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Introduction

Abstract: This chapter outlines the conceptual framework of the book and the variety of viewpoints related to the use of the notion of scale and zooming in digital history and humanities. The contributions included in the volume encompass different degrees of theoretical assumptions, practical insights and middle-ground reflections, symbolically expressed through the three conceptual levels: *bird's-eye view*, *overhead view* and *ground view*. While no general theory of scale is defined, the reader is offered the ingredients needed to build such theoretical constructs based on his or her own exploratory and symbolic journey through Zoomland. This variable-scale representation is combined with four categories of enquiry or thematic realms that make up the territory of Zoomland: *History*, *Media*, *Hermeutics* and *Digital landscapes*.

Keywords: scale, zooming, digital history, digital humanities, multiple perspectives

Welcome to Zoomland!

Imagine you could travel to Zoomland – both physically and virtually. This is what this book – in both its printed and online open access version – is offering. To explore its multi-layered landscape, you can delve into this opening chapter for a more con-

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Note: This book is the result of a *thinking grant* awarded in 2019 by the C²DH to the first editor. The initial project included a call for papers, launched in October 2021, and a cross-reviewing workshop, which was held at the C²DH and online in June 2022 so that the authors could come together to collectively discuss the selected proposals. During the discussion, it was also decided which of the three conceptual or symbolic levels or views should be assigned to each chapter, to foster multi-scale explorations of Zoomland. The criteria used for this purpose involved aspects such as the degree and coverage of theoretical considerations or the particular focus on a specific project or topic, and the in-between possibilities for middle-ground enquiries. The contributions included in the volume represent the outcome of the peer-review and selection process that followed the workshop. The symbolic book-land(scape) representation of Zoomland was initially devised by Florentina Armaselu as a 2D visualisation using symbols and colours for the three perspectives and four thematic areas to make up a landscape. The three symbols, suggesting a certain object size or position relative to the ground, were assigned to the chapters according to the workshop discussion; the representation eventually served as a starting point for the game.

ventional introduction to the topic or, if you are looking for a thrilling adventure, embark on an experimental online game¹ set on the uncharted island of ZOOMLAND.



Figure 1: ZOOMLAND game: *physical map*.



Figure 2: ZOOMLAND game: *symbolic map*; 🕊️ bird's-eye view, 🏠 overhead view, 🗺️ ground view; and thematic colour code: **History**, **Media**, **Hermeneutics**, **Digital landscapes**.

¹ Zoomland, accessed on July 25, 2023, <https://www.c2dh.uni.lu/zoomland>.

Designed by **Kirill Mitsurov** and **Daniele Guido**, the online game, inspired by the book-land(scape) metaphor, invites the player/reader to embark on the small island of ZOOMLAND and explore the unknown territory (Figure 1) by looking for signs and symbols that represent different heuristic perspectives and thematic entry points from which the content of the book can be discovered and explored. In order to do so, the player/reader has to collect the chapter cards assigned to the various objects scattered across the island. These objects, according to their size or position relative to the ground, can stand for three conceptual stand-points – bird’s-eye view, overhead view and ground view –, one of which is attributed to each chapter. Through this quest, the player is building a symbolic map of the island (Figure 2) that offers another way of looking at the configuration and nature of the assembled pieces and another means of accessing the actual manuscript of Zoomland.

A voyage into Zoomland feels like an encounter with the fairy-tale figure of Tur Tur, the imaginary giant in Michael Ende’s famous children book “Jim Button and Luke the Engine Driver” (*Jim Knopf und Lukas der Lokomotivführer* in the German original) from 1960. Jim Button is a little black boy living on the tiny island of Morrowland. When Jim grows bigger, there is simply no longer enough space for everybody. Someone must go, decides King Alfred the Quarter-to-Twelfth. But should that someone really be Emma, the locomotive of Jim’s best friend Luke? Jim cannot allow that. Together with the engine driver and Emma the locomotive, he leaves the island and sets off on a great adventure: transparent trees, stripy mountains and dragons cross their path.² In a desperate episode on the journey, in which Jim and Luke traverse a desert at the end of the world, they see a giant apparition on the horizon. Although Jim is frightened, they finally decide to wave to the figure and tell it to come closer. And to their great surprise, the long-bearded figure gets smaller with every step closer he takes. When the friendly old man finally stands in front of them, he has shrunk to the size of a normal person and presented himself as Tur Tur the imaginary giant. “Good day”, he says. “I really don’t know how I can thank you enough for not running away from me. For years I have been longing to meet someone who got such courage as you, but no one has ever allowed me to come near them. I only look so terribly big from a long way off” (Ende 1963: 123–124).

After the initial shock has worn off, Jim and Luke ask Tur Tur to explain the nature of his existence as a make-believe giant.

² Michael Ende, accessed on July 29, 2023, <https://michaelende.de/en/book/jim-button-and-luke-engine-driver>.

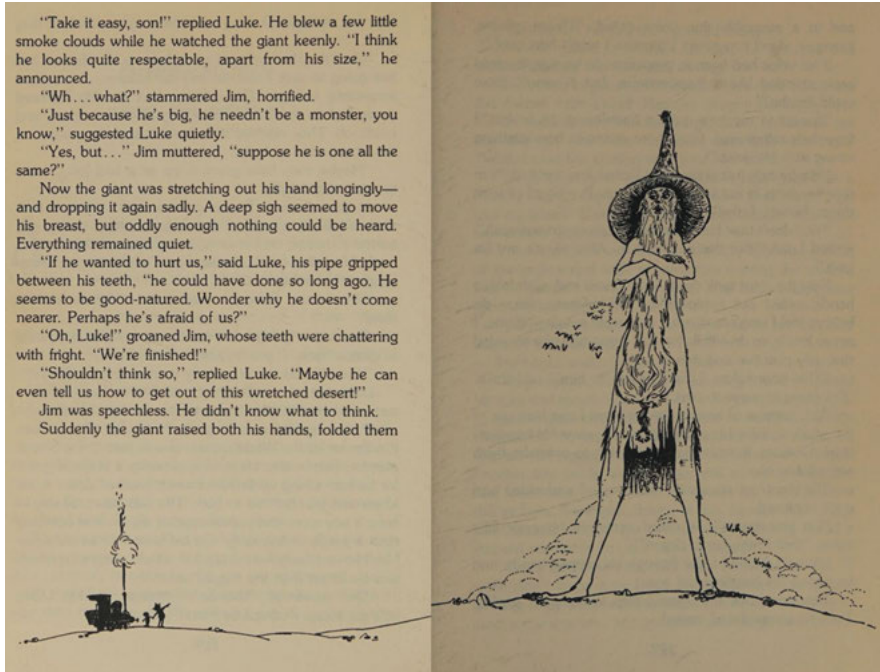


Figure 3: Jim Button and Luke the engine driver meet Tur Tur, the make-believe giant. In: Michael Ende,³ *Jim Button and Luke the Engine Driver*, Woodstock (N.Y.): The Overlook Press, 1963, p. 120–121.

“Well,” said Tur Tur, “there isn’t really an awful lot to tell. You see, my friends, if one of you were to get up now and go away, you would grow smaller and smaller till in the end you only look like a dot. And if you started to come back, you would grow bigger and bigger till you would stand in front of us your proper size. You must agree, though, that in reality you would have remained the same size all the time. It only looks as if you’ve grown smaller and smaller, and then bigger and bigger.”

“Exactly,” said Luke.

“Well, now,” explained Tur Tur, “in my case it is simply the other way about. That’s all. The farther away I am away, the bigger I seem. And the closer I come, the better you can see my real size. My nature is simply the opposite to yours.”

“You mean to say,” asked Luke, “you don’t really grow smaller when you come nearer? And you aren’t really the size of a giant when you are far away, but it only seems like it?”

“That’s right,” replied Mr. Tur Tur. “That’s why I said I am a make-believe giant. Just as you might call the other people make-believe dwarfs, because they look in the distance like dwarfs, though they aren’t dwarfs, really.”

³ Reproduced with permission (© Michael Ende, illustrator F.J. Tripp, Jim Knopf und Lukas der Lokomotivführer, Thienemann-Esslinger Verlag GmbH).

“This is very interesting,” mumbled Luke, and he thoughtfully blew a few smoke rings.
(Ende 1963: 127)

In the conclusion of the treatise “Aufstieg und Fall der Zentralperspektive” (Rise and Fall of the Central Perspective, 2004), the literary scholar Dieter Borchmeyer explains: “The ‘illusory giant’ thus turns perspective foreshortening on its head. [. . .] In the inverted world of the illusory giant, perspective appearance becomes a plaything of the imagination – a signal that central perspective, once the proud achievement of a thoroughly rationalised, scientifically dominated world, has played out its historical role forever” (Borchmeyer 2004: 310). To us, the central or linear perspective, an artistic technique developed in Renaissance paintings, has become a by-word for modernity and rationality, in line with the concept of linear time and geometrically measured space.

1 Zooming as a metaphor of knowledge production and heuristic practice

The “birth” of the so-called early modern period in the 16th century was characterised by a fruitful exchange and interplay between new techniques, instruments and experimental practices in both the sciences and the arts and crafts (Rossi 1997). Magic and science were intertwined (Daston and Park 1998), but with the use of instruments such as the telescope and the microscope, the nature of scientific observation changed dramatically – and with it notions of truth, objectivity and reality (Stengers 1993). As “leading instruments” of the early modern process of natural enquiry, both the telescope and the microscope remained rooted in the ancient ideal of visual perception, with the eye being the most trustful and objective sense – seeing is believing (Weigl 1990: 16–17). The ability to get closer to matter, either by zooming in (microscope) or zooming out (telescope), radically changed the perspective of the exploratory mind. It triggered philosophical – today we would say epistemological – debates about the nature of cognition as well as the intricate relationship between our senses and technical instruments in the co-construction of reality. As the etymological roots of the Greek term σκοπέω (skopéō) – “to look, examine, or inspect” or figuratively “to contemplate, consider” – suggest,⁴ instruments such as the telescope, the microscope and later the stethoscope in medicine or the periscope in nautical navigation are technologies of knowledge that fostered a whole set of new heuristic practices. These practices had to be appropriated through critical learning and testing, and

⁴ Accessed on July 23, 2023, <https://en.wiktionary.org/wiki/σκοπέω>.

it was only once a degree of mastery in handling such instruments had been acquired that they could become epistemic objects in the co-construction of new knowledge (Rheinberger 2008).

As a cultural practice, zooming gained popularity with the development of varifocal lenses in photography in the second half of the 19th century (Kingslake 1989). Preceding this, playing with multiple lenses to create the impression of movement had been a widespread artistic practice employed by so-called lanternists, who produced shows with the help of magic lanterns, theatrical performances and sound effects (Jolly and DeCourcy 2020). As Étienne-Gaspard Robert, an experienced projectionist and inventor of the “Phantasmagoria” – a show combining the projection of glass slides and shadow play – explained, the zoom-like special effects created suspense and surprise amongst the spectators: “At a great distance a point of light appeared; a figure could be made out, at first very small, but then approaching with slow steps, and at each step seeming to grow; soon, now of immense size, the phantom advanced under the eyes of the spectator and, at the moment when the latter let out a cry, disappeared with unimaginable suddenness” (Heard 2006: 97). This scene of a magic lantern show from the 1890s reads like a Victorian anticipation of the Tur Tur scene by Michael Ende – albeit with a different purpose. While the lanternist made use of a visual trick to enchant his audience, Ende aimed to make his young (and no doubt also his adult) readers think about the tension between experience-based visual perceptions and popular imagination and narrative conventions. As Nick Hall has outlined in his study about the aesthetic and narrative functions of zooming in film and television, it is the “impression of being transported forward or backward at high speed” that makes zooming such a powerful technique in dramatized filmic narratives (Hall 2018: 1).

Technically, the zoom lens is a lens with continuously variable focal length. The variation of the focal length creates an apparent movement forward or backward – but this movement is different from a physically moving camera. As Hall explains: “When a camera moves, the position of objects in the images it captures change relative to one another. From these movements, viewers can infer the size, shape, and depth of the space in front of the camera. The zoom, by contrast, simply magnifies the image in front of the camera, and no change occurs to the relative position of the objects in front of it” (Hall 2018: 8). As such, the zoom lens basically magnifies or reduces the size of a picture,⁵ but depending on the length

⁵ The change of scale in the reproduction of an image was also an issue in printing technology. With the “fougéadoire”, an invention in lithography patented by the Frenchman Auguste Fougeadoire in 1886, it was possible to reduce or enlarge the size of an illustration based on rubber by stretching or compressing the rubber plate. See <https://fr.wikipedia.org/wiki/Fougéadoire>, accessed July 17, 2023.

or speed of the zoom shot, its aesthetic effect and dramatic force can vary greatly. The psychological properties of the zoom lens are therefore inextricable from the phenomenology of cinematic or televisual vision (Sobchack 1990). With the “zoom craze” in amateur film of the 1950s and 1960s, zooming conquered the non-professional realm of home movie or family film (Hall 2018: 123–152), preparing a larger audience for the digital revolution to come. Today, zooming in and out on the screens of our mobile phones or desktop computers has become “one of our predominant twenty-first century ‘ways of seeing’”, argues Tom White. “We zoom in and out on manuscript images in much the same way we zoom in and out on text, maps, websites, and our personal photos”.⁶

2 Zooming in/out and the art of scalable reading

Scholars in digital history and humanities are increasingly interested in the metaphor of zooming and scale as a way to imagine and revisit concepts, methods and tools for processing, analysing and interpreting data, and for creating innovative representations of knowledge. New terms and expressions have been added to the digital humanities vocabulary, which convey a particular conceptual frame based on the potential of digital methods and tools to support new forms of data exploration and various types of functionality. The aim may be to balance out the global, universal standpoint of “big data” with a “small data” world view, along with “every point in between”, as in the case of the *macroscope*: “What is more, a ‘macroscope’ – a tool for looking at the very big – deliberately suggests a scientist’s workbench, where the investigator moves between different tools for exploring different scales, keeping notes in a lab notebook” (Graham et al. 2016: XVI). To enable the combination of *distant reading* (Moretti 2013) with close reading, a new cultural technique of *scalable reading* is necessary: through changes of perspective by zooming in and out, from a bird’s-eye view to close up, new forms of “intertextual analysis” (Mueller 2014) are opened up. The aim of *scalable reading* is to move “gracefully between micro and macro without losing sight of either one”, to see “patterns” and “outliers”, to zoom in and zoom out and to understand what “makes a work distinctive” within a “very large context” (Flanders and Jockers 2013). In a similar vein, the use of geographic information systems (GIS) and Web-based spatial technologies to build “spatial narratives” that capture multiple voices, views and memories to be seen and examined at “various scales” (Boden-

⁶ Tom White, “A Working History of Digital Zoom, Medieval to Modern,” in *Humanities Commons* (2023), <https://doi.org/10.17613/2tfp-de60>.

hamer et al. 2015: 5) is promoted as a new form of historical and cultural exegesis of space and time (deep mapping) within what is called the *spatial humanities*.

Some disciplines in the humanities, such as history, have previously integrated the concept of scale into their discourse, thus providing starting points for theoretical and methodological enquiry within a digitally oriented context. Examples from this area include conceptual constructs such as the division of historical temporalities into long-, middle- and short-term history, referring to “quasi-immobile”, “slowly paced” and “rapid” processes and events taking place at the environmental, social and individual levels (Braudel 1976: 11–12). Other reflections target the interconnections between the notion of scale in history and its counterparts in cartography, architecture and optics, with reference to the degree of detail or available information at a certain level of organisation, the construction of a historiographic object or the operational metaphors of “magnifying glass”, “microscope” and “telescope”, as applied to historical discourse (Ricoeur 2000: 268–270). Scale in history also serves to define the “historical universe”, a continuum in which one pole is occupied by “syntheses of extreme generality – universal histories” while the opposite pole is ascribed to “investigations of atom-like events” (Kracauer 2014: 104). Combined approaches are also possible, with studies in “global microhistory” that integrate micro and macro analysis, sometimes supported by digitised libraries, archival collections and websites dedicated to family genealogies, to connect microhistories of individuals with broader scenes and contexts on a global scale (Trivellato 2011).

Recent theoretical approaches have pointed out the importance of scale, understood as both an ontological and epistemological entity, and the need to consider broader standpoints and a wider disciplinary spectrum when analysing it. Horton’s (2021) viewpoint on the *cosmic zoom* provides such an example – that is, a conceptual framework for thinking about scale and its medial manifestations, in an attempt to capture totality as a world view, from the microscopic to the cosmic stance. Starting from Boeke’s book *Cosmic View* (1957), and its legacy, *Powers of Ten*, a 1977 film by Ray and Charles Eames, and Morrison’s 1979 review of Boeke’s book, Horton sets out to examine the cosmic zoom through the lens of media analysis. He considers both analogue and digital media, spanning various representational and compositional scalar standpoints, from literary and cinematographic to database-driven forms of mediation. Similarly, by arguing that scale represents a significant concept in all sciences, as well as in culture, language and society, DiCaglio (2021) devises six thought experiments that serve as a basis for elaborating a general theory of scale, intended to apply to a wide number of disciplines. In the first of these experiments, he defines *resolution* as a key element of scale: “Resolution is the amount of detail one can discern within an observation. [. . .] At different resolutions, different objects are discerned [. . .] Shifts in resolution and shifts

in scale go hand in hand: scale tracks the range of observation while resolution points to the amount of detail able to be seen at that range” (DiCaglio 2021: 23). This assumption allows him to distinguish between different types of scaling: he contrasts *Gulliver’s scaling*, in the sense of “making objects bigger or smaller”, cartographic scaling, as a matter of “representation” and “transformation of reality”, and cinematic zooming, as a “result of magnification” or “moving forward”, with scaling that involves a change in resolution, a “transformation of observation”, as illustrated by the scalar transformations operated in the *Powers of Ten* – from the view of two picnickers in a park to planets and galaxies and back down to cells and subatomic particles (DiCaglio 2021: 26–27, 70, 232). The main goal of the book, grounded in rhetoric, philosophy, science studies and critical theory, is therefore to train the reader in scalar thinking, in other words in understanding how scale reconfigures reality and the main conceptual, perceptual and discursive aspects of scale involved in this reconfiguration process.

3 Playing with layers and perspectives: Bird’s-eye view, overhead view, ground view

Despite this variety of theoretical and practical undertakings, which proves the richness and significance of the topic of scale and the interest in it manifested by researchers from different areas of study, the potential and concrete application of this concept to new forms of analysis and knowledge production in digital history and humanities are still largely unexplored. This book proposes a systematic discussion on the epistemological dimensions, hermeneutic methods, empirical tools and aesthetic logic pertaining to scale and its innovative possibilities residing in humanities-based approaches and digital technologies. Taking a variety of viewpoints from scholars experiencing this notion in digital history and digital humanities, the edited volume gathers theoretical and application-related perspectives, from microhistory and visual projections of historical knowledge in graphs to shot scales in television adaptations, scalable reading and cartographic zooming, and fosters reflections on the potential for novelty and creative exploration of the concept of scale when combined with digital humanities methods.

By navigating through various themes considered in relation with the notion of scale, such as historical storytelling, online virality, literary computing, media, text and tool analysis, data-driven narrative and map modelling, the reader can learn about the variety of scales used within these different areas of research. Each chapter encompasses different degrees of theoretical assumptions, practical insights and middle-ground reflections, symbolically expressed through the three

conceptual levels: *bird's-eye view*, *overhead view* and *ground view*. While no general theory of scale is defined, the reader is offered the ingredients needed to build such theoretical constructs based on his or her own exploratory and symbolic journey through Zoomland. This variable-scale representation is therefore combined with four categories of enquiry or thematic realms that make up the territory of Zoomland: *History*, *Media*, *Hermeneutics* and *Digital landscapes*.

3.1 History

This thematic area offers different perspectives on the potential of the concepts of zoom and scale for digital history projects. 🗺️ Through a focus on narrative history, **Alex Butterworth** engages the reader in an illustrative and speculative adventure. He combines reflections on semantic modelling and narrative practices from existing projects, such as *The Lysander Flights*, *Tools of Knowledge* and *Crimes in London*, with designs for future graphic interfaces that bring together knowledge graph formalisms, filmic and narrative grammars and conceptualisations of zoom defined along the *detail*, *abstraction* and *cognitive* axes, to support historical storytelling. 🗺️ From a similar vantage point, **Christian Wachter**'s account of the democratic discourses in the press in the Weimar Republic outlines the conceptual bases of a methodological framework that elaborates on theoretical and technical constructs such as the discourse-historical approach, corpus annotation and analysis, and scalable reading, understood as a *digitally assisted* technique for pattern search and identification, as well as close inspection and interpretation. The proposed framework is therefore intended for both quantitative and qualitative analysis, as well as contextualisation and interpretation of discourse in historical research. 🗺️ **Amanda Madden**'s *Menocchio Mapped* follows an intermediate-level line of enquiry that bridges micro- and digital history methodologies and narrative and quantitative approaches. It illustrates the topic by crossing various scales of analysis, from bird's-eye view perspectives on the two fields of investigation to historical GIS projects, such as *Mapping Decline*, *The Atlantic Networks Project* and *DECIMA*, and vivid fragments with a micro-historical flavour, like a revenge poem from the diary of a 16th-century nun. 🗺️ While articulated within the same micro- and digital history setting, **Mariaelena DiBenigno** and **Khanh Vo**'s chapter adopts a different viewpoint that delineates a particular thematic focus. In their study, centred on runaway slave advertisements in the United States in the 19th century, the authors argue that the shift from macro to micro allowed by digital technologies may illuminate how sources and data are used in historical narrative reconstruction and foster new means of historical storytelling,

ranging from nationwide accounts to the experiences of individual and marginalised communities.

3.2 Media

Within the second Zoomland area, the reader can explore the use of scale in media-related studies from a middle- and ground-view perspective. 📍 **Fred Pail-ler** and **Valérie Schafer** propose an analysis of the history of online virality based on a range of examples from the early 1990s – *Godwin's Law* and *Dancing Baby* – to the more recent *Harlem Shake* and *Distracted Boyfriend* meme. The authors inspect a series of visualisations and media inventories, from the more traditional press to social media platforms, and the way in which these phenomena spread, to devise an approach that intertwines scalable readings of content, encompassing spatial and temporal dimensions with a cross-media reading of context. 📍 Adopting a median approach between empirical and theoretical analysis, **Landry Digeon** and **Anjal Amin** develop a comparative study of shot scale patterns in two TV series, *American Law & Order: Criminal Intent* and its French adaptation, *Paris: Enquêtes Criminelles*. Their methodology explores shot scaling as a cinematographic device and carrier of meaning, while also using machine learning techniques, inter-cultural models and media, feminist and psychological theories to decode gender- and emotion-related televisual representations across different cultures. Two other media are examined in this section in relation to zooming and scale, this time from a bottom-up, implementation-oriented perspective. 📍 In the first study, **Nadezhda Povroznik**, **Daniil Renev** and **Vladimir Beresnev** discuss forms of mediation that allow for zoom-in, zoom-out and zoom-zero modes, as well as the challenges inherent in the digitisation and virtual representation of religious sculpture from the Perm Art Gallery. While the possibility to switch between different zoom modes in a digital environment enables new ways of exploring and formulating research questions, the authors assert that digitising this type of cultural heritage should involve a deeper understanding of the cultural layers and contexts of existence of the sculpture, which may require additional knowledge regarding traditions and local customs in the object's region of origin, going beyond the reconstruction of its environment. 📍 The second ground-view study deals with sonic scales, as described in **Johan Malmstedt's** computer-assisted analysis, which enables him to zoom in and out on a 1980s Swedish broadcasting dataset. It argues that scale and zooming may be related to various methods of detecting sonic diversity, such as differentiating between music, speech and noise, or several types of noise, and that they can help in tracing trends and developments over time in the acoustic style of broadcasting.

Analysis may therefore produce different results, depending on the type of zoom applied, either within the frequency register or along the time axis.

3.3 Hermeneutics

This third area pertains to overhead and ground standpoints on the capacity of zooming and scale to inspire and shape interpretative trajectories. 📍 By adopting a continuously scale-shifting perspective that evokes the size-appearance parable of the illusory giant Tur Tur, **Chris and Raluca Tanasescu** revisit concepts such as *monstrosity* and *iconicity*, anchored in the realm of intermedial and performative enquiries, to examine digital writing processes and illustrate their complexity through the case of the *Graph Poem*, a network of computationally assembled poems. The authors argue that the multi-scalar architecture of this type of poetry anthology, with algorithms operating at both a small scale, on poetry diction-related features, and a large scale, on network-topology-relevant criteria, coupled with a *monstrous/iconic* reflection filter, may inform more general considerations on the complex and often paradoxical inner mechanisms of text production, interconnection and analysis in a networked, ubiquitous and ever-changing digital space. 📍 **Benjamin Krautter**'s four-dimensional reconstruction of Mueller's conceptualisation of scalable reading and its application to the network-based analysis of a corpus of German plays represents another middle-ground exemplar of approaching the question of scale through a combined theoretical and practical line of thought. The chapter unfolds as a detailed discussion and contextualisation of Mueller's concept and the metaphor of zooming underlying it, followed by an illustration of how the various dimensions of scaling and a research agenda based on qualitative and quantitative methods can be brought together when analysing literary texts. 📍 From the same intermediate perspective, combining theoretical and practical aspects in scale investigation as a heuristic instrument, **Florentina Armaselu** advances the hypothesis that texts can be conceived as multi-scale conceptual constructs involving various degrees of detail, and devises a method for detecting levels of generality and specificity in a text, applied to analyse a selection of books from micro-global history, literature and philosophy. The proposed method integrates elements from topic modelling, fractal geometry and the zoomable text paradigm to build interpretations and visualisations of *informational granularity* aimed at capturing the dynamics of meaning that emerges from the assemblage of blocks of text considered at different scales of representation. 📍 In the last chapter of this section, **Stephen Robertson** proposes a ground view of the construction of the digital history argument, as opposed to a print-based form of argumentation, exemplified through the *Harlem in Disorder* project, a multi-layered, hyperlinked narra-

tive set up via the *Scalar* platform. According to the author, the project demonstrates how different scales of analysis and multiple threads of interpretation can be supported by the digital medium, enabling the user to understand the complexity of racial violence through the interconnection of a multitude of individual events, aggregated patterns and chronological narratives, which are more wide-ranging than could be contained in a book.

3.4 Digital landscapes

The fourth thematic group gathers viewpoints from all three perspectives and focuses on the interplay between scale, tool-building and analysis in envisaging and perusing various forms of digital landscapes. 🌐 **Natalie M. Houston**'s examination of three open-source network visualisation tools, *Pajek*, *Cytoscape* and *Gephi*, tested on the *Les Misérables* character interaction dataset, proposes a critical approach that analyses the default aesthetics offered by these software packages in order to grasp the meaning and knowledge creation assumptions embedded in the design of this type of tool. From a humanistic standpoint, the author argues that a critical awareness of the ways in which network graphs are produced and facilitate understanding of data structures at a variety of scales contributes to more informed data visualisation practices that acknowledge the role played by aesthetic choices in the production of meaning. 🌐 **Quentin Lobbé**, **David Chavalarias** and **Alexandre Delanoë** proceed from a similar bird's-eye vantage point to investigate the various ways in which the notions of *scale* and *level* are used in the digital humanities literature. Using the theory of complex systems, a mathematical apparatus, and *Gargan-Text*, a free text mining software, they analyse a *Web of Science* and *Scopus* dataset and build visual representations of evolving branches of knowledge based on the conceptual distinction between *level* and *scale* understood in a more specific sense, as *level of observation* and *scale of description*, in the research and data analysis processes. 🌐 **Francis Harvey** and **Marta Kuźma** adopt a mid-way approach to discuss and illustrate notions and techniques such as cartographic scale, zooming and generalisation in historical maps. After theoretical considerations and examples, including the analysis of maps of Warsaw and the Vistula River from different time periods, the authors formulate a series of assumptions as to how future interpretative research in digital humanities may benefit from a better understanding of *generalisation* changes, differences between zooming and scaling, and their impact on the graphic representations in historical maps. 🌐 The *Weather Map* proposal by **Dario Rodighiero** and **Jean Daniélou** offers a ground view of a visual model designed to depict public debates and controversy through the visual grammar of synoptic weather charts, and a Web-based implementation relying on the

Media Cloud archives and allowing for zooming and contextualisation through access to additional information, such as links to sources and statistics. According to the authors, this form of modelling enables users to capture controversy in the making and study the movements and plurality of actors that shape controversial events.

Finally, this Introduction chapter outlined the conceptual framework and the variety of viewpoints related to the metaphorical and physical use of scale and zooming in digital history and humanities. Moreover, our intention was to provide readers with the incentive they need to continue their journey through Zoomland and to discover and explore both its *actual* and its *symbolic* territory.

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