about plants have also been investigated (Goldammer, 1969; Daems and Vogler, 1986; Müller, 2005). General discussions about herbal healing in Paracelsus can be found in the 1979 Symposium of the Paracelsus-Gesellschaft (*Heilen mit Heilpflanzen, 1979*), in Daems, 1993; Nowotny, 1998 and in Fellmeth, 2013. Aschner’s dated work perhaps provides the richest textual analysis (Aschner, 1930). This is similarly true of Schmaltz’s book, which shares with Ascher’s article the outdated goal of discovering remedies in Paracelsus’ treatises, although Schmaltz’s inquiry is inevitably flawed by the historical context (Schmaltz 1941). The aspect of Paracelsus’ thought about plants which drew the most attention among contemporary scholarship is the doctrine of signatures (Quecke, 1955; Betschart, 1977; Bianchi, 1987; Müller-Jahncke, 1984; Böhme, 1989; Bono, 1995; see also the critical introduction by Kühlmann and Telle to Croll, 1996). For more general works on the idea of signatures, which include discussions of Paracelsus’ conceptions, see Foucault, 1966 (to be used most cautiously); Ohly, 1999; Bennett, 2007; Agamben, 2008 (same remark); Hirai and Kikuchihara, 2014. See also Demonet, 2012, for some heavy criticisms of Foucault’s and Agamben’s works.

4 S2: vii-viii.
Such a picture contrasts sharply with the keen interest expressed by the first Paracelsians for their master’s works about herbs in general, and for his *Herbarius* in particular. It was clear for most of them that the *Herbarius* was part of a much larger herbal not found or printed yet, which they spent years trying to recover while they strived to unearth all the works left behind by Paracelsus, convinced as they were that the full treatise would bring groundbreaking perspectives on herbal healing. As it happens, Paracelsus himself spent a fair amount of time during the mature years of his career, from the Basel episode, a turning point in his life (1527-1528), to the late *Kärntner Schriften* (1538), thinking about the way the invisible, spiritual and occult properties of plants could be known.

This article aims at reassessing the significance of Paracelsus’ *Herbarius* and herbal healing more generally, both to Paracelsus himself and to those who came after him. I will first trace the posthumous reception of the treatise at a time where the prevailing opinion was that the majority of the work of Paracelsus still had to be discovered. I will then consider the interpretation of the text by Karl Sudhoff and confront it with my own analysis, which leads me to see the *Herbarius* as a carefully planned and well-crafted treatise, although most of its chapters might have been lost. I will eventually detail the purpose and intended audience of the treatise, in order to situate it within the other tracts on plants left by Paracelsus and, more generally, the broad mosaic of his medical writings.

2. **Defining the outlines of the Herbarius**

The *Herbarius* as we know it is extremely short. It contains a foreword and only six chapters, whereas other herbals of the time often ranged to dozens, if not hundreds of sections. The six chapters deal with seven simples: the *Schwarzen* and *Weißen Nießwurtz* (or black and white hellebores, discussed in one single chapter), the *Persicaria*, the *Angelica*, *Saltz* (salt), *Corallen* (coral) and the magnet. Michael Toxites (1514-1581) was the first to
publish, in 1570, this version of the *Herbarius*\(^5\), quite identical to that published by Huser based on the autograph manuscript of Paracelsus in 1590. Yet, from the first mention of the *Herbarius* in 1564\(^6\) to its publication by Johannes Huser (ca. 1545-1600/1601) in 1590 in the collective edition of Paracelsus’ writings\(^7\), the quest for the “full *Herbarius*” sometimes came close to an obsession amongst Paracelsians, as they unanimously believed that many more chapters of the treatise had yet to be uncovered: a tireless hunt indeed, of which Leonhard Thurneisser (1531-1596), who pretended to have found a fuller version than the one known by his contemporaries, was the central protagonist. This history needs first to be addressed, as it deeply influenced the early modern reception of the *Herbarius*. In particular, the relative frustration resulting from the *Herbarius*’ brevity led the first commentators of the treatise to identify other Paracelsian works as fragments of the greater herbal they were expecting to find. Before coming to the analysis of the treatise per se, it is therefore necessary to clearly differentiate between the treatise as we know it, and the various texts which were believed to pertain to Paracelsus’ greater herbal. All of this will set the scene for a new assessment of Sudhoff’s interpretation that the extreme brevity of the *Herbarius* indicated it was a mere draft, swiftly abandoned by Paracelsus.

2.1. *Printing history of the Herbarius*

Like most treatises written by Paracelsus, the *Herbarius* was never published during the author’s lifetime. The earliest mention of the treatise appeared in the first edition of *Von den hinfallenden Siechtagen* in 1564, a treatise in which Paracelsus mentioned his *Herbarius* twice\(^8\). The anonymous editor added in the margin, next to these mentions: “*Herbarius*

\(^6\) See fn. 8.
\(^7\) H7: 61–108.
\(^8\) “Es seind mehr simplicia die auß der Chiromancey genommen werden [...] Als jr mich in meim *Herbario* bedeutlicher verstehen werdet / Darumb so laß ich auß / und in *Herbario* und dergleichen von den *Arcanis* natürlichen künsten / wil ich an selbigen orten die ding mit lengerem verstandt erklären und außlegen [...]” (Paracelsus, 1564: sig. k2r\(^o\)). On this treatise, see Sudhoff, 1894: 101–104.
Paracelsus. Readers of this work could therefore expect to find an herbal among the still unpublished writings of Paracelsus. Indeed, in May 1566, the Paracelsian editor Marcus Ambrosius announced his intention to soon publish the “Herbarius Theophrasti, de virtutibus herbarum, radicum, seminum, &c. Alemaniae, Patriae & et imperij”. His use of this title of the treatise, almost identical to the one which was to appear in the Huser edition, made clear that more precise information was available by that time. But no trace of an edition of the Herbarius by Ambrosius exists. In 1567, the Herbarius was mentioned again by Jacques Gohory (1520-1576) in a list of thirty treatises of Paracelsus which had come to his knowledge (operum quae ad nostram notitiam peruenerunt), this time without its full title.

It is only in 1568, with the edition of the chapter on the Schwarzen and Weißen Nießwurtz by Adam von Bodenstein (1528-1577), that part of the Herbarius became accessible to the public for the first time. Segments of the chapters on coral and Persicaria were published later in 1568 by an anonymous editor, and the chapter on magnet was edited in 1570 by Johann Albrecht (ca. 1540 - after 1570). The same year, Toxites’ edition of the full Herbarius was released under the title Beschreibung Etlicher Kreuter auß dem Herbario Theophrasti Paracelsi, Bombast / beyder Artzney Doctoris. Aside from three reprints of Toxites’ edition, the only other edition of the full treatise was Huser’s one, Herbarius Theophrasti, De Virtutibus Herbarum, Radicum, Seminum, &c. Alemaniae, Patriae & Imperij (1590), corrected (Huser specified) with the help of the autograph manuscript – today lost or destroyed, like all the other Paracelsian autographs.

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9 Paracelsus, 1564: sig. k2r.  
12 Paracelsus, 1568a (quoted in Sudhoff, 1894: 149).  
13 Paracelsus, 1568b (quoted in Sudhoff, 1894: 160). Our chronology of the successive editions of independent chapters of the Herbarius has been established based on the list provided by Sudhoff, 1894: 197–198.  
15 See fn. 5.  
16 In 1582, 1588 and 1597. See Sudhoff, 1894: respectively 334–335; 365; 423.  
Let it be noted that two manuscripts containing the *Herbarius* are still known to exist. One of them dates back to the years 1580-1590 and only includes excerpts of the chapters on salt, magnet, coral and *Angelica*\(^{18}\). The other, Sudhoff claimed, was potentially an autograph of the *Herbarius*, its title being exactly the same as that of Huser’s edition. This manuscript, bound with an incunabulum, was long kept at the monastery of Herzogenburg (Austria)\(^{19}\).

Sudhoff tried to have it transferred to Düsseldorf’s library for, he recounted, “more than a generation”. But he regrettably never made the journey to check for himself until the volume was sold to an antiquarian bookseller, together with the manuscript\(^{20}\). He could only rely on the secondhand information he obtained from his colleague Karl Aberle (1818-1892), who guessed (based on the date of 1542 on the cover) that the manuscript might have been written before Paracelsus’ death in 1541\(^{21}\). This volume has not resurfaced yet, but given the fact that it contained the *Cœlum philosophorum*, a notorious (and mediocre) Paracelsian apocryphal, apparently written in the same hand as the *Herbarius* (such was at least Aberle’s opinion), the date of 1542 must be considered with caution\(^{22}\).

### 2.2. An incomplete treatise?

The first editor to publish a chapter of the *Herbarius*, Bodenstein was also the first to claim that what he published was not the “full *Herbarius*”, but part of a broader herbal written

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\(^{18}\) Broszinski, 2011: 55 for the dating (54 for the description of the manuscript). Sudhoff, 1899: 710, dated it around 1600. Kassel, Landes- und Murhardsche Bibliothek, Ms. 4° chem. 17, fol. 139r°-159r°, entitled: “*Aqua Persionis. Ex Herb. Theophrasti*.”

\(^{19}\) Sudhoff, 1899: 133. Stift Herzogenburg, ms. 363 (not 307 as written by Sudhoff), bound with an incunabulum, allegedly Montagnana’s *De urinarum judicis*, actually Johannes de Ketham (ed.), *Fasciculus medicinae* (Venice, Johannes und Gregorius de Gregoriis, 1500). See also Kristeller, 1983: 17 (notice borrowed by Kristeller from an older typed list of Herzogensburg’s manuscript).

\(^{20}\) S2: x–xiii.

\(^{21}\) Sudhoff, 1899: 133–136, here 136. Sudhoff was obviously suspicious about the alleged date of 1542. One can of course imagine all sorts of things, e.g. that the manuscript was inserted there after the binding of the printed work. However, Sudhoff had a rather high opinion of the value of the manuscript, based on the excerpts provided by Aberle.

\(^{22}\) Didier Kahn and Julian Paulus tried in vain to locate the printed volume. A single sheet of the *Cœlum philosophorum* has been preserved in fac simile (Archiv der Universität Wien, Autographensammlung, 151.252). Julian Paulus found and shared it.
by Paracelsus and not found yet. However, what he considered to be the full *Herbarius* was not the treatise we nowadays regard as the actual and only *Herbarius* of Paracelsus, published two years later by Toxites. Bodenstein was rather of the opinion that the real *Herbarius* must have been a much more considerable work. Such was also the case of Toxites, who relentlessly lamented the fact that most of the treatise remained hidden, even after he published the six chapters in 1570. The title he gave to the treatise, *Beschreibung Etlicher Kreuter auß dem Herbario Theophrasti Paracelsi, Bombast*, made it obvious: to him, these chapters were only an extract of Paracelsus’ full *Herbarius*. Toxites never changed his mind on this topic until his death (1581), and his opinion seems to have been unanimously shared by the Paracelsians of his time. In 1574, Georg Forberger (ca. 1543-1604) gently asked the owner of the treatise, whoever he might be, to disclose it. In 1584, Lucas Bathodius (d. after 1597) more crudely called on the “jealous dog” who kept the *Herbarius* hidden to release it.

To all of them, a treatise describing the virtues of only seven simples could clearly not be Paracelsus’ entire herbal.

The brevity of the *Herbarius* was not the only reason why the early commentators and editors of Paracelsus were convinced that a longer treatise existed. A rumor, probably launched by Leonhard Thurneisser in the beginning of the 1570s, contributed to strengthen this belief. Thurneisser, who was for long regarded as a quack by scholars and has more

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23 “[...] laß dich nicht betrüben das der gantz *Herbarius* noch zur zeit nicht herfür wil [...]” (CP 2: 245; see Paracelsus, 1568a: sig. A ij v).
24 See below, p. 9.
25 Toxites wrote, in the foreword to the 1570 edition: “Der herbarius ligt auch noch verborgen / Gott geb / das er ein mahl ganz an tag komme [...]. Dann Theophrastus hat seine schrifffen nit lenger wollen verborgen haben / dann biß auff bestimpfte zeit / die ist jetzt vorhanden [...]” (Paracelsus, 1570b: sig. [*vij]* v). After that, he complained in 1574, in the foreword to Paracelsus’ *Testamentum*, that Paracelsus had written a major book on herbs that had not been found yet (CP 2: 303); and repeated it in 1576, in his foreword to [Bartholomäus Carrichter’s] *Horn des heyls* (CP 2: 393–400).
26 See part 2.3 of the present article for more details.
27 CP 3: 353.
recently been acknowledged as a prominent alchemist and entrepreneur of his time\textsuperscript{29}, was however not beyond suspicion when it came to the edition of Paracelsian treatises. At the end of 1569, when the Latin translation of the *Archidoxis* had been published as of July of the same year, he published an alchemical poem called *Archidoxa* which had nothing to do with Paracelsus’ treatise\textsuperscript{30}. Although the genuine *Archidoxis* was already widely known, Thurneisser innocently explained his choice for the title *Archidoxa* by resorting to its Greek etymology, without any reference to Paracelsus\textsuperscript{31}. Later, in 1583, he pretended to have at his disposal the *Carboantes*, a treatise attributed to Paracelsus, hitherto unseen and which perhaps actually never existed\textsuperscript{32}. In much the same way, Thurneisser published in 1578 the first volume of what was supposed to become a ten-volume encyclopaedia on plants, the *Historia unnd Beschreibung […] Aller fremden unnd heimischen Erdgewechssen*\textsuperscript{33}. The nine remaining volumes were abandoned due to his chaotic life. But Thurneisser astutely gave to the first volume the alternative titles of *Neiüwes Paracelsisches Herbarium / oder Kreutterbuch*, or even *Herbarius*\textsuperscript{34}. This exacerbated the confusion regarding the status of this *Historia unnd Beschreibung*, suggesting that Thurneisser’s book was, in fact, the full *Herbarius* of Paracelsus. Soon enough, he started receiving a series of more or less infuriated letters urging him to disclose the full treatise.

30 Thurneisser, 1569.
31 Mentioned in Sudhoff, 1894: 303–304: “[...] dieweyl aber in disem gantzen buch aller Welt hendel / tuen und lose / und hilische Elementische metallische und irdische sampt den menschlichen und natürlichen sachen / auch aller kösten Fundament nam und grund dorin gemelt anzeigt auch mancherley schöner konstücklein und den aller edlesten Misterio Lapis Philosophorum, dorin gleret werden / und vorhin auf disse weyss kein buch nie aufgangen weder in truck noch schrift kome / hab ich diß buch mit dem griechischen namen Archidoxa genempt” (Thurneisser, 1569: sig. B vi r\textsuperscript{a}). I thank Didier Kahn for pointing out and sending me this passage.
32 As pointed out by Sudhoff, 1894: 338–340. I again thank Didier Kahn for indicating me this other example of Thurneisser’s fraudulent practices about *Paracelsica*.
33 Thurneisser, 1578.
34 As pointed out in CP 2: 452. See Thurneisser, 1578: sig. )( iij r\textsuperscript{a} for the first alternative title; sig. )( iiiij v\textsuperscript{a} for the second.
Back in July 1571, the owner of the supposedly full *Herbarius* still seemed unknown when Toxites sent a letter to August von Sachsen (1526-1586) in which he explained that numerous Paracelsian books were still kept hidden by some people, including the *Herbarius*, although he did not name any potential owner. However, we learn in a 1573 letter sent by Alexander Thurneisser to his brother Leonhard that Adam von Bodenstein had tried to contact Leonhard for two years in order to ask if he was indeed the one who detained the full *Herbarius*, as the rumor already began to spread. Bodenstein had eventually written to Alexander in the hope of reaching out to his brother. Numerous letters to Thurneisser followed: from Johannes Montanus (1531-1604) in 1574, Christophorus Pannonius (1515-1590) the same year, Toxites himself, twice, in 1576, and Johannes Franke (1545-1617) in 1578. Montanus and Pannonius seemed to be unaware of Thurneisser’s project of publishing his own work about plants. Montanus severely asked him to release the *Herbarius*, whereas Pannonius genuinely inquired regarding the state of advancement of his edition of the treatise. However, in 1576 Toxites believed that Thurneisser not only planned on editing Paracelsus’ herbal, but also on publishing his own herbal based on Paracelsus’ work. He exhorted Thurneisser to draw a clear line between Paracelsus’ work and his own comments and additions, in order to fairly restore Paracelsus’ treatise. This call was later echoed by Bathodius, when he wished for the treatise to be taken out of the hands of Thurneisser (the aforementioned “jealous dog”) in order to be printed again, this time without Thurneisser’s

35 CP 2: 234–235. Toxites vaguely refers to “*De collectionibus herbarum*”. Kühlmann and Telle underlined that this title, which refers to no known Paracelsian treatise, cannot be taken as a reference to the *Herbarius*. But it is certainly a reference to what Toxites imagined as being Paracelsus’ real herbal, of which the *Herbarius* might have been only one part.

36 See below, fn. 47, for some clues on its origins.


38 CP 3: 385.

39 CP 3: 563.

40 CP 2: Nr. 64 and 65, 436–462.

41 CP 3: 479.

42 CP 2: 452.
“additions and deceptive digressions” (ohne allen zuzatz unnd verführische weithleufftigkeyt)\textsuperscript{43}.

Thurneisser seems to have answered none of the letters he received. To the contrary, he fueled the doubts not only through the title he gave to his treatise, but by starting the foreword of the Historia arguing that he had written this “new Paracelsian Herbarius [...] partly based on the writings of the aforementioned author, partly based on his own experience”\textsuperscript{44}. The section “nach Paracelsischer weis” that he provided in each of the 37 chapters of his herbal could only reinforce the suspicions of his contemporaries.

Did Thurneisser really have access to a longer version of the Herbarius than the one we know today? Actually, an “Auszug der Beschreibung etlicher Kreutter aus dem Herbario Theophrasti Paracelsi Bombasti” is listed in his testament\textsuperscript{45} – and given its title, it sounds like a mere excerpt of Toxites’ 1570 edition. His Historia, clearly not an edition of the “full” Herbarius of Paracelsus, is probably neither a partial edition, nor even an edition mixed with Thurneisser’s own remarks. For the Angelica and Nießwurtz (viz., the only two plants contained both in Paracelsus’ and Thurneisser’s Herbarius), no interpolations, or even quotations of Paracelsus’ treatise can be found. Thurneisser concerns himself with astrological considerations which are much less present in the Herbarius, and he partakes in etymological debates regarding the Hebrew, French, English, etc. names of each herb, which are fully absent from Paracelsus’ treatise and were even dismissed by the latter as irrelevant with regards to the study of herbs\textsuperscript{46}. It is much more likely (although not certain) that Thurneisser made up the whole rumor concerning the Herbarius for financial reasons, as a marketing ploy aimed at selling a treatise which had not much to do with Paracelsus’

\textsuperscript{43} See above, fn. 28. Significantly, Bathodius wrote this in the foreword to the De natura rerum, a treatise in which the doctrine of signatures, one of the most salient features of Paracelsus’ thought about herbs, is theorized at length. See section 2.4, below for more details.
\textsuperscript{44} “Newenn Paracelsischen Herbarium oder Kreutterbuch / zum theil auß ernanntes Authoris hinderlaßnen schrifften / zum theil aber auß meiner selbstaignen erfahrunge versamlet.” (Thurneisser, 1578: sig. ij r).\textsuperscript{45} CP 2: 446.
\textsuperscript{46} This aspect of Paracelsus’ thought will be developed in another article.
writings. This marketing ploy (if deliberate) probably enabled his Historia to gain more attention than it would have otherwise.

Be it as it may, the Paracelsians did not abandon their hopes of seeing the remaining chapters of the Herbarius come out some day. This remained true even after Huser published in 1590 the same ensemble composed of a foreword and six chapters as Toxites, along with several unpublished fragments Paracelsus had written about herbs, including another foreword to a Herbarius, the “Prologus in librum de herbis”, dedicated “to all the doctors of the world”, in which Paracelsus sharply criticized such botanical authorities as Dioscorides and Macer.

In the first quarter of the 17th century, Karl Widemann (1555-1637) still referred to the Herbarius as one of the “unausgegangenen Bücher Theophrasti”.

2.3. Paracelsus’ Herbarius spiritualis sidereus

Aside from the brevity of the Herbarius and Thurneisser’s subterfuge, a third reason might explain the vigor with which some of the Paracelsians kept looking for the Herbarius: namely, the emphasis Paracelsus himself had laid on the importance of the study of herbs and their healing properties, especially insisting on the necessity of discovering the signature of plants. The absence of any explicit consideration regarding the doctrine of signatures in the Herbarius led the Paracelsians to single out two treatises containing discussions of the

47 It is difficult to know with any certainty whether the rumor was launched voluntarily or not. For instance, Alexander Thurneisser contacted Theodor Zwinger (1533-1588) in 1576 to borrow his copy of Stirpium historiae, a book about plants written by Rembert Dodonaeus (1517-1585), which his brother needed to write his Herbarius (see CP 2: 759). Zwinger was among the ones who told Johannes Franke about Thurneisser’s project of writing a Herbarius, perhaps as early as 1570/1571 (see CP 3: 482). This led Franke to send a letter to Thurneisser in 1578 (see above, p. 9). Perhaps the rumor originated under similar circumstances at the beginning of the 1570s, due to Thurneisser’s borrowing of books from other Paracelsians. But his personality allows us to cast some doubts on the subject.

48 Paracelsus, Fragmenta aliquot de re herbaria (H7: 406–429). Huser indicates: “zuvor nie in Truck außgegangen” (H7: sig. α7) iij r’). See also Sudhoff, 1894: 398. The “Prologus in librum de herbis” (H7: 406–411) is alternatively entitled “prolog[us] ad medicos Orbis” (H7: 411). Huser was also the first to publish, in the same volume, Paracelsus’ commentary on the famous botanical poem of pseudo-Macer (Scholia & Observationes quadem perutilis in Macri poemata de virtutibus herbarum, etc., H7: 237–277), as well as some unpublished fragments he added to the Scholia in libros de Gradibus & Compositionibus (H7: 373–389).

49 See CP 2: 246. Widemann’s mention is found in a manuscript written between 1620 and 1625; see Paulus, 1994: 335.

50 See section 4.2 of this article for more details.
signatures (contrary to the Herbarius) as potential fragments of this greater Paracelsian herbal: Von den natürlichen Dingen and book nine of De natura rerum: “De signatura rerum naturalium”.

First of all, let it be noted that although Paracelsus bears the reputation of a doctor mainly interested by mineral remedies, herbal drugs were an integral part of his medicine. Otto Nowotny counted no less than 400 different plant names in the works of the Swiss doctor (all the while acknowledging that it could only constitute an estimate given Paracelsus’ use of different names to refer to the same plants)\(^51\). As early as 1527, Paracelsus is said by Andreas Jociscus (d. 1569) to have undertaken botanical excursions with his Basel students\(^52\). The great number of plants mentioned in works such as the Archidoxis (ca. 1525/1526)\(^53\), the Große Wundartzney (1536), the Buch von den Tartarischen Krankheiten (1538) and the perhaps genuine book 9 of De natura rerum was deemed by Nowotny to be at odds with the brevity of the Herbarius\(^54\). We should add to this list the De gradibus (1526-28)\(^55\), the Labyrinthus medicorum errantium (1538) or the consilium Paracelsus wrote for the abbot of Pfäfers (1535), in which the Swiss doctor prescribed only herbs, and not a single mineral drug\(^56\). As the Paracelsians unearthed the treatises of their master, they might, like Nowotny, have been struck by the discrepancy between the small number of plants mentioned in the Herbarius and the numerous herbal remedies they encountered elsewhere in his works.

There was, more strikingly, a sentence in the Labyrinthus medicorum errantium which raised the stakes of discovering the full Herbarius even further, viz., Paracelsus’ assertion that “each doctor should build his own Herbarium spiritualem sidereum”\(^57\). The Labyrinthus, completed three years before Paracelsus’ death, is often taken as a condensed version of

\(^{52}\) “Egressus cum suis discipulis Theophrastus, vt herbas colligerent [...]” Jociscus, 1569: sig. A viij v°.
\(^{55}\) See fn. 48 for the text, Benzenhöfer, 2005: 174–176 and S4: vi for the dating.
\(^{56}\) S9: 661–665. See also Daems and Volger, 1986.
\(^{57}\) “Auff das volgt nun dz ein jetlicher Artzt sein Herbarium spiritualem sidereum haben soll [...]” (H2: 233).
Paracelsus’ whole doctrine, in which he looks back to all the points he developed during his career. First published in 1553, it was reprinted many times after that, and stands out as one of the most widely read Paracelsian treatises. There, in book 10, Paracelsus explained at length the nature of this spiritual herbal, intended to take into account both the visible, corporal, elementary form of plants (i.e. the Aristotelian idea of form, adjusted to Paracelsus’ own conceptions) and their invisible, spiritual, sidereal form, that is, their “signature.” According to Paracelsus, the spiritual properties of natural objects had been totally ignored by the Galenists. He proposed nothing less than to replace the traditional, Aristotelian-Galenic doctrine (in which the properties of plants were known both from their elementary qualities, e.g. hot, cold, wet, dry, and their specific form) with his own dichotomous system, in which the invisible form, or signature – a concept he claimed to have rediscovered after centuries of oblivion, played a central role.

Yet, almost no trace of the idea of signatures was to be found in the Herbarius when it was published in 1570. The Paracelsians were therefore faced with a major contradiction. Accepting that this version of the Herbarius was the “full Herbarius” would not only have meant admitting an herbal unusually short in size as the only work on herbs left behind by Paracelsus. It would also have entailed that, although Paracelsus had advised all doctors to build a Herbarius based on the signatures of plants – an idea supposed to revolutionize the whole botany of his time – the Swiss master never wrote one himself.

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58 Sudhoff, 1894: 45–47.
60 “Dieweil nun die hülf der krancken demassen ein Spiritus ist / vnd ligt verborgen vor dem Elementischen Leib / vnd allein dem Syderischen offenbar: Jetzt volgt nun / dz Magica zu lehren hat / vnd nit der Avicenna, noch Galenus” (H2: 229-230).
62 The concept of signatures underlies much of the discussions going on in the Herbarius, but it is never properly mentioned there: Paracelsus even decided to hide it (see below, pp. 30–31).
This major contradiction might have served as the source of the close association, if not indeed the conflation, of the *Herbarius* with another treatise of Paracelsus: *Von den natürlichen Dingen*. A work in ten chapters published by Toxites for the first time in 1570 in the same collection as the *Herbarius*, the treatise *Von den natürlichen Dingen* is the only Paracelsian writing which took the form of an herbal and explicitly mentioned the idea of signatures, applying it to practical cases. Because the early editors of Paracelsus expected to find an herbal dealing with signatures among the works of Paracelsus, *Von den natürlichen Dingen* was often mistakenly described by early commentators as a part of the *Herbarius*. Its printing history could have been a source of further confusion. Independent chapters from *Von den natürlichen Dingen* began to be published from 1564 onwards, shortly before the *Herbarius*. After this, chapters of both treatises were often published in the same compilations, and, adding to the confusion, four chapters out of the ten found in *Von den natürlichen Dingen* also appeared in the *Herbarius*, yet written in a completely different style: those about the Nießwurtz, the Persicaria, salt, and the magnet. Consequently, before both treatises were printed in their entirety in 1570, segments were frequently extracted from a chapter of either treatise and interpolated in order to fill the blanks in the corresponding chapter of its twin.

The Paracelsian who contributed most to this intertwining between the *Herbarius* and *Von den natürlichen Dingen* was Toxites, who saw both treatises as fragments of the greater

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63 Book 9 of *De natura rerum* contains several practical examples of the signatures of plants, but it is clearly not an herbal and could therefore not be confused with the *Herbarius*. See section 2.4 for more details; and section 4.2 for references to the signatures in *Von den natürlichen Dingen*.

64 All references to the editions of independent chapters before 1570 can be found in Sudhoff, 1894: 196–198. The three chapters of the *Herbarius* published before 1570 were all published either with interpolations of *Von den natürlichen Dingen*, or along with independent chapters of it (see Sudhoff, 1894: 149–150 and 159–160).

65 The ten chapters are on Terpentin, the Schwartzer und Weisser Nießwurtz, the Wasserblut (or Persicaria), Salz, Sankt Johannis Kraut (or Perforata), the Magnet, the Schwefel, Vitriol, Arsenicum and Tartarus. See H7: 109-221. The last chapter on Tartarus was either lost or never written: only the title remains (see H7: 221).

66 Whereas Paracelsus deals with “Persicaria” in the *Herbarius*, he calls the same plant “Wasserblut” in *Von den natürlichen Dingen*. Compared with other herbals of the time, the properties and description of the plant allow us to recognize that both the *Herbarius* and *Von den natürlichen Dingen* deal with the *Polygonum Persicaria*. See Brunfels, 1532: sig. CLXVI–CLXVIII; Bock, 1546: xxxiiij–xxxv; Fuchs, 1563: sig. Dd ij v–tij r.

67 See for instance the chapter on the Nießwurtz published by Bodenstein in 1568 (Paracelsus, 1568a).
Paracelsian herbal he expected to find. In his preface to the 1576 edition of the *Kreütterbuch* of Bartholomäus Carrichter (1510-1567), he explained: “Paracelsus has written for the most honorable State of Carinthia, based on *signatura rerum*, a *Herbarius* which has up to this point never been seen, as the few herbs printed now make clear: the two *Nießwurtz*, *Sankt Johannis Kraut*, the *Persicaria*, the *Angelica*, etc.”68 The chapter on *Sankt Johannis Kraut* is, however, not to be found in the *Herbarius*, but in *Von den natürlichen Dingen*. This cannot be read as a simple mistake by Toxites. In the edition of 1570, the chapters of the *Herbarius* were numbered as the twelfth, thirteenth, etc. up to seventeenth chapters, as if they were integral parts of *Von den natürlichen Dingen*69. In 1574, Toxites still maintained that Paracelsus had written an important book about herbs and other natural things (*andern natürlichen dingen*) which had, up to this point, never been seen70.

From the beginning, Toxites saw *Von den natürlichen Dingen* as part of Paracelsus’ greater herbal because its chapters better fitted his expectation of an herbal dealing with the signature of things than those of the *Herbarius*. In addition, Toxites thought that both the *Herbarius* and *Von den natürlichen Dingen* were part of the Carinthian writings, a group of works composed by Paracelsus in 1538, shortly before his death71. No *Herbarius* can of course be found among the Carinthian writings. Nevertheless, it was in the *Labyrinthus*, one of the Carinthian writings, that the most thorough theorization of the concept of “signature” could be found, as well as Paracelsus’ call for physicians to write their own *herbarius*.

68 “[Paracelsus] hat an die hochlöbliche Landtschafft in Kärnten auβ obgemelter signatura rerum [ein] Herbarium gemacht / dergleichen vormals keins gesehen worden / (wie dann klerlich auβ den wenigen Kreuttern / so darauf getruckt seind / als beide Nießwurtz / S[anc]t Johans kraut / Persicaria, Engelsch distel etc. zuuernemen ist).” (CP 2: 394). The *Kreütterbuch* edited by Toxites was published under a pseudonym, “Philomusus anonymus”. It is attributed to Carrichter since 1606 (CP 2: 336 and 393).

69 *Von den natürlichen Dingen* contains only nine chapters (the tenth chapter, which consists only of a title in the Huser edition, was left aside by Toxites). But Toxites added two short treatises on honey and turpentine to this ensemble (Paracelsus, 1570: sig. P vi r0 – S vi v0). This explains why the numbering of the *Herbarius* starts at twelve. Yet, not all the treatises of the volume edited by Toxites are numbered in a row: *De mineralibus*, which starts right after the *Herbarius*, has its own, autonomous numbering.


71 Aside from the 1576 foreword just quoted above (fn. 68), Toxites also connected Paracelsus’ *Herbarius* to the *Kärntner Schriften* in one of his letters to Thurneisser (CP 2: 397).
spiritualis sidereus. Toxites could thus reasonably expect Paracelsus to have composed his great spiritual herbal about the signatures of plants along with the Labyrinthus, as part of the Carinthian writings.

2.4. The Herbarius and signatura rerum theory

Another treatise, or rather, one chapter of another treatise came to be closely associated with the Herbarius, as a consequence of this quest for Paracelsus’ greater herbal: the “De signatura rerum naturalium”, last chapter of the problematic, at least partly spurious De natura rerum. Toxites was the first to popularize the idea that Paracelsus had written a great herbal called Signatura rerum, an idea which had major consequences on the reception of Paracelsus’ ideas about herbs. Indeed, as early as 1571, Toxites listed a treatise called De signatura rerum among the missing Paracelsian writings. In 1574, he added that De signatura rerum was the title of Paracelsus’ major, yet still not found herbal, using the expression again in 1576 to characterize Paracelsus’ Herbarius.

As for the treatise De natura rerum, its earliest known version is a manuscript dated from the summer of 1571, entitled DE NATURA RERUM, Das ist, Von Naturlichen dingen Siben Bucher. The text was printed by Bodenstein from a different source in 1572 under the title Metamorphosis, perhaps to avoid any confusion with the actual Von den natürlichen Dingen. The chapter “De signatura rerum naturalium”, however, appeared for the first time in Bathodius’ 1584 edition. De natura rerum, with its nine chapters dealing with a wide range of topics pertaining to the realm of alchemy and natural magic, today appears as a compilation of fragments originating from at least three different authors, most of them

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72 Gantenbein, 2020a.
73 CP 2: 247.
74 CP 2: 303.
75 See above, fn. 70.
76 Gantenbein 2020a: 7.
77 See Hirai, 2020: 492.
spurious. However, Urs Leo Gantenbein has brought strong arguments suggesting that this ninth chapter, dealing with the concept of signatures, might be one of the few genuine of the treatise.

The death of Toxites in 1581, three years before the publication of the chapter “De signatura rerum naturalium”, probably spared him a great disappointment. Even though this ninth chapter could well be seen as a treatise on its own, especially due to its length (34 pages), that was simply merged with other spurious fragments, it is clearly not an herbal. Despite the many examples of signatures found in herbs that this writing contains, it remains mostly a theoretical work, which possesses neither the structure, nor the regularity of an herbal, that is, a writing in which the properties of herbs are systematically listed and expounded, each herb possessing its own chapter – as was the case in the Herbarius.

However, the insistence with which Toxites used the expression “signatura rerum” is worth noticing. If Paracelsus frequently wrote about Signatur, Signatum or Zeichen to refer to the signatures of natural things, the expression “signatura rerum” is never found among Paracelsus’ writings, outside of the ninth chapter of De natura rerum, where this designation appears only two times (in the title of the chapter and in the first line). In itself, the use of this terminology by the author of the chapter cannot be taken as an argument standing for, or against authenticity. After all, Paracelsus is widely known for his constant linguistic variations and coining of new terms. In any case, Toxites’ conviction that there was a Paracelsian treatise called Signatura rerum, which, to him, could only be Paracelsus’ great herbal, played a decisive role in making an expression otherwise marginal in the works of the Swiss master the hallmark of Paracelsus’ botanical thought. “Signatura rerum” became the title of most treatises which started to flood Europe after the publication of De natura rerum.

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79 As argued by Gantenbein 2020a, who sees some of the chapters of De natura rerum as full standing treatises.
80 Gantenbein 2020a: 25 sqq.
81 As argued by Gantenbein 2020a.
82 Stannard, 1999.
such as Oswald Croll’s *De signaturis internis rerum* (1609). Suffice it to say, would the chapter eventually prove inauthentic, Toxites’ role in inspiring its author the expression “*signatura rerum*” would have to be taken into account.

At any rate, chapter nine of *De natura rerum* played an important role in making the doctrine of signatures an iconic aspect of Paracelsus’ thought about herbs, perhaps at the expense of botanical notions developed elsewhere by the Swiss doctor. Oswald Croll, in his *De signaturis internis rerum*, called Paracelsus the “father of secrets” for having discovered the hidden signatures of things. This notion influenced major thinkers such as Johannes Kepler (1571-1630) and Gottfried Wilhelm Leibniz (1646-1716), and became an important cause of dissent in the quarrel against Paracelsianism: Guy de Brosse (1546-1641), the famous founder of the Jardin royal des Plantes, mocked the Paracelsians for letting themselves be fooled by this idea like the people who believe they see forms in the clouds; contrary to the Galenists who did not believe in it. For the many Paracelsians who believed that the *Herbarius* was far too short to be considered Paracelsus' *Herbarius spiritualis sidereus*, writing a treatise based on “*signatura rerum*” thus became synonymous with writing a Paracelsian herbal.

3. **The significance of the Herbarius – An assessment of Sudhoff’s arguments**

In the 1570s and 1580s, there seems to have been a consensus concerning the fact that the version printed by Toxites in 1570 was not the “full *Herbarius*” of Paracelsus. Huser was

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83 Croll, 1996. For examples of these titles, see Croll, 1996: 15; CP 2: 310; Hirai and Kikuchihara, 2014.
84 “Paracelsus secretorum pater pro suo inter alia praeclara in Rempublicam medicam promerita, Verum Medicum & scientia & usu medicinae innotescere & cupientem, ad dignoscendas Signaturas & Hieroglyphica grammata sedulo hortatur in suis scriptis [...]” (Oswaldus Crollius, 1609: 84).
85 Hirai and Kikuchihara, 2014.
86 “C’est comme des nuées que l’on fait ressembler à tout ce que la fantaisie se représente [...]” (La Brosse, 1628: sig. T ijj r–v.)
87 For an example of an herbal centered on the signatures claiming Paracelsus as its primary authority, see Popp, 1625 (sig. A ij v” for the reference to Paracelsus). The first third of Croll’s work (Croll, 1996: 94–116) focuses exclusively on plants, although the treatise lists successively the parts of the human body and, for each body part, the relevant medicinal herb. This does not make it less of an herbal, but it is worth noting that Croll abandoned the standard structure of most herbals (each plant having its own chapter) to create a new classification centered on the concept of signatures: e.g. the chapter on eyes lists all the plants looking like an eye (Croll, 1996: 95), etc.
more factual in 1590, in his authoritative edition based on the autograph manuscript. He mentioned at the end of the *Herbarius* that clearly, Paracelsus had never finished writing both the *Herbarius* and *Von den natürlichen Dingen* \(^{88}\). On the other hand, he wondered when commenting on *Von den natürlichen Dingen* whether the fact that the autograph ended with the title “De Tartaro” immediately followed by a blank page (instead of the corresponding chapter) was a sign that Paracelsus had stopped writing the treatise, or if this chapter, and maybe others too, had been lost \(^{89}\).

A decisive shift occurred in 1930 with Karl Sudhoff’s radically new interpretation of the brevity of the two treatises, which he saw as a sign that both were mere drafts, or field notes, loosely taken by Paracelsus years after years during his youth, as he was travelling in the Upper Rhine region in the middle of the 1520s. This interpretation played a crucial role in minimizing the significance of Paracelsus’ writings about herbs as a whole. By showing the consistency of the *Herbarius* as a treatise rather than a collection of loose notes, and then by considering its broader role among Paracelsus’ medical works, we hope to throw light on the necessity of reassessing the relevance of Paracelsus’ herbal writings.

3.1. *The Herbarius, loose draft of field notes or carefully organized treatise?*

Sudhoff was categorical when he wrote that the *Herbarius* was

full of ever new “*Additiones Theophrasti*”, of additions and complements, that maybe only appeared as such based on the color of the ink and the inflection of the writing, and therefore received by Huser the appellation of “*Additiones*” only because they were obviously added to precedent notes throughout weeks, months and years. \(^{90}\)

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\(^{89}\) “Lectori. Ob der Author in diesem Buch nichts weitter geschrieben / oder ob dises vom Tartaro, und anders / darvon verloren sey / kan man nicht wissen. Es ist dieses zehenden Capitels Titel im *Autographo* am end deß Blatts geschrieben / und folgen ettliche Bletter reins Papis hernach. Der guthertzige Leser wirdt hiermit für gutt nehmen.” (H7: 210).

\(^{90}\) The *Herbarius* is “voll [von] lauter neuen und immer wieder neuen „*Additiones Theophrasti*”, von Nachtragungen und Zusätzen, die sich als solche vielleicht nur in Tinte und Stimmung der Schrift kundgaben und deshalb nur die Husersche Kennzeichnung als „*Additiones*“ erhielten, weil sie offenbar im Laufe der
The different chapters of the *Herbarius*, each dedicated to a particular plant, are indeed organized as a succession of very short sections entitled “Additiones”. To Sudhoff, these titles were absent from the autograph, and later added by Huser to put some order in the loose collection of field notes he had before his eyes. Based on this unusual organization, Sudhoff contended that both the *Herbarius* and *Von den natürlichen Dingen* were mere drafts, or fragments, which never became real treatises. His opinion on the matter seems to have partly been influenced by his own preconceptions, according to which Paracelsus, an innovative physician par excellence, could only have displayed a juvenile interest for these basic remedies, switching to more complex medicines as he matured—a dubious assumption if one considers the dominant role played by plants and “elementary remedies” (in Sudhoff’s words) in the last years of his career, for instance in the late *Labyrinthus medicorum errantium*.

### 3.2. The internal consistency of the Herbarius

Although no autograph manuscript of the *Herbarius* remains to assess Sudhoff’s claim, several significant arguments entirely invalidate his thesis. To begin with, Huser was not the first to name parts of the text “Additiones”. These headings are already found at

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91 “Wie diese völlig fragmentarisch gebliebenen Ausarbeitungen zustande kamen, zeigt namentlich die erstgenannte Zusammenschreibung, eine unvollendete Sammlung verschiedener einheimischer, weitverbreiteter Naturdinge aus Pflanzen- und Steinreich.” (S2: vii–viii).

92 “[…] [Es] sich hier ebensosehr um Konzepte wie um Kollektaneen handelt, zu deren vollem Abschluß Hohenheim weder in diesen oberrheinischen Schaffensjahren noch überhaupt jemals gekommen ist, wie er sich denn mit diesen primären Heilmitteldingen später überhaupt nicht mehr abgegeben hat. […]” (S2: viii).

93 One could go further and argue that the virtues at work in the vegetal world and, especially, trees, are the cornerstone of the whole argument Paracelsus builds in the *Labyrinthus*. After stating in book 2 that trees have their own, indecipherable language (H2: 201), Paracelsus describes in book 6 how humans can learn the properties from natural things by providing examples which are all taken from the vegetal world (the *birnbaum*, *scammonia*, etc., see H2: 216–217). Although Paracelsus makes clear, when he eventually exposes his new doctrine of signatures in book 10, that such a doctrine also applies to metals and stones (H2: 234), the demonstration starts once again by taking the example of a tree (H2: 232) before providing four examples, all taken from the vegetal world (*salvia*, *lavendula*, *majorana*, *eufragia*, see H2: 234). All this will be detailed in another article.
exactly the same places in Toxites’ edition\textsuperscript{94}. Furthermore, there are variations in the headings: sometimes we read “\textit{Additio in die andern Kranckheiten}”, or “\textit{Additiones Theophrasti secundae}”, etc., and these variations are identical in Toxites’ and Huser’s edition. We do not know which manuscript Toxites’ edition was based upon, but Huser specified that he “most carefully corrected” the text “against Paracelsus’ autograph manuscript”\textsuperscript{95}: this most probably means that his text was based on Toxites’ edition and proofread based on Paracelsus’ autograph. As we can see, these textual pieces of evidence do not fit well with the hypothesis of a text made up of an addition of dozens of passages supposedly written in different inks and handwriting. It rather seems that both Toxites and Huser used a very clear manuscript as a basis for their edition.

Moreover, Paracelsus happens to define precisely what he means by “\textit{Additiones}”. He does it, however, not in the \textit{Herbarius}, but in \textit{Von den natürlichen Dingen}. There, he criticizes his contemporaries, the “\textit{Neoterici}”, for adding too many substances to their preparations, when it is better to add the least components possible to make an efficient remedy. It is sometimes necessary, he admits, to correct the action of an herb by using another substance: this supplementary substance is called an “\textit{additio}”, or a “\textit{correctio}”, two terms which could be translated by the word “additive”\textsuperscript{96}. Each chapter of the \textit{Herbarius} actually follows a very clear structure, based on this division into successive “\textit{Additiones}”. Paracelsus starts by describing the possible uses of the remedy without any additive, the main diseases it heals, and how. He then comes to the less important diseases cured by the simple. He eventually proposes different “\textit{additiones}”, most of the time to increase the degree of efficiency of a remedy, to avoid its secondary effects, or to treat a more specific illness than the one

\textsuperscript{94} There is only one exception to this rule (see below, p. 23).
\textsuperscript{95} “Alles zum fleissigsten aufß Theophrasti eigenen handschriften corrigiret” (H7: sig. a7) ij v.)
\textsuperscript{96} “So sind die \textit{Neoterici} allein in dem gelegen / wenn sie lange Recept machen / das say Addiert : das dann ein jrrung ist. Wann nach der kürzt\textsuperscript{1} zu reden / ist das allein die Addition / dz zu einer andern Arztney gehört / wo dieselbig nit weitter mag / vnd das sein vollbracht hatt : vnd doch aber noch etwas vbriges blieben / das dasselbige auch genommen werde durch ein andere Artzney / dieselbig heißt als dann \textit{Additio, oder Correctio}.” (H7: 128).
originally cured by the plant or mineral\textsuperscript{97}. When he adds a new potential use of the remedy without changing the additive, a heading “weitter” keeps the section short.

There are only two exceptions to this rule, but they are not enough to contradict it. The chapter on the magnet starts immediately, in the Huser edition, with an “Additio”, but this title is absent from the version edited by Toxites\textsuperscript{98}. Given Huser’s well-known accuracy as an editor of Paracelsus, one can guess that this mention was mistakenly added by Paracelsus and not printed by Toxites because of the incongruity of the presence of this “Additio” here. The “Additio” is indeed not followed by the enumeration of potential additives, but by introductory remarks concerning the possible uses of the magnet.

The other exception is the chapter on coral. After describing the different types of corals and exposing the illness they can cure, Paracelsus interpolates several sections whose content deviates from the order followed in the majority of the treatise, instead of exposing the different properties of coral and then possible additives just as he did in other chapters. At first sight, these sections look like digressions in which Paracelsus mainly explains that corals heal naturally and not based on a form of demonic action, and in which he writes little about their healing properties. As a result, the chapter on corals was taken by Sudhoff as the most blatant example that the \textit{Herbarius} is a loose draft, and not a treatise\textsuperscript{99}.

However, the historical context of the writing of the \textit{Herbarius} provides a clear explanation for the presence of this excursus. Paracelsus indeed anticipates the potential accusations of the numerous people who, he believes, will think that the properties he

\textsuperscript{97} To give only one example, the \textit{Schwartzer Nießwurtz}, taken alone, enables to expel the excess of fluids within the body (\textit{expulsio superfluitatis}) caused by dropsy (\textit{Wassersucht}). But, to achieve a complete cure, one needs not only expelling the fluids, but also preventing their further reappearance. This can only be done by adding some \textit{Tinctur von Marte} to the preparation, a substance presented in the section “\textit{Additiones Theophrasti Secundae}”: “So es nuhn aufgeleert ist mit der Elleboro, wie gmeldt / nach jninhalt der Ordnung / als dann so gang an die Cur. Nuhn ist das nicht die Cur / außleeren / Es ist \textit{Expulsio Superfluitatis}; Die Cur ist / das nichts mehr wechst. Dieselbige Cur ist also / das du eegendreck seyest der Tinctur von Marte, die allein thuts [...]” (H7: 72–73).

\textsuperscript{98} See H7: 100 and Paracelsus, 1570: sig. Aa iij v°.

\textsuperscript{99} S2: viii.
discloses are unnatural or superstitious. His concerns can be better understood if one considers the explosive content of the chapter, in which Paracelsus presents the working of two kinds of corals: the red one, which has benevolent effects, and the brown one, which produces strictly opposite effects. The red coral can repel the storms, lightning, hail, birds, and bad spirits that devastate the crops, etc. The brown coral, however, can make people extremely sad, contrary to the red which prevents suicidal thoughts. But Paracelsus does not give any details concerning the other opposite effects the brown coral can be expected to produce – that is, summoning storms and the hail or birds that devastate crops, etc. Many of these potentially harmful virtues of the brown coral correspond to the malevolent powers attributed to the witches at the time.

In such a context, one can better understand why Paracelsus added three preliminary sections at the beginning of the chapter, to make clear that all the properties of coral treated of are not based on forms of diabolic action. These three sections can warrant an interpretation diametrically opposed to that provided by Sudhoff. Instead of seeing them as evidence that the treatise is a random succession of observations loosely taken on the field, one can read them as evidence that the chapters of the *Herbarius*, or at least the chapter on corals, were carefully thought out in advance by Paracelsus, who wrote them as a coherent whole, anticipating the potential accusations he might face.

Worth noticing is also the fact that in this particular case, the word “Additio” seems to have been used by Paracelsus in its usual Latin sense of “addition”. The titles of the sections dealing with the natural working of corals (“Additiones causarum. Theophrasti”, “Additio naturalis. Theophrasti”) might explain why Sudhoff missed the sense taken by the term “additio” in the rest of the treatise. Even if the chapter on corals is the one in which the order

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100 “Dann es möchten villeicht viel meinen / es wer das [nit] natürlich / vnd werend Superstitiosisch.” (H7: 95).
101 “Nun die *Coralli Rutilantes* seind frölich vnd lieblich: gleich so vnfrölich vnd vnfreundliech seind die Braunen / all mal das widerspl.” (H7: 93).
102 H7: 90–100.
103 See, for instance: Levack, 2013.
followed by Paracelsus is the less obvious, it is nonetheless organized following the same order as in the remaining parts of the treatise, save for the parenthesis anticipating potential accusations of witchcraft: after this parenthesis (95–97), Paracelsus enumerates the medical uses of coral alone (97–99), and he ends up by exposing possible additives (99–100).

Furthermore, the internal organization chosen by Paracelsus, with a succession of small and strictly defined sections, was not uncommon among herbals, collections of recipes, books of *secreta* or *experimenta* of the time. These works often functioned on a cumulative basis, the successive copyists or editors of each treatise adding their own ideas to initial versions of the text. They were thus most of the time written intentionally as a succession of small and independent sections, to ease future transformations. The famous *Circa instans* attributed to Mattheus Platearius (d. 1161), for instance, initially listed the virtues of 273 simples, when vernacular adaptations of the text sometimes ranged to over 500 chapters in the 15th century. The clear-cut organization of the *Herbarius* can thus be interpreted as a technique meant both to facilitate the later addition of new “*Additiones*”, and to achieve a greater clarity for the people who would implement the recipes while reading the treatise.

Sudhoff’s hypothesis is thus almost entirely erroneous, except for the fact that Paracelsus actually planned to add indications regarding the use of each plant later. The Swiss doctor indeed concludes the foreword of the *Herbarius* with the following words: “In this sense, reader, I will proceed. Look at it, whether you like it now in the first version (*in der Ersten arbeit*). When I get more, you will also have more”105. It is therefore true that the *Herbarius* was intended as a first version of a longer work to come. But it was neither a fragmentary draft, nor a compilation of field notes: rather a carefully organized treatise, each

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104 See Lieutaghi, 1990 for a critical edition of the French version of the treatise (*Le livre des simples medecines*), based on a 15th century manuscript of the text. These transformations were so intense that it might even be questionable to call the *Livre des simples medecines* a translation of the *Circa instans* attributed to Platearius (see Opsomer, 1980).

105 “Also will ich Leser fürfahr / vnd besichs / wie es dir gefalt jetzt in der Ersten arbeit : kompt mir mehr / dir wirdt auch mehr werden.” (H7: 64).
chapter possessing a clear structure, probably designed to facilitate the addition of further observations. However, even if each of the chapters of the *Herbarius* is consistent and must be read as a completed section of the work, the *Herbarius* remains, like *Von den natürlichen Dingen*, too short to be considered a full treatise. It is most likely that the majority of both works was either lost or never written by Paracelsus (as Toxites and Huser believed). The possibility of a loss of most chapters of both works should be considered carefully indeed: in *Von den natürlichen Dingen*, Paracelsus often refers to chapters supposed to be part of the treatise, of which we possess no trace\(^\text{106}\).

3.3. *The Herbarius, a medieval herbal*

Sudhoff brought forth a last, minor argument to support his claim: to him, the lack of separation between remedies of mineral and vegetal origin within both treatises was a supplementary proof that they were a mere compilation of notes, taken on the field by Paracelsus to record the various elements of the natural world he observed around him while wandering about\(^\text{107}\). The presence of the magnet, of salt and, to a lesser degree, of corals, could indeed be seen as incoherent in a treatise supposed to deal with herbs. This question is not a problem of categories: Paracelsus clearly saw salt and the magnet as minerals. More ambiguously, in the *Paragranum*, he likened the virtues of coral to those of marble, which might be a sign that he saw coral as a mineral too\(^\text{108}\).

The point raised by Sudhoff can be answered easily, however, by considering the long-term history of the genre of herbals. From the 12\(^{\text{th}}\) to the 16\(^{\text{th}}\) century, botany did not exist as a discipline separated from medicine in Europe: plants were studied only for the sake


\(^{107}\) “Zunächst werden in dem sogenannten “Herbarius” und der Sammlung “Von den natürlichen Dingen” Heilstoffe aus beiden Naturreichen geboten, die in zwei getrennten Sammelbänden von Hohenheim rein äußerlich verteilt aufgezeichnet waren, ohne schärfere stoffliche Scheidung.” (S2: vii).

\(^{108}\) See respectively H7: 83, 101 and 57–58.
of healing, as part of the medical curriculum\textsuperscript{109}. It was much more frequent to find medical books focused on simple medicines, as opposed to compound medicines, than to find books dealing solely with plants. “Simples medicines” were drugs which, according to medieval definitions, were either used as nature produced them, or prepared without anything else added – be they of mineral, vegetal or animal origin\textsuperscript{110}. The study of plants was therefore not separated from that of remedies originating from other realms of the natural world.

The modern canonization of authors such as the “Founding fathers” of botany (Brunfels, Bock and Fuchs), who were interested in the exhaustive description of plants, has given us a distorted image of how most medieval herbals looked\textsuperscript{111}. Coral, magnet and salt were invariably found in the most widely diffused herbals of the medieval and early modern period, such as the \textit{Livre des simples medecines} attributed to Platearius, or the \textit{Herbarius zu Teutsch} of Johann Wonnecke von Kaub (1430–1503/04) – a treatise now better known under the title \textit{Gart der Gesundheit}\textsuperscript{112}. These works could indeed be more accurately described as books of simples than as herbals. Accordingly, at the time Paracelsus was writing, that is, before the pivotal shifts affecting botany and the genre of the herbal from the 1530s onwards, the presence of remedies originating from the three realms of the natural world in works known under the title “\textit{Herbarius}” was the norm, not the exception\textsuperscript{113}.

We can be even more precise about the point raised by Sudhoff: contrary to the “founding fathers” of botany, Paracelsus did not mean to write an herbal about the German

\textsuperscript{109} Reeds, 1991.
\textsuperscript{110} See Platearius, 2019: 178.
\textsuperscript{111} Stannard, 1999.
\textsuperscript{112} See Lieutaghi, 1990: 247–251 (“Sel’); 242 (“Ayment’); 248 (“Coral, corail’); or Von Kaub, 1485: sig. Q iv r\textsuperscript{5}–v\textsuperscript{9} (“Sal commune’); sig. B v r\textsuperscript{7} (“Lapis magnes’’); sig. p viij v\textsuperscript{9} (“Corallus corallen’’). Von Kaub’s \textit{Herbarius zu Teutsch} should not be confused with the 1484 \textit{Herbarius latinus}, and the 1491 \textit{Hortus sanitatis}. Each of these herbals, subsequently published in 1484, 1485 and 1491 in Mainz, could be described as an enriched version of the former. All of them contained remedies originating from the three realms. This complex common history is summarized with remarkable clarity in Gerulaitis, 2003: 141–142.
\textsuperscript{113} The same could be said of the term “Kreutterbuch”. For an example around the same period, see Rösslin’s 1533 herbal: Rhodion, 1533.
flora, but about German “Gewechse”\textsuperscript{114}. In Paracelsus’ writings, this term is used to name all growing things\textsuperscript{115}: humans, who grow out of an invisible seed; metals and stones, which grow out of a metallic tree to be found beneath the earth; plants, which grow out of the earth; stars and comets, which grow out of the firmament, etc.\textsuperscript{116} Like the category of “simples”, Paracelsus’ encompassing category of Gewechse entails no sharp separation between the mineral, animal and vegetal world. It cannot be stated, thus, that the title of the Herbarius is inconsistent with its content.

4. \textit{A treatise written for “the common man”}

As we have seen, Toxites tended to amalgamate the Herbarius and Von den natürlichen Dingen. There are, nevertheless, good reasons to regard these two treatises as separate writings, each with its own singularities. A peculiarity of the Herbarius is that it was written in a resolutely simple style, as attested by the concluding lines of the chapter on persicaria: “While I treat the natural things in simplicity here, as meant for the common man, I will not instruct him higher, but let him remain in simplicity”\textsuperscript{117}. Claiming to write a treatise about simples for simple people seems, at first sight, quite commonplace. Such a trope can be found in countless books of simples and herbals produced in various cultural and historical contexts\textsuperscript{118}. In this particular case, however, Paracelsus’ statement can be assessed by comparing the Herbarius to Von den natürlichen Dingen, as four of the six chapters of the Herbarius deal with simples that are also discussed in individual chapters of Von den

\textsuperscript{114} “Daß aber ein solche zeit nit an Tag kommen ist / oder fürgenommen / hat than Italia, die ist ein Mutter der Vnwissenheit vnnd Vnerfarenheit / haben die Teutschen dahin bracht / daß sie auff jhr eigen Gewechs nichts gehalten haben : allein alles ex Italia zunemen / oder vber Meer her.” (H7: 61).

\textsuperscript{115} From the verb \textit{wachsen}, “to grow”.

\textsuperscript{116} Examples of Paracelsus’ broad understanding of the term “Gewechs” can be found in numerous texts, for instance in the Labyrinthus (H2:205). This aspect of Paracelsus’ thought will be discussed in another paper.

\textsuperscript{117} “Dieweil ich aber hie die \textit{Naturalia} Tractier / nach der Einfalt / für den gemeinen Mann / will ich jhn nit höher anführen / sondern in Einfalt bleiben lassen.” (H7: 80).

\textsuperscript{118} See Cooper, 2007; and, for an example, see the end of the title of Bock’s herbal, “[…] vorab dem gemeinen einfältigen man” (Bock, 1546).
natürlichen Dingen. Major differences between them strongly support the thesis that Von den natürlichen Dingen is a more theoretically elaborated work than the Herbarius, a treatise written in a resolutely plain style. After reflecting upon the specific historical juncture of the early 16th century, which witnessed a surge in the number of treatises dedicated to the “common man”, we shall provide two interpretations to account for the divergences between the Herbarius and Von den natürlichen Dingen. Von den natürlichen Dingen can either be seen as a treatise posterior to the Herbarius, partly written based on the latter and, therefore, more theoretical as it incorporates the new concepts devised by Paracelsus between the two redactions; or the two treatises might have been written concomitantly, the Herbarius being a simplified version of Von den natürlichen Dingen.

4.1. The “common man”, medicine and the advent of the “printing revolution”

Paracelsus’ appeal to the “common man” in the Herbarius is worth pondering in and of itself. Far from being a mere topos, it must be read in the context of the surge of books dedicated to “common men” in the German territories from the turn of the 16th century onwards, a phenomenon closely related to the advent of the “printing revolution”. The spread of the printing press indeed contributed to render treatises which had been, up to the end of the 15th century, mostly read by “noblemen and civil servants, priests and nuns, merchants and city fathers”, available to a new readership that included some of those among the townsmen and big farmers (Grosßbauer) who could afford a book and read it.

True, this new, lay readership of common men could partly have been, in the first place, an

119 See above, fn. 64 and 65.
120 Eamon, 1994, 93–268, esp. 93–133. Eamon makes clear that the term “gemeine man” did not refer to the lower classes, but to the “urban Burgertum (citizens, excluding patricians) and to nonnoble landowners and householders (Allgemeindenutzer) in the countryside. The essential condition of being gemein was having legal rights in a municipality or village corporation (Gemeinde). The term common man thus excluded those at the top as well as those at the bottom of the social and economic scale: urban patricians and rural nobility on the one hand; on the other hand, the urban poor, landless peasants, Jews and Gypsies” (100–101). See also Schenda, 1988.
121 I use quotation marks when writing about the “printing revolution” because this historiographical category has been thoroughly called into question over the last few years: see especially Chartier, 2015.
“imagined audience”\textsuperscript{124}, as the slow increase in literacy rates was not always in keeping with the desires expressed by some authors to break away from the elitism of their elders. Yet, as the century wore on, more and more books – some of them written by Paracelsus – were to be found in postmortem inventories of laymen who did not have access to literacy before\textsuperscript{125}.

More specifically, the 1530s were years of violent polemics between those who refused to disclose the secrets of medicine to the common people, or did so only reluctantly\textsuperscript{126}, and the proponents of a medicine that would be accessible to the masses – a polemic that widely intersected with the question of whether the vernacular language should be used rather than Latin\textsuperscript{127}. The first half of the 16\textsuperscript{th} century witnessed the blossoming of practical treatises, books of recipes and books of secrets in German-speaking territories, for the most part written in the vernacular, seeking to disseminate a practical knowledge first and foremost, and aimed at a wide audience of “common men”, as exemplified by the 

*Kunstbüchlein*, printed a dozen times between 1531 and 1533 and more than fifty times in the following centuries\textsuperscript{128}.

Paracelsus fully partook in the debates of his time. As a champion of the use of German against the Latin of university doctors, he clearly sided with the advocates of an opening of medicine beyond the elitist circles of Latin-speaking doctors and physicians\textsuperscript{129}. For all these reasons, his expressed intent to write a treatise accessible to the “common man” should be considered all the more seriously.

4.2. *The Herbarius, a less theoretical treatise than Von den natürlichen Dingen*

Let us now question to what extent the fact that it was written for the “common man”

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\textsuperscript{124} Eamon, 1994: 95.
\textsuperscript{125} Eamon, 1994: 123–125.
\textsuperscript{126} See, e.g., Weeks, 1997: 56; Eamon, 1994: 102 for examples of contemporaries of Paracelsus who held to this position.
\textsuperscript{127} See Kuhn, 1996.
\textsuperscript{128} Eamon, 1994: 113. On the *Kunstbücher* see Gantenbein, 2000: 14–17, who describes this genre as “the first textbooks of technical alchemy” (Gantenbein, 2000: 17).
\textsuperscript{129} See Kuhn, 1996; see more specifically Weeks, 1997, 12–13 for a discussion of Paracelsus’ use of German in the broader context of the Reformation.
provides a relevant key for understanding the *Herbarius*, by comparing it to *Von den natürlichen Dingen.*

The first major difference is the absence of any explicit discussion of the doctrine of signatures in the *Herbarius*, contrary to *Von den natürlichen Dingen*. In the latter, the *Persicaria* (called “Wasserblut”) serves to illustrate the doctrine of signatures. The blood-like red dots on the leaves of the plant are depicted as a sign of its capacity to heal open wounds, and thus as its signature (“Signatum”)\(^{130}\). In contrast, in the *Herbarius*, at a point where Paracelsus has still not mentioned the signature of the *Persicaria*, he stops right before disclosing what he characterizes as an ultimate marvel of the plant, adding that this secret cannot be disclosed here in order to keep the treatise simple and to avoid its falling into the hands of the *Humoristen* (doctors of humors):

But above all, there is something else with regard to *Persicaria* which surpasses everything reported up to now. While I treat the natural things in simplicity here, as meant for the common man, I will not instruct him higher, but let him remain in simplicity. Marvelous are, however, the magnalia of God. Who can altogether fathom them? The doctors of humors have hidden the real secrets and have brought their own filth into the world. Thus they have made sophistry from *sophia* and have crushed the pearls of nature, as they obviously still do today. [...] Thus people lie sick for years who would recover by means of this plant, if the sophistry of the humor doctors would disappear and the secret be revealed. But the pearl is not befitting such humor-doctors\(^{131}\).

It is obvious that it is indeed this aspect that Paracelsus would hide: not only is the absence of the idea of signature the main difference between the two chapters; but the link between the blood-like drops, recalling Christ’s stigmata, and the ability of the plant to heal wounds was

\(^{130}\)”[D]arumb hatts die Natur verzeichnet / vnd beflicht allein / das jhr die Zeichen lehnen kennen. Dann jhr möchten sprechen / wer kan in das Kraut sehen / was in jhm ist? Nein / allein sich sein Zeichen an / so sichtst duß alles / was in jhm ist. […] Im Wasserblut seindt Rott Bluttdroppfen: Das ist nuhn Signatum, das es ein besondere Arth vndd Natur in jhmhatt vber andere Kreutter.” (H7: 132).

\(^{131}\) Translation Moran 1993: 113, slightly modified. “Aber vber das alles / so ist noch Eins mit der *Persicaria*, das die vorbemelten ding all vbertrifft. Dieweil ich aber hie die Naturalia Tractier / nach der Einfalt / für den gemeinen Mann / will ich jhn nit höher anführen / sondern in Einfalt bleiben lassen. Wunderbarlich seind aber die Magnalia Gottes / wer kan sie gar ergründen? Die Humoristen haben die rechten Secreta verborgen / vnd jhren Vnflat in die Welt bracht: vndn also auß *Sophia* ein Sophisterey gemacht / vnd das Perlin der Natur zerknutscht / wie sie dann noch thun zu meinen zeiten augenscheinslich […] Durch jhr Sophisterey vrsachen sie / das vom Perlin muß geschwigen werden: dann so sie öffentlich nichts sollen / was würden sie dann heimlich thun? Wie ligt so mancher kranck / lange Jahr / der durch das Kraut auffkeme / so der Humoristen Sophisterey verschwünde / das geöffnet möchte werden: dann das Perlin gehört je für solche Humoristen Sew nit.” (H7: 80).
often described as a great marvel of nature in herbals of the time. Brunfels even described this correspondence as the most astonishing miracle he had ever witnessed among herbs. Thus, whereas Paracelsus develops, possibly for the first time at such length, one major aspect of his ideas about herbs in Von den natürlichen Dingen – namely, the doctrine of signatures, – this theoretical point is not exposed in the Herbarius.

This important variation is not enough to prove the difference in the degree of abstraction sought in both treatises. There are, however, further arguments to support this thesis. In Von den natürlichen Dingen, Paracelsus proceeds in an inductive fashion, using each particular Gewechs as a way to illustrate one particular aspect of his broader thought about the natural world – as exemplified in the case of Persicaria, used as a basis to elaborate on the doctrine of signatures. He concludes most of his points by stating that the characteristics he described are not only valid for the Gewechs in question, but for many other plants too, or for all natural objects. For instance, he writes, concerning the attractive power of the Persicaria, that “such [a power] is not only to be understood for this herb alone, but for many more of this kind that I will not mention here, but in their own chapters.” This dimension is wholly absent from the Herbarius, in which Paracelsus only seeks to achieve practical ends, without drawing any general, theoretical conclusion.

When Paracelsus needs to develop a more abstract aspect of the use of a plant in the Herbarius, he does so in a quite simple language, using metaphors and images. For instance, when writing about the ways corals can be distilled, he explains it by using several analogies: the pure essence contained in the coral, which needs to be extracted from its material and perishable body since it is the part in which all the virtues are concentrated, is likened to the

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133 “Vnd nicht allein dz solchs von dem Krautt allein zuverstehen sey / sondern von vielen dergleichen mehr / die ich hie nicht meldt / sondern in seinen Capitulis.” (H7: 135). Or, concerning the signatures: “Auß den dreyen Signatis, werden jetzt die Tugend erfahren / was im Krautt ist. Vnd nicht allein in dem / sondern in allen.” (H7: 133).
soul in the body, or to a pearl within a shell\textsuperscript{134}. This kind of images is of course typical of Paracelsus’ thought: for instance, he often used that of the soul contained within the body to illustrate his concept of \textit{arcana}\textsuperscript{135}. But the tone he adopts when doing so elsewhere is much less didactic, the metaphors are often just mentioned incidentally; whereas in this passage of the \textit{Herbarius}, they are elaborated upon at length to render the philosophy underlying the process of distillation more concrete. In \textit{Von den natürlichen Dingen}, by contrast, the idea of distillation is taken for granted and never explained to the readers, whom Paracelsus expects to be familiar with this important alchemical technique\textsuperscript{136}.

We have seen that the \textit{Herbarius} contains no mention of the idea of signatures. It must be said, however, that when we read both the \textit{Herbarius} and \textit{Von den natürlichen Dingen}, it becomes obvious that the idea of signature, or at least of a correspondence between the body of the patient and the remedy, underlies much of the discussions going on in the \textit{Herbarius}, even though it is never theorized properly. Simple metaphors enable Paracelsus to convey some of the main lines of the doctrine of signatures: for instance, the coral has, like the patient, a belly and a back, a right and a left side, and its branches are all the blood vessels of the human body\textsuperscript{137}. It must be worn in the right sense, so as to mimic the body of its bearer, if one wants it to function properly\textsuperscript{138}. Owing to these similarities between the body of the plant

\textsuperscript{135} “Und dass Gott dieselbigen krefft und Tugendt in die Natur gossen hat / wie die Seel in Menschen / und das die kreft der Seel nicht ungleich sindt […]” (\textit{De vera influentia rerum}, H10: 138).
\textsuperscript{136} On the significance of distillation in Paracelsus’ works, see Gantenbein, 2011 and Kahn, 2016a.
\textsuperscript{137} “Die Corallisch Form an jhr selbst gestalt / ist am Stammen zu erkennen / der Bauch vnd der Rücken / an jhr selbst wol bezeichnet. Auß dem folgt nun / das die recht vnddie linck Seitten am ersten zuerkennen sind / vnd also soll sie auch getragen vnd gebraucht werden. […] Dann sie formiren den gantzen Mann: vnd offthmais mit allein / das der Leib der Form gefunden werde / sondern die gantz \textit{Hauptsumma} des Leibs / mit sampt den Nerven / Adern […]” (H7: 97).
\textsuperscript{138} “Vnd je mehr von Aesten / je besser / vnd den Rücken hindersich / vnd den Bauch für sich gehenckt / damit
and the body of the patient, doctors can either attract or repel the diseases within the patient’s body. All these methods are deemed efficacious by Paracelsus because an intellectual framework centered on the concept of signatures leads him to believe that plants’ organs mimic the organs of humans, and that plants therefore act specifically on the location corresponding to their signature within human bodies – even if he never mentions these points explicitly in the *Herbarius*.

Even the terminology used in the *Herbarius* differs greatly from the one employed in *Von den natürlichen Dingen*. Paracelsus is well known for his use of neologisms. *Von den natürlichen Dingen* is full of notions pertaining to Paracelsus’ peculiar language, such as his famous “*Vulcanus*” (sometimes the “Olympischen”, sometimes the “Firmamentischen” one) or the “*Ysopus*”, or “*Ysopaica*” (a word supposed to designate the ancient art of separating the pure from the impure). None of these expressions appear in the *Herbarius*. Worth noting is also the absence of the theory of the *tria prima* in the *Herbarius*, whereas it plays a significant role in *Von den natürlichen Dingen*.

Latin terms, which are quite common in *Von den natürlichen Dingen*, are for the most part absent from the *Herbarius*. The few Latin words found in the *Herbarius* are mostly names of particular substances or plants, of diseases, or qualities of plants, or they are simple Latin terms such as the *centrum* or *locus nati* of the disease. In fact, given the omnipresence of Latin in the medical terminology of the time, not using these basic Latin terms would probably have made the *Herbarius* more difficult to understand. By contrast, in *Von den
natürlichen Dingen, Latin terms often refer to more abstract realities, such as alchemical concepts, or words belonging to the realm of astral magic (for instance found in Al-Kindi). Another example is the term “cura magnetica or magnetina”, by which Paracelsus designates the effects of all the Gewechse endowed with an attractive power similar to that of the magnet. In the Herbarius, such Gewechse are merely said to operate like the magnet, without it giving rise to any specific term.

The tone of the Herbarius is also quite different, as Paracelsus adopts a more sensationalistic vocabulary, using countless terms belonging to the register of the wonders of nature (secreta, mysteria, magnalia) and emphasizing the wondrous character of every property he is about to disclose.

Finally, Paracelsus quotes many more authorities in Von den natürlichen Dingen than he does in the Herbarius, whether to agree or contradict them on precise points of their doctrines. He mentions in the former treatise Galen, Avicenna, Elias, Apollo, Machaon, Hippocrates and Polydoros. Aristotle’s name is mentioned twice: Paracelsus calls him the “ignorant philosopher” because he denied the possibility of the transformation of species, although the fact is attested by the transmutation of metals. Paracelsus admittedly quotes a verse of Ovid in the Herbarius, but without specifying the name of the author (he calls him “ein Poet”).

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143 Ya’qūb ibn Isḥāq Abū Yūsuf al–Kindī, 2003. For some examples of such terms, see H7: 133 (“Influentia Carnalis”, “Attractuum Influential”, 137 (“Concordantz vnd Coniunction”).

144 “Das ist nuhn Cura Magnetica oder Magnetina.” (H7: 135).

145 See also the striking differences in the description of the possible uses of Persicaria in the Herbarius and Von den natürlichen Dingen (H7: 75–76 and 133–135).

146 The followers of Avicenna and Galen are accused of letting people die because they refuse to learn the art of distillation (H7: 191). Aristotle is opposed to Elias in the context of discussions of the transmutation of metals (H7: 198). Apollo, Machaon, Hippocrates and Polydoros are mentioned in the context of discussions of the quinta essentia (H7: 173). Let it be noted that Apollo, Machaon and Hippocrates were positively regarded by Paracelsus, who saw them as the founder of a worthwhile, authentic medicine (see e.g. the Septem Defensiones, H2: 158).

147 H7: 198. Moses is also named in the Herbarius, but Paracelsus only uses an episode of his life to describe metaphorically the unfolding of the Wassersucht within the patient’s body (H7: 67).

148 “Darumb sagt ein Poet: Nescit nodosam Medicus curare Podagram.” (H7: 72). The reference is to Ovid,
4.3. The Herbarius, simplified version or early draft of Von den natürlichen Dingen?

Two diverging assumptions can be made based on these observations.

The first is that Paracelsus wrote simultaneously the Herbarius and Von den natürlichen Dingen, conceiving the former treatise as a simplified version of the latter, intended to reach a broader public and showcase his new medical art to the widest audience possible, at a time when his ideas were far from being commonly accepted and when composing a successful herbal could have been for him a source of fame and money\(^{149}\). The second is that Paracelsus wrote Von den natürlichen Dingen after the Herbarius, at a time when his theories had more fully blossomed.

The strongest argument to support the first thesis lies in the fact that Paracelsus seems to deliberately conceal the doctrine of signatures in the Herbarius, insisting on his desire to write a treatise that appeals to the common man (gemeine Mann) while possibly having this doctrine in mind at the same time\(^{150}\).

On the other hand, the second hypothesis, namely that Von den natürlichen Dingen is a later treatise in which Paracelsus built on the preliminary investigations he had made in the Herbarius, also seems plausible. The lack of any substantial discussion of the doctrine of signatures in the Herbarius and Paracelsus’ extended use of analogies instead could be explained by the fact that although he had noticed the correspondence between the blood-like drops on the persicaria and its ability to heal wounds (a marvel he chose not to disclose to the doctors of humors), he had not yet developed the concept of signatures by the time he was writing the Herbarius. The smaller number of Paracelsian neologisms in the treatise could similarly be the result of it being written at an earlier stage of Paracelsus’ career. Aside from Paracelsus’ simple will to impress his audience while he dictated his treatises in taverns and

\(^{149}\) Weeks, 1997: 55.

\(^{150}\) See above, pp. 30-31.
inns\textsuperscript{151}, there are many sound reasons for his ceaseless invention of neologisms (such as the need to find new terms to break away from the Latin terminology of his time\textsuperscript{152} or the need to name diseases, plants and phenomena that were unknown to the ancients\textsuperscript{153}) which make it possible to assume that the more his medical theories blossomed, the more the Swiss doctor invented neologisms. As a result, the \textit{Herbarius} would be less theoretical simply because it was written earlier than \textit{Von den natürlichen Dingen}.

The two hypotheses are not mutually exclusive. We can for instance imagine that Paracelsus wrote the \textit{Herbarius} early in his career, targeting an audience of “common men” and therefore writing it in a deliberately plain style. The project of writing an herbal might then have been started anew later, this time under the title of \textit{Von den natürlichen Dingen}. At this point, Paracelsus would no longer have deemed it important to appeal to the “common man”; and he would have used some of the elements that were formerly used in the \textit{Herbarius}, upgrading them to include some of his new theoretical findings, all the while complexifying the language and arguments of the treatise so as to adjust to his new audience.

Neither hypothesis can be privileged solely based on a critical analysis of the texts. Only by dating the \textit{Herbarius} and by comparing it to contemporary Paracelsian treatises can the plausibility of either option be more accurately investigated. Whichever hypothesis proves true, we can already assert that the fact that the \textit{Herbarius} was aimed at a relatively well-defined audience of “common men” rules out other possibilities concerning the identity of the intended addressees of the treatise. It could for instance hardly be reconciled with the prospect of seeing the \textit{Herbarius} as one of the textbooks Paracelsus wrote for his students while a teacher at Basel, as is for instance the case of \textit{De gradibus}\textsuperscript{154}. This observation is in line with the absence of any substantial discussion of the humoral tradition in the \textit{Herbarius}, which

\begin{itemize}
\item \textsuperscript{151} Weeks, 2008: 34.
\item \textsuperscript{152} Kuhn, 1996.
\item \textsuperscript{153} Braun, 1981.
\item \textsuperscript{154} See p. 12.
\end{itemize}
contrasts with the approach Paracelsus adopted in De gradibus, the commentary on Macer (1527)\textsuperscript{155} or the German commentary on Hippocrates (1527-1528)\textsuperscript{156}, so many treatises that testify of the Swiss doctor’s ability to master the language of humoral medicine when he wished to do so\textsuperscript{157}. trained physicians, academic doctors and university students were most probably not the audience targeted by the Herbarius.

5. Dating the Herbarius

The Herbarius has been alternately dated by editors and specialists of Paracelsus 1) from the first years of his career as a doctor, that is, from the middle of the 1520s\textsuperscript{158}; 2) around the Basel period (1527–1528)\textsuperscript{159}, a turning point in Paracelsus’ life; or 3) as a post-Basel treatise\textsuperscript{160}, perhaps even written around the same time period as the Kärntner Schriften\textsuperscript{161}. In this last part, we attempt to demonstrate that while the hypothesis of a dating of the Herbarius prior to Paracelsus’ stay at Basel can be easily excluded, assessing whether the treatise was written during or after it (and if so, how long after) proves much more problematic. Pursuing, for the sake of comparison, our parallel discussion of Von den natürlichen Dingen, we will proceed in four steps. First, we will provide a quick chronology of the transformations of Paracelsus’ theorizations of herbal healing in seven of his works on the matter, in order to ease our subsequent discussions. Then, we will examine two hypotheses in turn: first, that the Herbarius was written during the Basel years whereas Von den natürlichen Dingen was composed several years after, second, that both treatises were written after Basel. Leaving both possibilities open, we will eventually discuss how they relate to the two hypotheses of the simultaneous or successive writing of the two treatises exposed in the previous part.

\textsuperscript{155} S3: xlix. See also fn. 48.
\textsuperscript{156} S4: xxxii.
\textsuperscript{157} See below, p. 39, but this will be discussed more in-depth in another article.
\textsuperscript{158} S2: vii–viii; Daems, 1988: 16, sees the Herbarius as a treatise written around 1525–1526; Moran, 1993: 101, does not question Sudhoff’s dating; see also Nowotny, 1998: 28.
\textsuperscript{159} Benzenhöfer, 2005: 75.
\textsuperscript{160} Weeks, 2008: 122, fn. f.
\textsuperscript{161} This seemed to be the opinion of Michael Toxites (CP 2: 390).
5.1. *A quick chronology of Paracelsus’ tracts on herbs:*

Let us start by providing a quick chronology detailing how herbal virtues are theorized in seven Paracelsian treatises containing key discussions on the matter\(^{162}\), then assessing the relative position of the *Herbarius* and *Von den natürlichen Dingen* vis-à-vis these writings.

The healing properties of herbs are the main topic of the already mentioned *Scholia & Observationes* [...] *in Macri poemata* and *De gradibus*, two treatises written shortly before and during Paracelsus’ stay at Basel (1526-1528)\(^{163}\). There (and contrary to what he does in his more mature works), Paracelsus still closely engages with the humoral tradition, although his aim is already to transform it at its core: to give only one example, he reduces the number of complexions from four to two, explaining that everything dry is hot and everything moist is cold – a major adjustment indeed\(^{164}\). This is not to say that Paracelsian concepts are wholly absent from both treatises: they correspond, for the most part, to the typology of the different kinds of essences at work within natural objects that Paracelsus had earlier built in the *Archidoxis*. The virtues of plants are called *quintae essentiae, arcana, magisterii, specific forces, elixirs and “extrinsecis”*\(^{165}\). The explanation is based partly on the humoral system, and partly on the virtues exposed in the *Archidoxis*.

Later on, *De vera influentia rerum* (part of the so-called *Philosophia magna*, tentatively dated by Sudhoff ca. 1529–1532) specifically discusses the origins of the occult properties, or *arcana*, that herbs were endowed with by God\(^{166}\). In this work the *arcana* appear as the new and single rationale for explaining the virtues of plants, as a result of what

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\(^{162}\) For obvious reasons of space, their content can only be very briefly outlined here. A close reading will be attempted in another article.

\(^{163}\) See respectively fn. 155 and 55.

\(^{164}\) “Antequam de Gradibus tractare incipiam, obseruanda sunt Complexiones naturæ, quarum duæ sunt, alia calida & alia frigida. Porrò, quælibet harum ingenitam quandam Diathesin habet in se: Nam omne Calidum est siccum, & omne Frigidum humidum: neque enim calor neque frigus sola esse possunt. Itaque he duæ naturæ, calidum & siccum, vnum sunt, similiiter frigidum & humidum.” (H7: 1).

\(^{165}\) See H6: 1–99. This will be discussed in another article.

appears as a drastic simplification of the earlier typology. A similar cosmological scheme predominates in De potentia et potentiae gratia Dei (1533), a theological treatise in which Paracelsus develops one of its most refined descriptions of the invisible arcana circulating within what he describes as an invisible tree underlying the whole universe, to which all plants and Gewechse are connected, and out of which they draw their power.

The arcana remain a central feature of later works such as the Ander Erklärung der Gantzen Astronomey (before 1537), the Astronomia magna (1537-1538) or the Labyrinthus medicorum errantium (1538). However, the doctrine of signatures plays in these works a new, major role, since the signatures have become the main technique to discover the inner arcana of plants and, in fact, of all Gewechse whereas earlier treatises

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168 See NPE1: 713–724 for the text; 377 and 717 for the dating (indicated in the text itself).

169 This treatise has not been dated yet with any certainty but, as an unfinished text closely related to the Astronomia Magna, it was probably written before 1537 (Kahn, 2016b, 73 and 109, here 73: “Another Erklärung der ganzen Astronomey was dated 1535/1536 by Sudhoff, based on the mention “Geben zu München” at the end of its preface. Yet this dating has been rejected by Benzenhöfer [Benzenhöfer, Paracelsus, ed. 2002, 102] as deprived of any firm basis, for we cannot date with certainty Paracelsus’ stay in Munich.”)

170 See Daniel, 2003 for the dating.

171 “Nun aber zu erforschen / was in Kreuttern ist / darzu gehört Philosophia Adepta, dieselbig weiß alle verborgene ding / alle Heimlichkeit / alle Arcana der Natur / was in einem jeglichen Kraut / Sahmen / Wurtzen / etc. befunden ist. ” (H10: 173) “Dann do wirt das signum Magicum auch angezündt / das sind die Arcana Herbarum werden brennen / wie das Holtz / vnnd zeigen sein krafft / warzu dasselbig gut ist” (H2: 231)

172 “Alle ding eröffnen sich in seinen Proprieteten / Qualiteten / Form / Gestalt / etc. was in jhm ist / Kreutter / Sahmen / Stein / Wurtzen / etc. Das ist / sie werden all durch jhr Signatum erkennt / vnnd durch das Signatum haben alle gelerte Leuth gefunden / was in den Kreuttern gesein ist / Steinen / Sahmen” (Ander Erklärung der Gantzen Astronomey, H10: 471). “Dann also haben die Signatores viel Medicina, Remedies, vnnd andere Vires in Natürlichen dingen gefunden: vnnd wer nicht auß der Signatur die Krafft der Kräutter schreibtet / der weiss nicht was er schreibt.” (Astronomia Magna, H10: 153). In the Labyrinthus medicorum errantium, Paracelsus explains in the chapter devoted to signatures that “da werden gesehen die krefft vnnd Tugend: Als wenn man einen Menschen Anatomiert / in dem alle Glider gefunden werden / vnnd gar zusotten / vnnd noch mehr gefunden. Solche Anatomia der Künsten finding / zeigt erstmal an das Signatum” (H2: 230), later adding that “die kunst Signatu bey dem auch soll bekannt sein” (H10: 236).

contained only vague references to the Zeichen of plants, often used as an equivalent to the term “form” (Form, Gestalt) and deemed by Paracelsus to be indicative of their therapeutic uses (in much the same way that the miraculous healing performed by the apostles demonstrate that they are apostles).\textsuperscript{174}

Two major shifts can thus be observed in Paracelsus’ herbal writings: first, the transition from a theoretical system centered on the terminology elaborated in the Archidoxis to a monist system centered on the notion of arcana, second, the growing importance ascribed to the signatures of plants. The first shift seems to have started as early as 1527: the term “arcana” is indeed almost absent from the first five books of De gradibus, which were, according to Sudhoff, written in 1526\textsuperscript{175} (that is, before Paracelsus’ arrival to Basel), and in which Paracelsus relies extensively on the typology of the Archidoxis\textsuperscript{176}. In contrast, in books VI and VII of the treatise (both written in 1527), the notion of “arcana” appears twenty-three times\textsuperscript{177} and has become the main concept to account for the healing power of herbs\textsuperscript{178}. The second shift is more difficult to date, but it seems posterior to 1533, since the doctrine of signatures is still absent from De potentia et potentiae gratia Dei (1533), whereas it has become central in the Ander Erklärung der Gantzen Astronomey.

In the two following parts, we will wonder how the Herbarius and Von den


\textsuperscript{175} S4: vi.

\textsuperscript{176} See below, p. 43.

\textsuperscript{177} Most of my counts in this section were done using the THEO database (https://www.paracelsus-project.org/), developed by Urs Leo Gantenbein.

\textsuperscript{178} “Vnum idemque Arcanum saepenumo in plus minus trecentas distribui Herbas, quæ singula, si in vnum omnia conferas, tum demum perfectum atque adeo integrum Arcanum adest: Quandoquidem, omne perfectum medicamen Arcanum est.” (H7: 51). De gradibus is centrally discussed here rather than the commentary on Macer because the practical nature of the latter treatise makes it difficult to decipher any change at work in Paracelsus’ doctrine.
natürlichen Dingen fit within this chronology. It should nonetheless be mentioned that Paracelsus’ writings cannot be easily ordered into clear-cut chronologies. Paracelsus often referred in his late works to treatises or notions that used to be seen by previous scholarship as outdated at this point of his life, and conversely, he sometimes did not use in late writings notions he had already developed elsewhere, simply because he was arguing from another point of view. Only by investigating multiple aspects of his ideas about herbal healing can the frequent coexistence of different systems of thought in his mind be truly acknowledged, and a secure dating be attempted.

5.2. First hypothesis: the Herbarius, a treatise written in or immediately after Basel (1527-1529)

Let us turn to our first hypothesis: namely that the Herbarius was written during the Basel period or immediately after (1527-1529) whereas Von den natürlichen Dingen would have been written after Basel or, even, after 1529 (for reasons that will be soon apparent). In order to substantiate this view, we will begin by showing that the Herbarius and Von den natürlichen Dingen were both written at least in 1527. Then, we will interpret the lesser intensity of the attacks against university doctors in the Herbarius as compared to Von den natürlichen Dingen as a sign that the Herbarius was written before the end of the Basel period (i.e. at the latest in 1528) whereas Von den natürlichen Dingen dates from after this pivotal episode. We will eventually argue that the importance of the topic of German medicine in the Herbarius, and its striking absence in Von den natürlichen Dingen, make it possible to extend the dating of the Herbarius to 1529 (the treatise having thus to be regarded as dating from 1527-1529), while it allows for a dating of Von den natürlichen Dingen after 1529.

A first set of arguments leads us to see, with almost absolute certainty, the Herbarius

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For instance, the Archidoxis (supposedly completed in 1525/26) is still quoted in the plague treatises (written in 1529–1530 and 1534, see Gunnoc, 2019). The Yliaster, a notion believed to have been abandoned in Paracelsus’ cosmology after the Philosophia de generationibus & fructibus quatuor elementorum (ca. 1527) still appears in Von dem Bad Pfeffers (1535). I thank Didier Kahn for pointing me out both points.
and Von den natürlichen Dingem as treatises dating at least from the Basel era (i.e. at least from 1527). If we consider the transition in Paracelsus’ theorizations of herbal healing that was mentioned in part 5.1. (viz. from the typology of the Archidoxis to the arcana), it is indeed obvious that both treatises are contemporary or posterior to this shift started in 1527. Contrary to what is the case in De gradibus, the typology of the Archidoxis is mostly absent from both the Herbarius and Von den natürlichen Dingem: for instance, the idea of quintessence does not appear in the Herbarius and is applied to plants only twice in Von den natürlichen Dingem, whereas it is used thirty-six times in De gradibus\(^{180}\); and the same goes for the other kinds of essences introduced in the Archidoxis\(^{181}\). On the other hand, the word “arcana” has become the main term to refer to the virtues of plants both in Von den natürlichen Dingem (in which it appears twenty times)\(^{182}\) and in the Herbarius. Though the word appears only three times in the latter treatise (probably due to its simplified writing style), it nonetheless plays a central role: in the prologue, Paracelsus, who “completely admits that the simples are not powerful enough [based on] their qualities alone [but must be used based on] their arcana [too]”\(^{183}\), asserts his will to disclose the virtues of plants based on both their qualities and arcana\(^{184}\). The predominance of the concept of arcana over the typology of the Archidoxis thus appears as a strong sign that both treatises date at least from 1527.

Let us now consider a second set of arguments supporting a dating of the Herbarius before the end of the Basel period (at the latest in 1528), and, in contrast, a dating of Von den natürlichen Dingem after 1528: namely the fact that Paracelsus uses a far more aggressive

\(^{180}\) While it could be objected that the concept of quintessence can still be found in the 1535 Von dem Bad Pfeffers (see H7: 328, 333 or 342), Didier Kahn has recently suggested that albeit finalized at a late date, this treatise might have been started earlier, as much of its content echoes the cosmological elements found in the 1527 De gradibus (Kahn, forthcoming).

\(^{181}\) For instance, the word “elixir” appears four times in the Gradibus as compared to one time in the Herbarius and zero time in Von den natürlichen Dingem; the “magisterium” appears three times in De gradibus as compared to one time in the Herbarius and zero time in Von den natürlichen Dingem.

\(^{182}\) “[...] vnd derselbige Will Gottes ist das Arcanum, das in den natürlichen dingen ist [...] Vnd so viel Arcana, so viel auch Willn Gottes.” (H7: 153).

\(^{183}\) “Ich kan wol erkennen / daß die Simplicia allein in den Qualitatab. nit mögen genugsam sein / aber in Arcanis” (H7: 64).

\(^{184}\) H7: 64.
language when he writes about academic doctors in *Von den natürlichen Dingen* than in the *Herbarius*. Here I make use of Andrew Weeks’ argument, recently reinforced by Urs Leo Gantenbein, that it is only the clash with academic doctors at Basel that turned the “self-confident, almost arrogant professor […] who rejects everything old and only wants to accept his own ideas”¹⁸⁵ Paracelsus still was when he arrived in the Swiss city into a “cynical, scolding and embittered outlaw”¹⁸⁶ after 1528. Based on this argument, we can subtly try to differentiate between the attacks against university teachers already to be found in the Basel writings¹⁸⁷, in which Paracelsus adopts a polemical tone typical of an age of radical Reformation¹⁸⁸, and the infuriated lines written by the spiteful writer Paracelsus became after Basel.

In the *Herbarius*, Paracelsus holds those whom he calls the “doctors of humor” responsible for the fact that “people [lie] sick for years” who could easily have recovered, if only they had not “hidden the real secrets” of medicine, “brought their filth into the world”, “made sophistry from *sophia*” and “crushed the pearls of nature”¹⁸⁹. In *Von den natürlichen Dingen*, he refers to the same doctors as a bunch of “bunglers” (*Sudler*)¹⁹⁰ or even “murderers”¹⁹¹, who “fool the people all over the world”¹⁹². The more serious accusation that the humoralists are “murderers”, which became a real topos in Paracelsus’ post-Basel writings

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¹⁸⁶ Gantenbein, 2020b: 44.
¹⁸⁷ For instance, in the Basel Lecture Manifesto, dated from the 5th June 1527: “Sed vt nostrum Institutum clarius Studiosis innotescat, non piget exempli loco subiicere, nos in complexionum ac humorum ratione Veteres nequaquam imitari, qui sane omnes aegritudines illis falso acceptas ferunt: Vnde nullis aut certe paucissimis Doctorum hodie, morbos, causas, ac decretorios dies exacte nouisse, contingit” (H7: sig. A v r⁰.
¹⁸⁹ See fn. 131.
¹⁹⁰ H7: 189 and 192.
¹⁹¹ “Ich achts für ein Plag von Gott / vnd für ein grosse Plag / das Gott die Welt mit solchen Artzten versorgt vnd begabt hatt / die do wissendlich Mörder seindt / ohn alle Inredt bekennen müssen / vnd das die Hohenschulen die Doctores machen / vnd bey jhr eigner Conscientz bekennen müssen / das sie nicht Stösser in ein Apothecken geben / vnd betriegen also das Volck inn der gantzen Welt / vnn wegen eines kleinen Geldts / vnd sie selbst wissendt bey jhren eignen Gewissen / das sie selbst nichts sollendt / vnd nichts gutts machen können. Ob das nicht ein grosse Mörderey sey / von wegen deß heillosen Geldts dermassen ein solche Speluncam machen in diser Welt?” (H7: 139–140).
¹⁹² See fn. 191.
whereas it never appeared before\(^{193}\), is absent from the *Herbarius*\(^{194}\), whereas it occurs four times in *Von den natürlichen Dingen*\(^{195}\). This could be an indication that the *Herbarius* was written in Basel or before (i.e. at the latest in 1528), whereas *Von den natürlichen Dingen* was written after.

A last series of arguments will now lead us to slightly displace the temporal boundary between the two treatises and argue that the *Herbarius* could have been written as late as 1529, whereas *Von den natürlichen Dingen* should be regarded as posterior to 1529: namely, the pervasiveness of the topic of German medicine in the *Herbarius*, and its complete absence in *Von den natürlichen Dingen*.

The prologue of the *Herbarius* is centered on the idea that “each land grows its own diseases, its own remedies and its own physicians”\(^{196}\). Paracelsus criticizes the remedies that come “to the German lands from far off lands at a great cost, effort and work, and with great care”\(^{197}\) from Italia, France, Greece, or the lands he refers to as *Arabia, Chaldea, Persia*\(^{198}\), then asserting the need to replace them by plants (or, rather, *Gewechse*) that every reader can find in his own garden\(^{199}\). The importance of developing a genuinely German medicine expressed in the *Herbarius* constitutes valuable information to the extent that all the other works in which such an idea appears were written between 1527 and 1529 (except one, for reasons exposed below).

For instance, we find in the 1527 letter to the Zurich town physician Christoph Clauser (ca. 1490-1552), cited here from an early translation that contains archaic spellings, the following lines:

\(^{193}\) A sudden surge of such accusations of murder can be found in the 1529 *Vom Ursprung und Herkommen der Franzosen sampt Heilung Acht Bücher* (see especially HC: 223c–225b).
\(^{194}\) The most violent passage of the treatise was quoted in fn. 131: Paracelsus indeed goes as far as calling the humoralists “sows”.
\(^{195}\) H7: 139 and 169.
\(^{196}\) “Einem jeglichen Landt wechst sein Kranckheit selbst / sein Artzney selbst / sein Artzt selbst” (H7: 62).
\(^{197}\) “[...] die Artzney so in Teutscher Nation / so von ferren Landen kommen / mit grossem kosten / mühe / vnnd arbeit / vnnd mit viel sorgfeltigkeit” (H7: 61).
\(^{198}\) H7: 61.
\(^{199}\) “[...] vnd ein bessers ist im Garten vor jhrem Hauß” (H7: 62).
“My Medicinal drivings and forcings are born in me out of my Countrey Soil: As Avicen was the Arabians Physician, Galen the Pergamensians, and Marsilius the best of the Italian Physicians, even so the most fruitful Germany her self hath chosen me to be its necessary Physician [...] From this observe, that thou compares Hypocrates to Me, Me to Averois, and Rhasis together with Us three, Each according to his own countrey [...] nor art thou ignorant that every Countrey contains in it self the Matrixes of its own Element, and exhibits to its own self that which is necessary [...]”

The criticism of foreign authorities and drugs also permeates the various treatises Paracelsus dedicated to syphilis (the “French disease”) in his famous, yet understudied polemic concerning the use of guaiac wood, between 1528 and 1530. This proximity of topics does not come as a surprise if we consider that during this controversy, Paracelsus was in fact arguing in favor of a local Gewechs (mercury) against one brought from the “New World” to Germany by the Augsburg Fuggers. Von den Blatern, Lähme, Beulen, Löcheren vnnd Zitrachten der Frantzosen (1528) contains a denunciation of medical ingredients coming from “beyond the sea” not overly different from the similar rejection found in the Herbarius. We find, more strikingly, a sentence in the 1529 Von der Französichen Krankheit drei Bücher which reproduces almost verbatim the prologue of the Herbarius (“where the diseases are, there, too, are the remedies; where the diseases and remedies are,

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200 Paracelsus, 1660: 94–95. I deleted “compare” and “viz.” to remain more faithful to the Latin original: “Innata mihi mea est violentia medica ex patrio solo: Sicut enim Arabum medicus erat Auicenna, Pergamensium Galenus, Italorum vero Marsilius Medicorum optimus fuit : ita etiam ipsa me Germania foelicissima in suum Medicum necessarium delegit [...]. Ex quo quidem observa, vt ad me Hippocratem conferas, me vero ad Auerroen, Rasil em autem cum nobis tribus comparar simul, quemlibet nempe iuxta suam patriam [...] Neque enim clam te est, vnamquamque patriam sui Elementi in se continere Matrices, sibique ipsi id, quod est necessarium, exhibere.” (H7: sig. A v v). For a discussion of Paracelsus’ self-fashioning as the German Avicenna, see Gantenbein, 2020b: 29–32.

201 As underlined by Andrew Weeks, the term “syphilis” is only used to follow common uses: we cannot presume that what we identify today as “syphilis” is what Paracelsus meant when he wrote about the “Franzosen” (Weeks, 2008: 6).

202 That Paracelsus saw mercury as a Gewechs is attested in the Drey Bücher von der Frantzosen, in which he writes that “So nunn in diesen Krankheiten so trefflich auffsehen not ist / so liget dz Best in den Mercurialisichen Gewächsen / vnnd nicht im Avicenna” (see HC: 177a). As was already mentioned in fn. 116, an explanation of Paracelsus’ broad understanding of the term “Gewechs” (a category which includes plants, stones, metals, comets and, even, humans) will be attempted elsewhere.

203 As pointed out by Weeks, 1997: 46, the Fuggers’ family in fact benefited from the trade of mercury even more than it benefited from the trade of guaiac wood.

204 The treatise belongs to the few Paracelsian works printed in his lifetime: see S6: 301.


206 “[...] haben die Teutschen dahin bracht / daß sie auff jhr eigen Gewechs nichts gehalten haben: allein alles ex Italia zunemen / oder vber Meer her.” (H7: 61).

207 Same remark than in fn. 204, see S7: 67.
there, too, are the doctors\(^\text{208}\), and in which the criticism aimed at Chaldean, Arabic, etc. medicine is strongly reminiscent of similar lines found both in the letter to Clauser and the Herbarius\(^\text{209}\).

The only treatise dealing with German medicine that does not date from the years 1527-1529 is the 1536 Große Wundarznei\(^\text{210}\). However, despite its late publication, the Große Wundarznei itself might well have been started by Paracelsus much earlier, perhaps as early as the Basel period\(^\text{211}\).

Paracelsus’ advocacy of German medicine, although by no means original (since it recalled both the ancients’ doctrine “\textit{non omnis fert omnia tellus}” and the apology of German medicine found in the works of other German humanists of his time\(^\text{212}\)), stands out as one specific moment in his career as a doctor, of which the writing of an herbal purported to reclaim German Gewechse would probably have constituted a high point. So far, we have underlined that this moment corresponded to the years 1527-1529: it would not be improper to refer to these years as the Basel years and their immediate aftermath. Writing about the

\(^{208}\) “[..] wo die kranckheiten sind / da sind auch die Artzneyen / vnnd wo die kranckheit vnd die Artzney ist / da ist auch der Artzt.” (HC: 171a).

\(^{209}\) “Dann Gott hat die Artzney allzeit gleich außgetheilt / vnnd dieselbig den Heiden eben als frü vnnd als vil mit getheilt als andern / vnnd kein vorbehalten der Artzney nie gehabt. Auch keinerley Nationen sonderlich vor die andern versprochen / sondern eben als wol betracht die Deutsche sprach / als die Hebraische / die Polnische / als die Caldeische / was aber ein jegliche für sich selbs berümpf zu haben / vnnd ein andere des entsetzt / geschicht auß Vbermuth. […] dann Gott hat kein Sprach für die andern begabt […]” (HC: 170c).

\(^{210}\) “Vnd wiewol aber das ist / daß ich nicht die Stück nim so die Griechen / Arabischen / Caldeischen / Egyptischen / gebraucht / vnnd genommen habend: Sondern nim auch die Stück / die einem jegklichen im Garten wachsen: Ists nicht gleich das jenig / so ist es aber demjenigen gleich. So magstu auch wol verstehen / daß du Honig vnnd Butter nemen magst / das ist / wann Honig steht / so magst wol so vil Butter nemen / wo Butter steht / so vil Honig / vnnd werden also / wie hernach folgt.” (HC: 25a).

\(^{211}\) I thank Didier Kahn for bringing to my attention that in the Große Wundarznei, Paracelsus identifies alchemy, philosophy, astronomy and \textit{physica} as the four pillars of medicine (HC, 59b). The fact that this group reproduces the quadripartition found in the \textit{Kommentare} on Hippocrates, written during Paracelsus’ stay at Basel (see the appendix to H5: 4 for the reference and fn. 156 for the dating), instead of the slightly different group found in 1530 in the \textit{Paragranum} (the four pillars being, in this emblematic treatise, alchemy, philosophy, astronomy and “\textit{virtus}”) could be interpreted as a sign that the Große Wundarznei was based on both older and later drafts (or written early and completed or printed at a late date). For an extensive discussion of the four pillars of the \textit{Paragranum}, see Weeks, 2008, especially 10–14. Weeks already noticed the “anticipatory reference” to the pillars in the \textit{Deutsche Kommentare}… (Weeks, 2008: 8). As noticed by Kahn, the definition of \textit{adech}, a notion typical of the Basel writings, is surprisingly found only in the Große Wundarznei, which strengthens the thesis of an early start of this surgical work.

\(^{212}\) See Hasse, 2016 for a discussion of the nationalism of German humanists, which includes a discussion of the herbals of the “Founding fathers” of botany (157 sqq); and see Weeks, 1997: 40–41 for a mention of Paracelsus’ nationalism in the Herbarius.
1529 *Vom Ursprung und Herkommen der Franzosen sampt Heilung Acht Bücher*, Sudhoff

indeed speculated that the treatise was already in Paracelsus’ “thinker’s head (Denkerkopf)” in 1527-1528, while still in Basel. We could read other treatises dealing with German medicine by hypothesizing that, after he clashed with academic doctors and their Greek and Arab *auctoritates* in the Swiss city, Paracelsus used the plea for a truly German medicine to defend his own (incidentally German) theories. The treatises he completed in 1529 would then have been part of the same, gut reaction to Basel, before he moved on to other topics. We find significantly no criticism of foreign medicine in *Von den natürlichen Dingen*, where Paracelsus mentions, once, a “transmarine or Indian balm” without any derogatory comment, only adding that (German) turpentine equals its virtues.

To sum up, we argued in this part that both the *Herbarius* and *Von den natürlichen Dingen* should be regarded, with almost certainty, as dating from at least 1527. We then pointed to arguments supporting the idea that the *Herbarius* was written at the latest in 1528, before extending our temporal boundaries to include 1529 – conversely arguing that *Von den natürlichen Dingen* dated from after 1528 or 1529. Even if a doubt remains as to where to draw the line (1528 or 1529), what really matters is that, under this hypothesis, the *Herbarius* should be regarded as a treatise from the Basel period and its immediate aftermath, whereas *Von den natürlichen Dingen* should be regarded as a post-Basel treatise.

5.3. Second hypothesis: the *Herbarius*, a post-Basel treatise (after 1528)

But this is only one of the two options examined in this article. If we believe, as was just suggested, that the *Herbarius* dates from 1527-1529, it most probably means that the treatise was started in Basel and, perhaps, completed in 1529. How to reconcile, however,

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213 S7: 11.
214 “[...] vnd in der Balsamischen Arth gleich dem Transmarinischen oder Indianischen” (H7: 112).
such a dating with the *Herbarius*’ decisive shift away from the ideas on herbs found in the other Basel treatises, viz. the commentary on Macer and the *De gradibus*? What we want to argue now is that equally strong arguments support a dating of the *Herbarius* as post-Basel, that is, a treatise perhaps written after Basel, when Paracelsus’ interests, language and topics had shifted away from what they were during his stay in the Swiss city and immediately after\(^{216}\). Two arguments shall be considered. First, we will interpret the singularity of the *Herbarius* and *Von den natürlichen Dingen* compared to other tracts on herbs written in Basel as evidence that both treatises were written after the Basel period. Then, we will suggest that the development stage of the doctrine of signatures in *Von den natürlichen Dingen* could hint at a dating of the treatise years after Basel, leading us to consider the implications of such a late dating for the *Herbarius*.

Once again, we shall use as a point of departure Weeks’ and Gantenbein’s argument according to which Paracelsus’ ambition of an all-encompassing reform of medicine, natural philosophy, theology and society was really sparked by the Basel episode (the rejection of his writings on syphilis and his *Spital-Buch* by the city council of Nuremberg in 1530 later adding to his resentment)\(^ {217}\). We have already mentioned in part 5.1. that in *De gradibus* and in the commentary on Macer Paracelsus still closely engaged with the humoral tradition, although he tried to transform it at its core\(^ {218}\). The same cannot be said of the *Herbarius* and *Von den natürlichen Dingen*, two treatises in which Paracelsus’ recommendations on how to use plants to heal are strikingly at odds with those found in herbals written by followers of the Galenic-Hippocratic tradition. Is it not a sign that both treatises were written after Basel, when

\(^{216}\) Andrew Weeks suggested such a post-Basel dating for the *Herbarius*, arguing that the interest Paracelsus displayed in the treatise for several diseases corresponded to his post-Basel preoccupations (Weeks, 2008: 122 fn. f). However, the THEO database reveals that substantial discussions of these diseases are already found in many treatises written before or during Paracelsus’ stay at Basel: see examples in the *Liber Paraphrastorum* (H3: 410), *Das Siebente Buch in der Artzney de Morbis Amentium* (H4: 45 and 59), *De Urinarn et Pulsam Judicis Libelli* (H5: 104), *Liber de renovazione et restauracione* (H6: 105), *Liber de longa vita* (H6: 119), *Liber de Gradibus* (H7: 388).


\(^{218}\) See above, p. 39.
Paracelsus’ reform of medicine was already well under way?

We find repeatedly in the *Herbarius* and *Von den natürlichen Dingen* the strange idea that plants have the power to draw diseases out of the body\(^{219}\), or, conversely, that the human body has the power to attract the subtle *arcanum* that lies in the plant\(^{220}\). In both cases, this power is likened to the capacity of magnets to attract iron\(^{221}\). Such an idea stands apart from conceptions found in the herbals of von Kaub, Brunfels, Bock or Fuchs, in which healing is almost always based on a physical contact between the plant and the patient. True to the academic medicine of the time which tended, due to the influence of Aristotelian physics, to dismiss (or empty of its content) the idea of action at a distance\(^{222}\), these authors recommend to boil plants, to turn them into powder, balm, poultice, plaster, etc., and then to ingest, drink or rub them onto the patient’s body. Not to say that the idea that plants can act at a distance existed nowhere outside of Paracelsus’ works: it was widespread within popular culture (sometimes giving rise to healing rituals somewhat similar to the forms of action at a distance found in Paracelsus)\(^{223}\), and discussed in some erudite works on natural magic (e.g. through the issue of the sympathies and antipathies existing between plants and humans)\(^{224}\). But overall, this remained a marginal practice within academic medicine.

Perhaps it comes as no surprise that the strange idea of using plants as magnets is absent from the Basel treatises, even when *persicaria* (the paradigmatic example of a plant possessing such magnetic properties) is discussed\(^{225}\). It only seems to appear in the *Herbarius* and *Von den natürlichen Dingen*: could we not infer from that that both treatises were written

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\(^{219}\) H7: 74–75; 134.


\(^{221}\) See fn. 220.

\(^{222}\) Weill-Parot, 2013; Copenhaver, 2015.

\(^{223}\) See Brévart, 2008.

\(^{224}\) Stannard, 1999. See also Lefèvre d’Étaples, 2018, for an example of such views in a Renaissance learned treatise completed prior to the times of Paracelsus.

\(^{225}\) It is absent, for instance, from both *De gradibus* and the commentary on Macer, even where *persicaria* is discussed in the latter treatise (H7: 258).
at a time in Paracelsus’ career when his medical ideas diverged widely from that of orthodox humoralists, that is, after 1528?

Then comes the question of how long after Basel Paracelsus wrote *Von den natürlichen Dingen* and the *Herbarius* (provided that it was indeed written after Basel). A more theoretical treatise, *Von den natürlichen Dingen* offers better grounds for attempting a more precise dating, the problem being, then, that not all our conclusions about this treatise necessarily apply to the *Herbarius*. Nevertheless, we shall attempt a more precise dating by examining the development stage of the doctrine of signatures in *Von den natürlichen Dingen*.

Even though attempting to write the history of these transformations should rather give rise to a full-fledged article, let us mention here, at a general level, that the concept of “signatures” arises in the works of Paracelsus as a progressive distortion of the meaning ascribed to the term “sign” (*Zeichen*). What is only meant, in the beginning, at drawing a parallel between the external manifestations of diseases (referred to as *Zeichen*) which indicate their inner nature, and the external forms of plants (*Form, Gestalt* and sometimes *Zeichen*) which indicate their inner properties, soon resulted in the invention of an autonomous term patterned after the Latin form *signum*; later giving rise to a wide array of terms (*signator, signatum, signatura rerum...*)

As mentioned above, the version of signatures found in treatises from the early post-Basel years such as *De vera influentia rerum* or *De potentia et potentiae gratia Dei* still corresponds to the primitive form of the doctrine, and the form “*signatum*” is never found in these treatises. It is only in later works such as the *Ander Erklärung der gantzen Astronomey, the Astronomia Magna* and the *Labyrinthus medicorum errantium* that this word is systematically applied to natural objects. Yet, in *Von den natürlichen Dingen*, the term “*signatum*” is used each time the signatures of *Gewechse* are discussed226. We find repeatedly

226 See fn. 130.
in the treatise both the motto that nothing can be known without the signatures, and the
assertion that signatures are to be discovered not only in plants, but in all natural things\footnote{“Der von den natürlichen dingen schreiben will / der muß schreiben auß dem Signato, vnd dasselbig auß dem Signo erkennen” (H7: 163).}: these elements were characteristically found in the aforementioned later works\footnote{See above, pp. 40–41.}.

Considering the question of the signatures alone, \textit{Von den natürlichen Dingen} proves much closer to these late treatises than to treatises from the early 1530s such as \textit{De vera influentia rerum} or \textit{De potentia et potentiae gratia Dei}. Thus, a dating after 1533 (i.e. after \textit{De potentia et potentiae gratia Dei}) should not be fully discarded. As for the \textit{Herbarius}, nothing of this sort can be asserted because Paracelsus clearly chose not to discuss the signatures in the treatise. It is only by considering the different elements now at our disposal that the plausibility of a writing of the \textit{Herbarius} after 1533 (if we see it as the simplified twin of \textit{Von den natürlichen Dingen}) can be assessed.

5.4. Some final hypotheses concerning the dating of, and mutual relationship between the \textit{Herbarius} and \textit{Von den natürlichen Dingen}

We are thus brought back to discussing the two hypotheses enunciated in part 4.3, now combining them to what we have learned so far about the dating of the treatises. As it is, claiming to conclusively date the \textit{Herbarius} and \textit{Von den natürlichen Dingen} would be unreasonable. As is often the case with Paracelsus, we are left with a set of contradictory elements and, although it is pretty much certain that the \textit{Herbarius} was written at least in 1527\footnote{See above, p. 43.} and \textit{Von den natürlichen Dingen} at least in 1528-1529\footnote{See above, pp. 44–48.}, there is still doubt about the latest possible dating. Although we asserted that both treatises could very well have been written after Basel\footnote{See above, pp. 49–51.}, determining how long after proved much more difficult. The development stage of the doctrine of signatures in \textit{Von den natürlichen Dingen} opened the

\footnote{227 “Der von den natürlichen dingen schreiben will / der muß schreiben auß dem Signato, vnd dasselbig auß dem Signo erkennen” (H7: 163).}
\footnote{228 See above, pp. 40–41.}
\footnote{229 See above, p. 43.}
\footnote{230 See above, pp. 44–48.}
\footnote{231 See above, pp. 49–51.}
possibility of a dating after 1533, yet we were left wondering to what extent such a late
dating could plausibly apply to the *Herbarius*. Considering that both the nature of the
criticism directed at the doctors of humors and the importance of the topic of German
medicine in the *Herbarius* suggest a dating close to 1527-1529, it would not make sense to
admit a dating too long after these dates.

Although being able to draw a neat dot on a chronological timeline would prove more
self-satisfactory, we therefore propose to imagine the dating of the *Herbarius* and *Von den
natürlichen Dingen* using the metaphor of vectors instead. The possible dating of the
*Herbarius* could be conceived of as a time span ranging from 1527 to 1529, perhaps a bit
after, with a vector pointing to 1527–1529; whereas the interval for *Von den natürlichen
Dingen* would range from 1528 to 1534 or later, with a vector pointing to 1534 or later.
Considering again the question of whether the *Herbarius* and *Von den natürlichen Dingen*
were written successively or concomitantly, the door is left open both for a simultaneous
redaction of the two treatises between, say, 1528–1529 (or shortly after); and for a separate,
successive writing, if we consider that the *Herbarius* was written closer to 1527 and *Von den
natürlichen Dingen* closer to 1534 or later.

6. Conclusion

The history of the early reception of the *Herbarius* is first and foremost that of a
growing frustration. The Paracelsians were driven by the hope, dashed by the publication of
the actual *Herbarius*, of discovering an herbal centered on the signatures of plants – a work
they could legitimately expect to find among the treatises left behind by Paracelsus, since they
had read in his *Labyrinthus medicorum errantium* that such a spiritual herbal was a must-have
for any serious physician.

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232 See above, pp. 51–52.
233 See above, pp. 44–48.
The absence of any discussion of the signatures in the actual *Herbarius* led authors such as Toxites to fall back, in the first place, on *Von den natürlichen Dingern*, the only Paracelsian work which looked like an herbal and where the doctrine of signatures played a substantial role. Even though there is clear evidence that the *Herbarius* and *Von den natürlichen Dingern* are distinct works, not scattered fragments of the same herbal, the *Herbarius* cannot be studied without considering *Von den natürlichen Dingern*.

In any case, these two treatises cannot, by any means, be considered juvenilia from the mid-1520s, as contended by Sudhoff. Neither can they be regarded as loose drafts, or compilations of field notes (Sudhoff’s idea again): their strong internal coherence and, in the case of the *Herbarius*, its clearly identified intended readership of “common men” bear witness to the fact that they are both well thought-out treatises, although the *Herbarius* is clearly far too short to be considered a complete herbal.

Two main lines of interpretation were examined in order to elucidate the nature of their relationship. The *Herbarius* was first envisioned as a work written simultaneously with *Von den natürlichen Dingern*, devised as a simplified version of the latter treatise: whereas the latter clearly theorized the doctrine of signatures, the former, while resting on it as well, left it entirely implicit. Then we discussed the possibility that *Von den natürlichen Dingern* had sprouted, as it were, from the *Herbarius*, as it corresponded to a more complete and complex version of this initial herbal.

This question could not be conclusively answered, and both options remain open upon the completion of our inquiry. We nonetheless came to a more precise understanding of the dating of both works. Whereas *Von den natürlichen Dingern* can undoubtedly be called a mature work, perhaps even a late one (as it was at least started in 1528 and might even have been written after 1534), the *Herbarius* cannot unambiguously be called a mature treatise, as it dates either from the Basel period or shortly after.
After the publication in 1584 of chapter nine of *De natura rerum*, which demonstrated that Paracelsus had not written any herbal called *Signatura rerum* – as first believed by Toxites, – many Paracelsians made their own the task of writing the “spiritual herbal” (the *Herbarius spiritualis sidereus*) that the Swiss master had called forth in his *Labyrinthus*. Despite (or because of) its incompleteness, the *Herbarius* elicited an ever-growing interest for Paracelsus’ herbal writings as a whole. Assessing the significance of the *Herbarius* and *Von den natürlichen Dingen* is, thus, only the first step towards a broader reexamination of the relevance of herbs in the work of Paracelsus, an importance which remains, up to this point, highly underestimated.

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**Abbreviations:**


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