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Sustainable Web Ecosystem Design

 Springer

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Just as a torrent of burned Carbon atoms into the air since the dawn of industrial man has altered the fundamentals of the Earth's atmosphere, a torrent of informational bits is altering our sense of reality and what it means to be a human being.

Aristotelian format of the analogy is

Carbon atoms : Atmosphere :: Information bits : Reality

This book is dedicated to the Gunthers, especially John, for the astounding record of human experience called “Death Be Not Proud,” and Johnny and all of the other Glioblastoma multiforme patients and their families who have suffered. Your contribution to the understanding of the human ecosystem is invaluable. Also, to Morgan, Finnegan, “number 3”, and my insightful wife, Carey

Preface

If you are reading this book you may or may not be aware that there is a virtual sea of instruction and help documentation freely available online to assist a beginner straight through to seasoned guru build and/or improve a Web site, Web app, or native mobile device app. To be clear, this book is *not* one of those documents. If you need to know how to optimize your site for beautiful, responsiveness in a mobile environment, how to resize a jpg, or how to secure your site from SQL injections, the help you need is out there on the Web and often times in many forms, but this book is not one of those forms. This book talks about those things briefly because they are certainly integral parts of the anatomy of the existing Web ecosystem. But this book does not explain those technologies or techniques. It simply addresses them as part of the larger informational context. This book is not a how-to manual in any way, unless you consider ideas about how these technologies fit together and act on each other and their users to be “how-to.” Of course, there would be nothing wrong with that approach. In fact, often times, I take that approach myself. However, in brief, this book goes further in working to establish an early, comprehensive view of the basic, important nodes of Web interface development within the greater context of real world human-computer interaction issues.

In this current beta release, this book’s primary role is as a companion text to the IST250 course offered by the College of Information Sciences and Technology at The Pennsylvania State University, however, you certainly do not need to be enrolled in the class in order to find value in the book’s message. The technologies mentioned above, along with many others, are the technical basis of a basic Web instance and are covered thoroughly in IST250 during the semester. This book does not duplicate that course material as much as it points to those technologies and illustrates how they work together, and work with us, the users. The roles that these technologies now play in our lives cause bigger questions to arise. This book is concerned with those questions. In *Image, Meaning, Text*, Roland Barthes points out the difference between a *denoted* message and a *connoted* message. Barthes showed us that when a photograph is shown to a viewer there is a signifier involved from which the viewer finds the signified, that is, the denoted message, the plain message, the simple message, the message that is contained within the image alone. In other words, when a person looks at a photograph, they may find

some meaning there. When the same person looks at the same photograph, but this time the image is within a context, that is, a newspaper page, for example, with a headline, a caption, story text, and maybe even an advertisement or two or three running adjacent to the image, a different meaning may come about for the viewer than when the image was seen on its own. This is what Barthes termed the connoted message. In our rich information landscape, connoted messages are everywhere. They are all over the Web causing high beta brain waves, waves associated with decision-making and high mental simulation. This is the condition of our world today and, for good or ill, it is only going to increase. So, we must be aware of it and do our best to understand it.

It is the aim of this book to broaden your view of what the Web really is. The hope is that perhaps in a slightly less immediate kind of way, this book will help you build, or at least contribute to, a better Web ecosystem. This book is just as important to shaping a healthy future as it is about what you can do right now toward that goal. If you are interested in taking part in the progression of a sustainable Web ecosystem, then please read on to find out how to become an active participant.

Acknowledgments

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Contents

1	Introduction: Discovering Where We Are Not	1
2	Seeing Where We Need to Be	7
2.1	The Anatomy of Sustainable Web Ecosystem Design	9
3	Getting There: Landing an Onion on Mars	11
4	The Necessity of a Sustainable Web Ecosystem	15
4.1	Individual, Medium, Society	17
5	The Real Discovery: The Web is Glial	19
6	Web User Research	25
6.1	HCI/BCI	26
6.2	Surveys	30
6.3	Usability	30
6.4	Focus Groups	31
6.5	Web User Profiles	31
7	The Project	33
7.1	Vision	33
7.2	Brand/Message	34
7.3	Communication	34
7.4	Balanced Media Ecosystem	35
8	Project Management	37
8.1	Pre-production	37
8.1.1	Concept Document/Functional Specification	37
8.1.2	Competitive Matrix	41
8.1.3	Cost Benefit Analysis	41

- 8.2 Team Roles and Methods 42
 - 8.2.1 Development Team Roles and Responsibilities. 42
- 8.3 Source Code Management 43
- 8.4 Development Journal. 43

- 9 Architecture 45**
 - 9.1 Web Content Management Systems 45
 - 9.2 Taxonomy 46
 - 9.3 Intuitive Tagging 47
 - 9.4 SEO Optimization. 47

- 10 Functionality 49**
 - 10.1 Hypertext. 49
 - 10.2 Hypertext Transfer Protocol 50
 - 10.3 HyperText Markup Language (HTML) 50
 - 10.4 Document Object Model 51
 - 10.5 Web Browsers 51
 - 10.5.1 Background 52
 - 10.5.2 Popular Web Browser Descriptions. 53
 - 10.6 Accessibility. 54
 - 10.6.1 The Limitations of the Users' Computer Systems . . . 54
 - 10.6.2 The Limitations of the User. 55
 - 10.7 Universality 56
 - 10.8 Searchability 56
 - 10.9 Scalability 57
 - 10.10 Social-Sharing 57
 - 10.11 Responsiveness. 57
 - 10.12 Testing 58

- 11 Image. 59**
 - 11.1 Data Visualization 59
 - 11.2 Multi-Formats 59
 - 11.2.1 Definitions of Basic Terms 60
 - 11.3 Dynamic Interface 61
 - 11.4 Image Genome. 63

- 12 Writing 65**
 - 12.1 Creative. 65
 - 12.2 Technical. 65
 - 12.3 Documentary 66
 - 12.4 Critical 66

- 13 Code** 67
 - 13.1 Stability Through Standards 67
 - 13.2 Lightweight 68
 - 13.3 Secure 69
 - 13.4 Open 69
 - 13.4.1 Semantic 70
 - 13.5 Interoperable 71
 - 13.6 Energy Utilization. 72

- 14 Web Hosting** 73
 - 14.1 Efficiency 75
 - 14.2 Performance 75
 - 14.3 Lightweight Stability 76
 - 14.4 Reconciling Project and Host 77
 - 14.4.1 Content Considerations 78
 - 14.4.2 Image Slices. 79
 - 14.4.3 Measuring Performance 79
 - 14.5 Security 80
 - 14.5.1 Types of Security 81
 - 14.5.2 Web Security 82
 - 14.5.3 Site Design 82
 - 14.5.4 Site Development 83
 - 14.5.5 Site Management 83
 - 14.5.6 User Considerations 84

- 15 Post Launch** 85
 - 15.1 Maintenance 85
 - 15.2 Workflow 85
 - 15.3 Content Provider Groups, (e)Teaching, (e)Learning 86
 - 15.4 User Groups, Community 87
 - 15.5 Analytics 88

- 16 Education** 91

- 17 Policy** 95
 - 17.1 Web Standards: The W3C 96
 - 17.2 Freedom of Speech/Human Rights 97
 - 17.3 Politics 97
 - 17.4 Health 98
 - 17.5 Economics 98
 - 17.6 Open Accessibility 99
 - 17.7 Environment 99
 - 17.8 Education. 100

- 18 Philosophy of Technology 101**
 - 18.1 Fredrick Jameson 101
 - 18.2 Jean Francois Lyotard 103
 - 18.3 Harold Innis 106
 - 18.4 Emile Durkheim 109

- 19 Conclusion 111**

- Book Editions/Versioning Information 113**

- References 115**