

## Alt text for “Comics Beyond Sight” for MIT Technology Review June 2023 issue

(To see the comic described below and related materials, please go here:

<https://spinweaveandcut.com/mitcomic/>)

### Title panel reads:

“Comics Beyond Sight: A Highly Visual Case for Blind Access.” Ideas/words by: Nick Sousanis and Emily Beitiks. Drawings: Nick Sousanis. A brief note before we go further for clarity. If you prefer to listen to the audio version of this comic, which aims for a richer experience than alt text provides, please visit: [spinweaveandcut.com/MITcomic](https://spinweaveandcut.com/MITcomic). Throughout the comic, you will hear repeated references to a fictional comic, titled “Amazing Detective: featuring Blackout.” It will appear throughout our piece, a comic inside a comic, because it allows us to demonstrate the complexity of the comics’ form with a recognizable comics aesthetic. For example, whenever we are showing strategies for accessing comics non-visually, we demonstrate these modalities in use with images from our superhero Blackout, who looks suspiciously like Batman but more owl-like in silhouette so as to avoid copyright, and the cast of the Bad Ideas Gang. The first Bad Ideas member is the leader, Bad Idea, dressed in a dapper suit and bowler hat, he holds a walking stick as his weapon and fashion accessory, a lightbulb attached to the tip. His thought bubbles always match his style, shaped like lightbulbs. Bad Idea also has a henchman, who wears a black mask over his eyes and a lightbulb on his shirt. Most villains have a henchman like this - not much personality, just a body for Bad Idea to boss around. Lastly, we have Felixa, dressed as a wide-eyed catwoman who attacks with accessories she carries in her carpet-bag purse. She’s modeled on Felix the Cat, an animated cartoon from the silent film era, who is credited with the visual icon of a lightbulb over the head to signal the concept of a good idea. This theme of lightbulbs carries throughout the piece. Now onto the comic!

### Panel 1 (2nd box row 1):

Caption: “Comics take us places.” A figure with the head of a lightbulb and two human hands holds a comic book, its bulb brightening the surrounding area while taking in the newest issue of “Amazing Detective: featuring Blackout.”

### Panel 2 (3rd box row 1):

Same picture, but the lightbulb no longer illuminated, the comic’s cover blacked out except for a thin wisp of a question mark. Caption “But if you can’t see their contents...”

### Panel 3 (4th box row 1):

White text on a black box reads “those places are closed off.” A white box reads “How might comics be made accessible for blind and low vision readers?”

### Panel 4 (1st box row 2):

Text reads: “Comics are a deceptively complex network, elements interacting in linear and non-linear ways.” A page of our comic within the comic, starring superhero Blackout, exploded into all the different elements that go into a single sheet. First, the full panel layout. Next, we see a sheet with the characters. Then, the backgrounds and setting, a layer of the text balloons, and finally the words and sound effects. By the final layer, the panel barriers have dissolved so the final details - “Boom!” “Idea: Realized” “Purrfect” - all escape off the page, ending at a spiral of text that leads into the sight of a single isolated eyeball. More text: “Even sound and time transmitted visually.”

### Panel 5 (2nd box row 2):

The muscle of the eye becomes a cord that enters into a densely tangled web of cords which form the shape of a human brain. Text reads “Access is necessarily messy.” Above, A lightbulb with text curving around the top and bottom creates the shape of an eye’s outline, the lightbulb as pupil and the word “idea” formed in the bulb’s glowing filament. Text reads: “That this means idea is a visual concept.”

### Panel 6 (3rd box row 2):

The untangled cords escape the brain and lead into the next panel, each connecting to power up nine different light bulbs, varying in shape and size. Text reads: “One size does not fit all, each person’s needs and preferences vary.”

### Panel 7 (big box row 3):

A single visually-busy larger panel. Text reads: “Consider putting an image into words...” A cube is situated so that it presents three of its faces, all with the same picture showing: an illustration with Blackout, in bodysuit and large black cape, as he soars down from the sky over three members from the Bad Ideas Gang: Bad Idea, his henchman, and Felixa the catwoman. As he descends, Blackout says, “Lights out!” With a hardened face, the henchman exclaims, “Not him!” Blackout has whipped a spiky throwing blade, the shape of the Blackout symbol, to slice open the sack slung over the henchman’s shoulder and cash trails behind; Felixa in a full cat bodysuit holds a carpetbag and says, “mmm...I need my bag of tricks...” Bad Idea, leader of the crew and dressed in suit, tie, and bowler hat, says, “IDEA: RUN!” All three have light bulbs patterned on their clothing. From each of the six faces of the cube, three visible and three obscured, text boxes extend to provide six alternative styles of describing the panel, though the descriptive text can only be partially read behind captions and the cube. Labels illustrate a

description style with a teaser of that style in the box. For example, “The minimalist: A masked caped figure says ‘Lights out!’ Below, three figures on the street: a person says ‘Not him!’ A lady in a catsuit - says, ‘mmm...I need my bag of tricks’ and another figure says, ‘IDEA: RUN!’” Second style “Poetic license” uses much more flowery language, provides subjective interpretation to describe character’s expressions. The third style: “For the art lover,” provides a lot of detail for someone who cares about visual aesthetics, more spatial information, more description of the artistic style. Fourth: “Striving for objectivity,” a bit awkward as it strives to only use neutral language and descriptors, it doesn’t guess at characters’ gender or race, doesn’t name expressions which could be open for interpretation. The fifth approach: “Radio drama” just uses the sounds and word bubbles to tell the story, “Swoosh!” “Lights out!” “[eeeeeeeeeeooo]” and so on. The final style, “Everything but the kitchen sink,” is as it sounds - an extremely detailed description that provides leaves no visual detail undescribed, but becomes a bit cumbersome with how many words this then requires. A text caption at the bottom reads, “There’s no one right answer. (And this is only a single panel!)”

### Panel 8 (big box row 1 pg 2):

Another larger panel drawn on a scrolled piece of parchment, an illustrated topography map, like something at the start of a fantasy book. At the top near the map’s compass, a caption reads, “There are many potential paths to navigate.” Arrows suggest three directions. The first path leads to the land of sound, on the map’s coast, a mermaid emerges from the water with the words “voice actors” written across her face and torso, a word bubble drifts above with “dialogue”. The mermaid’s tale emerges out of the water, “rich description,” written on the tail. Sounds visualized fill the water, and float off into the sky as words become clouds, such as “tonal dissonance,” “ambient sounds,” “music,” “immersive sounds,” and “earcon.” Caption reads, “Audio adaptations convey drama.” Now exploring the central path leads to the “tactile” region, like a central mountain range, the comic begins to gain elevation, emerging into 3D and raising from the page to reveal snippets of comic panels with braille and textures graphics, including Felixa the catwoman rendered accessible to touch with textures distinguishing from her catsuit and her exposed skin, and raised outlines to follow her shape. Caption reads, “Tactile renderings allow thinking in pictures.” Two life-sized fingers descend from outside the comic’s wall down to touch the tactile region. Below the tactile elevated mountains, a recreation of a city created by raised pins, like refreshable braille but with a bigger tactile surface grid. On the third path in the map, text reads “Assistive technologies break down barriers to grasp the comic’s original form.” A phone vibrates and sounds bubbles emerge to orally provide the dialogue from the featured page of Blackout that is being accessed on the screen. A low vision magnifier rests on the map and extends outside the map’s boundaries. Through the magnification, a close up shot of two panels from the comic, Bad Idea pleads “No,” Blackout counters “Yes.” Text reads, “There’s no neat one-to-one mapping. For instance, what works visually may not to touch.” Two adjacent pictures illustrate this point: on the left, a sketch with dark shading shows Blackout’s profile and grave expression next to the second image, a raised outline of this same Blackout profile, with lines from wherever there was shading in the first picture that make it a very complicated tactile form, hard to imagine having much meaning to touch. The bottom right corner of the map, embedded in a storm cloud, the sun just visible behind it, text reads, “New horizons to be explored.” An ornate map key with one bit of guidance for all who utilize the map:

“Nothing About Us Without Us.” A caption at the base of the map, “For access is an art of translation - its own creative journey.”

### Panel 9 (page 2 row 2, panel 1):

The bottom row of the comic, two crossing paths, layered on top of the other, each ending in a comic modality: the first strand’s text reads, “This comic takes deliberate advantage of the visual affordances comics offer - densely layering ideas in ways only comics can do.” The words on a path end in a miniature picture of the print comic. The negative space in between the two paths creates an arrow pointing forward. The second path states, “To make an accessible version, we preserved the meaning of the drawn comic - with words and sounds to find its own path.” This leads to a QR code, with the words “Listen Here” framed around it to create a 3D effect, enticing the sighted reader to join, the qr code links to [spinweaveandcut.com/MITcomic](https://spinweaveandcut.com/MITcomic). Text reads in between the print comic and QR code reads, “Both aim to provide a distinct experience.”

### Panel 10 (page 2 row 2, panel 2):

The final panel, text on top “Everyone deserves access to the places comics take us.” Four children in a shared space all are experiencing comics, each with a different type of lightbulb overhead, glowing and activated from their own comic modality. A black boy with glasses sits with legs criss-crossed and reads the print copy of Blackout. Behind him, an Asian American boy wears headphones and holds a device that shows a still of Blackout. The side and back of a third child with long hair and thick eyeglass frames using a digital magnifier to view a zoomed in page of Blackout. The fourth, a white girl at a desk, looks straight ahead as her hands explore a tactile comic in front of her. In the center of the picture, a hand holds a phone using an app to access the Blackout comic, sound escaping from it voices, “Closeup on Bad Ideas Gang as...” Taken as a whole, a room of active comics experiences for all. Final caption reads, “With multimodal tools, comics can go beyond sight!”