



The Future of Text : A 2020 Vision

Growing out of our annual Symposium (*of which all contributors to the book are also invited as speakers*), we are putting together a book on the possible futures of text which has turned out to be the largest survey of the future of text ever undertaken, with a wide range of different perspectives and inspirations.

The book is intended to be a collection of dreams for how we want text to evolve as well as how we understand our current textual infrastructures, how we view the history of writing and much more. The aim is to make it inspire a powerfully rich future of text in a multitude of ways today and to still have value in five hundred years and beyond. It should serve as a record for how we saw the medium of text and how it relates to our world, our problems and each other in 2020.

Contents

FOREWORD

Vint Cerf. *Internet Co-Inventor & Pioneer*

OPENING QUOTE

“The thing that amazed me - even humbled me - about the digital computer when I first encountered it over fifty years ago - was that, in the computer, I saw that we have a tool that does not just move earth or bend steel, but we have a tool that actually can manipulate symbols and, even more importantly, portray symbols in new ways, so that we can interact with them and learn. We have a tool that radically extends our capabilities in the very area that makes us most human, and most powerful.”

“There is a native American myth about the coyote, a native dog of the American prairies - how the coyote incurred the wrath of the gods by bringing fire down from heaven for the use of mankind, making man more powerful than the gods ever intended. My sense is that computer science has brought us a gift of even greater power, the ability to amplify and extend our ability to manipulate symbols...”

“We need to become better at being humans. Learning to use symbols and knowledge in new ways, across groups, across cultures, is a powerful, valuable, and very human goal. And it is also one that is obtainable, if we only begin to open our minds to full, complete use of computers to augment our most human of capabilities.”

Douglas C. Engelbart

INTRODUCTION

Frode Hegland. *Editor.* Truth is not in the written words. But in how they are connected. This is why text-

interactions are important. This is why, in an environment of weaponised social media with high-velocity fake news, the way we can address and connect determines what we see and therefore where we stand. Draft Text

CONTRIBUTIONS

Listed alphabetically by first names, some people you will have heard of, others provide more niche perspectives, all are *brilliant minds*. The contributors are roughly grouped, to make it easier to get an overview, but these are not people you can really put in a box:

authors, artists & publishers

- **Amira Hanafi.** Writer and artist
- **Bob Stein.** Founder of Criterion, Voyager, and the Institute for the Future of the Book
- **Chaomei Chen.** Editor-in-Chief, 'Information Visualization' and Professor, College of Computing & Informatics, Drexel University
- **Clive Thompson.** Author of 'Coders' and 'Smarter Than You Think'
- **Dave Winer.** On the net since mid-70s. Started two Silicon Valley companies. Wrote for Wired. Fellow at Harvard, NYU. Founder of podcasting, blogging, RSS. Open web.
- **David Jablonowski.** Artist
- **Doc Searls.** Editor-in-chief of Linux Journal, Author of 'The Intention Economy' & Co-Author of 'The Cluetrain Manifesto'
- **Howard Oakley.** Mac Developer and Technical Writer
- **Howard Rheingold.** Educator and Author of 'Net Smart', 'Tools for Thought: The History and Future of Mind-expanding Technology'
- **Johannah Rodgers.** Independent Artist, Scholar, Author of 'Technology: A Reader for Writers', former Associate Professor and Founding Director First Year Writing @ City Tech, The City University of New York
- **John Armstrong.** Writer & Performance Artist
- **John-Paul Davidson.** Producer, Director & Author of 'Planet Word'
- **Jordan Abel.** Nisga'a Author and Artist
- **Keith Houston.** Author of 'The Book' and 'Shady Characters'
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- **Leigh Nash.** Publisher at Invisible Publishing
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- **Peter Flynn.** Principal Consultant at Silmaril Consultants and former Head of Research and Academic

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- **Richard Saul Wurman.** Author of ‘Information Architects’, ‘Information Anxiety’ and Creator the the TED conferences
- **Richard Seymour.** Author of ‘The Twittering Machine’
- **Sarah Walton.** Author and Digital Consultant
- **Sarven Capadisli.** Web technologist
- **Stephanie Strickland.** Poet, in print and digital media, and Author of ‘How the Universe Is Made’
- **Steve Newcomb.** Consultant
- **Ted Nelson.** Visionary, Interactive Media Pioneer and coiner of the term 'hypertext'

academic, archive & library affiliated
(whether author or other)

- **Amaranth Borsuk.** Assistant Professor, Interdisciplinary Arts and Sciences, University of Washington Bothell and Author of The MIT Press Essential Knowledge series ‘The Book’
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- **David Owen Norris.** Head of Classical Performance, Professor of Music University of Southampton
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- **Derek Beaulieu.** Director, Literary Arts, Banff Centre for Arts and Creativity
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- **Ewan Clayton.** Calligrapher, Teacher and Author
- **Fiona Ross.** Typographic Consultant & Professor of Non-Latin Type Design, University of Reading
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- **Garrett Stewart.** James O. Freedman Professor of Letters, University of Iowa and Author of 'The Look of Reading: Book, Painting, Text'
- **George Landow.** Professor and Author of 'Hypertext: The Convergence of Contemporary Critical Theory and Technology'
- **Harold Thimbleby.** See Change Digital Health Fellow at Swansea University and Author of 'Press On'.
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- **James Baker.** Senior Lecturer in Digital History and Archives at the University of Sussex
- **James O'Sullivan.** Lecturer in Digital Arts & Humanities, University College Cork and Author of 'Towards a Digital Poetics: Electronic Literature & Literary Games'
- **Jane Yellowlees Douglas.** Author of pioneering Hypertext Fiction, including 'I Have Said Nothing', one of the first published works of hypertext fiction.
- **Janet H. Murray.** Ivan Allen College Dean's Professor in the Graduate Program in Digital Media, Georgia Tech and author of 'Hamlet on the Holodeck: The Future of Narrative in Cyberspace'
- **Jason Morningstar.** Analog Game Designer
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- **Maryanne Wolf.** Director, UCLA Center for Dyslexia, Diverse Learners, and Social Justice, Visiting Professor and Author of 'Reader, Come Home: The Reading Brain in a Digital World' and 'Proust and the Squid'
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- **Richard A. Carter.** Artist and Lecturer in Digital Media, University of Roehampton
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- **Sam Brooker.** Assistant Professor, Richmond University UK
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- **Tyler Shoemaker.** PhD Student, University of California, Santa Barbara
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technologists

- **Adam Kampff.** Neuroscientist at the Sainsbury-Wellcome Centre and founder of Voight-Kampff
- **Adriano Ferrari.** Developer of Ginkgo, the Card-Tree Writing Software
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- **Bruce Horn.** Software Developer and Author of the original Macintosh Finder
- **Chris Gebhardt.** Software Engineer and Researcher, The InfoCentral Project
- **Chris Messina.** Hashtag inventor, product designer, technologist
- **Christopher Gutteridge.** University of Southampton and Developer of academic repositories
- **Cathy Marshall.** Texas A&M University and Hypertext Developer
- **Dan Whaley.** Hypothes.is Founder and Innovator in Web Annotations
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- **David Price.** DebateGraph, Founder
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- **Gyuri Lajos** TrailMarks Founder
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- **Jeremy Helm.** Inventor, Communication Advocate and California Bay Area Organizer of 2020orBust.org
- **Jesse Grosjean.** HogBaySoftware, Developer of 'WriteRoom'
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- **Leslie Lamport.** Inventor of LaTeX
- **Marc-Antoine Parent.** Developer of IdeaLoom
- **Mark Bernstein.** Eastgate Systems, Developer of hypertext software 'Tinderbox' and 'Storyspace'
- **Matt Mullenweg.** Developer of WordPress
- **Mei Lin Fung.** Co-founder People Centered Internet and IEEE Standards Association Liaison to the Humanitarian Activities Committee
- **Oliver Reichenstein.** Developer of iA Writer
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Brasil, Sophie Ying Liu, Alexandre Lopes and Lidia Ganhito

- **Raine Revere.** Developer or of EM
- **Shane Gibson.** Technologist and Political Scientist
- **Shuo Yang.** Interaction Designer at Google
- **Timur Schukin.** Partner, NakedMinds Lab, Russia
- **Ward Cunningham.** Inventor of the Wiki

POST SCRIPT

Ismail Serageldin. Founder & Director Emeritus, Library of Alexandria

EDITOR & CURATOR

Frode Hegland. Developer of Liquid | Author, Reader & Flow, and Host of the Future of Text Symposium

Frode is passionate about unleashing the potential of the future of text. To this end, he has held the annual Future of Text Symposium since 2011, many of which have been co-hosted by Vint Cerf. He has also designed and built two novel text-interaction systems, the macOS word processor Liquid | Author and the Liquid | Flow utility: www.liquid.info.

Frode is currently a PhD student at the University of Southampton where he is researching dynamic views in word processors for literature reviews, and developing the [Visible-Meta system](#), as blogged about on wordpress.liquid.info. This system is being co-developed by this community and will be employed in the book.

His work is greatly influenced by [Doug Engelbart](#) whom he worked with at the turn of the millennium. Doug Engelbart sent him this email in 2003: “I honestly think that you are the first person I know that is expressing the kind of appreciation for the special role which IT can (no, will) play in reshaping the way we can symbolize basic concepts to elevate further the power that conditioned humans can derive from their genetic sensory, perceptual and cognitive capabilities.”

Further Contributions

If you feel that you have something compelling to write on the future of text, please send a proposal to frode@liquid.info. If you can think of someone else to add to the list, please send their names and also contact information if you have it.



*Humans became behaviourally modern
the moment they committed to storing abstract information outside their brains*

Lyn Wadley

as quoted in Mark Moffett's '[The Human Swarm](#)'

Publishing : Paper, Digital & Metal

In order to deliver on the short and long term aims the book we will produce not only a printed and digital edition but also aim to produce an edition etched in metal, to make it as durable for the long haul as we possibly can.

GUIDELINES *for* AUTHORS

For further information, you may want to read the [Author's Invitation](#) and the [Author's Guide](#), but the key info is:

- **1 page** (around 500 words)
- **Manuscripts or Abstracts, along with brief Biographies, are requested on or before the 1st of November 2019**, to be ready for review before the [Symposium](#) on the 9th of November.
- **Final Text on the 9th of December 2019** (anniversary of Doug Engelbart's demo), including 1 (optional) image

Contributors are separately welcome to submit an optional glossary for their writing, of a reasonable length. The format will be determined as a group, to aid reading into the deep future and for people of very different perspectives today.

VISUAL - META

All of the editions will feature future looking innovations including [Visual-Meta](#) to make information about the book readable by humans and machine. This will even enable the metal edition to easily become richly interactive again when scanned in the far future.

Symposium

Please also note that all contributors are also invited to the 9th annual Future of Text Symposium on the *9th of November* at the University of Southampton, UK.