The representation of Space, Time, and Event Sequence in an Ancient Egyptian Netherworld Comic*

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Abstract

This article explores signs of space and time in the ancient Egyptian graphic narrative “Book of Caverns,” inspired by comic research, Peircean semiotics, and diagrammatology/Diagrammatik research. Based on a thorough distinction between “narrative” space or time and “narrated” space or time, the panel tableau layouts and their relation to narrated space and time are discussed. The tableau layouts are found to be “productive” for the narrative sequence. A major result is a mental map of the reconstructed mental model of the Egyptian underworld geography as underlying the Book of Caverns. Signs of “situation time” are identified in the very form of the sun god. Furthermore, the narrative sequences are explored and compared to the probable narrated sequences of the journey. Inspired by comic research, the article identifies and analyzes comic phenomena in Caverns such as splash panels, opening panels functioning as establishing shots, split panels, and polyptychs. Moreover, the occurring panel-to-panel transitions are described and problems related to their categorization are exposed.

Keywords

Book of Caverns, comic, graphic narrative, graphic novel, netherworld book, underworld, journey, Aker, time, space, diagram, topography, mental map, narrated space, narrative space, narrated time, narrative time, tableau, register, productive layout, split panel, opening panel, splash panel, polyptych, panel-to-panel transitions.

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1 Introduction

1.1 Netherworld “comics”

This article investigates the representation of space and time in the diagrammatic text/image composition of the Ancient Egyptian netherworld book “Book of Caverns” (henceforward simply “Caverns”) from the 13th century BCE. Written after the “Amduat” and the “Book of Gates,” Caverns is the youngest of three great underworld books from the New Kingdom (16th–12th century BCE). The main topic of these books is the journey of the sun god from the western to the eastern horizon through the underworld and his interactions with its inhabitants. Probably more than the earlier two books, Caverns also tries to represent, I argue, a coherent mental model of the geography of the netherworld.

The underworld books include images and accompanying texts. Originally, they were composed in the form of long papyri, drawn and written in black and red ink, the images sometimes colored. The images are usually arranged in tableaus with three rows, “registers” in Egyptological terminology (Fig. 1). The tableaus are comparable to the

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1 Werning (2011). Latin nos. of scenes in this article refer to this publication.
2 Hornung (1999). For the character of a loose set of scenes of what is traditionally called “Book(s) of the Earth,” see Roberson (2012: 8–9).
3 Barta (1987: 10) believed quite the contrary: “Eingeteilt in sechs Abschnitte verzichtet [das Höhlenbuch] auf die Wiedergabe geographisch-lokaler Verhältnisse der Unterwelt, wie sie wenigstens andeutungsweise in Amduat und Pfortenbuch mit Hilfe der Lokalisierung des Unterweltsstromes im Mittelregister der Stundengebiete verwirklicht worden waren.” This article shows to what extent this judgement was unjustified.
Space, Time, and Event Sequence in a Netherworld Comic

page or “tableau” in modern comics, while scenes correspond to “panels” in comic terminology.\(^4\) Texts appear between as well as inside image tableaus. Inside the tableaus they appear inside, above, or next to individual scenes. In contrast to modern comics,\(^5\) scenes are not normally separated by lines or “gutters.” In the 3rd–7th tableaus of Caverns, however, the margins of the text columns between scenes simultaneously create comparable dividers. The inscriptions inside the scenes usually refer to specific figures. In this case, they are oriented in accordance with these figures. There are various categories of texts and text–image relations:\(^6\) most importantly, (i) identifying names or labels next to individual figures, (ii) direct speech, (iii) narrative texts, and (iv) descriptive texts. Furthermore, there are (v) offering statements and/or (vi) litanies, which are probably part of a secondary text layer. Moreover, some copies exhibit (vii) personalized textual or pictorial additions for the respective book “owners,” which are clearly secondary.\(^7\)

![Image](image_url)

Figure 1 | 6th tableau of the Amduat on a wall of the tomb of Amenophis II\(^8\)

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\(^6\) On text–image relations in modern comics, see McCloud (1993: 152–155).


\(^8\) From Bucher (1932: pl. xxxiii).
As to Caverns specifically, it has to be imagined as a long papyrus with seven large image tableaus including ca. 80 scenes and accompanying texts. Between the tableaus, there were long text blocks (see Fig. 2).

![Figure 2 | Schema of the Book of Caverns](image)

Similar Ancient Egyptian compositions have already, however rarely, been compared with modern “comics” (alias “graphic novels”) in comic research as well as in Egyptology. However, it has been acknowledged in and outside Egyptology that the case of Egyptian “comics” is special in certain respects. For example, the border between writing and image is less clear in the Egyptian case. The Egyptian hieroglyphic script also allows for different writing directions and orientations. This serves the same purpose as the “spikes” of word balloons in modern comics. The text–image relations are also not quite the same. As mentioned above, in addition to direct speech and descriptive inscriptions, Egyptian “comics” also usually contain short identifying labels referring to the figures.

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9 Cf. Werning (2011, I: 5–8 with fig. 1).
10 Werning (2017: 42, fig. 1).
12 Assmann’s (1998, 147) higher judgement of the potential of Egyptian multimodal compositions as compared with modern comics (“komplex[e] Lesebilder, die [...] in dem Reichtum der Verbindung von Bild und Schrift weit über das hinausgehen, was selbst auf dem Gebiet der modernen Bildnarrativik (Comics) möglich ist”, highlighting D.W.) seems to be partial if we look at the full potential of modern comics (cf. McCloud 1993: e.g., ch. 5, 8; for the frequent bad judgement of comics as opposed to literature and pictures, see especially ch. 1 and 9).
13 McCloud (1993: 142, 145 “pictures and words once together in the center of our iconic abstraction chart”, 161); Assmann (1988: 147): “der fließende Übergang zwischen Beischrift (der ins Bild integrierte Text) und Illustration (das in den Text integrierte Bild) im Rahmen gegenseitiger „Determination“”; Lapčić (2014); D.A. Werning, “Mental Images and Diagrams in Egyptian Art,” in: Bawden et al. (2016). Note however that the underworld books were originally written in cursive hieroglyphs with some hieratic sign shapes (Werning 2011, I: 74–77), which are less iconic than monumental “hieroglyphs” proper.
14 Assmann (1988: 147): “die vollkommene Flexibilität der Schrift, die sich mit dem Wechsel der Schriftrichtung (rechts/links, horizontal/vertikal) vollkommen der Bildkomposition und der Figurenrichtung [...] anpassen kann.” Note, however, that, in modern comics, the inscription framing and the word balloons and their shape (cf. McCloud 1993: 134) fulfill similar functions.
15 Assmann (1988: 147): “die dreifache Funktion der Schrift, das Bild zu erklären ([…]), die Personen usw. zu identifizieren ([…]) und durch Wiedergabe der Reden, also Tonaufzeichnung multimediell zu ergänzen.”
In this “comparative” spirit, the following investigation is partially inspired by comic research, the notion of “comic” being understood along the lines of Scott McCloud’s definition as

“juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer” (McCloud 1993: 9).

1.2 Narrated vs. narrative time/space

For the discussion of the representation of event sequence and space in the underworld books, it is useful to differentiate between “narrated” time or space, on the one hand, and “narrative” time or space, on the other hand (cf. Tables 1 and 2). In our case, rather than time in general, temporal sequence is especially interesting. “Narrated” time/sequence is the natural flow of events that the comic tells. “Narrative” time/sequence refers to the order of the discussion of events as aligned by the author. (“Narration” time, the time of the actual reading of the book is not relevant for my discussion.)

<table>
<thead>
<tr>
<th>Narrated time</th>
<th>Narrative time</th>
<th>Narration times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous, unidirectional</td>
<td>Sequence as laid out in the comic (with, e.g., flashbacks, ...)</td>
<td>Time of individual performance (e.g., reading)</td>
</tr>
<tr>
<td>Event A</td>
<td>Event C</td>
<td>Event C</td>
</tr>
<tr>
<td>Event B</td>
<td>Event A</td>
<td>–</td>
</tr>
<tr>
<td>Event C</td>
<td>Event B</td>
<td>Event B</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>Event B</td>
</tr>
<tr>
<td>Event Z</td>
<td>Event Z</td>
<td>...</td>
</tr>
<tr>
<td>(Imagined) journey of the sun god</td>
<td>Presentation of the journey in the Netherworld Book</td>
<td>Reading of (parts) of the Netherworld Book</td>
</tr>
</tbody>
</table>

Similarly, I use “narrated” space for the spatial mental model of an imagined 3-dimensional space, for example, the underworld topography, and “narrative” space for the usually 2-dimensional spatial arrangement of the figures, scene panels, and tableaus in the book. As for the narrative space, it may be helpful to further differentiate between the “original” narrative space, as intended by the author, and the narrative spaces of individual copies, which might, for example, be abbreviated, stretched, or distributed over different walls in a tomb (i.e., a 2-dimensional plane arranged in a 3-dimenional space).

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18 This differentiation is especially crucial in the case of the Amduat. The decoration remarks in this book (e.g., “These (manifestations) are executed with their names according to the vorlage (ššm) that is drawn onto the eastern side of the ‘Hidden Chamber’ of the underworld,” Amd. 650–651, translation D.W.) obviously refer to the execution of copy of the Amduat on the walls of a room. Differing from Hegenbarth-Reichardt (2006), I believe that this narrative space of room wall copies
## Table 2 | Narrated vs. narrative space (in the underworld books)

<table>
<thead>
<tr>
<th>Narrated space</th>
<th>Narrative space (original manuscript)</th>
<th>(individual copies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial mental model of the narrated world (3D)</td>
<td>Space as laid out in the original book (2D)</td>
<td>Spatial realization of a copy (2D/2D in 3D space)</td>
</tr>
<tr>
<td>Mental model of the topography/topology of the underworld</td>
<td>Presentation of the underworld space in tableaus and panels on a long papyrus</td>
<td>E.g., abbreviated papyrus, different format, relief on tomb walls</td>
</tr>
</tbody>
</table>

Figure 3 | A possible modern visualization of the reconstructed mental model of scene XXI of Caverns

Figure 4 | Reconstruction of the archetype of scene XXI of Caverns.©Daniel A. Werning, CC BY-SA 3.0 DE. Cf. Werning (2011, I: 58, fig. 23, 69; fig. 6; 333, tab. 1 [case XXIb]).

Figure 5 | Scene XXI of Caverns on papyrus BM EA 10490 (Nedjmet).©Trustees of the British Museum (part of image AN00153564_001).

Since the underworld books mainly describe a directed journey, time and space, notably event sequence and path/topology, are intimately related in these books. In the following sections, I suggest a reconstruction of the narrated space/time, based on narrative space/time as laid out in the reconstructed archetype of Caverns (and, simultaneously, I reconstruct how the narrated space was transformed into narrative space).

### 2 Signs of Space and the geography of the underworld

#### 2.1 Earth material texture

One of the most noticeable signs of the netherworld space is the strip of earth material that frames the whole book, i.e., the tableaus as well as the text blocks between them (see, for example, Fig. 2 and Fig. 9). It is designed as a texture of alternating rows of red and black dots on a kind of light red background (cf. Fig. 6). A few text witnesses

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19  ©Daniel A. Werning, CC BY-SA 3.0 DE.
20  ©Daniel A. Werning, CC BY-SA 3.0 DE. Cf. Werning (2011, I: 58, fig. 23, 69; fig. 6; 333, tab. 1 [case XXIb]).
21  ©Trustees of the British Museum (part of image AN00153564_001).
have instances with the background coloring left out (e.g., in Fig. 7). Conversely, certain scenes (notably XXXVIII–XL) and certain text witnesses in general (Osireion, TT33/Pet) exhibit no dots, displaying only a red, ocher, or yellow ground. In any case, the texture is very obviously an iconic sign for earth material, i.e., soil, sand, gravel, or the like. The earth “frame” of the book is to be interpreted as a sign for the fact that the netherworld is indeed an underworld inside the earth.

Figure 6 | Earth frame and part of Scene IIa in the tomb of Ramses IV.

Figure 8 | Part of Scene LV in the tomb of Ramses VI.

Figure 7 | Scene IIa on papyrus BM EA 10490 (Nedjmet).

Red, ocher, or yellow background coloring is occasionally also used for the body of hills and the background of whole scenes. Strangely enough, it is not always exactly the same color as that used for the earth frame. However, some individual text witnesses even exhibit the dotted texture for scene backgrounds, hills, and what seem to be pits (see Fig. 8) in a few scenes.

22 Scene IIa on papyrus BM EA 10490 (Nedjmet), scene LVIII in the tomb of Ramses VI.
23 From Theban Mapping Project: Photo Database, image database file “RIV_DSC_0036 (2)”.
24 ©Trustees of the British Museum (part of image AN00153580_001).
25 From Theban Mapping Project: Photo Database, image no. 15085, database file.
26 Scene LXXVIII in RVI, Pet; whole scenes: scenes of the 3rd tableau in Osireion, RVI, scene LVIII in Osireion.
27 Backgrounds: scenes XXVIII–XXIX in RVI; hills: scenes XII and LXVIII in RIX; pits: scenes XI and XXII–XXIII in RIV, LV in RVI and Pet. No two text witnesses display exactly the same color pattern. There also seems to be some confusion with the coloring of the characteristic ovals that some creatures lie in. These ovals are probably the creatures’ sarcophagi, which the texts repeatedly mention. However, individual text witnesses clearly iconically identify some of the ovals as pits using the dotted texture (scenes XI and XXII–XXIII in RIV and scene LV in RVI and Pet), notably inconsistent with the textual descriptions of the very scenes, which in each case speak of the divine creatures as lying in “sarcophagi” (Hb. 12.2, 25.12, 26.1, 65.1.9). However, the sarcophagi are probably to be thought of as lying in pits (cf. Hb. 27.7: ḫp wr).
It becomes clear that there are two slightly different interpretations for the earth material areas: in one case they signify the foreground, i.e., solid bodies of earth, and in other cases they refer to a background, i.e., the walls of a cave or a pit. The upper and lower strips of earth are definitely to be interpreted as compact bodies of earth “around” the netherworld, i.e., as the walls of the underworld cave system. Similarly, the hills with this texture can be interpreted as compact bodies of earth, and the creatures or objects drawn “on top of” them are probably to be interpreted as being buried inside them, embedded in earth material. In other cases, however, the earth areas clearly serve as a background to the figures “on top of” them, i.e., they highlight the earth walls of a cave. This interpretation as a background also accounts for the initial and final scenes of the book in which the sun (god) is depicted largely “on top of” a strip of earth (see Figs. 7 and 12). These scenes depict the entrance and exit of the underworld. What at first might look like the sun god breaking through or traversing a barrier of sand like a ghost – at least to an Egyptological eye – is indeed to be interpreted, I suggest, as the sun god passing an opening of the cave to the upper world. The earth is just a background. At least, this interpretation is in line with a literal interpretation of the textual evidence, which speaks of a gateway situation at the entrance (Hb. 1.6 “I … open the sky gate in the west.”).

2.2 Panel tableaus, splash panels, and narrated realms

All three netherworld books group their scenes (henceforth “panels”) in a number of tableaus with between three and five rows, i.e., “registers” in Egyptological terminology. The two later books, Gates and Caverns, also exhibit large panels with the same height as the multi-register tableaus. In comic research terminology, these are called “splash panels.” The narrative spaces of the three underworld books seem to correspond partially to similar, partially to different mental models of the narrated spaces, though in each case not absolutely straightforwardly (Table 3).

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28 E.g., scenes XII and LXVIII in RIX.
29 E.g., scenes XXVIII–XXIX in RVI.
30 Compare also scene XXXVIII–XL. Interestingly, there is a gap in the background/earth color behind the sun god in one individual text witness in this sequence of scenes (Osireion).
31 In Caverns, one may also interpret this particular mention of a gate as a metaphor. However, since other texts from the same and later periods also repeatedly mention the “sky gates” (cf. D.A. Werning, “Mythem-Netze: Mytheme im Kontext des Sonnenaufgangs in ägyptischen Texten und Bildern,” in preparation), this is probably not likely.
Table 3 | Narrative space vs. narrated space in the underworld books.

<table>
<thead>
<tr>
<th></th>
<th>Narrative space</th>
<th>Narrated space</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amduat</strong></td>
<td>12 tableaus</td>
<td>12 “hour” realms&lt;br&gt;(incl. eastern horizon); separated by gates</td>
</tr>
<tr>
<td><strong>Book of Gates</strong></td>
<td>12 tableaus + 12 gate panels (incl. a judgement splash panel) + sunrise splash panel</td>
<td>12 “hour” realms&lt;br&gt;+ eastern horizon land; separated by gates (with guarding snakes)</td>
</tr>
<tr>
<td><strong>Book of Caverns</strong></td>
<td>6 tableaus (incl. 2 entrance plash panels) + extra sunrise tableau</td>
<td>3+3 “caverns”, i.e., cave systems (incl. regions of hell below)&lt;br&gt;+ eastern horizon land; entrances partially guarded by snakes</td>
</tr>
</tbody>
</table>

The earliest book, the Amduat, has twelve panel tableaus which seem to correspond to the same number of successive “hour” realms, one realm per hour of the night. The end of the twelfth hour realm is identical to the horizon. Gateways that separate the realms are not depicted but only mentioned in the texts. The second book, the Book of Gates, likewise has twelve main tableaus, each followed by a gate splash panel. Inside the splash panel of the 5th gate, there is an extra scene (the judgement before Osiris). In addition, the Book of Gates has an extra splash panel after (and probably as a part of) the 12th gate panel. It elaborates the sunrise after the twelfth realm. Despite the differing amounts of “compartments,” twelve tableaus in Amduat compared with twelve tableaus including twelve gate panels with two “extra” splash panels in the Book of Gates, the two books do not seem to refer to largely different mental models, i.e., narrated spaces. In both cases, there are twelve realms with gates between and after them. The end of the twelfth realm coincides with the horizon land.33

The Book of Caverns, on the other hand, is separated into only seven panel tableaus. Like the final splash panel in Gates, the last panel tableau of Caverns is an elaboration of the sunrise in the eastern horizon land (Fig. 12, below). At the beginning of the 1st and after the 3rd tableau, there are splash panels that depict the proceeding sun god (Fig. 9 and 40, below). The “interior” splash after the 3rd tableau also exhibits a guarding snake, “who unites the two underworlds” (Hb. 43.4). As this makes clear, the underworld cave system is separated into two parts. The tableaus of the first part each contain a set of guarding snakes in the first panel of the uppermost register (scenes III, XV, XXV). The snakes are repeatedly called “doorkeepers” ( jr.(i)w$^\text{ dispatcher}\$). However, this job title probably does not necessarily imply actual doors with door leaves but may also be employed in the case of simple straightened passageways between caverns. At least, there is no mentioning of doors between the realms in Caverns except for in these titles.

The case of the first panel tableau including the initial splash panel, however, is special (Fig. 9). It is, I argue, comparable to what is called an “opening splash” in comic

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34 Abel & Klein (2016: 92).
research, functioning as an “establishing shot.” The tableau enumerates important creatures from the first part of the underworld. It sets the scene and simultaneously introduces important protagonists from not only the first but also later parts of the underworld, notably Osiris in his shrine from the realm of the 3rd tableau. If Osiris in his shrine in the 1st tableau does not correspond to an actual locus inside the first cavern, as I argue, perhaps the whole 1st tableau might not correspond to a separate realm on its own in the mental model of the underworld. However, the introduction of the 2nd tableau as the “second cavern of the first (sc. part of the two underworlds)” (Hb. 18.1) seems to support the interpretation of at least parts of the opening splash tableau as a separate realm on its own. If this interpretation is correct, the first splash panel and tableau of Caverns is directly comparable to Massimo de Vita’s opening splash in Walt Disney’s graphic novel “Das Tal der Pharaonen.” It introduces the initial setting (a kind of Nilotic landscape) and the first scene of the story (a plane approaching) as well as the main protagonists, only one of which, however, is actually present in the “first” scene of the story after the opening splash (Mickey; see Fig. 10). It is a hybrid space/time. Parts of the opening splash are the beginning of the story, other parts are a time/space-less introduction of protagonists. Similarly, the first splash plus tableau of Caverns introduces the initial setting (the first of the two underworld parts) and a first scene (sun god enters and exchanges greetings with the inhabitants of the underworld) as well as the main protagonists (sun god, Osiris, further inhabitants of the underworld) (Fig. 9).

Figure 9 | Opening panel tableau of the Book of Caverns.

35 For the terms “opening splash” and “establishing shot,” see Abel & Klein (2016: 91–92, 86).
36 Compare the scenes IX and XXIX from the 1st and 3rd tableau, respectively.
37 Sarda & de Vita (2003), first published 2002 in Italian under the title “Indiana Pipps e il faraone d’Amazzonia,” in Topolino no. 2439.
38 Text critical reconstruction of Werning (2011, I: pl. vii), with correction of the earth texture (©Daniel A. Werning, CC BY-SA 3.0 DE).
2.3 Spatial interpretation of the tableau architecture

2.3.1 Basic schemes

There are three fundamentally different ways of interpreting the spatial arrangement of the panel in the tableus of the underworld books: a “ground plan” interpretation, a “plain scheme” interpretation, and a “vertical section” interpretation.

Some tableus are to be interpreted in such a way that the middle register signifies a central pathway, while the upper and lower registers correspond to spaces on both sides of the central pathway in the same plain. I call this roughly coherent space in a horizontal plain the “ground plan scheme.” It comes in two versions. In one case, the upper and the lower registers are both vertically oriented towards the middle, the upper register(s) being upside down. This type is well exemplified by the 1st tableau of Gates and the final tableau of Caverns (Fig. 11 and 12). In the other case, all panels are vertically oriented upright. This is exemplified by the 7th tableau of Amduat (Fig. 13) and by the 2nd tableau of Caverns (Fig. 14), except for the lowest register (for which, see below).

The fact that the upper register is turned upside down, mirroring the lower register, in the first type signifies, I believe, a centralized perspectivization from the central pathway, i.e., the sides are meant to be perspectivized from the pathway as *left and right*, respectively (not from a bird’s eye perspective). More specifically, I call it the “perspectivized ground plan scheme.” The second type, on the other hand, is, I believe, not perspectivized at all (rather than a bird’s eye perspective or a reader perspective). This scheme is also frequent in Egyptian images of architecture. Compare the following image of an office building, roughly contemporary to the Book of Caverns (Fig. 15).

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40 Part of Barta (1990: fig. 13).
41 Text critical reconstruction of Werning (2011, I: pl. xiii), with correction of the earth texture, deletion of place holders for texts, addition of two text block borders (©Daniel A. Werning, CC BY-SA 3.0 DE).
42 Part of Barta (1990: fig. 7).
43 Text critical reconstruction of Werning (2011, I: pl. viii), with correction of the earth texture and highlighting.
There are, however, tableaus in which there is no reason to assume that the scenes that are central in the narrative space of the tableau are also central in the narrated space. Among the scenes of the tableau – notably apart from the “entering” scene with the sun god in the middle registers (see below) – no scenes are clearly more prominent than the others and consequently likely on the central pathway. The only thing that is clear is that the scenes are all roughly on the same plain. The panels may still be arranged in a meaningful way, e.g., in a specific sequence, but not topologically like in the ground plan scheme. Good candidates for this “plain scheme” are the 7th tableau of Gates (Fig. 16) and, again except for the lowest register (see below), the 4th tableau of Caverns (Fig. 17). Both exhibit a basically enumerative set of panels.

Fundamentally differently, some tableaus exhibit panels in different registers which are obviously vertically above each other not only in the tableau (narrative space) but also in the mental model of the narrated space. Clear examples of this are the pathway that crosses all registers in the 4th tableau of Amduat, as well as the Sokar hill scene in the 5th tableau of Amduat (Fig. 18) and the Osiris-under-Aker scene in the center of the 3rd tableau of Caverns (Fig. 19; see the discussion in §2.3.3, below). This “vertical

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45  Borchardt (1907: fig.1).
46  Part of Barta (1990: fig. 19), highlighting D.W.
47  Text critical reconstruction of Werning (2011, I: pl. x), with correction of the earth texture and deletion of place holders for texts (©Daniel A. Werning, CC BY-SA 3.0 DE).
section scheme,” as I call it, does not have a pure example in the underworld books. All instances exhibit some other scenes that need to be interpreted according to the (enumerative) ground plan scheme.

Figure 18 | 5th tableau of the Amduat (vertical section scheme highlighted).

Figure 19 | 3rd tableau of the Book of Caverns (vertical section scheme panels highlighted).

The basic interpretation schemes are enumerated in Table 4. However, none of the tableaus in Caverns is a pure example of one of these schemes. Notably, the interpretation schemes of Caverns, as found in the 1st–6th tableaus, are always a mixture of all three basic schemes. As discussed in the following two sections, the lowest register always corresponds to a level below the main level of the underworld (vertical section scheme). Furthermore, most tableaus have what I call an “entering scene” which depicts the sun god as he enters the respective cavern at the beginning of the middle register (§3.1, below). This scene is to be interpreted as marking the pathway of the sun god, which is to be imagined on the central axis at least in the passageways between two of the major caverns (ground plan scheme). The scenes in the upper register(s) are to be interpreted, I argue, as likewise lying on the main level – however, without further implication for an exact position (plain scheme). Furthermore, in the 2nd and 3rd tableaus (Figs. 14, 19), the middle register contains a panel that displays an obviously important scene, which is probably to be reconstructed as lying

48 Part of Barta (1990: fig. 5), highlighting D.W.
49 Text critical reconstruction of Werning (2011, I: pl. ix), with correction of the earth texture, deletion of place holders for texts, and highlighting (©Daniel A. Werning, CC BY-SA 3.0 DE).
50 In the 1st tableau, this scene is designed as a split splash panel (Fig. 9; see §§3.2.2, 3.2.3, 3.2.5). In the 5th tableau, we find it incorporated into the initial splash panel, i.e., the “cave of the Mysterious (Underworld)” (scene L; Fig. 26f).
in the central axis of the underworld (*ground plan scheme*). However, in the 4th–6th tableaus, none of the scenes in the middle or upper registers is obviously conceptually “central.” No specific position of the scenes seems to be implied (*plain scheme*). In the case of tableaus with not three but five registers, the 2nd and 4th registers next to the middle register behave like the upper register.

Table 4 | Tableau registers (narrative space) and basic spatial interpretation schemes (narrated space/time)

<table>
<thead>
<tr>
<th></th>
<th>Plain scheme</th>
<th>Ground plan scheme</th>
<th>Vertical section scheme</th>
<th>Basic scheme of Caverns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upper register</strong></td>
<td>On plain</td>
<td>On one side of central pathway</td>
<td>Uppermost level</td>
<td>Main level</td>
</tr>
<tr>
<td><strong>Middle register</strong></td>
<td>On plain</td>
<td>Central pathway</td>
<td>Middle level</td>
<td>Main level, partially central</td>
</tr>
<tr>
<td><strong>Lower register</strong></td>
<td>On plain</td>
<td>On other side of central pathway</td>
<td>Lowermost level</td>
<td>Lower level</td>
</tr>
</tbody>
</table>

To sum up, the basic scheme of Caverns is the following (compare Table 4): The “entering scene” at the beginning of the middle register represents the central pathway on a main level, and the lowest register represents a lower level. The upper register displays loci on the main level without specification as to their position. The rest of the middle register displays loci on the main level that are either central or not. The basic scheme is well represented in the 3rd and 4th tableaus (cf. Fig. 20) and its adaptations to a tableau with five registers in the 2nd tableau (Fig. 22). The spatial interpretation of the registers of the 4th tableau is actually roughly comparable, I argue, to respective parts in the famous stool image from the tomb of Hesy (Fig. 21), which likewise displays two axes in a simple plain.$^{51}$

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51 Cf. Schäfer (1963: 145f.).
In comic research, the page layout is categorized according to the questions (i) whether the story and the tableau layout are independent of each other or not and (ii), whether the comic authors designed the tableau layout according to the needs of the narrative sequence, or whether they predetermined a layout of the tableaus and adjust the narrative sequence to it (cf. Table 5).

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52 Text critical reconstruction of Werning (2011, I: pl. viii), with correction of the earth texture and deletion of place holders for texts, plus overlay text (©Daniel A. Werning, CC BY-SA 3.0 DE).
53 Quibell (1913: pl. xviii).
54 Text critical reconstruction of Werning (2011, I: pl. x), with correction of the earth texture and deletion of place holders for texts, plus overlay text (©Daniel A. Werning, CC BY-SA 3.0 DE).
55 Cf. Abel & Klein (89–90), Schüwer (2008: ch. 4.1), with reference to Benoît Peeters (Case, planche, récit, 1991). Note that the descriptions of the four categories are not fully identical in these three scholarly works.
In Caverns, I argue, we clearly find predominantly *productive* tableau layouts. The tableau layout is influenced by the story. For example, the scenes of hell are always placed in the lowermost register (see the following section), and the concept of a pathway with two sides is responsible for a layout with three registers in the 7th tableau (see above). Furthermore, I argue, the “basic scheme” tableau layout, as discussed above, also influenced the narrative sequence. For once, the regions of the main level and the regions of hell are discussed apart from each other although they are probably visited and addressed in turns (see §3.2.4, below). Furthermore, the amount of space covered by scenes from the main level and the amount of space covered by scenes from hell are inevitably in a proportion of 2:1 (for tableaus with three registers) or 4:1 (for tableaus with five registers). In both respects, the tableau layout of Caverns clearly had a “productive” influence on the narrative sequence.

2.3.2 Regions of hell below the main level

The Book of Caverns exhibits many panels that display scenes from hell regions, in which the “enemies of Re and Osiris” are annihilated. All these panels are distributed across the lower registers of all tableaux (narrative space). The only exception is the final sunrise tableau, which elaborates the eastern horizon land and adheres to the perspectivized ground plan scheme (§2.3.1). Simultaneously, the inscriptions occasionally make it explicit that the regions of hell are situated below the main level on which the sun god travels according to the mental model of the underworld (narrated space):

Ex. 1 $m = \dot{\text{c}}n \cdot w(j) \cdot j^i \cdot \text{m-}$ $\text{hrw} = \dot{\text{c}}n \cdot$ (Hb. 16.15, scene XIV, 1st tableau)

‘(O, you who are being annihilated! …) I pass by above you.’

Ex. 2 $\text{pi} \cdot jn \text{ ncrt} \cdot pn \cdot \text{m-}$ $\text{hrw} = \text{hmr}, yf^j$ (Hb. 85.59, scene LXIII, 5th tableau)

‘Then The Great God passes by above the hell.’

This corresponds to a lower level in the underworld, as testified by, among others, the address to the guarding snakes of the lowest register in the 1st tableau (Fig. 9):

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Ex. 3  \(j\,nn-n(i)\,h\,jw.(w)\,w^2\,br.(\,i)w^2\,t\,t^2\,t\,sfr\,t\,shf\,w.(w)\)  
(Hb. 15.8; scene XIII)  
‘O, you snakes of the lower (regions) of the netherworld, which also has Osiris (in it).’

It is therefore clear that the described mental model of the underworld includes two levels: the main level on which the sun god travels and a lower level with the regions of hell.

2.3.3 The Aker scene

As discussed in the preceding section, the scenes of hell are situated below the other scenes in narrative as well as narrated space. However, it is not normally to be interpreted as an exact relative placement.\(^57\) As an exception, a much more iconic spatial relation exists between the panel with the double-headed lion Aker in the middle register and the panel with the corpse of Osiris in the lower register of the 3rd tableau (see Fig. 19, above). Indeed they are to be interpreted as one single scene (XXXIII) referring to one coherent space. This is made clear by three texts which relate the two panels, for example, in the speech of the sun god to Osiris in the “entering scene” of the 3rd tableau:

Ex. 4  \(hs.t=e\,k\,tw.wn=k\,jnn\,n=k\,hr\,sk\,t\)  
(Hb. 15.8)  
‘… your (i.e., Osiris’) corpse, your image, which you have hidden under (the double lion) Aker, …’

In addition, there is another “spatial” element in this scene. There is a god above the back of Aker who doesn’t stand upright but rather “lies” horizontally, his arms bent forward (\(\text{𓀒}\)). The inscriptions related to the figure reveal that this is:

Ex. 5  \(Gb\,z\,w\,sk\,t\)  
(Hb. 37.2)  
‘Geb, who guards Aker’

Ex. 6  \(st\,sw\,hr\,pst\,sk\,t\)  
\(z\,w=f\,s.\st[s.t]=ji\)  
(Hb. 37.15f.)  
‘… as he bends over Aker’s back  
and guards the mystery that is in the underworld.’

I argue that the specific posture of the earth god Geb, described as bending over Aker like a shield,\(^58\) signifies the massive body of earth that forms the vaulted ceiling of the cave of Aker (compare Fig. 23 and Fig. 24).

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\(^57\) As is clear from the discussion in §2.3.1 and §2.4.

\(^58\) For a discussion of this interpretation of the verb \(\text{Ꜣ}\), see Werning (2011, II: 523–524).
2.4 Topographical mental model: reconstruction of a mental map of the underworld

Based on the results from the preceding sections and some additional considerations regarding the Egyptian image of the world, I try to reconstruct and draw a “mental map” of the underworld as underlying the Book of Caverns. We may assume that it consists of a chain of six large caverns (§2.2) in the earth (§2.1), with an entrance in the western horizon land and an exit in the eastern horizon land. At this exit (Fig. 12), a group of divine adorants wait to welcome the sun god at sunrise, i.e., when he leaves the underworld, after he has passed a body of water from the primeval ocean, in the middle of which the world was created. Below the chain of caverns on the main level, there is another set of caves in which the damned dead are being annihilated: the regions of hell (§2.3.2). The entrance of most of the caverns on the main level are guarded by snakes (§2.2), as is the entrance to the regions of hell (§2.3.2). A cavern of utmost importance is the cavern displayed in the 3rd tableau. This is where Osiris-the-Chief-of-the-Westerners resides in a shrine, where the two bodies of the sun gods lie and in which a giant “hill” lies in form of the double lion Aker with the corpse of Osiris buried under it (§2.3.3) – notably protected against the surrounding regions of hell by a surrounding snake (Fig. 24). Figure 25 below presents a schematic mental map of my reconstruction of the mental model of the underworld according to the Book of Caverns from the 13th century BCE. It takes the form of a modern section through the world “bubble” from west to east. In addition, the corresponding image tableaus and splash panels of the book are related to the different loci.

59 Text critical reconstruction of Werning (2011, I: pl. ix), with correction of the earth texture and deletion of place holders for texts (©Daniel A. Werning, CC BY-SA 3.0 DE).
60 ©Daniel A. Werning, CC BY-SA 3.0 DE.
61 For the concept of a “mental map,” compare Lynch (1960).
In terms of Peircean semiotics and diagrammatology/Diagrammatik research,\(^63\) the spatial “diagram” of the panels in the Book of Caverns is very much comparable to the mental “diagram” of the mental model of the underworld. The narrative space is a “diagrammatic-iconic” sign for the narrated space.\(^64\)

3 The journey of the sun god: time, event sequence, and narration

3.1 Indexical Signs of Time

Like the other netherworld books, the Book of Caverns describes the journey made by the sun god through the netherworld every night. Consequently, signs of a specific historical time,\(^65\) e.g., an era or even a specific reign, are missing. However, there is an


\(^{64}\) In this respect, the Book of Caverns is roughly comparable, I argue, to modern subway diagrams (cf. Nöth 2000: 489–490), for which the term “maps” is commonly used at least in English (see Cartwright 2012).

\(^{65}\) See Nöth (in print: §6.1).
index of *situation time* which is comparable to signs of the daytime in modern comics. The very form of the sun god. In the 1st–5th tableaus (Fig. 26), he takes a mixed form with an anthropomorphic body and the head of a sacred ram (Eg. *bi*). The ram-headed figure is the unmarked ‘manifestation’ (Eg. *bi*) of the sun god *in the night*. In the 6th tableau (Fig. 26h), on the other hand, he takes the shape of a scarab beetle (Eg. *hprr*). This shape is first of all associated with the *sunrise*, on the occasion of which the sun god is also named *Khepri*, i.e., ‘the transforming one’ (Eg. *hp (r) j*). However, denoting the sun god’s ‘transformation’ in the course of the sunrise, he also seems to take this shape a certain time before and after the very moment of leaving the underworld, marking his transformation as a process rather than a sudden change. In the sunrise tableau of Caverns, we find representations of both these forms of the sun god: the ram-headed *bi*-form and the scarab-shaped ‘transformation’-form (Figs. 26j–k). In one instance they appear next to each other, in the other case we find a combination of the two, together with yet another representation as a royal child, which signifies the ‘rejuvenation’ of the sun god, achieved towards the end of the night. Both the form of the beetle and the form of the child are clear signs of time for the latest phase of the journey of the sun god, the approach of and the appearance in the eastern horizon land.

![Representation of the sun god in the 1st–5th tableaus](image)

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66 Nöth (in print: §6.1). Both Nöth (*loc.cit.*) and Abel & Klein (2016: 94) mention the length of shadows as an index for the specific altitude of the sun as well as the daylight of a scene.


69 Note that youth as a *sign of age* (Nöth, in print: §6.1) has very different implications in this case of the Egyptian sun god than in the case of non-divine persons in modern comics.

70 Parts of the text critical reconstructions of Werning (2011, I: pls. vii–xi), with correction of the earth texture.
3.2 Panel sequences

3.2.1 Reappearance of the main character

In the preceding section, we saw that, like in modern comics, the main protagonist reappears in different panels. However, this reappearance occurs only once per tableau (or tableau section). From the 3rd tableau onwards, it is rather the sun disk which reappears from panel to panel (cf. Fig. 20). The sun disk is described and depicted (see Figs. 26a–k) as following the sun god. As a reappearing sign, I argue, it stands pars pro toto also for the sun god. Notably, it is regularly not depicted in the panels of the regions of hell in the lowest register, which the sun god (and the sun disk) do not enter (cf. §2.3.2). Why there is no repetition of the sun disk in the first two tableaus (Figs. 9 and 22) is not quite clear.

3.2.2 Split panels and polyptychs

As argued in Section 2.3.3, the two panels in the center of the middle and lower registers of the 3rd tableau display one spatially coherent scene. The panel with the corpse of Osiris is under the panel with the double lion Aker, just as the corpse lies buried under Aker in the underworld (compare Fig. 23 and Fig. 24). As the two panels form one common continuous space, they can be categorized as one single “split panel.” Compare Figure 27, in which one coherent scene is “cut” into four panels.
In this specific case, however, both parts of the split panel exhibit a representation of the main character of the story in the form of the sun disk (§3.2.1). Such a split panel, which displays one coherent space and, simultaneously, multiple representations of a protagonist in each part of the split panel (and therefore no coherent time) is called a “polyptych” in comic research. Compare the Aker/Osiris scene to Scott McCloud’s explanatory polyptych (Fig. 28), in which what is obviously the same character reappears in the coherent space of a kitchen that is “chopped” into a coherently arranged set of panels.

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76 Abel & Klein (2016: 92, fig. 24).
3.2.3 Narrative times: reading sequences in tableaus

In this section, I discuss the question of reading sequences in the tableaus of the Book of Caverns, more precisely in the 1st–6th tableaus, the 7th tableau with its “perspectivized ground plan scheme” (see §2.3.1) being a separate case. In order to understand the reading sequence, it is crucial to differentiate between the hints from the tableaus (plus incorporated texts) and the hints from the contiguous text blocks behind the tableaus. This is especially justified by the fact that the text blocks were probably created in a separate, secondary step.79

The panel tableaus themselves do not make an intended sequence for their reading explicit, e.g., by a numbering system. Some hints, however, come from the distribution of certain categories of figures. The most obvious hint is the single, and therefore marked, representation of the sun god either in his form as a semi-anthropomorphic, ram-headed god or in his form of a scarab beetle (cf. §3.1). This representation invites the reader to understand the respective panels as the first ones to be read in each tableau. According to this interpretation, it is normally the first scene of the middle register which is to be read first (compare Fig. 29).80

Figure 29 | Reading sequence of the 6th tableau of the Book of Caverns.81

Moreover, representations of the sun god often include a group of divine adorants. Indeed, as suggested by the distribution of texts, the sun god and the adorants form a single “entering scene” in most tableaus.82 Notably, this is also true in the case of the 1st tableau, in which the entering scene is a “split panel,”83 covering the initial splash panel and the first scene of the middle register of the following tableau (“1” in Fig. 30).

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80 This includes the case of the second section of the 5th tableau. In the special cases of tableaus with an initial splash panel (1st/5th tableau), it is – as one would naturally assume – the splash panel which is to be read first. Notably, the first scene of the middle register of the 1st tableau is actually connected to the initial splash panel with the sun god.
81 ©Daniel A. Werning, CC BY-SA 3.0 DE (background: text critical reconstruction of Werning 2011, I: pl. xii).
82 1st tableau: scene II (split panel: Ila+Ilb); 2nd tableau: scene XX; 4th tableau: scene XLIV; second part of the 5th tableau: scene LXI; 6th tableau: scene LXVIII. In the 3rd tableau, scene XXXI cannot clearly be identified as equivalent.
83 For the notion of “split panel,” see §§3.2.2; for further discussion of the case of the 1st tableau, see §3.2.5.
Indeed, the fact that both panels form a single split panel is further marked by the exceptional phenomenon that the arm of the sun god crosses the border between the initial splash and the panel in the middle register (see Fig. 9, above). As an exception, in the 3rd and 5th tableaus, separate autonomous panels seem to fulfil an equivalent function: the first scene in the upper register in the case of the 5th tableau, and possibly the second scene in the middle register in the case of the 3rd tableau (Fig. 19).

Figure 30 | Reading sequence of the 1st tableau of the Book of Caverns.  

Another hint about the reading sequence is the distribution of guarding snakes in the first three tableaus. In each of them, a set of guarding snakes appears in the first panel of the upper register. I understand that these snakes guard the entrances to the three caverns that correspond to the three tableaus, and I take their placement in the tableau as a hint that the upper registers are the first of the registers to be read. In summary, the tableaus themselves suggest to first read the “entering scene” with the sun god (plus adorants) in the middle register as well as the panel with the guarding snakes at the beginning of the upper register, most likely in this sequence. Naturally, one would finish reading the upper register, followed by the other registers from top to bottom (compare Fig. 30).

This reading sequence register-by-register from top to bottom is supported by separate information from the long text blocks between the tableaus, more precisely those text blocks that discuss the panels of the preceding tableau. These are contiguous texts, i.e., they exhibit a clear reading sequence. In each case, the basic reading pattern is that the panels of each register are to be read sequentially in the same direction, e.g., from left to right, and the registers from top to bottom, the eye basically following a “zigzag” line, like in modern texts. This is a common reading scheme in Egyptian

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84 ©Daniel A. Werning, CC BY-SA 3.0 DE (background: Fig. 9).
85 I.e., the text blocks behind the 1st, 2nd, 5th, and 6th tableaus. The text blocks after the 4th tableau and after the splash panel behind the 3rd tableau do only very partially or not at all, respectively, discuss the panels of the respective preceding tableau.
86 See Hb. 1–17, 18–28, 74–85, and 101, discussing the 1st, 2nd, 5th, and 6th tableau of Caverns, respectively.
multi-register compositions. However, the evidence concerning the relative position of the entering scenes is dichotomous. In the case of the 1st and 6th tableaus, the entering scene with the sun god plus adorants is discussed first (and not again in the middle of the text block). See the reading sequences in Fig. 29 and Fig. 30. This observation is completely in line with the assumption that the entering scene in the middle register is to be read before the rest of the panels, as suggested by the tableau design (discussed above). In the case of the 2nd tableau and the second section of the 5th tableau, on the other hand, the entering scenes are discussed in the middle of the respective text block, i.e., the text block discusses the registers strictly from top to bottom seemingly without treating the entering scene any differently from other scenes. A possible solution to this surprising observation is that, according to this “reading,” the entering scene is mentally split into two parts: (i) the entering sun god and (ii) the welcoming divinities. While the sun god would still be recognized first, but not be discussed separately, the welcoming divinities are counted as a “normal” panel, separate from the sun god, discussed in turn with the other scenes. Compare the two competing reading sequences marked by “1–10” and “A–K,” respectively, in Fig. 31.

As to the 7th tableau, which is designed according to the perspectivized ground plan scheme (§2.3.1), I can only hypothesize a dedicated reading sequence based on the content of the scenes (Fig. 32). The sun god enters the eastern horizon land (no. 1), passing a pair of hills (2). He dives through a body of water (3) and transforms into the

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88 This is probably also, however not clearly, true for the case of the 4th tableau (Hb. 57.16–31); compare Fig. 34.
89 Notably, in case of the first tableau, this is also true for the second part of the split panel of the entering scene in the middle register (scene IIb).
90 As to the 5th tableau, Barta (1987: 10–14) called attention to this. However, his estimation that this can be transferred to all other tableaus proved to be wrong.
91 Same tableau without/with smaller overlay: Figs. 14 and 22.
92 ©Daniel A. Werning, CC BY-SA 3.0 DE (background: Fig. 14).
young sun of the morning when he rises on the horizon (4, 5). On the earth gods adore him as he rises (6).\textsuperscript{93}

Figure 32 | Hypothetical reading sequence of the 7th tableau of the Book of Caverns.\textsuperscript{94}

3.2.4 Narrated time: reconstruction of the narrated temporal sequence
As discussed in Section 2.3.2, the sun god does not enter the regions of hell that are regularly displayed in the lowermost registers of the 1st–6th tableaus and which are to be understood as lying on a lower level than the main underworld cave system. He just passes by “above” them on the main level.\textsuperscript{95} Consequently, it is only the other caves that the sun god actually visits that are visually marked by the representation of the (red) sun disk which follows the sun god. As to the temporal sequence of events, I believe that the sun god’s addresses to the regions of hell from the main level take place \textit{not after} finishing the visits to the caves on the main level, as suggested by the \textit{narrative} sequence discussed in the preceding section, but that it takes place by turns, \textit{parallel} to these visits (see Fig. 33). This assumption allows for a straightforward reconstruction of the regions of hell as lying directly under the caves of the main level, as suggested by the tableau layout (compare Fig. 25).\textsuperscript{96} The \textit{narrative} sequence of the book and the \textit{narrated} sequence of the journey are therefore not identical, I argue (compare Fig. 33 with Fig. 34). Rather the non-lowest and lowest registers display two different “aspects” of the journey: the visits to the caves with blessed dead and divinities on the main level vs. the addresses to the caves of hell in a lower level, respectively. In \textit{narrative} sequence

\textsuperscript{93} Cf. the discussion in Werning (in print).
\textsuperscript{94} ©Daniel A. Werning, CC BY-SA 3.0 DE (background: text critical reconstruction of Werning 2011, I: pl. xiii).
\textsuperscript{95} The only scenes in the lowermost registers that the sun god enters are the scenes XXXIIIu and LXXVI, which both do not display parts of hell. (Note that the figures in it are both guarded by protective snakes.)
\textsuperscript{96} Otherwise we either had to assume that the regions of hell displayed in the lowest register of, e.g., the 2nd tableau, are situated under a path \textit{behind} the caves of the main level – this resulted in a rather strange imbalanced world image –, or we had to assume that the sun god goes back in the cave system on the main level and travels through this cave system a second time in order to address the regions of hell – a rather complicated scenario without further support from the inscriptions.
they are presented one after the other, while in *narrated* time the addresses to the main level and the lower take multiple turns.

**Figure 33** | Hypothesis on the journey of the sun god and temporal sequence of addresses to the caves of the 4th tableau of the Book of Caverns

3.2.5 Panel-to-panel transitions

In the context of comic research, it is interesting to categorize the transitions from panel to panel and to compare their distribution. Scott McCloud suggested a categorization based on six types (see Fig. 35), and he compared proportions of occurrences across different modern comics. In doing so, he identified what might be termed different comic cultures: a European/American, i.e., “western,” and a Japanese culture. In the western comic culture, we find a mix of basically *action-to-action* transitions plus some *subject-to-subject* and *scene-to-scene* transitions (Fig. 36a). In Japanese comics, in

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97 ©Daniel A. Werning, CC BY-SA 3.0 DE (figures from Fig. 20).
98 ©Daniel A. Werning, CC BY-SA 3.0 DE (background: text critical reconstruction of Werning 2011, I: pl. x).
addition, we find a few moment-to-moment transitions, a considerable percentage of aspect-to-aspect transitions and relatively more subject-to-subject transitions (at the expense of the other two types; Fig. 36b).  

Figure 35 | Categorization of panel-to-panel transitions from McCloud, Understanding Comics.  

Figure 36a–c | Proportions of panel-to-panel transitions in American/European and Japanese comics and the Book of Caverns compared.

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100 McCloud (1993: 75, 76, 80).
102 Data for the American/European and the Japanese proportions are median values (error indicators: minimum and maximum) based on the 16 and 5 charts, respectively, in McCloud (1993: 75/76, 80). (The data for the Japanese comic “750 Rider” are left out since its chart obviously contains a mistake: it adds up not to 100%, but to 110%.)
As to the Book of Caverns, we basically find three or four types of panel-to-panel transitions, depending on interpretation. The most frequent transition is the one from one locus in the cave system of the main level of the underworld to a subsequent locus on the same level. It comes in two versions: either with or without an index for the traveling protagonist, i.e., the sun god, in the form of the sun disk (compare Fig. 37 and Fig. 38). Apart from the repeated presence of the sun disk, the texts that correspond to the scenes in both cases make it clear that the panels display different points in time.\(^{107}\)

We cannot know the exact time that passes by between the arrival at two subsequent loci. Nevertheless, a rough approximation is relevant for a classification of the transition. The sun god visits at least approximately 80 loci in the twelve hours of the night. In addition, we have to account for the extra way between two caverns, the proportional length of which is unfortunately unclear (compare Fig. 25). Nonetheless,

\(^{103}\) Text critical reconstructions of Werning (2011, II: 136, 140).

\(^{104}\) Text critical reconstructions of Werning (2011, II: 98).

\(^{105}\) Text critical reconstructions of Werning (2011, II: 198, 200), with correction of the earth texture.

\(^{106}\) Text critical reconstructions of Werning (2011, II, 162), with correction of the earth texture.

\(^{107}\) On the temporal implications of word balloons vs. captions in comic panels, see McCloud (1993: 95–99). If it were not for the texts that follow the tableaus, the 1st and 2nd tableaus would probably be interpreted as exhibiting mainly aspect-to-aspect transitions, which “bypass[es] time for the most part and set[es] a wandering eye on different aspects of a place, idea or mood” (McCloud 1993: 72; cf. also Schüwer 2008: 274).
the time progression between the arrivals of the sun god in two subsequent scenes in the same cavern can be computed to be approximately between a few and ten minutes.

In any case, the classification of these transitions in terms of McCloud’s categories is ambiguous. On the one hand, the traveling of the sun god from locus to locus is comparable to McCloud’s example of a traveling car in subsequent loci, which he classifies as a case of action-to-action transitions (Fig. 41). On the other hand, the temporal and spatial distance between two scenes is rather “significant,” I feel. Based on this evaluation, the transitions are cases of scene-to-scene transitions. This classification suggests itself even more in the case of the second version of the transitions that lacks the pictorial representation of the traveling sun god or disk, which are only mentioned in the corresponding texts. Indeed, the case of the described transitions in Caverns suggests, I argue, that the border between action-to-action and scene-to-scene transitions is fuzzy.

Figure 41 | Scott McCloud’s (Understanding Comics) third example for action-to-action transitions.

Usually once per tableau, we find an again slightly different type of transition: a switch from a locus on the main level to a locus in the regions of hell (Fig. 39). As argued in the preceding section, this implies a temporal a “flashback.” This leap back in time computes roughly to between half an hour and two hours. Moreover, the travelling sun god only addresses the loci of hell from a distance. In this case, there is no doubt that these transitions are cases of scene-to-scene transitions. The same may be true for the transitions in the other direction, i.e., from a locus in hell to a locus on the main level, which implies, I argue, a small leap forward in time.

As to the fourth type of transition, we find it in the entering scene of the 1st tableau (including the adorants) and the interior splash panel(s) after the 3rd tableau (Figs. 9 and 40). They both depict the sun god with the sun disk, which is considered to follow him, as they cross a boundary. In the first case, it is a barrier of earth, which the sun


110 For the difference between moment-to-moment and action-to-action transitions as gradual, see Schüwer (2008: 51–52).

111 McCloud (1993: 70).
god transgresses (cf. §2.1, above). In the second case, there is an additional figure, a guarding snake, which the sun god is said to “pass” (Hb. 44.2–6). In both cases, the figures are separated by lines so that it seems that they are distributed across separate panels. According to this reading as a sequence of panels, these cases exhibit subject-to-subject transitions.112 However, as suggested by the other entering scenes (Figs. 26c, e–g), the disk and the sun god are rather to be understood as belonging to a single scene. Accordingly, each sequence of panels is a case of a single coherent “split panel.”

To sum up, depending on interpretation, one may classify all transitions in Caverns as scene-to-scene transitions or one may differentiate between cases of scene-to-scene, action-to-action, and subject-to-subject transitions (Fig. 36c). In the latter case, the “fingerprint” of proportions of panel-to-panel transition types in Caverns turns out to be roughly in line with the proportions in western comics (compare the minimum/maximum marks in Fig. 36a). However, it has become clear that the figure obscures the fact that the action-to-action transitions in Caverns are not fully comparable to McCloud’s examples, in which the actions themselves are always conceptually clearly in the foreground. In Caverns, on the contrary, the “actions” of visiting the individual caves are comparatively less prominent, I feel, than the visited loci and creatures – at least on the pictorial level.

Whether this rather special characterization of panel-to-panel transitions in the Book of Caverns is representative for other Egyptian netherworld books, or even for Egyptian “sequential art” more generally, remains to be seen.

4 Conclusions

For the netherworld “comic” Book of Caverns, a diagrammatic analysis of the tableau layout combined with the textual information on the topography of the underworld allows for a largely consistent reconstruction of a mental model of the Egyptian underworld in the 13th century BCE (§2.4; cf. the “mental map” in Fig. 25).

Based on a comparison with phenomena discussed in research on “sequential art” (comics, graphic narratives, graphic novels), certain peculiarities related to the representation of space in Caverns appear in a new light: for example, the interpretation of the 1st tableau as an “establishing shot” tableau (§2.2), the interpretation of the tall initial and interior panels with the entering sun god and his sun disk as “split panels” (§§2.2, 3.2.5), and the interpretation of the Aker/Osiris scene as a “polyptych” (§2.3.3).

The distinction between “narrative” sequence and “narrated” sequence enables a plausible hypothesis on the spatial relation of the main cave system of the divinities and the dead and the lower cave system of hell, as well as on the narrated journey of the sun god through the underworld topography (§§3.2.3–4). Based on this analysis, a comparison between distributions of panel-to-panel transitions in modern comics and those in Caverns is possible. It reveals interesting difficulties related to the

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113 For the notion of “split panel,” cf. §3.2.2.
categorization of the transitions in Caverns. Nevertheless, certain similarities but also certain differences in the proportions of transitions types as compared with modern comics become apparent (§3.2.5).

Bibliography


