SYSTEMS DOSIGNELLING

SYSTEMATIC STORYTELLING

Inspiration sources at the intersection of system design and storytelling

- Analysis by Gerlinde Schuller

January 2021

The Library of Babel (1941) Jorge Luis Borges

Trajan's Column (112/113 CE) Rome (IT)

Cultural History 1880-1983 (2003) Hanne Darboven

Mannheim – City of Squares, Germany (1813)

Family Tree (2018) Joanna Kaplanis, Yaniv Erlich, New York Genome Center (US)

'24' TV series (2001) Joel Surnow, Robert Cochran for Fox (US)

Today Series (1966-2014) On Kawara

Garden Cities of To-morrow (1902) Ebenezer Howard

It was me. Diary 1900-1999 (2002) Daniela Comani

COVID-19 Dashboard (2020)

Ensheng Dong, Hongru Du, Lauren Gardner, Center for Systems Science and Engineering at Johns Hopkins University, Baltimore (US)

This analysis is part of the project *The Infinite Narrative* https://theworldasflatland.net/the-infinite-narrative/

1/10

"T con nu or nu or nu or mi Liù he ba sy: de pa rau tra all an ha sy de pa rau tra all an ha cie ing Bu De po De his raj Ba rej Ba rej Ba rej Cr





The Library of Babel (1941) Jorge Luis Borges

In his short story Jorge Luis Borges (1899-1986) describes the universe as an infinite library that contains every book that has ever been written or is still being written.

System

Classification system:

The order of the books in the library is random.

Standards:

The books – each having 410 pages, with 40 lines on each page and 80 characters on each line. Thus, there are $410 \times 40 \times 80 = 1,312,000$ characters in each book. The library contains every possible book of this form, that is, one book with each of the possible orderings of the characters. Borges used an alphabet of 25 letters, so the total number of books is 25 raised to the power 1,312,000. This corresponds approximately to two followed by 1.8 million zeros, an unfathomable number. No matter if a book is lost: there are more than 30 million others that differ from it by only a single character.

Universal (design) methods:

universal library, a complete collection of knowledge

Network:

a geometrically organized labyrinth of rooms with a centre

Rules

The library is 'total' and contains every single combination of letters that is possible.

Modularity:

geometrical hexagons

Flexibility:

open system, an infinite number of identical rooms

Storytelling

Theme:

the meaning of life Setting (place/time):

an infinitely large library; present

Characters (main/secondary):

librarians, scientists, purifiers (arbitrarily destroy books), admirers (call for idolatry of books)

Plot:

An infinitely large library is described as a fantasy universe that contains all information, including predictions of the future, biographies of any person, and translations of every book in all languages. It contains the total number of possible combinations of 25 written symbols. The meaning of life and the answer to life are out there in the library, in a book somewhere. Thousands of librarians rush out to seek their own fortunes. They also search for the one book that must be a perfect index of the library's content. Chaos and violence ensue because valid information is swamped by multitudinous tomes of gibberish.

Climax:

The narrator's big realization is that 'everything' in the library has meaning, even the seemingly random assortments of letters. For every word that looks like gibberish, there's a book in the library that decodes that gibberish and gives the word meaning. The narrator's conclusion is that the library is periodic and that therefore there must be order to the universe.

Time concept:

The library is infinite but periodic (it repeats itself).

Narrative style: novel, fiction

Narrative perspective: first person narration from an unnamed librarian

Tone of voice:

philosophical, cynical

Other characteristics

Users/target group: library inhabitants

Access: Readers live and grow old in the library.

Scope: The infinite library building is their world/universe.

Language: Every book exists in all languages.

Material: fictional architecture

Interactivity: Not really, the librarians don't write their own books.

Response (production) time: -

Images: Engraving by Erik Desmazières in The Library of Babel. 1941 odany.wordpress. :om/2014/0



Conclusion

In order to fight the gibberish we need structured overviews, preferably about the past, the present and the future.

2/10









Trajan's Column (112/113 CE)

Rome, Italy

The victory column was constructed for the Roman emperor Trajan (53-117 CE) and depicts scenes from successful wars in a spiral.

System

Classification system:

The structure is about 30 metres in height and 35 metres including its large pedestal. The shaft is made from a series of 20 colossal Carrara marble drums, with a diameter of 3.7 metres. The 190-metre frieze winds around the shaft 23 times. Inside the shaft, a spiral staircase of 185 steps provides access to a viewing platform at the top. The total length of 200 meters marked the height of the hillside that had to be cut away to construct Trajan's Forum. The relief portrays Trajan's two victorious military campaigns against the Dacians, the lower half illustrating the first (101–102), and the top half illustrating the second (105–106). A room at the base of the column holds his ashes upon his death in 117 CE.

Standards:

The frieze repeats 155 standardized scenes of imperial address, sacrifice and the army setting out on campaign.

Universal (design) methods:

reading from bottom to the top; different carving styles are used to enhance visibility

Network:

Trajan appears at regular intervals, up to 60 times.

Rules:

one spiral height throughout

Modularity:

repeating 155 standardized scenes

Flexibility:

Napoleon III requested in 1861 that moulds are taken from the original relief. Sets of plaster casts of the relief can be viewed in various museums worldwide.

Storytelling

Themes:

good vs. evil (Romans against Dacians); the pain of war

Setting (place/time): Roman Empire; past

Characters (main/secondary):

Trajan, the emperor and 2,662 human figures

Plot:

The relief portrays Trajan's two victorious military campaigns against the Dacians, a civilization in what is now Romania. It contains detailed descriptions of the war with elements of propaganda, particularly with the repeated emphasis on the barbarity of the Dacians compared to the Romans.

Climax:

The column is storytelling and tombstone in one. Five Dacian women are depicted torturing three naked men – it is remarkable that women are included at all in a war monument.

Time frame:

4 years of Roman history – 101-102 and 105-106 CE

Narrative style:

documentary

Narrative perspective: told from the perspective of the Romans

Tone of voice:

monumental and propaganda; wartime violence has been downplayed

Other characteristics

Users/target group:

urban population of Rome, addressing their fear and distrust of the army by depicting its warfare as one with little collateral damage

Access:

publicly accessible; originally the column stood in the middle of a courtyard surrounded by galleries from which one could view at various levels the spiral band

Scope:

population of Rome and visitors

Language: picture story with a short Latin inscription at the base of the column

Material:

white Carrara marble

Interactivity: no

Response (production) time: erected in 113 CE, seven years after the last military campaign depicted on the column

Casts of Trajan's Column at the Museum of Roman Civilization in Rome (IT).



Interactive graphic of Trajan's Column https://www.nationalgeographic.com/trajan-column/index.html Images: Wikimedia Commons Sources: https://www.nationalgeographic.com/trajan-column/index.html https://www.vam.ac.uk/articles/trajans-column

Conclusion

A human, emotional representation full of details and a regular repetition of the main characters allow us to experience a story more intensely.

3/10



Cultural History 1880-1983 (2003) Hanne Darboven

The encyclopedic installation combines cultural, social, and historical references with autobiographical documents by Hanne Darboven (1941-2009).

System

Classification system:

The timeline consists of 1,590 paper sheets and 19 sculptural objects arranged in chronological order.

Standards:

poster size 27¹/₂ x 19³/₄ inches (50x70cm), landscape format

Universal (design) methods:

color coding: larger sections cohere by color and morphology rather than by subjects

Network:

an infinite-yet-incomplete historical archive

Rules:

Darboven uses a grid that provides a taut formal structure.

Modularity: same poster size throughout

Flexibility: grid appears endless and infinitely repeatable

Storytelling

Themes: a century of world history; a synthesis of collective memory and personal history; the social with the private

Setting (place/time): the whole world and Darboven's personal world; past

Characters (main/secondary):

Hanne Darboven, historical figures and unknown persons

Plot:

Telling the story of society at large, while also presenting an autobiography of Darboven herself by weaving together autobiographical documents with cultural, social, and historical references like postcards, pinups of film and rock stars, documentary references to the first and second world wars, geometric diagrams for textile weaving, a sampling of New York doorways, illustrated covers from news magazines, the contents of an exhibition catalogue devoted to postwar European and American art and a kitschy literary calendar.

Climax:

The work only poses as a complete systematization of a culture. In fact, the impossibility of such a system is Darboven's whole point.

Time frame:

around 100 years

Narrative style:

Like an encyclopedia, the work catalogues and displays information without subordinating it to a dominant narrative form.

Narrative perspective:

Hanne Darboven's choice

Tone of voice: a visual experience, an image of information. In some installations an ambient soundtrack of one of Darboven's musical compositions - a mindmassaging solo for double bass with a repetitive structure similar to her visual art - provides a beat.







Other characteristics

Access: galleries and museums worldwide mainly visual Material: paper, objects, beat

Users/target group: general public, art lovers Scope: Western/European history Language:

Interactivity:

no Response (production) time: 1980-83



Photos: Bill Jacobson Studio Sources: Dia Art: https://tinyurl.com/y4sed3jj NY Times: https://tinyurl.com/yxkw6nns

Conclusion

A systematic and visual coding and structure facilitates access to a complex story.

4/10











Mannheim – City of Squares, Germany (1813)

The city center of Mannheim, also known as 'City of Squares', is designed as a planned city. The beginnings date back to 1606. Even today, the city center consists of 144 'squares' which are actually different rectangles.

System

Classification system:

144 'squares' in a coordinate system A-U and 1-7. A street named *Breite Straße* goes through the middle of the blocks from south to north, with blocks A-K on the west side of the street and L-U on the east, with each row going 1 to at most 7 based on distance from this road. House numbers begin on the south corner nearest *Breite Straße* and go counterclockwise for A-K and Clockwise for L-U.

Standards:

'Squares' although they are different rectangles. There are rectangular, rhombic and trapezoidal 'squares' and two triangles.

Universal (design) methods:

Coordinate system which provides a letter/number code

The Mannheim 'chess board' has the shape of an inverted 'U' and is divided into a left and a right half.

Rules:

An address is formed by the square code with the associated house number, for example: D 6, 2.

Modularity:

More squares could be integrated.

Flexibility:

The squares on the coordinate system could be expanded endlessly but the infrastructure of the city is determinded and doesn't allow expansion of the square system.

Storytelling

Themes:

protection from enemies; the influence of war on life; planned city

Setting (place/time):

urban/town of Mannheim; past and present

Characters (main/secondary):

Elector Friedrich IV of the Palatinate (1574-1610), Dutch fortress architect Bartel Janson

Plot:

In 1606, Elector Friedrich IV of the Palatinate laid the foundation stone for the construction of the Friedrichsburg fortress and commissioned the Dutch architect Bartel Janson to plan the neighboring city. He followed the ideals that apply to planned cities, which were strongly influenced by military aspects, and designed the regular system of geometric shapes that is so characteristic of Mannheim to this day. The fortress was the historical fixed point of the squares, which are all oriented towards it. In 1622, during the Thirty Years' War, the city and fortress were destroyed. After 1648 a reconstruction under Elector Karl I. Ludwig followed. In 1720, the Mannheim Baroque Palace was built on the site of the former fortress. The current system of squares with letters and numbers was introduced in 1811. Today the city's tourism slogan is Mannheim². Leben im Quadrat (Life. Squared.)

Climax:

People unused to the unusual addressing system will often become lost. It also causes major issues with most mapping software (e.g. Google Maps), as the databases they use are based on the standard street-number system.

Time frame:

The planned city centre is around 410 years old.

Narrative style:

abstract, military style

Narrative perspective:

Friedrich IV's ideal perception of a city

Tone of voice: strict, classic

Other characteristics

Users/target group: city dwellers

Access: publicly accessible

Scope: total city area is 145 km²

Language: universal codes – alphabetically and numerically

Material: city infrastructure, maps and signs communicating the addressing system

Interactivity:

no

Response (production) time: start of construction was 1606, construction time is unknown

Image: Generallandesarchiv Karlsruhe (DE) Sources: https://tinyurl.com/y2p7pfz8 https://tinyurl.com/y32v7rp5

Conclusion

Universal classifications and codes allow a long-term, if not infinite narrative to unfold.

5/10





Family Tree (2018) Joanna Kaplanis, Yaniv Erlich, New York Genome Center (US)

13 million people are connected on the world's largest family tree, mainly from Europe and North America, in a time frame of 500 years. For this purpose, 86 million profiles of people from a genealogy website were processed.

System

Classification system:

tree structure as a way of representing the hierarchical nature of a structure in a graphical form

Standards:

public profiles listing a person's name, sex, date and place of birth, date of death, and immediate relatives; for the visualization the names have been stripped from the data to protect privacy

Universal (design) methods:

quantative analysis, tree diagram, information visualization, color coding

Network: data packages from

data packages from *Geni.com*, where people share their family trees, are linked together

Rules:

color code in visualization; individuals are represented in green and marriages in red

Modularity:

comparable crowdsourcing data packages of 13 million people

Flexibility:

The family tree could be expanded endlessly with more and more data packages.

Storytelling

Themes:

research on what family trees can tell us

Setting (place/time): the whole world; past

Characters (main/secondary): 13 million people

Plot:

This family tree is stretching back 500 years that links 13 million people related by blood or marriage. Their relatives were mostly of European descent, dating back 11 generations. By plotting births on a global map over time, the scientists charted major migration events, such as the Mayflower landing in 1620 in present-day Massachusetts - soon followed by a burst of births in the region – and the 1788 founding of the British penal colony that began Australia's colonization. Human relationships, as documented in the family tree, can elucidate the heritability of a host of medical and biological parameters. They are used to examine the genetic architecture of human longevity and migration patterns. But more interesting is the possibility that such data may one day be linked to medical information or to DNA sequence data as more people have their genomes sequenced and deposit that information in public databases.

Climax:

The family tree includes famous people, e.g. Sewall Wright, a founder of human population genetics, and the actor Kevin Bacon. The two are separated by 24 degrees.

Time frame: 500 years

Narrative style:

objective research

Narrative perspective:

The final research paper is witten by 14 researchers from New York Genome Center, Columbia, MIT, and Harvard.

Tone of voice: scientific, academic





Other characteristics

Users/target group: scientific community and general public Access:

research article in *Science* Scope: worldwide Language: English Material: raw profile data, programming, data visualization Interactivity: no

Response (production) time:



appr. 7 years (2011-2018)

Image: New York Genome Center (US) Sources: science.sciencemag.org/content/360/6385/171 NY Times: https://tinyurl.com/yb724neq

Conclusion

A story that unfolds like a network enables non-linear storylines and individual access for each user.

6/10



THE FOLLOWING TAKES PLACE BETWEEN MIDNIGHT AND 1:00A.M., ON THE DAY OF THE CALIFORNIA PRESIDENTIAL PRIMARY.





'24' TV series (2001) Joel Surnow, Robert Cochran for Fox (US)

24 is an American action drama television series with counter-terrorist agent Jack Bauer as protagonist. The series is characterized by the action taking place in real time.

System

Classification system:

24 has eight seasons all made up of 24 episodes. Each episode is an hour long, taking place over the course of a single day.

Standards:

A 24 episode is between 39 and 42 minutes long. This corresponds to the standard length for drama in the United States (excluding advertisements).

Universal (design) methods:

serialised narration, splitscreens, clock/countdown

Network:

8 seasons, a feature film, 24: Legacy-series (spin-off of 24), a series adaptation for India, a video game, an energy drink, a DVD board game, novels, comic books, toys

Rules:

Every season lasts 24 hours, but begins at another time e.g. season 1 begins at midnight, season 2 at 8:00 a.m., season 3 at 1:00 p.m.. The action happens in real time, not using slow motion and flashback techniques.

Modularity:

units of time such as day, hour, minute, second

Flexibility:

The series could go on forever. It stopped because the audience numbers dropped dramatically.

Other characteristics

Users/target group: general public, TV/film viewers

Access: Fox, Amazon Prime Video, DVD box set

Scope: worldwide

Language: English (original language)

Material: film and diverse material for merchandising

Interactivity:

A valid California phone number (310-597-3781) has been shown on screen at various points during the show. The number, since dubbed the 24 'fan phone', leads to an actual

telephone on the set, and received upwards of 50,000 callers in the first week after it was shown. The phone is often picked up by whoever is free on set, and viewers have spoken to

a wide variety of cast and crew members. A video game for *PlayStation 2* and a DVD board game also allow viewer to interact with the fictional characters.

Response (production) time: 13 years (2001-2014); 24 tv series on Fox (2001-2010)

Images: Fox Corporation (US) Sources: https://tinyurl.com/y2xebxct

Storytelling

Themes:

good vs. evil, counter terrorism in post-9/11 America, a race against the clock

Setting (place/time): urban (Los Angeles, Washington); present

Characters (main/secondary):

Jack Bauer (Kiefer Sutherland) is the main character. The rest of the cast changed considerably each season.

Plot:

Jack Bauer, counter-terror agent, has exactly 24 hours per episode to stop a terror plot from taking place in the United States. A typical plot has Bauer racing against the clock as he attempts to thwart multiple terrorist plots, including presidential assassination attempts, weapons of mass destruction detonations, bioterrorism, cyber attacks, as well as conspiracies that deal with government and corporate corruption. There is a huge narration gap between the events of the seasons, and it is never completely explained what happened in the meantime.

Climax:

The first 24 season was postponed due to the 9/11 attacks. It was finally aired on November 6, 2001.

Time frame:

The story time of each series is 24 hours. Each episode takes place over the course of one hour, with time continuing to elapse during the commercial breaks. The story time is one hour, whereas the viewing time is 39-42 minutes. Events in the 24 timeline take place in the 'perpetual now', where concepts of the exact date and year are never specified.

Narrative style:

action-espionage series, political thriller, real-time narrative, illusion of omniscience

The title of the show refers to its narration technique. Split-screen and jump-cuts are used as a form of storytelling to help the audience keep up with the intense twists and turns on the show. The 24 h-format means that the action will keep on coming relentlessly. Also the stress and tiredness of the events of the day can be emphasized with clever use of make up and costumes, e.g. characters get more dirty and more tired as the day progresses. A on-screen countdown clock is adding urgency to each passing second of Bauer's mission. When the running clock is shown full screen, an alternating pulsating beeping noise (like the kind seen on a time bomb) for each second can be heard.

Narrative perspective:

Each episode of 24 can be divided into two parts: the recap with its homodiegetic voice-over host/narrator (the protagonist Jack Bauer), who updates the viewer; and the show itself which is transmitted from another, invisible narration level.

Tone of voice:

dramatic, aggressive (showing 67 scenes of torture in its first five seasons)



Conclusion

Excitement and highlights can be delivered in systematically structured time windows without wearing out.

7/10









Today Series



DEC.29.1977

The New York Eimes

Today Series (1966-2014) On Kawara

The *Today Series* includes nearly 3,000 paintings that show the date of the day On Kawara (1932-2014) painted the picture. The date format corresponds to that of the country in which he stayed at the time. Each painting is accompanied by a clipping of a daily newspaper. On Kawara marked each finished picture in a *100 Years Calendar*.

System

Classification system:

time units (days and years of On Kawara's life), timeline

Standards:

The paintings conform to one of eight sizes, produced in a landscape format, ranging from eight by ten to sixtyone by eighty-nine inches. They are painted in one of three colours – grey, red and blue. On Kawara used international date formats and common typefaces, e.g. Gill Sans and Futura.

Universal (design) methods:

white on colour, primary colors, monochrome, landscape formats, handmade

Network:

Appr. 3,000 date paintings are accompanied by a clipping of a daily newspaper and are documented in On Kawara's *100 Years Calendar.* The *Today Series*-boxes are distributed (separate from each other) all over the world in various museums.

Rules:

The painting is always completed on the day it is begun. The date format corresponds to that of the country in which On Kawara stayed at the time. As far as the national language did not use Latin characters, the date is shown in Esperanto. The paintings in the series conform to one of eight sizes, produced in a horizontal format. For each work On Kawara mixed the paint afresh, so that the color of each is unique, e.g. the red is never the same red. He painted white block letters on a monochromatic ground. Each finished picture is marked in a *100 Years Calendar*. Each painting is stored in a handmade cardboard box along with a clipping from the local newspaper.

Modularity:

The system's recurring component is a 'day'.

Flexibility:

On Kawara's project ended with his death in 2014. However, his system is flexible. In 2013 the artist Eric Doeringer began making 'date paintings', following the parameters of Kawara's *Today series*.

Other characteristics

Users/target group: general public, art lovers

Access: museums worldwide

Scope: On Kawara created date paintings in 137 cities worldwide.

Language: different languages and Esperanto (constructed international auxiliary language)

Material:

Storytelling

Themes:

experiencing and recording time

Setting (place/time): different places worldwide; present

Characters (main/secondary):

On Kawara; people appearing in the newspaper

Plot:

On Kawara begins his *Today Series* of paintings on January 4, 1966, and continues to work on them until his death in mid-2014. He sets up an extensive set of rules, a kind of protocol for the production of the paintings. In addition to these formal conventions, the paintings are stored in handmade cardboard boxes along with a clipping from the local newspaper. Combining the individual with the universal, the *Today Series* is both a deeply personal journey (asserting that I was here on this day), but also the story of humanity and struggles experienced on a much larger scale – as captured through the lens of daily newspaper reportage.

Climax:

If On Kawara did not complete a painting by midnight, he destroyed it. Some days he made two paintings. Very occasionally, he made three. He marked each finished picture in a *100 Years Calendar*, in which, beginning with his date of birth, he systematically marked every day of his life with a yellow dot and every finished painting with a dark green dot.

Time frame:

48 years (1966-2014)

Narrative style:

universal, systematic, timeline, reportage The works appear industrially produced but are handmade.

Narrative perspective:

On Kawara's choice to produce a painting He exhibited the paintings both with and without their boxes.

Tone of voice:

abstract, classic, archival



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24,698 Days (100 Years Calendar)

oil on canvas, cardboard, newspaper

Interactivity:

no

Response (production) time: appr. one day for one painting = nearly 3,000 days for the whole series

Images: phaidon.com Sources: Phaidon: https://tinyurl.com/yyncyv6q Guggenheim: https://tinyurl.com/yy72qzex

Conclusion

A system can be simple and rigid, but needs a human touch and an emotional framework in order not to be boring.

8/10







In this publication, the British city planner Ebenezer Howard (1850-1928) describes his idea of reorganizing society by means of networks of Garden Cities. He believed that bringing urban and rural life together could break the strong influence of capitalism and lead to cooperative socialism. The book was first published in 1898 under the title To-morrow: A Peaceful Path to Real Reform and reprinted in 1902 as Garden Cities of To-morrow.

Ebenezer Howard

System

Classification system:

'The Three Magnets' form the basis for Howard's model city. Howard distinguishes between people who want to live in the town, in the countryside or in the hybrid structure 'town-country'. For the latter, he developed the garden city which he considered a perfect blend of city and nature.

Garden Cities of To-morrow (1902)

Standards:

Today, zoning, greenbelting and urban decentralization are common methods of urban planning.

Universal (design) methods:

diagrams and maps for explaining ideas effectively

Network:

After the success of one garden city, clusters of Garden Cities would grow up. As the first garden city reached its optimal size (max. 32,000 inhabitants), another would be founded. The cities in the network are linked to each other by a fast railway system.

Rules:

Industry should be kept separate from residential areas such zoning was a new idea at the time. Each garden city has a belt of country around itself. The distance from any garden city to the heart of a central city is only three and a quarter miles, a distance that could be covered in five minutes. Each garden city should have a limit of 32,000 inhabitants.

Modularity:

Every garden city consists of the same infrastructure and equipment modules. Howard planned a constitution for the Garden Cities that is divided into a 'central council' and three 'municipal groups': Public Control (assessment, law, inspection), Engineering (roads, railway lines), and Social Purposes (education, baths and wash-houses, music, libraries, recreation).

Flexibility:

Howard considered his diagrams to be merely suggestive as each city should be planned to be organised as per the needs of the people and their environment. The garden city was not flexible in size but limited to 32,000 inhabitants.

Storytelling

Theme (main/secondary):

sustainable interactions between human society and nature, cooperative socialism, model for the privatisation of the municipality, controlling urban sprawl

Setting (place/time): urban and rural; future

Characters (main/secondary): urban planners, citizens

Plot:

In Ebenezer Howard's utopian 'Garden City' people live harmoniously together with nature. The new suburban towns should be of limited size, planned in advance, and surrounded by a permanent belt of agricultural land. Social production are organized for local demands with the goal of creating self-sustaining communities, thus reducing the need for long-distance trade. Howard insisted that the long-term sustainability of Garden Cities was founded on abiding by the law of restitution, where all wastes were recycled back to the soil to ensure the continued productive potential of the land. In this, Howard's Garden Cities provided a model for an ecologically sustainable society. The Garden Cities would be largely independent, managed by the citizens who had an economic interest in them, and financed by ground rents on the Georgist model. The land on which they were to be built was to be owned by a group of trustees and leased to the citizens.

Climax

Howard lived to see his plans put into action. In 1903 he developed Letchworth Garden City and in 1920 Welwyn Garden City near London (UK). Based on his ideas Letchworth was owned by a company called First Garden City Ltd (15 individual owners) and was constructed as an example of how the Garden City could be achieved. Howard's ideas inspired city projects around the world, including Canberra (AU), Hellerau (DE), Tapanila (FI) and Mežaparks (LV).

Time frame:

Until today Ebenezer Howard's vision of Garden Cities has had an enormous impact upon urban planning and the development of cities around the world.

Narrative style:

First-person narrative, giving instructions

Narrative perspective:

Ebenezer Howard's ideas

Tone of voice: utopian, reasoned



Other characteristics

Users/target group: citizens

Access: publicly accessible

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Interactivity:

no



Letchworth (1903)



Canberra (1913)

Response (production) time:

In 1903, five years after Howard's first book Letchworth Garden City is built.

Images: Wikimedia Commons Source: Andrea Gibbons on writingcities.com: https://tinyurl.com/y698w7h

Conclusion

Storytellers who focus on interaction and collaboration engage audiences for a long time. It's about a process not a product.

9/10

AUGUST 13TH

I begin the construction of the Berlin wall, at first using barbed wire divisions.

AUGUST 14TH Bridgeport. I manage to fly 900 m at a height of 12 m in my homemade airplane.

AUGUST 15TH

Today I am found dead in my Hamburg apartment. My 40 square metre apartment accommodates, among other things, 500



Mars. July 24th. In Fosso Reale near Livorno three stone heads are fish olm and sinks off the American coast. July 26th. Oldnam, UK. My first te Red Cross in Monrovia I kill 600 people (mostly women and children). J anded. I survive. August 3rd. In Göteburg at the Swedish automobile man the first atomic bomb on the Japanese city Hiroshima. August 7th. I lift llon. August 14th Bridgeport. I manage to fly 900 m at a height of 12 m radios and 3000 old newspapers. 250 trash sacks are filled. August 16th. aception pill Enovid produced by the American company Searle & Co in th runch any criticism of my role as a leader. August 20th. My tanks occupy ugust 23rd. Boston, Massachusetts. In spite of an unproven charge and w in a hotel room in Torino, dead. August 27th. I declare war on the Au r, cloth and aluminium are reserved for war use.) August 30th. Hamburg. Marce at the Olympic Games in Rome. Il sec.: world record. The Süddeu of socialists and communists. September 5th. Hans Martin Schleyer has be pins. September 9th. In Pyongyang I proclaim the formation of the Demo lies during the putsch. September 12th. I prevail and free Belgrade. E 1. Nice. I die in a car accident. I suffocate because of my long red so ilt myself. September 17th. In the town Hoyerswerda in Saxony, I raid

01.01.1919	01.02.1953	01.03.1903	01.04.1930	01.05.1902	01.06.1945	01.07.1997	01.08.1936	01.09.1939	01.10.1949	01.11.1975	01.12.1953
02.01.1992	02.02.1922	02.03.1933	02.04.1982	02.05.1924	02.06.1967	02.07.1957	02.08.1980	02.09.1960	02.10.1960	02.11.1917	02.12.1901
03.01.1925	03.02.1998	03.03.1976	03.04.1968	03.05.1979	03.06.1967	03.07.1928	03.08.1972	03.09.1982	03.10.1929	03.11.1967	03.12.1984
04.01.1947	04.02.1945	04.03.1960	04.04.1968	04.05.1949	04.06.1989	04.07.1997	04.08.1944	04.09.1970	04.10.1993	04.11.1966	04.12.1926
05.01.1953	05.02.1916	05.03.1970	05.04.1971	05.05.1981	05.06.1995	05.07.1960	05.08.1962	05.09.1977	05.10.1935	05.11.1972	05.12.1976
06.01.1907	06.02.1967	06.03.1978	06.04.1968	06.05.1994	06.06.1979	06.07.1995	06.08.1945	06.09.1991	06.10.1908	06.11.1971	06.12.1921
07.01.1993	07.02.1929	07.03.1915	07.04.1939	07.05.1998	07.06.1981	07.07.1990	07.08.1994	07.09.1967	07.10.1949	07.11.1968	07.12.1970
08.01.1954	08.02.1924	08.03.1914	08.04.1994	08.05.1985	08.06.1952	08.07.1941	08.08.1991	08.09.1994	08.10.1977	08.11.1939	08.12.1980
09.01.1989	09.02.1904	09.03.1945	09.04.1906	09.05.1976	09.06.1940	09.07.1986	09.08.1945	09.09.1948	09.10.1967	09.11.1989	09.12.1998
10.01.1927	10.02.1992	10.03.1910	10.04.1946	10.05.1933	10.06.1907	10.07.1985	10.08.1983	10.09.1988	10.10.1972	10.11.1938	10.12.1993
11.01.1949	11.02.1990	11.03.1985	11.04.1968	11.05.1961	11.06.1994	11.07.1987	11.08.1999	11.09.1973	11.10.1928	11.11.1918	11.12.1941
12.01.1970	12.02.1974	12.03.1930	12.04.1961	12.05.1941	12.06.1990	12.07.1967	12.08.1995	12.09.1944	12.10.1952	12.11.1936	12.12.1901
13.01.1980	13.02.1945	13.03.1988	13.04.1976	13.05.1981	13.06.1984	13.07.1949	13.08.1961	13.09 1993	13.10.1970	13.11.1970	13.12.1981
14.01.1916	14.02.1989	14.03.1996	14.04.1960	14.05.1948	14.06.1977	14.07.1977	14.08.1901	14.09.1927	14.10.1952	14.11.1930	14.12.1995
15.01.1972	15.02.1902	15.03.1972	15.04.1989	15.05.1911	15.06.1987	15.07.1965	15.08.1997	15.09.1968	15.10.1917	15.11.1994	15.12.1961
16.01.1920	16.02.1959	16.03.1978	16.04.1912	16.05.1966	16.06.1963	16.07.1945	16.08.1969	16.09.1979	16.10.1978	16.11.1988	16.12.1987
17.01.1995	17.02.1992	17.03.1969	17.04.1975	17.05.1954	17.06.1953	17.07.1936	17.08.1980	17.09.1991	17.10.1951	17.11.1963	17.12.1903
18.01.1985	18.02.1943	18.03.1970	18.04.1906	18.05.1980	18.06.1982	18.07.1937	18.08.1960	18.09.1982	18.10.1977	18.11.1967	18.12.1901
19.01.1919	19.02.1913	19.03.1970	19.04.1995	19.05.1929	19.06.1948	19.07.1900	19.08.1936	19.09.1941	19.10.1992	19.11.1978	19.12.1924
20.01.1955	20.02.1999	20.03.1995	20.04.1938	20.05.1947	20.06.1951	20.07.1944	20.08.1968	20.09.1958	20.10.1931	20.11.1975	20.12.1960
21.01.1924	21.02.1965	21.03.1960	21.04.1996	21.05.1927	21.06.1908	21.07.1969	21.08.1911	21.09.1964	21.10.1959	21.11.1995	21.12.1991
22.01.1981	22.02.1943	22.03.1919	22.04.1912	22.05.1966	22.06.1974	22.07.1946	22.08.1992	22.09.1980	22.10.1964	22.11.1963	22.12.1989
23.01.1985	23.02.1997	23.03.1900	23.04.1976	23.05.1992	23.06.1924	23.07.1903	23.08.1927	23.09.1963	23.10.1956	23.11.1957	23.12.1966
24.01.1984	24.02.1920	24.03.1989	24.04.1923	24.05.1941	24.06.1929	24.07.1984	24.08.1921	24.09.1945	24.10.1931	24.11.1915	24.12.1951
25.01.1925	25.02.1986	25.03.1999	25.04.1995	25.05.1907	25.06.1993	25.07.1956	25.08.1950	25.09.1937	25.10.1929	25.11.1973	25.12.1991
26.01.1924	26.02.1952	26.03.1967	26.04.1986	26.05.1906	26.06.1969	26.07.1978	26.08.1950	26.09.1997	26.10.1994	26.11.1942	26.12.1908
27.01.1945	27.02.1973	27.03.1977	27.04.1983	27.05.1944	27.06.1993	27.07.1970	27.08.1916	27.09.1940	27.10.1934	27.11.1961	27.12.1934
28.01.1986	28.02.1991	28.03.1941	28.04.1955	28.05.1961	28.06.1987	28.07.1914	28.08.1963	28.09.1960	28.10.1994	28.11.1943	28.12.1908
29.01.1999	29.02.1964	29.03.1994	29.04.1945	29.05.1953	29.06.1967	29.07.1900	29.08.1917	29.09.1919	29.10.1956	29.11.1945	29.12.1989
30.01.1948		30.03.1987	30.04.1993	30.05.1968	30.06.1990	30.07.1990	30.08.1999	30.09.1933	30.10.1974	30.11.1989	30.12.1922

chronology (appendix)



It was me. Diary 1900-1999 (2002)

Daniela Comani

In a publication and different art installations Daniela Comani reports about events from the entire 20th century in a mixture of a calendar and a diary. She does this as if the described events had happened to her, impersonating Hirohito, Hitler or Einstein.

System

Classification system:

one event is described per day; in total, events are described on 366 days (from January 1 to December 31 in a leap year) in the 20th century

While the individual dates (day/month) are accurately set to their historical reference, the years do not appear in chronological order. A chronology in the appendix indicates the years of the events. The first event happens on 1.01.1919, the last on 31.12.1958.

Standards:

calendar system, timeline, diary entries in the first person While the life events of 366 days are told in chronological order, the sequence of historical events is broken. These two kinds of narrations, a linear (simple) and a nonlinear (complex) one were already described by Aristotle, who referred to them respectively as mythos (irrationality, stories of gods) and logos (rationality, science).

Universal (design) methods:

black text on white; Courier (a computer font that was originally a typewriter typeface)

Network:

The work exists in different mediums: book, wall installation, audio installation (CD, 66 min.), app, a site specific version for Alexanderplatz, Berlin (DE)

Rules:

short diary entries (appr. 3 sentences), naming the date without the year, I-messages only, real historical events

Modularity:

One component consists of a date (and sometimes place) and a historical event.

Flexibility:

The diary could be expanded endlessly with new entries. They could also be inserted in between, provided they follow the chronological order.

Other characteristics

Users/target group: general public

Access:

museums worldwide

Scope: worldwide

Language:

The original text is in German. The wall installation is available in eight languages: German, English, Italian, French, Swedish, Chinese, Hungarian, Russian.

Material:

Storytelling

Theme (main/secondary):

world history, collective memory/individual memory, universal/particular, impersonal/personal

Setting (place/time): different places worldwide; present

Characters (main/secondary):

Malcolm X, Willy Brandt, Hirohito, Hitler, Einstein and many others

Plot:

Daniela Comani is citing events of the 20th century as if they occured to herself. Through a mix of conceptual rigor and poetic depth, she unfolds an index of human drama and war, technical and social achievement and catastrophe. All diary notes are narrated in first-person. A single author, the artist's persona, alleges to hold responsibility for events and actions as diverse as the murder of Malcolm X, the prohibition of slavery in China or Willy Brandt's famous visit to Warsaw. The first entry is: "January 1st. I founded the Communist Party of Germany in Berlin." The last entry is: "December 31st. During a New Year's party I flee Cuba. Thus ends my regime."

Climax:

"August 15th: Today I am found dead in my Hamburg apartment."

Time frame:

366 days/events in a time frame of 99 years

Narrative style:

diary style, uniting two forms of storytelling-biographical and historical; combining linear and nonlinear narration (events in chronological order/years do not appear in chronological order)

Narrative perspective:

first-person narrator

The narrator assumes alternatively the role of the victim and the role of the perpetrator, introducing an 'impossible author' of the century's world history. The events are chosen by the artist for subjective reasons and not according to the criteria of official history.

Tone of voice:

it's me, it was me, it was me!, enumerating facts, succinct

 It Was Me - Diary @danielacomani · 9 nov. 2018
 >

 9 novembre 1989
 Berlino Est. In tarda serata apro le frontiere della Repubblica Democratica Tedesca verso Berlino Ovest.
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 It Was Me - Diary @danielacomani · 7 nov. 2018
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 It Was Me - Diary @danielacomani · 7 nov. 2018
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 •
 ①
 ①

 It Was Me - Diary @danielacomani · 7 nov. 2018
 >
 >
 ●
 ①
 ①

 I tattend the CDU party gathering in Berlin: 29-year-old #BeateKlarsfeld slaps chancellor #KurtGeorgKiesinger to make a statement about his Nazi past.
 ●
 1
 ①
 ①

paper, digital print on vinyl cloth, audio

Interactivity:

In *Ich war's. In 32 Tagen um den Alexanderplatz. 1805-2007* (2007/2008) Comani adapted the concept into a public art installation by using the billboards in the Alexanderplatz underground station to describe real events which took place around Alexanderplatz.

Response (production) time:

Comeni started the project in 2002 and continues to exhibit it to this day.

Images: Daniela Comani Sources: danielacomani.net/a.ichwars.08.html https://twitter.com/danielacomani

Conclusion

Stories told from different perspectives encourage reflection and opinion forming.

It was me-Diary on Twitter

10/10









Active Cases (= total number of cumulative confirmed cases minus the recovery minus the death cases; reflect best the current risks)

Global Deaths 863.488	Global Recovered 17.306.848
185.747 deaths	3.387.309 recovered
US	Brazil
123.780 deaths	2.970.492 recovered
Brazil	India
67.376 deaths	2.231.757 recovered
India	US
65.816 deaths	824.783 recovered
Mexico	Russia
41.602 deaths	553.456 recovered
United Kingdom	South Africa
35.497 deaths	504.541 recovered

COVID-19 Dashboard (2020)

Ensheng Dong, Hongru Du, Lauren Gardner, Center for Systems Science and Engineering (CSSE) at Johns Hopkins University, Baltimore (US)

Researchers from Johns Hopkins University developed one of the first and most widely used online dashboards to visualise and track reported cases of coronavirus disease in real time. The dashboard, first shared publicly on January 22, 2020, illustrates the location and number of confirmed COVID-19 cases, deaths, and recoveries for all affected countries.

System

Classification system:

The dashboard shows global data of 188 countries. It reports cases at the country level, at the province level in China, at the regional level of e.g. Russia, Germany, Brazil, Mexico, Netherlands and at the city level in the USA, Australia, and Canada. The most detailed data is shown of the United States on country, state, county and city level (cumulative cases, active cases, deaths, recovered, test results). The data is shown in listings, on a world map and on a line plot/bar graph (as a timeline since January 2020).

Standards:

the use of cumulative data (incorporating all current and previous data up to the present or at the time of measuring); the use of datavisualization-formats like data bubble map, line plot and bar graph

Universal (design) methods:

The use of the colour red for indicating danger. Numerical data is ordered from large to small numbers.

Network:

Appr. 200 data sources are used. The most important one is DXY, an online platform run by members of the Chinese medical community, which aggregates local media and government reports to provide cumulative totals of COVID-19 cases at the province level in China and at the country level otherwise. The dasboard-website also provides information about the data sources, the downloadable database and general information (FAQ) about the development of the dashboard.

Rules:

Data is double checked – confirmed by health departments and compared with the data by WHO, which is a completely independent source.

Modularity:

The dashboard works as a template which could also be used for tracking other global diseases.

Flexibility:

All data collected and displayed are made freely available through a *GitHub* repository (open-source platform), along with the feature layers of the dashboard, which are now included in the *ESRI Living Atlas* (ready-to-use data layers, maps and apps).

Other characteristics

Users/target group:

general public, 1,2 billion requests a day (March 2020) Access:

- World Wide Web (desktop and mobile version)
- Scope:
- data of 188 countries worldwide (Sept. 2020)

Storytelling

Theme (main/secondary):

tracking the COVID-19 spread in real-time, sick vs healthy

Setting (place/time): different regions worldwide; past and present

Characters (main/secondary):

world population; Johns Hopkins (entrepreneur and philanthropist), Stavros Niarchos (entrepreneur), Mike Bloomberg (politician and philanthropist)

Plot:

On December 31, 2019, the World Health Organization (WHO) was informed of an outbreak of a novel coronavirus detected in Wuhan City (CN). The Johns Hopkins University (US) built a COVID-19 online dashboard to mapping the corona outbreak in near real-time. It was launched on January 22, 2020 to provide researchers, public health authorities, and the general public with a user-friendly tool to track the outbreak as it unfolds. As of January 24, 2020 there were 881 cases of COVID-19 confirmed globally. By September this number increased to appr. 26 million cases. The dashboard is a philanthropic project – in addition to the National Science Foundation, it is funded by the Bloomberg Philanthropies and Stavros Niarchos Foundation.

Climax:

The climax has yet to come.

Time frame:

The data is updated in near real time throughout the day. The time of the latest update is noted in hours and minutes. The story is still in full development.

Narrative style:

visual, self explanatory, objective During January 22-31, 2020 all data collection and processing were done manually. Since February a semiautomated living data stream strategy is adopted. Data is not filled in when there is no reliable source to provide truthful information. The dashboard uses ArcGIS software, which combines mapping and data analytics. It's programmed by ESRI (US), a global market leader in geographic information systems (GIS).

Narrative perspective:

The data visualized is collected from various sources, including World Health Organization, U.S. Centers for Disease Control and Prevention, US National Health Council (NHC), Chinese Centre for Disease Control and Prevention (CCDC) and DXY. DXY is a Chinese website that aggregates NHC and local CCDC situation reports in near real-time (updated every 15 minutes).

Tone of voice:

reliable, trustworthy, somber

30.69	2 deaths		480.177 recovered			
France	e		Peru			
٩	Global Deaths	⊳.	٩	Global Recovered		



Global and US data on 3 September, 2020

Language: English

Material: website, free data sets

Interactivity:

All data is downloadable for educational and academic research purposes. The dashboard uses crowdsourced information from the public. The public also reports data errors.

Response (production) time: Launched on January 22, 2020, appr. 2 months after the first COVID-19 case became known.

Images: Johns Hopkins University (US) Sources: https://tinyurl.com/uvclzl9

Conclusion

When a story is too emotionally involving, we need credible storytellers who prevent us from losing the plot thread.

SYSTEMATIC STORYTELLING

SYSTEMS DORIGNELLING