Preface

Given the "information overload"[1] erupting from an exponentially growing amount of data being produced, exchanged, and generated electronically,[2] Data design is now, more than ever, paramount in not only addressing the material nature and behavior of such piles of unstructured raw data, but also in ascertaining a spectrum of new user scenarios there within. A cross between the arts and design science, its focus is on deploying both practical and semantic types and solutions that not only represent data flows (data production, transactions, and generation) and data clusters (semantic data-mapping), but also visualize volume changes in line with a number of parameters and methods.

Doing away with traditional design models oriented around information-fed presentations, data design opts for another vision, striving to devise spaces for both display and viewing purposes that couple context with environment. In turn, greater visibility of the relational dynamic inherent in the myriad facets of the data itself[3] results, ultimately giving shape, substance, and stance to the myriad changes, "trajectories,"[4] and shifts in data.[5]

What then does it take to make this creative endeavor[6] possible? What design-bred steps or approaches are needed to display and view these genuinely complex, relationship-based data ecosystems, while at the same time digging up new user relationships[7] lodged there within?

Within the wake of these questions lies the research in question. While drawing attention to alternative ways of processing colossal volumes of data in motion, the research aims at shedding light through the ever-evolving eye of a designer on data

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[1] This data massification, or "Big Data," has reached critical status in a multitude of areas.

[2] Current volume worldwide is nearing three (3)-zettabytes.

[3] The opportunities for data abstraction are on the rise.

[4] With regard to lines and curves drawn in space by various groups of data in motion.

[5] The realization that the nature of data is both immaterial and intrinsic.

[6] Based on the assumption that data is physical matter.

[7] This refers to the triggering of new applications and uses.

display and viewing methods. It only then makes sense that the spotlight be directed at designers whose expertise and expert eye on the matter unravel as broadly as possible the complexity inherent in the relational dynamics of data components[8] through unprecedented formal and graphic arrangements. With an approach whose axis rotates simultaneously around the senses as it does around sensations, designers illustrate that a visual and graphic take can and does factor into a better grasp on organizational rationale involving data sets and clusters, and, in turn, facilitate greater visual reasoning.

The work divides the designers' contributions into eight parts, which comprise articles and written interviews. The first seven parts of the book outline the scope of data design. Each designer-author has been assigned the task of writing a chapter based on a theme, topic, or issue of his choice.[9] What follows is a line-up of "viewpoints"[10] that bring the main fields and areas of interest[11] under the discipline's umbrella to the surface and offer an in-depth look into practices boasting both foresight and imagination. The eighth and final part features a series of interviews with data designers and artists whose way of working, as well as what results from it, embody originality and marked singularity. Walking a fine line between testimony and trust, declaration and demand, and perception and projection, these designer-artists offer their readers, on the one hand, access into the intricacies of their personal journey and commitment, and on the other, the most contemporary principles in data design.

Each designer-contributor also strives to provide new answers to the question, "What challenges await Data Design?" To avoid falling into too narrow a mindset, each works hard to explain the breadth carried today by design and its widespread application across a mix of business sectors. With end users in mind, designer-contributors lift the curtain on the myriad purposes for which the field was originally intended, forging the bond even more between data design and the aims and intentions of those who contribute to it. As a result, a number of enlightening concepts and bright ideas unfold within the confines of this book to help dispel the thick fog around this new and still relatively unknown discipline. A plethora of equally eye-opening and edifying new terms, words, and key expressions also unfurl. Informing, influencing, and inspiring are just a few of the buzz words belonging to an initiative that is, first and foremost, a creative one, not to mention the possibility to discern the ever-changing and naturally complex nature of today's datasphere.

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[8] In other words, what shapes, articulates, and establishes the guidelines specific to relational data.

[9] In relation to his/her own practical, conceptual or theoretical interests.

[10] Fueled by intuition, these viewpoints are backed by a solid foundation in critical thinking and judgment.

[11] These stem from the choice of themes, topics, or issues addressed.