Visual Science Storytelling, Sequential Art & Illustrated Science Communication: Introducing a New Series

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Abstract: This article introduces $w/k\hat{a}_{\square}$ s new series on sequential art, visual science storytelling and illustrated science communication. Articles in this series are dedicated to the discussion of art forms that use images in a particular order and/or illustrations to tell visual stories about science (or) for the purpose of communicating science. This introduction explains how the new series fits into the journal, defines the most important terms and discusses their context. It also explores the expected artistic and scientific scope and framework.

The aim of the online journal w/k $\hat{a} \square$ Between Science and Arts to investigate the interfaces and interconnections between science and art. All art movements $\hat{a} \square$ including sequential art and science illustration $\hat{a} \square$ are interesting for w/k as long as they include the following criteria: artists work in a science-related way; there are collaborations between science and art; and science/art border crossers are involved (see here for the journal $\hat{a} \square$ profile The articles published in the new series *Visual Science Storytelling, Sequential Art & Illustrated Science Communication* follow this aim and the well-established w/k structure and section profiles: The articles are written by artists, art-related scientists, about artists, and are appropriate, for example, for $w/k\hat{a} \square$ section of art-Related Scientists; they focus on individual artists or collaborations and/or theoretical aspects of the art and science theme. However, this series differs from other w/k series and articles because science illustration and sequential art also includes science-based (fictional) comics and graphic novels, which are popular art forms. The articles in this series will address the question of what makes these art forms so popular, and to what extent this is related to the fact that they use images in a particular order to tell stories about science and/or to engage in science communication. The articles published in this series have a frame in cyan.

Visual Art and Science Storytelling: Illustrated Science Communication, Comics and Sequential Art

This series is dedicated to the study of art forms that use images in a particular order and/or illustration to tell visual stories about science (or) for the purpose of communicating science. Visual artists who specialise in artful science illustrations or artistically-designed science articles and books, artists who use visual art to create stories about science for science magazines and visual artists who explore digital technologies to tell visual stories about science in augmented reality (AR) or virtual reality formats are therefore part of the focus of this series; this also includes visual artists who create sequential art about science in the form of comics and graphic narratives. Artist-created comics, for example, are a visual art form that can explore, communicate and even generate science understandings and meanings in a myriad of ways.



Comics exploring science themes and metaphors (2024). Photo: Nic Vevers.

Comics are also called sequential art â at a term describing art forms in which images are used in a particular order for the purpose of graphic storytelling or conveying information â∏ that goes back to the influential 1985 book Comics and Sequential Art by comics artist Will Eisner. Comics as a graphic medium, and by extension, graphic novels, provide a plethora of diverse artistic visual styles, imagery and graphic narrative created by professional visual artists that can help deliver science insights, messages and meanings in a relatable way to a wide range of audiences of all ages. Nowhere is this more evident than the increasing use of comics material in every research field (see e.g. Farinella 2018 or Woolston 2014) at every level of education. The mise-en-page â∏ the layout of comics panels, gutters, panels, captions, contrasting levels of abstraction, body schemas, speech bubbles and other comicsspecific devices (such as heart eyes, onomatopoeia, steam spouting from the ears) â∏ and the creatorsâ∏ distinctive artistic styles (graphiation) all contribute to the unique ability of comics to help the reader develop gestalt, or, in other words, multiple, simultaneous understandings of environments, processes and a characterâ story. There already exist several lustrative works highlighting how comics uniquely visually organise information in cognitively complex and innovative ways â∏ Scott McCloudâ∏s *Understanding Comics* and Nick Sousanisâ are the most critically acclaimed examples. The static nature of the comics page allows for visual detail to be perused or returned to at leisure; the reader has the option to reabsorb and revisit visual information and jump back and forth in time at will during the reading. This is a written narrative-like media affordance that profoundly distinguishes comics from other forms of visual storytelling, like film. While most forms of visual art are taboo to touch , traditional print versions of comics afford the reader multisensory accessibility and engagement. The textures and finish of the paper, the smell of inks and preservatives, the positioning and embodiment of objects in rooms and landscapes â∏ all layered in pages and covers â∏ culminate in an architectural overview of the physical, visual and narrative alike, that anyone can grasp and appreciate.

This Series â∏ Focus and Aims

In this series we unpack the artistic concepts of professional visual artists and (their) projects, and how they explore and communicate science and scientific research through various forms of sequential art â∏ through science-based comic art, graphic science, (fictional) science comics, AR comics and related forms â∏ as well as through visual media revolving around the science-art interface (e.g. science magazines) that include science illustrations and engage in illustrated science communication. It is well known that art in scientific publication has a powerful effect on the impact and academic reach of scientific research (Wang et al. 2017), which can be explored in this series by tapping into studies on knowledge design. However, it is especially and specifically artistic concepts that we are most interested in discussing. In the realm of science-based comics, we are interested in unpacking comics as a visual art form. Cartoons, newspaper comic strips and infographics are thus of lesser interest in this series, unless they inspire visual artists and scientists alike or are at the centre of science-art collaborations, such as the Frozen-Ground Cartoons, SuperScientists or Cartoon Science initiatives. We are interested in clarifying how artists and scientists collaborate in this space, in strategies used by visual artists to illustrate science stories and in different understandings of visual science art in the context and guise of graphic art and comics. Ultimately, by better understanding the artistic concepts as they unravel in and across this series, we clarify the range and power of scientific storytelling techniques developed and applied by visual artists â∏ also referred to as pictorial storytelling, pictonarrative, narrative illustration â and the ways in which they communicate scientific research and convey meanings of science.

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Cover image: Collage featuring one issue of *Science Notes* and the *Anatomy of Comics* (2024). Photo: Anna-Sophie $J\tilde{A}^{1}_{4}$ rgens.

Tags

- 1. Anna-Sophie Jürgens
- 2. Border Crosser
- 3. Crystal-Leigh Clitheroe
- 4. Illustrated SciComm
- 5. science-related art
- 6. sequential art