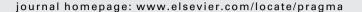


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Extra! Extra! Semantics in comics!: The conceptual structure of *Chicago Tribune* advertisements

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ABSTRACT

Recently, increasing attention is turning to comics as a graphic domain using similar cognitive processes to linguistic forms. As in the verbal and manual modalities of expression, various semantic structures arise across sequences of images in interesting and effective ways. This piece examines metonymy, conceptual metaphors, and blending across a three-panel pattern used in strips from an advertising campaign by the *Chicago Tribune* newspaper.

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1. Comics and linguistics

Recently, the emerging legitimacy of "comics" in the popular sphere has given rise to its visual language coming under the lens of linguistic analysis. While examination of the visual language in comics has been vogue for several decades, particularly in Europe (e.g. Gubern, 1972; Hünig, 1974; Krafft, 1978), this scholarship has largely remained steeped in the structuralist or semiotic paradigms of linguistics' past. Indeed, despite the nearly half century since the "cognitive revolution," the effort to elevate discussions about this visual language to its insights has only surfaced recently. Especially following the publication of theorist Scott McCloud's (1993) landmark book *Understanding Comics*, using the tools of modern language analysis to examine the visual language in comics has seemed an intuitive methodology. These attempts have ranged from the grafting of McCloud's approach onto existing linguistic discourse theories (Saraceni, 2000, 2003; Stainbrook, 2003; e.g. Lim Fei, 2006) or to cognitive schemas (Narayan, 2001), to arguing for the placement of the study of sequential graphic creation as a whole in a linguistic and cognitive paradigm (Cohn, 2003, 2007a,b).

Other research on this visual language has targeted more specific issues showing that the graphic form is capable of conveying rich conceptual expression beyond the demonstrative qualities of iconic signs. Recent studies have examined the pervasiveness of conceptual metaphor (Lakoff and Johnson, 1979) and blending (Fauconnier and Turner, 2002) in a variety of comics, including depictions of anger in the celebrated European *Asterix* comics (Forceville, 2005), text-image relations in political cartoons following the September 11, 2001 attacks (Bergen, 2004), and even underlying theories about the definition of "comics" itself (Horrocks, 2001). While these works have effectively shown how semantic properties arise in individual images, few studies have explicitly addressed how these conceptual phenomena arise across *sequences* of images.

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This piece will attempt to add to the discussion by doing just this, by looking at metonymy, conceptual metaphors, and blending across a three-panel pattern occurring regularly in a corpus of strips used in an advertising campaign by the *Chicago Tribune* newspaper.

1.1. Materials

In early 2005, the *Chicago Tribune* initiated an advertising campaign using various comics and cartoons to promote the day-to-day benefits of different sections of their newspaper, including multiple three-panel comic strips. These ads appeared on the sides of buses, on billboards, on the Internet, and other locations around the city of Chicago. All of these works were dominated by the visuals, with the only words in them inherently incorporated into the representation to specify the part of the newspaper concerning the strip. An additional peripheral sentence commenting on the usefulness of using that section of the paper accompanied the strips, but was not tied to it directly. In some cases, these sentences were unnecessary for the decoding of the visual message, while in other cases they provided essential information. Since these sentences were not interfaced explicitly with the strips, they will only be analyzed in select cases, while primary attention will be given to the strip itself. Additionally, each strip carried the advertising slogan, "Chicago Tribune: What's in it for you?" Tying broadly to the utility of the paper's varying sections, it did not play a key role in determining the semantics of each strip, and thus will not be discussed further in this analysis.

1.2. Sequential construction

A common pattern appears throughout the structure of all of the strips, which can best be illustrated through an example, such as in Fig. 1.

1.2.1. Narrative structure

The first panel sets up some situation, here of a person eating drumsticks. The second panel features a person reading a section of the newspaper labeled in text, which is nearly identical across all of the strips, though the section of the newspaper changes. The final panel features an image nearly identical to the first panel, though altered in some way. Here, that alteration changes the food to weights, brought about by reading the newspaper's health advice in the second panel. Implicit in this construction is a broader narrative "Arc" that begins with an "Initial" state that sets up the event of the sequence in the first panel. The second panel depicts a causative force (reading of the newspaper), which is where the "Peak" of the sequence occurs – the climax upon which the overall meaning hinges. Finally, the sequence ends with a "Release" that brings about the change shown in the third panel, relieving the narrative tension of the predication and depicting the resultant state caused by the Peak (Cohn, 2007a,b).

This account of comics' sequences flouts the popularly held theory that sequential image understanding moves through a linear sequence of panel-to-panel transitions (e.g. McCloud, 1993), instead favoring an approach that acknowledges a broader global level of structure inside of which panels play functional roles (Cohn, 2007a,b). Though not applied in the context of sequential image processing, this view of narrative is certainly not unprecedented. While not using the exact same terminology, the notion of a "rising-climax-falling" narrative arc on a broad scale goes back to Aristotle's description in *Poetics* of the three-act play, and similar structures surface in more modern theories of narrative and discourse structure (e.g. Mandler and Johnson, 1977; Mandler, 1984). These strips use this same sort of structure on a small scale where each graphic unit is a narrative type – given that such limitations make up the entire narrative structure for the piece.

1.2.2. Semantic structure

While previous approaches have explored broadly applied semantic fields involved with comic's conceptual expression (Bergen, 2004; Forceville, 2005), the exploration of sequential semantics apart from narrative structure has yet to receive

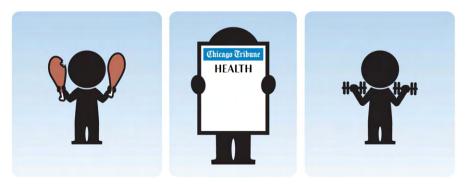


Fig. 1. Example strip from the Chicago Tribune advertisement campaign.

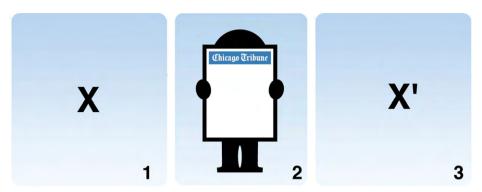


Fig. 2. Graphic compositional structure of Chicago Tribune comics.

serious scrutiny, particularly motivated by a cognitive context. On some level though, we should not expect altogether different forms of meaning than those found in verbal sentences – only the nature of the signs are graphic-iconic rather than verbal-symbolic. A semantic mapping of the generalized schema in the *Chicago Tribune* strips could follow the form below, using Jackendoff's basic formalism of Conceptual Semantics (e.g. Jackendoff, 1990):

[Fvent CAUSE([READ(Person $^{\alpha}$, Chicago Tribune)], INCH(Y(α))]

This formalism depicts transitive events as functions (in capital letters to indicate conceptual status), where the arguments of the function are enumerated in parenthesis (i.e. FUNCTION(Argument1, Argument2). The whole formula above is a consistent structure corresponding to the relationship of the second panel of the strips to the third panel. It says that the event READ consists of two arguments, a Person^{\alpha} (the "reader") and the Chicago Tribute (the "read item") – mapping to the second panel of the strip, where the Person^{\alpha} reads the Chicago Tribune. This event is part of a broader causative function where it serves as the first argument (the "causer"), with the second being an inchoative event "Y" (the "caused") that the Person undergoes (bound through the repetition of the alpha). This CAUSE event ties the second panel (the causer) to the result, event "Y" that Person^{\alpha} undergoes, in the final panel of the strip. Naturally, the first and third panels have more rich structure than this implies, though varying with the specific events found in each example.

It is interesting to note that these base consistent structures do not convey any sort of event structure depicting actions as they unfold over space and time. While they do show temporally subsequent events, each panel is demonstrative of a particular state that is united through this semantic structure, without connection to an event structure. For example, for the event of READING, each panel does not show progressive states showing the process of unfolding the newspaper, opening it to a particular page, and/or reading through different sections. In the first panel of Fig. 1, beyond the indexical bite marks, no action of eating the drumsticks is shown other than the character holding them in his hands – and not even in a position common to eating! The sense overall is not of a progression of events that there is a person who does something, then reads the paper, then does something else. Rather, there is a singular panel showing reading of the newspaper in panel two, while the first and third panels individually show their own encapsulated states. The first panel acts as a sample state that is altered in the third panel, facilitated by the causation of the second panel. This will become clearer with specific examples throughout.

1.2.3. Graphic structure

Beyond the semantic and narrative factors, graphic compositional elements also structure the patterns of the strips. Panels are primarily black and white, with a background gradient running blue to white from top to bottom. Figures are drawn schematically, generalizing the characters past any recognizable individuality other than gender. The figures look like the representations used on signs for bathrooms, making them what C.S. Peirce would call "Iconic Legisigns" – signs that are conventional in culture, yet still gain their expression through resembling what they mean (Peirce, 1931).¹

For every strip, the central Peak panel remains exactly the same, showing a person reading the newspaper. The only changing aspects of these panels are the gender of the character and the text indicating the newspaper section. In the one exception to this pattern, the person does not read the newspaper, but instead sits at a computer monitor.

The compositional patterning is more distinct in the first and third panels though, where the Initial and Release panels mirror each other in graphic composition (marked as X and X' in Fig. 2), though changing some element to show the causative

¹ Peirce's theories of semiotics are often misunderstood on this point. While Peirce categorized many aspects of his triadic semiotic sign, often the only concepts retained in usage have been the threefold *icons*, *indexes*, and *symbols*. Since symbols must be conventional, they are often misconstrued (perhaps out of over-association to the arbitrary dyadic Saussurean sign) as the *only* type of conventional sign. Peirce actually accounts for this, making conventionality a separate variable of the nature of the "sign vehicle" that can engage the types of reference of iconicity, indexicality, *and* symbolicity, though for symbols it is a defining characteristic.

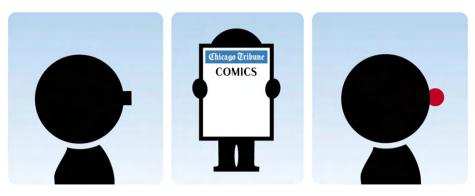


Fig. 3. Metonymy in a graphic morpheme of a clown nose.

force of reading the newspaper. The apparent visual changes between these panels took on three different types of characteristics: *reduction* of an existing element, *addition* of a new element, or *alteration* of an existing element. Out of the 23 strips, 18 featured alteration of some sort, while addition and reduction were only used three and two times respectively. However, in panels where alteration occurred, often the changes made to the existing elements were done through reduction or addition, though it was not of a whole separate entity. The other major technique used in altered panels was that of substitution of one element for another (like drumsticks for weights). As will be seen, all of these techniques lend towards conveying semantic expression.

1.2.4. Parallel architecture

In total, the overall pattern of the strips runs across several intertwining structures. In the spirit of Jackendoff's (2002) Parallel Architecture, indices denote the interfaces of the structure to each other in terms of the overall whole, conveniently here denoting the panel numbers:

 $Narrati Structure : [ArcInitial_1 - Peak_2 - Release_3]$

Semantic Structure : $[Event CAUSE([READ(Person^{\alpha}, Chicago Tribune)]_2, INCH(Y(\alpha))_3]$

Graphic Composition:

Insofar as this causative pattern is consistent and productive across multiple levels of structure, it is reminiscent of constructions in verbal language, which create abstract form-meaning pairs above the level of "word" sized constituents (Goldberg, 2003). For example, the construction Verb-ing the Time Away is a consistent pattern that can be filled in with numerous words to indicate performing an action over a course of time, such as reading the afternoon away, drinking the year away or the classic song, twistin' the night away (Jackendoff, 1997). While it may not extend to usage in the "visual vocabulary" of a broader population of comics' authors like verbal constructions, the causative pattern used in the Chicago Tribune ads seems to carry this same characteristic of an abstract form-meaning pairing that transcends its tokens in individual strips to become a consistent schematic pattern. As will be seen in several of the examples, the knowledge of this generalized skeletal structure often aids in guiding the interpretation of the sequence. In some ways, this repetitive usage could be considered a visual construction that has yet to become entrenched in broader usage (Tomasello, 2000).

2. Metonymy

Many of the strips allowed for *metonymic* reference, using one thing to stand for another related concept, such as the classic example of a waitress saying *The ham sandwich just spilled beer all over himself*, where *ham sandwich* serves to mean 'the person who ordered the ham sandwich' (Nunberg, 1979). Other types of metonymy use a part of something to reference a whole or stating a place for an institution. In all cases, the metonymic element has some sort of related connection to a broader conception that it invokes.

Perhaps the best place to begin this analysis is with a somewhat reflexive example. In Fig. 3, a clown nose is added to the person after reading the "Comics" section of the newspaper.

The "Comics" section of the paper is assumed to be funny, bringing amusement to the reader. The causation brought about by the second panel is not conveyed narratively per se – the person is not laughing or smiling while reading the paper or after, nor is the clown nose a reflection of the person trying to be funny – its effect is demonstrated conceptually. The clown nose symbolizes the concept of humor, and its presence is metonymic to the idea that reading the comics section will bring humor to your life.

A similar metonymy occurs in a strip about gift giving, as in Fig. 4.



Fig. 4. Metonymy through lipstick imprints.

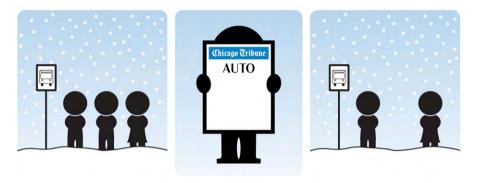


Fig. 5. Metonymy through reduction of a character.

The release of reading the "Gift Ideas" section of the paper depicts the figure to have lipstick marks all over his head. Partially, lip marks hold a part-whole relationship to a woman² as a whole, though it extends further because of the context of those lips and the meanings associated to kissing. Kisses imply an intimate relationship of the giver to the recipient, and such an abundance of lip imprints insinuates that that the gift had a happy reception. The message created is: taking the gift advice found in the paper will make your mate happy. Here, the lipstick stands for the happiness that the newspaper can bring to a spouse through gifts, and thus reciprocally to the giver of the gifts.

While these examples have both featured some sort of alteration to the Initial through addition, reduction of an element can also be metonymic, as in Fig. 5.

In the release of this strip, the reduction of the middle character from the three people at the bus stop implies that he is the person who read of the "Auto" section of the paper in the second panel, and that he has bought a car and no longer needs to use the bus. A bus stop represents a form of transportation, here depicted somewhat unfavorably because of the snow and the implication that a car would be preferable, validating the advertising of the newspaper's usefulness. By contrasting the bus stop with the auto section, the reduction of a person suggests he has bought a car to drive instead of taking the bus. Though two of the figures look identical, the reduction of the missing person is understood metonymically entailed as the one who read the paper.

Metonymy can also be formed through a backformation as well, as in Fig. 6.

This strip shows the utility of the "Sales" section by illuminating a darkened room with a lamp – presumably bought after reading the paper. In the first panel, the two white dots represent the eyes of the cat, but the reader can only make that distinction *after* they reach the final panel. The black of that panel is also unspecified, and only the presence of the lamp makes it clear that the first panel represents the same scene shrouded in darkness. The metonymic cat eyes become the only element that indicates that the first panel indeed does show a lamp-less living room (and knowledge of the compositional patterns of the overall strips). In a way, the darkness itself creates a metonymic part–whole relationship based on the presence of the cat, which thereby allows the whole blackened area to reference the living room, but only *after* reading the complete strip. Note also that narrative coherence is not maintained throughout the second panel, since that panel is *not* shrouded in darkness. Either the character is reading the paper in an entirely different location from his darkened room, or the panel serves only a conceptual purpose as a representation of causation – it does not represent the unfolding of events.

² Or a lipstick-wearing man!

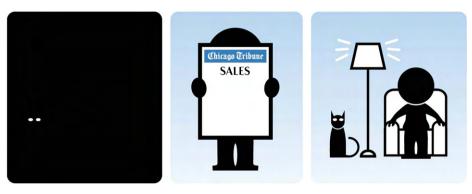


Fig. 6. Part-whole metonymy through backformation.

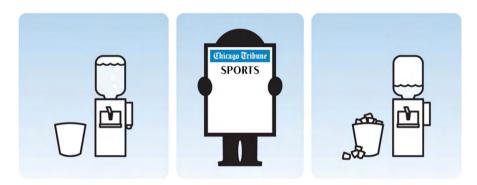


Fig. 7. Metonymy through the association of watercoolers and conversation.

Fig. 7 demonstrates a strip that bucks narrative event structure almost entirely. Here, the watercooler in the first and last panels stands as a place that people gather to talk in an office. In the first panel, the water tank and cup holder is full while the trashcan remains empty. The final panel shows the trash filled with cups and the water level decreased, implying that people have been drinking. Generally speaking, sports have no great connection to watercoolers, but the implication of the second panel is that reading the "Sports" section of the paper will give you something to talk about at work (not that it makes you thirsty!). Indeed, the only presence of characters in the strip is in the second panel, which only shows an individual reading the paper. However, the pile of cups in the Release implies that more than one person has been at the cooler, since social discussion is not a solo event, meaning the *individual* reading the paper also stands for *multiple people* (a metonymic partwhole relation), since reading the Sports section would allow a common ground for group discussion.

Again, this strip works at a purely conceptual level since no events are depicted in the relationship of panels exists at all. There are no characters introduced to partake in actions, and none conveyed. Rather, the panels create symbolic meanings unified by abstract narrative principles.

3. Metaphor

Conceptual metaphor involves understanding one conceptual domain in terms of another, thereby mapping properties of one into the other. A common metaphorical schema might be that Arguments are War, which yields statements like *I attacked all of his points and defended my arguments* (Lakoff and Johnson, 1979). Arguments do not have to involve *attacking* or *defending*, but the mapping of war onto debate allows for these types of expressions. Usage of metaphor seem unexceptional to language, making them an essential aspect underlying conceptual expression.

Fig. 8 shows a metaphor that is common in graphic form. This simple example utilizes the metaphor that Anger is a Hot Fluid in a Container, which, as Lakoff (1992)⁴ notes, manifests by showing steam blowing out of the character's (unseen) ears. In Forceville's (2005) analysis of the French comic *Asterix*, he found numerous signifiers of the Anger is a Hot Fluid in A

³ This also provides a good example of cultural relativity of using such tropes, as gathering around the watercooler may not be a universal practice in offices around the world. Indeed, this convention may not even be fully understood in America (where these ads came from) either. When faced with explaining this example on a homework assignment, some undergraduate students of mine did not understand the convention, and tried to reconcile watercoolers and sports using justifiable inferences, such as "doing sports make a person thirsty" or "they made up a sport throwing cups into the trash".

⁴ Unless otherwise noted, the metaphors in this section, and the verbal sentences used as examples for them, come from Lakoff (1992).

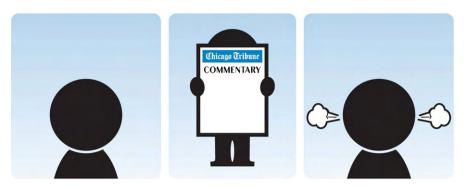


Fig. 8. Symbolic depiction of anger shown through steam coming out of the ears.



Fig. 9. Conceptual metaphors depicted through traveling on an escalator.

CONTAINER, especially facial expressions like bulging eyes and reddened skin, in addition to the full lifting of bodies off of the ground. This strip uses none of these fairly iconic – yet exaggerated – aspects of human emotion, and simplifies the metaphor to a singular "graphic morpheme" of steam. Since the causative panel shows the "Commentary" section of the paper, the steam conveys that reading it will get you angry. The accompanying sentence to this strip lends even more insight, stating "In-depth opinions you can't ignore," insinuating it gets you passionate about people's opinions – perhaps a good thing because it stimulates your thinking.

Only one strip deviates slightly from the standard graphic pattern of the construction. In Fig. 9, the central panel does not depict the newspaper in print form, but references a part of the *Chicago Tribune*'s website, the "career builder" section, by showing the figure in front of a computer screen:

Pervading this strip is a metaphor of a Career as a Journey – that allows for phrases like *He clawed his way to the top*, and *She's climbing the corporate ladder* – while also containing another metaphor of Status is Up that modifies the original career metaphor. Since the man moves down the escalator in the first panel and up in the third, this schema reinforces the positive force of the Tribune. This also invokes a metaphor of Making Progress is Forward Movement, since the figure is facing the direction of travel along the escalator, as well as moving in the left-to-right direction in which the reader experiences the panels. Note also that outside the text on the computer screen, the notion of "career" is never decodable from the visual representation – it only contains a man on an escalator and looking at a computer screen. While the metaphor is carried out visually, the semantic frame created by the text motivates it.

4. Blending

Metaphor and metonymy can also be accomplished through what Fauconnier and Turner (2002) call conceptual blending. In addition to the mapping of one domain onto another, they argue that blending maps into a new "mental space" that contains the blend of the two domains, allowing for correspondences that might not actually reflect a fully entrenched conceptual metaphor. Because this blend occurs in a new space, some qualities from the domains may not transfer, while other properties that emerge out of the new reading may not be explicit in the original domains. For example, in the sentence *The surgeon was a butcher*, only the juxtaposition of the two nouns crates underlying meaning that being a butcher is a bad thing – which in the context of their craft is untrue.

Fig. 10 shows how, in the visual form, blending can occur directly with graphic elements.

This strip implies that reading the "Science" section of the newspaper will make you smarter, metonymically conveyed by blending Einstein's hair on the figure. This sort of blend would be characterized by the philosopher C.S. Peirce as *metaphoric*

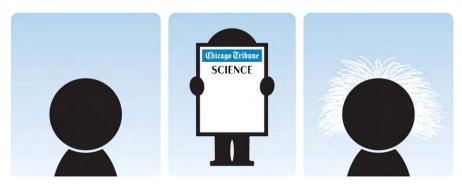


Fig. 10. Einstein's hair used as a symbol for intelligence.

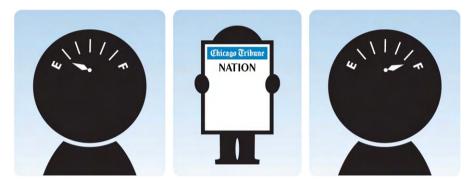


Fig. 11. Gas gauges overlain on a head symbolize the mind as a container.

iconicity, because its meaning is linked to its referent "by representing a parallelism in something else" (Peirce, 1940). Reading the newspaper will not make you *literally become* Einstein (unfortunately) – the figure in the final panel only gained a (physical) feature of Einstein's to conceptually convey the idea of heightened intelligence (a non-physical feature).

Fig. 11 makes use of a visual blend with more symbolic correlations, with a gas gauge mapped onto the person's head to imply that reading the "Nation" section of the paper will "fill up" your empty mind. The placement of the gauge on the head importantly implies that the mind is being filled, and that it is a container for information. In some ways, this relates back to the visual depiction of Anger is a Hot Fluid in a Container, since in both instances the physical head becomes that container, though they bear very different entailments. The blend doesn't fully make the mind like a gas gauge though, since the mind doesn't lose or shut down like a car does when "empty" of ideas. In this respect, the empty/full distinction is similar to the Status is Up metaphor. It is bad to be empty – which is why you want to read the newspaper to become full – but being empty won't cause your mind to stop functioning.

Perhaps another blend that has to do with the mind will make a fitting end to this discussion, depicted in Fig. 12. Like the example in Fig. 11, this strip invokes the idea of the mind needing intellectual stimulation that can be provided by reading people's "Editorial" opinions. The visual blend of gears on the head create a sense that the MIND IS A MACHINE, while their movement echoes the phrase get the wheels in your head spinning, invoking the metaphor that LACK OF PROGRESS IS LACK OF

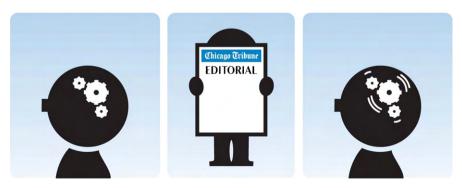


Fig. 12. The mind as a machine depicted with gears blended with a head.

MOVEMENT. Again though, unlike a brain, when gears of a machine stop moving, it shuts down. While it might be true that if a brain stops "moving" a person is likely dead, but at this point the editorial section wouldn't be of much help! Rather, the stagnation in the first panel only reflects the conception of intellectual stimulation, which is something that machines do not have a capacity for at all.

5. Conclusion

These strips demonstrate that the graphic form can also tap into the same abstract properties of conceptual thought – metonymy, metaphor, and blending – as other linguistic modalities. Often times these processes are motivated by a single sign, such as lipstick kisses, a clown nose, Einstein hair, or the presence or absence of motion lines. But, these signs themselves do not necessarily invoke such conceptual functions. Rather such an effect is brought about by these signs by embedding their contexts with other panels of the sequence concurrently with a single symbolic word. That is, the *sequence* facilitates the metonymy, metaphor, or blending, not just the signs.

Furthermore, these strips also rely on the integration of text and image. While the images carry out the meanings, such interpretations would be impossible without the words to point the way. Indeed, without the word "Sports" a watercooler would just stand for people drinking, and without "Sales" the room with a lamp would just appear to have a light turned on, not a lamp freshly bought. While the strips do show the ability of images to use creative conceptual processes, they also show the extensive impact that the conceptual network of a singular word can have. Each strip only contains one word, yet evokes very rich expressions achieved by the graphics. Through these means, sequences can transcend narrative norms in conveying conceptual expressions, showing that sequential images do not just mimic the unfolding of everyday events. Such textimage integration reflects the intuition that the verbal and graphic forms are not necessarily worlds apart in their expressive capacity, but are rather two sides of the same conceptual coin – and can thereby be studied with the same tools and methods from cognitive science.

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