Motion and Force in a Static Art Form: Image Schemas and Primary Metaphor in American Superhero Comics

Comics are static visual art, but unlike photography or painting, comics depict stories that unfold through time and are suffused with action. Comics artists are faced with a recurring problem: how to portray movements and force dynamics in static images that can be readily interpreted by readers (McCloud 1994). This study analyzes visual conventions used in American superhero comics and their grounding in image schemas and primary metaphors.

Humans conceptualize motion events via the source-path-goal image schema (Johnson 1987). In contemporary superhero comics, this image-schematic structure is reified in a *ribbon path*: a swath of color bordered by lines that directly depicts a path of motion in the drawn environment. The ribbon path may be a highlight color (white or yellow) but often matches the color of the trajector to emphasize the conceptual relationship. The source and goal may be highlighted with *flashes*: areas with lighter tints and/or outward radiating lines. This basic structure is often combined with other techniques to create specific visual effects: using the apparent orientation of the trajector to indicate direction of motion, using diverging lines to create the impression of motion toward the viewer, and using left-to-right layout so the direction of reading produces the sense of an unfolding process. The ribbon path contrasts with other conventions for representing motion in comics, namely motion lines or multiple traces which depict the smearing of rapidly moving objects in visual perception without the associated source-path-goal structure.

In superhero comics, motion combines with force dynamics (Talmy 2000) when one object strikes another. These impacts are depicted by *impact flashes*: areas with highlight colors (typically white or yellow) and radiating lines. Like the flashes that highlight sources and goals, impact flashes may be drawn on ribbon paths and mark points of deflection. Why should flashes stand for force dynamics? The answer seems to lie in a primary conceptual metaphor (Grady 1997) relating visual and auditory experience. The burst of energy in an impact is normally experienced by an observer as a percussive sound. Because comics are a soundless medium, this experience must be depicted visually. A flash has the same dynamic properties as a percussive sound—suddenness, power, short duration—and is often correlated with such a sound, as in an explosion. The impact flash stands metaphorically for the auditory (and kinesthetic) experience.

These effects are illustrated in the analysis of a complex comic panel. The analysis highlights the visual cues used by the artist to represent the sequence of motion and impact events while it describes the conceptual structures used by the reader to parse this representation of action unfolding through time.

References