

SCIVIAS: Know the Ways - The Vulva between Deification and Oblivion¹

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The artwork SCIVIAS (Fig. 1) shows that the representation of the vulva (also 'Fotze' (cunt) or 'Möse' (snatch)) has a long and varied tradition as a cultural symbol. 'Fotze' is mostly used as a crude swear word, but its representations are powerful and ambiguous.² The terms 'Fotze'³ or 'Möse'⁴ can be traced back to the 15th century.



fig. 1: SCIVIAS, enamel, painter's enamel, fine silver, ebony, unique 2020, dimensions: 65 x 37 x 37 mm, Photo: UL



fig. 2: Sheela Na Gig, Church of St Mary and St David in Kilpeck, Photo: Pryderi, Licensed under CC BY-SA 3.0, Wikimedia Commons

In passageways of medieval churches in Ireland and Great Britain, a figure with a spread vulva can suddenly be discovered when looking upwards. These stone sculptures are called Sheela-na-Gigs⁵. They were created in the 11th to 13th centuries, mainly in Ireland and Great Britain⁶, and about 140 are still preserved in their original locations.⁷ The best known is the Sheela-na-Gig of Kilpeck in England (Fig. 2).

1 Siehe auch: www.ursulaluecke.com oder fiftitu.at/luecke

2 Vgl. Ursula M. Lücke, *Kreuzstein und Reliquienschrein. Zur Ikonographie christlicher Steinmetz- und Edelmetallarbeiten im 'nahen' Osten und 'fernen' Europa*, 2015, S.160ff; als E-Book erschienen unter: http://opus.uni-lueneburg.de/opus3/frontdoor.php?source_opus=14356&la=de.

3 Vgl. „Fotze“ in: Jacob und Wilhelm Grimm, *Deutsches Wörterbuch*, 16 Bde. in 32 Teilbänden, Leipzig 1854-1961, Bd 4, Sp. 42, Quellenverzeichnis Leipzig 1971. Online-Version vom 04.05.2020. <http://www.woerterbuchnetz.de/DWB?lemma=fotze>; vgl. Wolfgang Pfeifer et al., *Etymologisches Wörterbuch des Deutschen (1993)*, <https://www.dwds.de/wb/etymwb/Fotze>, Zugriff: 04.05.2020; vgl. Friedrich Kluge, *Etymologisches Wörterbuch der deutschen Sprache*, Berlin 1989, S.228; vgl. Cornelis Kilian, *Etymologicum Teutonicae linguae*, Antwerpen 1599, S.119: Fotse. *ger. sax.* Villus; Fotte. *vet.* Cunnus; Villus ≈ Zotten, zottiges Haar, Cunnus ≈ Vulva.

4 Vgl. „Möse“, in: Pfeifer 1993, <https://www.dwds.de/wb/etymwb/M%C3%B6se>, Zugriff: 04.05.2020.

5 Jørgen Andersen, *The Witch on the Wall. Medieval Erotic Sculptures in the British Isles*, London 1977.

6 Auch in Spanien und Frankreich sind heute noch einige kontinentale Sheelas nachweisbar.

7 Vgl. James Jerman/Anthony Weir, *Images of Lust: Sexual Carvings on Medieval Churches*, London 1986; vgl. auch. Joanne McMahon/Jack Roberts, *Sheela-na-Gigs of Ireland and Britain: The Divine Hag of the Christian Celts – An Illustrated Guide*, Cork (Ireland) 2000.

The translations of Sheela-na-Gig are paradoxical. They range from old to young, ugly to beautiful, and include gender ambiguity, as shown by "old hag with breasts", "vulva", "wild man" and "girlish young man/man".⁸ The singer P J Harvey released the song Sheela-na-Gig in 1992 in direct reference to these sculptures.⁹

The famous abbess Hildegard von Bingen (1098-1179) also lived in the 11th - 12th centuries, when the Sheela-na gigs were created. As a visionary she received "visions" which she described in 26 visions in her first book SCIVIAS (engl.: Know the Ways) from 1151. The 3rd vision begins with: "After that I saw a gigantic structure, and shadowy. Like an egg, it tapered at the top, widened in the middle and narrowed again towards the bottom. Its outermost layer all around was light fire."¹⁰ The SCIVIAS Codex of 1175, produced during Hildegard's lifetime, is a magnificent manuscript with 35 illuminations. The codex has been considered lost since 1945, but black and white photographs and a colour copy handmade by nuns of St. Hildegard's Abbey between 1927 and 1933 exist. The 3rd vision (Fig. 3) is also illustrated. This picture is the basis of the enamel work SCIVIAS, which was made especially for the Fotzengalerie of the Kunsthalle Linz.

The third untitled vision was given names by researchers such as: "The Cosmos"¹¹, "The Macrocosm"¹², "The Universe"¹³, "The World Egg"¹⁴ and "The World Egg with Atmospheric and Planetary Ring Zones"¹⁵.

The historian of science and medicine Charles Singer wrote a study in 1917 in which he presented the 3rd vision as the first scheme of the universe. He called it "Hildegard's first scheme of the Universe"¹⁶. The illustration (Figs. 4, 5) was provided with cardinal points and, as usual in medieval maps, is east oriented, i.e. east is at the top. Singer calls the flame-like outer yellow area the luminous fire (lucidus ignis). Here are the outer planets Mars, Jupiter, Saturn and below them the sun and the south winds. In the next zone, called the dark envelope or black fire (umbrosa pellis or ignis niger), lightning, hail and the north winds are located.

8 Vgl. Kathryn Price NicDhàna, *Sheela na Gig and Sacred Space. The Cailleach as Creator*, Abschnitt: Word Magic: Etymological Síla, <http://www.bandia.net/sheela/article.html>, Zugriff: 22.04.2020.

9 Vgl. [https://en.wikipedia.org/w/index.php?title=Sheela-Na-Gig_\(song\)&oldid=939189886](https://en.wikipedia.org/w/index.php?title=Sheela-Na-Gig_(song)&oldid=939189886), Zugriff: 07.05.2020.

10 Hildegard von Bingen, *SCIVIAS, „Wisse die Wege“*, 1. Teil; 3. Vision Erstes Buch; 3. Kapitel: - Gott, Kosmos und Mensch - übersetzt und herausgegeben von Walburga Storch OSB; erschienen im Pattloch -Verlag; vollständiger Visionstext zu finden unter: <http://anthroposophie.byu.edu/mystik/scivias.pdf>, Zugriff: 23.04.2020.

11 Vgl. SCIVIAS, <http://anthroposophie.byu.edu/mystik/scivias.pdf>, Zugriff: 23.04.2020.

12 Vgl. Johann Konrad Eberlein, „Kosmos, Geschlecht und Frömmigkeit. Das Weltenei in einer Vision der Hildegard von Bingen“, in: Elisabeth Vavra (Hg.), *Virtuelle Räume - Raumwahrnehmung und Raumvorstellung im Mittelalter – Sektion Imaginäre Räume*, Wien 2007, S.33-40.

13 Sr. Maura Zátanyi OSB, „Scivias“-Kodex: Tafel 4: Das Weltall, in: <https://www.abtei-st-hildegard.de/%E2%80%9Cscivias%E2%80%9D-kodex-tafel-4-das-weltall/>, Zugriff: 23.04.2020.

14 Vgl. Annette Esser, „Hildegards visionäre Theologie“, in: dies., *Die Kirchenlehrerin Hildegard von Bingen*, Berlin 2015, S.143-206, hier: Abschnitt 3.2) Archetypische Geschlechtssymbolik.

15 Karl Clausberg, *Kosmische Visionen. Mythische Weltbilder von Hildegard von Bingen bis heute*, Köln 1980, Abb. 20.

16 Charles Singer, „The scientific views and visions of Saint Hildegard“, in: ders., *Studies in the history an method of science*, Oxford 1917, S.1-55, hier: S.9.



fig. 3: untitled, Hildegard of Bingen, SCIVIAS 1175.
1st part, 3rd vision, facsimile of manuscript no. 1, 1927-33,
photo: in the public domain.

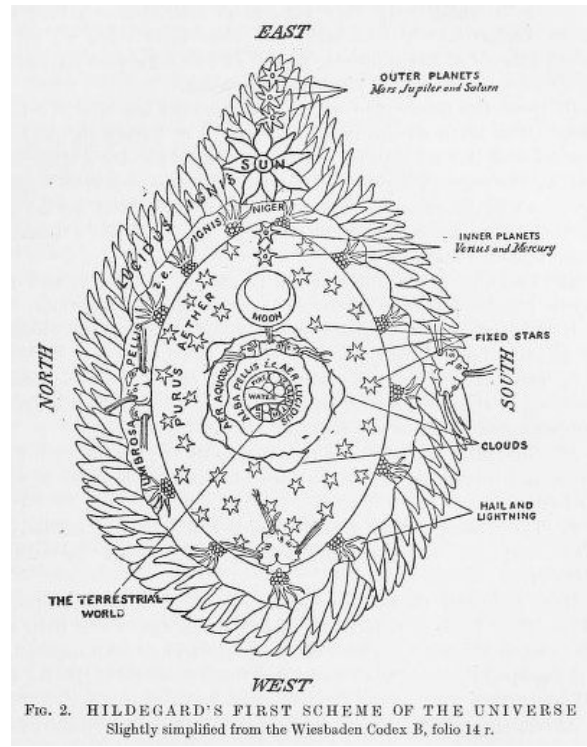


fig. 4: Charles Singer, »The scientific views and visions of Saint Hildegard«, in: *Studies in the history and method of science*, 1917, p.9.

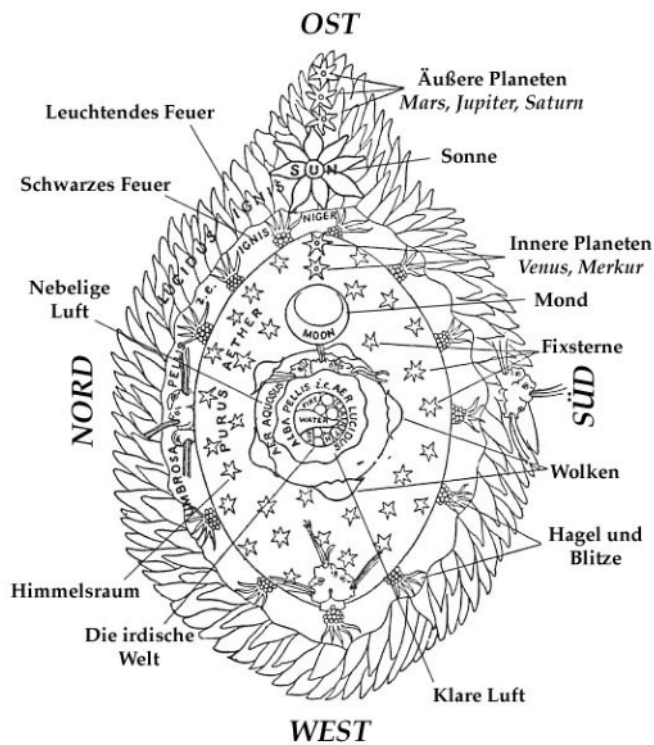


fig. 5: Singer 1917, p.9, Translation and additions: UL

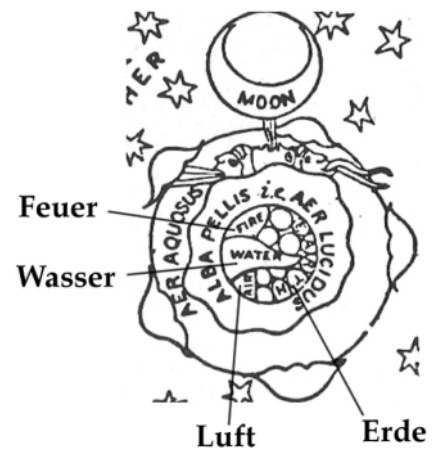


fig. 6: Singer 1917, p.9, Detail
The earthly world with the four elements

The blue oval inside the dark envelope shows the pure ether or celestial space (purus aether). The inner planets Mercury and Venus are positioned at the top inside the blue oval, the fixed stars are scattered around the oval, while the west winds blow below. Below the inner planets, the moon lies as a crescent in a circular shape, then the celestial spheres of the earthly world follow in direct contact. According to Singer, the spheres are built up from the outside inwards by clouds, air (aer aquosus) with easterly winds, bright envelope or luminous clear air (alba pellis or aer lucidus) and the earthly world, which consists of water, fire, earth and air (Fig. 6). This refers to the four-element doctrine valid in the Middle Ages, according to which all being was conceived as a certain mixing ratio of the four basic elements. Almost 100 years after Singer, the science journalist Gabriella Bernardi places Hildegard von Bingen in a series of unforgotten female astronomers and explains this scheme in detail.¹⁷

Hildegard's visionary image is interpreted by researchers from different disciplines (art history, mycology, psychology, theology) as cosmos and vulva at the same time¹⁸, whereby the sun corresponds to the clitoris, the luminous fire to the vulva hair with outer labia, the dark sheath to the inner labia, the moon to the urethral opening and the earthly world to the vagina. In 2004, philosopher Nancy Tuana analysed how knowledge of the clitoris and its significance has been excluded and repressed from scientific knowledge. It only reappeared in biology textbooks after the 2nd women's movement of the 1970s, as Tuana shows.¹⁹

The double meaning of cosmos and vulva is already contained in the powerful ancient symbol vesica piscis (Latin for "fish bladder").²⁰ From a mathematical point of view (Euclid), the vesica piscis is the geometric intersection of two circles of equal size, with the centre of each circle lying on the circumference of the other (Fig. 7). As a symbol, the vesica piscis denotes the opening between two polar imaginary stars, signifying the beginning of creation or the entrance into life.²¹ Delphos in ancient Greek is the word for those who are born alive from the same cleft/womb (delphys).²² Delphys, as the Greek word for womb, also stands for the live-bearing "fish" dolphin. The ancient city of Delphi held since the 7th century BC a sanctuary that was considered the centre of the world, the Omphalos. It was associated with Delphyne(s) and referred to the uterus.²³

17 Gabriella Bernardi, *The unforgotten sisters, female astronomers and scientists before Caroline Herschel*, London 2016, S.49ff.

18 Vgl. Eberlein 2007, S.33-40; vgl. Gerrit J. Keizer, „Hildegard of Bingen: Unveiling the Secrets of a Medieval High Priestess an Visionary“, in: John A. Rush (Hg.), *Entheogens and the Development of Culture, The Anthropology an Neurobiology of Ecstatic Experience*, Berkeley 2013, S.85-210, hier: S.184; vgl. Esser 2015, Abschnitt 3.2).

19 Nancy Tuana, „Coming to understand: Orgasm and the epistemology of ignorance“, in: *Hypatia* Vol. 19, No. 1, *Feminist Science Studies*, San Francisco, Winter 2004, S.194-232.

20 Vgl. Jean C. Cooper, *An illustrated encyclopaedia of traditional symbols*, London, 1978, S.11, 103-4, 185-6; vgl. auch: Mithu M. Sanyal, *Vulva. Die Enthüllung des unsichtbaren Geschlechts*, Berlin 2009, S.51.

21 Vgl. Todorova Georgieva Rostislava, "The migrating Symbol: vesica piscis from the Pythagoreans to the Christianity", in: Violeta Cvetkovska Ocokoljić (Hg.), *1th International conferende "Harmony of nature and spirituality in stone: proceedings, 17-18 March 2011, Kragujevac, Serbia"*, Stone Studio Association, Belgrade 2011, S.217-228; vgl. auch: E. Ann Pearson, *Revealing and Concealing: The persistence of vaginal iconography in medieval imagery: The Mandorla, the Vesica piscis, the Rose, Sheela-na-gigs and the Double-tailed Mermaid*, Ottawa 2002, S.90-91.

22 Vgl. Wissenschaftlicher Rat der Dudenredaktion (Hg.), *Duden, Das große Fremdwörterbuch*. 4. Aufl., Mannheim/Leipzig/ Wien/Zürich 2007, S.308, Stichwort "Delphin".

23 Vgl. Alphons A. Barb, "Diva Matrix, A fakes gnostic intaglio in the possession of P.P. Rubens and the iconology of a symbol", in: *Journal of the Warburg and Courtauld Institutes*, Vol 16, Warburg Institute, London 1953, S.193-238, hier: S.200.

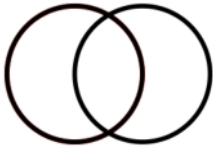


fig. 7: vesica piscis



fig. 8: Ichthys

In the fish symbol, the identifying sign of the early Christians, this ancient meaning is shifted. The beginnings of the Greek word sequence²⁴ **Iesùs Christòs Theòu Yiòs Sotèr** (Jesus Christ, Son of God, Saviour) result in the word I Ch Th Y S (= fish).²⁵ The fish was regarded as an inconspicuous identification sign of the early Christians. The Ichthys symbol consists of two uniformly curved lines that intersect, with two protruding ends forming the fish's tail (Fig. 8). The patriarchal shift in the interpretation of vesica piscis as Ichthys (= fish = Christ) displaced the synonymous Greek *delphos*, the cleft/uterus.²⁶ *Delphos* disappeared and the cleft shifted among the early Christians to the Virgin Mary's vulva, symbolised by an almond shape, called *mandorla* (Ital.: *mandorla* = almond). This is precisely what is taken up again in Hildegard's 3rd vision. The religious scholar E. Ann Pearson (2002) explains further connections between vesica piscis²⁷, *mandorla*, double-tailed mermaid²⁸ and other representations of the vulva.

The art historian Johann Konrad Eberlein interprets Hildegard's vision as a vulva and cosmic egg. The origin of this cosmic egg symbolism lies in the writings of the singer Orpheus (6th century BC). World and space emerge from chaos, dance, wind, desire and egg:

"Eurynome, the goddess of all things, rose naked out of chaos and danced on the sea. From the north wind that played around her became Ophion, the great serpent, who mated with her. She took the form of a dove, settled on the waves and laid the world egg. Ophion hatched it, and from the shells sprang all things, sun, moon, planets, stars, the earth with its mountains and rivers, its trees, herbs and living creatures."²⁹ Whether Eurynome or Ophion lays the egg is as unclear as its gender and body shape. The only certainty is that Ophion takes care of it and incubates the egg. A queer egg as the origin of the world?

24 Akrostichon ist eine poetische Form, bei der die Anfangsbuchstaben, -silben oder -wörter der Verse oder Strophen, im Zusammenhang gelesen, ein Wort, einen Namen oder einen Spruch ergeben, vgl. Brockhaus 1966, 1.Bd., S.258.

25 Ichthys, vgl. Brockhaus, 1969, 8.Bd., S.803.

26 "Dabei bedeutete ein anderes griechisches Wort für Fisch, nämlich *delphos*, gleichzeitig »weiblicher Schoß«, und die vorhellenische Fischgöttin Themis verschlang in ihrer Delphininkarnation zyklisch ihren Gottgeliebten und spie ihn analog zur Geburt als Sohn wieder aus. In der Bibel finden sich noch Rudimente davon in der Geschichte von Jonah und dem Walfisch, und die Mitra des Papstes erinnert verblüffend an den Kopf eines Fisches.", in: Sanyal 2009, S.51.

27 Vgl. Pearson, 2002, S.80-106.

28 Vgl. Pearson, 2002, S.121-27.

29 Eberlein 2007, S.39, nach Otto Kern, *Orphicorum Fragmenta*. Berlin 1922.

Description of the works of art:

SCIVIAS

The enamel artwork SCIVIAS takes up the historical illustration of the 3rd vision of Hildegard von Bingen. It transforms cultural-historical knowledge³⁰ into current artistic and scientific contexts. Conversely, artistic-technical knowledge flows into the analysis of the texts and images. As art-based research and research-based art, SCIVIAS traces repressed symbols of the vulva or 'cunt' and enables new play spaces for appropriation, reinterpretation and change.

Dimensions: 65 x 37 x 37 mm, square ebony base plate with silver rod, rotatable fine silver plate attached by means of a hinge tube, rectangular plate enamelled on both sides, capital letters hammered into base plate without spaces at regular intervals as justified text: Beginning of the 3rd vision of the SCIVIAS (Fig. 9).

The result is a carpet of letters that is not legible at first glance. A closer look reveals the text - a play of transitions between text and image, which is also found in medieval books such as the SCIVIAS Codex.

The fascination of enamelling art lies in the uniqueness of the play of transparency and opacity. Book painting on a gold ground also glows and is therefore called illumination. Enamel is molten glass that is fired onto metal in several phases. Depending on the thickness of the application, brightness and lighting conditions, the transparent colours allow the silver or gold background to shine through and reflect iridescent depths. The transfer of the illumination of Hildegard's 3rd vision into the enamel artwork SCIVIAS, transfers luminosity and depth - materially and conceptually.

In the Middle Ages, enamel art represented the highest secular and religious claims to power. This is illustrated, for example, by the large-format triptych of the Mother of God of Khachuli and Gelati (10th-12th century, Tbilisi Art Museum, Georgia, dimensions: 104.5 x 200.7 cm).³¹ It contains an unusually large enamelled plate with the image of the the image of the Mother of God and a huge number of stones and beads and a large number of stones and pearls, as well as a number of elaborately enamelled gold plates depicting saints and kings. The octagonal "Imperial Crown" (10th-12th century, Imperial Treasury Vienna, Austria) also embodies the highest standards. In addition to four gold plates interspersed with pearls and precious stones, four picture plates were artistically enamelled. Three show kings from the Old Testament, one depicts Christ. The SCIVIAS in enamel takes up this stately tradition, reinterprets it and fulfils the highest demands of the 'Fotze'.

30 Vgl. Lücke 2015, S.138ff.

31 Vgl. Lücke 2015, S.213-18.



Abb. 9: SCIVIAS, Ebony plate with stamped text, unique 2020, dimensions: 37 x 37 mm, photo: UL



Abb. 10: "Men are also afraid", ebony, unique 2020, dimensions: 19 x 19 mm, photo: UL

Männer haben auch Angst, Men are also afraid (Fig. 10)

The idea came about when I saw a man* hit another on the shoulder from behind. The man in front flinched, but immediately controlled himself and acted as if nothing had happened. This experience gave rise to the title and the work. As described above, the capital letters of the text without spaces form a carpet of letters that can only be deciphered on closer inspection.



figs. 11: 5 Minimösen (front), enamel, fine silver Unique 2020, height: 15 - 28 mm, photo: UL.



figs. 12: 5 Minimösen (back), enamel, fine silver Unique 2020, height: 15 - 28 mm, photo: UL.

The *Minimösen* (mini loops) (figs. 11, 12) were hung on strings in the front door area of the Kunsthalle. They are fun, wearable enamel objects in different colour variations. They are 15 to 28 mm high and made of fine silver. Opaque and transparent colours, applied and fused in different thicknesses, offer scope for further variations.

Cunts, vulvas and pussies (Fotzen, Vulven and Mösen) are diverse, colourful, lustful, long-lasting and powerful. The works of the artists of the Fotzengalerie show it in the Kunsthalle Linz from 8 March to 31 July 2020!³²

32 Vgl. <https://fiftitu.at/kooperation/finissage-fotzengalerie-mit-katalogpraesentation>.

Bibliography:

Andersen, Jørgen: *The Witch on the Wall. Medieval Erotic Sculpture in the British Isles*, London: Allen & Unwin, 1977.

Barb, Alphons A.: "Diva Matrix, A fakes gnostic intaglio in the possession of P.P. Rubens and the iconology of a symbol", in: *Journal of the Warburg and Courtauld Institutes, Vol 16*, London: Warburg Institute, 1953, S.193-238.

Bernardi, Gabriella: *The unforgotten sisters, female astronomers and scientists before Caroline Herschel*, London: Springer, 2016.

Bingen, Hildegard von: *SCIVIAS, „Wisse die Wege“*, 1. Teil; 3. Vision Erstes Buch; 3. Kapitel: - Gott, Kosmos und Mensch - übersetzt und herausgegeben von Walburga Storch OSB; erschienen im Pattloch-Verlag, Online: <http://anthroposophie.byu.edu/mystik/scivias.pdf>, Zugriff: 23.04.2020.

Brockhaus Enzyklopädie, 17. Aufl., 20 Bände, Wiesbaden: F.A. Brockhaus, 1966-74.

Clausberg, Karl: *Kosmische Visionen. Mythische Weltbilder von Hildegard von Bingen bis heute*, Köln: dumont, 1980.

Cooper, Jean C.: *An Illustrated encyclopaedia of traditional symbols*, London: Thames and Hudson, 1978.

Dudenredaktion, Wissenschaftlicher Rat der (Hg.): *Duden, Das große Fremdwörterbuch*, 4. Auflage. Mannheim/Leipzig/Wien/Zürich: Dudenverlag, 2007.

Eberlein, Johann Konrad: „Kosmos, Geschlecht und Frömmigkeit. Das Weltenei in einer Vision der Hildegard von Bingen“, in: Elisabeth Vavra (Hg.): *Virtuelle Räume - Raumwahrnehmung und Raumvorstellung im Mittelalter – Sek. Imag. Räume*, Wien: Österr. Akad. d. Wiss., 2007, S.33-40.

Esser, Annette: „Hildegards visionäre Theologie“, in: dies., *Die Kirchenlehrerin Hildegard von Bingen*, Berlin: epubli GmbH, 2015, S.143-206.

Grimm, Jacob und Wilhelm: *Deutsches Wörterbuch*, 16 Bde. in 32 Teilbänden. Leipzig 1854-1961. Quellenverzeichnis Leipzig 1971. Online-Version, Zugriff: 04.05.2020, <http://www.woerterbuchnetz.de/DWB?lemma=fotze>.

Jerman, James / Anthony Weir: *Images of Lust. Sexual Carvings on Medieval Churches*, London: Batsford, 1986.

Keizer, Gerrit J.: „Hildegard of Bingen: Unveiling the Secrets of a Medieval High Priestess an Visionary“, in: John A. Rush (Hg.): *Entheogens and the Development of Culture, The Anthropology an Neurobiology of Ecstatic Experience*, Berkeley: North Atlantic Books, 2013, S.85-210.

Kilian (Kiel), Cornelis: *Etymologicum Teutonicae linguae, sive dictionarium Teutonico-Latinum praecipuas Teutonicae linguae dictiones et phrases Latine interpretatas, & cum aliis nonnullis linguis obiter collatas complectens ...*, Antwerpen 1599.

Kluge, Friedrich: *Etymologisches Wörterbuch der deutschen Sprache*, Berlin: Walter de Gruyter, 1989.

Lücke, Ursula M.: *Kreuzstein und Reliquienschrein. Zur Ikonographie christlicher Steinmetz- und Edelmetallarbeiten im 'nahen' Osten und 'fernen' Europa*, 2015, als E-Book kostenfrei unter: http://opus.uni-lueneburg.de/opus3/frontdoor.php?source_opus=14356&la=de.

McMahon, Joanne / Jack Roberts: *Sheela-na-Gigs of Ireland and Britain: The Divine Hag of the Christian Celts – An Illustrated Guide*, Cork (Ireland): Mercier, 2000.

Pearson, E. Ann: *Revealing and Concealing: The persistence of vaginal iconography in medieval imagery: The Mandorla, the Vesica piscis, the Rose, Sheela-na-gigs and the Double-tailed Mermaid*, Ottawa: National Library of Canada, 2002.

Pfeifer, Wolfgang / et al: *Etymologisches Wörterbuch des Deutschen* (1993), digitalisierte und von Wolfgang Pfeifer überarbeitete Version im Digitalen Wörterbuch der deutschen Sprache, <https://www.dwds.de/wb/wb-etymwb>, Zugriff: 04.05.2020.

Price NicDhàna, Kathryn: *Sheela na Gig and Sacred Space. The Cailleach as Creator*, Abschnitt: Word Magic: Etymological Síla, <http://www.bandia.net/sheela/article.html>, Zugriff: 22.04.2020.

Rostislava, Todorova Georgieva: "The migrating Symbol: vesica piscis from the Pythagoreans to the Christianity", in: Violeta Cvetkovska Ockolji (Hg.): *1th International conferende "Harmony of nature and spirituality in stone: proceedings, 17-18 March 2011, Kragujevac, Serbia"*, Belgrade: Stone Studio Association, 2011, S.217-228.

Sanyal, Mithu M.: *Vulva. Die Enthüllung des unsichtbaren Geschlechts*, Berlin: Wagenbach, 2009.

Singer, Charles: „The scientific views and visions of Saint Hildegard“, in: ders., *Studies in the history an method of science*, Oxford: Clarendon Press, 1917, S.1-55.

Tuana, Nancy: „Coming to understand: Orgasm and the epistemology of ignorance“, in: Hypatia Vol. 19, No. 1, *Feminist Science Studies*, San Francisco: Wiley, Winter 2004, S.194-232.

Zátonyi OSB, Sr. Maura: *“Scivias”-Kodex: Tafel 4: Das Weltall*, in: <https://www.abtei-st-hildegard.de/%E2%80%9Cscivias%E2%80%9D-kodex-tafel-4-das-weltall/>, Zugriff: 23.04.2020.