PROGRAM OR BE PROGRAMMED

Ten Commands for a Digital Age

Douglas Rushkoff

Study Guide

The following study guide is suitable for high school through graduate school use, as well as book clubs. While the language and questions are simple enough for laypeople and beginning media students, they can also be approached through any number of more advanced perspectives.

Similarly, the additional resources suggested for each chapter are written for the non-academic reader, but offer positions and insights of value to researchers at all levels.

Program or Be Programmed is available at www.orbooks.com.

Please contact orders@orbooks.com or call (212) 514 - 6485 for more information.

Introduction

The opening sections of the book propose that every medium has an active and passive user. Speech has speaker and listener; text has a writer and reader; television has a "programmer" and an audience. And so too, digital technology has a coder and a user.

This is the opening message of the introduction to Douglas Rushkoff's *Program or Be Programmed*. The author takes us through the social, political, educational and economic ramifications of becoming a society of end users instead of programmers and technological creators. We soon find ourselves intimately involved in networks about which we understand very little. We do not know how our thoughts and behaviors are influenced by these tools, because we don't know how they work – much less work on us.

However, if we gain an understanding of how digital technology operates, if we can recognize what Rushkoff calls the "biases" of these media — the tendencies of a technology to reinforce certain patterns of behavior over others — we have the chance to program the machines instead of the other way around.

Questions for Discussion

What are your emotional reactions to the material and the initial premise of this book? We'll have plenty of time for intellectual and rational discussion. But right now, let's just share where we are at intuitively with this material. Nodding, frowning, smiling, confused?

What do media revolutions have in common? What do they allow us to do, other than offering new tools, toys and gadgets?

What does the author mean by the "bias" of a technology or medium. What are some examples of a technological bias? What about biases in systems that are neither media nor technology?

Are biases intentionally embedded, or accidental results? Can you find examples of both?

What does Rushkoff mean when he says we are "optimizing humanity for machines" rather than the other way around? Do you ever feel this way? Can you point to examples where this is the case?

How does our understanding of digital technology differ now, in the days of networked and cloud computing, from the earliest days of computing? (Consider Rushkoff's calculator example.)

Explore Further

Rushkoff talk about *Program or Be Programmed* at SXSW2010: http://www.youtube.com/watch?v=imV3pPIUy1k

McLuhan, Marshall. *Understanding Media* (Cambridge: The MIT Press, 1994).

Interactive McLuhan website http://www.cios.org/encyclopedia/mcluhan/m/m.html

1: Time

The First Commandment in Rushkoff's *Program or Be Programmed* is "do not be always on." He proposes that networked digital technology is biased away from continuous time, depending instead on command intervals to parse existence. As the speed and availability of networked connections grow, we become more and more attached to the constant stream of information that is always running, updating to our phones, laptops and inboxes. In this chapter, Rushkoff explores how this tendency to be "always on" changes our ability to engage with the world around us. He reminds us that paying attention to the digital distractions is still a choice and that we don't have to surrender our time to technology that has no use for it.

Questions for Discussion

What is it about the nature of computer programming that causes digital technology to be biased away from continuous time? And what are some examples of the asynchronous bias of digital technology?

What prevents people from claiming their own time in the face of digital distraction? How are these interruptions and distractions any different from those that plagued us before we had cell phones on our hips?

While the chapter focuses on the early, more asynchronous styles of communication on early networks, even newer technology such as streaming video and Facetime applications bring us onto each other's screens in something like real time. Do these new forms of digital communication negate the basic premise of digital non-nowness? Or do they simply hide a greater imposition on what we think of as time?

Explore Further

Video Clip: Rushkoff shares the Ten Commands at "Trendday" in Germany, 2010. http://vimeo.com/15423244

Greer, James. "Bending Time." *Discover*, Nov. 2008, Vol. 29 Issue 11, pp. 38-40.

2: Place

In Chapter 2, Rushkoff asserts that digital media are biased away from the local, toward dislocation, declaring we should "live in person." All media have a bias toward distance, as carrying a message from one place to another is what media are for. It just so happens that this bias toward dislocation breaks down the systems of local business, community and communication — leaving people disconnected from the local and engaged with national brands and ubiquitous corporations. By recognizing media's bias toward dislocation and learning to live in person, we can reclaim power by reclaiming the local.

Questions for Discussion

Even though it gives them exposure to a worldwide market, how does the Internet work against local business?

One result of the delocalizing nature of the Internet is the use of long-distance technologies when local and face-to-face interaction is possible. (Have you ever used an Instant Messaging Client to message a roommate, even though she was working on her computer in the same room?) What are two more examples of delocalization as a result of a networked existence?

Beyond the way we sometimes employ technologies for the gee whiz factor, or for convenience, do we sometimes utilize distancing as a "feature" rather than a "bug?" When do we like the fact that the person we're communicating with is far away?

Explore Further

Ed Shane, *Disconnected America: The Consequences of Mass Media in a Narcissistic World* (New York: M.E. Sharpe, 2000).

Pew Internet Reports – great data on how people use the net, at http://pewinternet.org

3: Choice

It all comes down to yes or no when digital technology is concerned. In Chapter 3, Rushkoff explains that digital technologies' reliance on a binary yes-or-no system forces humans into making choices at a nearly constant pace. Our reliance on digital technology allows the computers we thought we controlled to make minute choices about how we experience the world — and meanwhile we try to cram the human experience into the searchable confines of a database. Rushkoff points out that maybe our best choice is not to choose anything at all.

Questions for Discussion

Why is the bias of digital technology so heavy toward choice, rather than ambiguity? What are the human results of making so many digital decisions?

Rushkoff points out that this world of constant choice is a benefit for marketers and those who would use these decision points as pressure points to force sales. How exactly does this work, and what is an example of marketers using forced choice as a sales force?

Despite being biased toward top-down control, databases have to potential to be open-ended, bottom-up systems if we choose to use then in such a way. How would freeing the database help free us from forced choices?

Explore Further

Lanier, Jaron. *You Are Not a Gadget: A Manifesto* (New York: Knopf, 2010).
Excerpt online: http://www.randomhouse.com/catalog/display.pperl?isbn=9780307269645&view=excerpt

4: Complexity

The combination of the first three biases exposes the problem Rushkoff points out in Chapter 4. Because our digital technology reduces our world into an abstraction to be processed, it is "biased" toward a reduction in complexity. Digital technology seeks to level the playing field and holds all human knowledge at the same distance, only one level deep through any Internet search. This reductive nature of digital technology leads us to cherry-pick what we want to know when we want to know it and forget the information as soon as we have no use for it. It leads us to develop skills based on accessing this information, rather than using it. And more than anything, it leads us to think we understand the complex world around us when we are only reading part of the map.

Questions for Discussion

In the chapter, Rushkoff shows how the bias of digital culture for simplicity is based, in part, on the bias of the technology. Does this seem true, or is it simply a coincidence?

What do we think of the medium's promise to break elitism, and do we see the search box and what I call the "datapoint universe" as worthy replacements for it?

What are some of the effects of this digital oversimplification on academia and education? What are the effects on skilled labor and the process of discovery?

Explore Further

Shirky, Clay. *Here Comes Everybody: The Power of Organizing Without Organizations* (New York: Penguin Press, 2008).
Online Alternative (excerpt): http://us.penguingroup.com/static/html/features/herecomeseveryone.html

5: Scale

In Chapter 5, Rushkoff explains that the Internet, and the digital technologies that support it, are biased toward scalability. More than just a business buzz word, scalability is the requirement of any business operating in our digital century. The constant need for businesses to scale up, usurp competitors' territory and develop new markets to tap has fueled the modern evolution of business and, as Rushkoff explains, bring our recent financial troubles into a clear, new light. Due to the constant need for growth and development, business must rely on another bias of the medium — abstraction. By further abstracting how business is done, and what constitutes business to begin with, we can either choose to control the development or get lost and left behind by the demanding scalability of the status quo.

Questions for Discussion

What are "vertical" and "horizontal" integration? And how do they differ from the new requirement of "scaling up?"

While abstraction allows us to use such important tools as language and math, it also makes us more dependent on centralized standards. What does this do to the power structure of contemporary society, especially in the worlds of business and politics?

According to Rushkoff, how can the German philosopher Walter Benjamin's ideas help us navigate and appreciate our abstract world?

Explore Further

Benjamin, Walter. *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media.* (Boston: Belknap Press, 2008).
Also at: http://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm

Tim O'Reilly and John Batelle's "Web Cubed" http://www.web2summit.com/web2009/public/schedule/detail/10194

6: Identity

Rushkoff has always been Rushkoff online, and this display of identity online has come with happiness and heartache. In Chapter Six, Rushkoff looks at the Internet's bias toward anonymity and the effect that bias has on our personal lives and our social interactions. These days, we operate in a virtual world, free from our bodies, but not from identity. Because of this, we have a unique ability to reshape our identity to anything we please, and also operate anonymously and outside the restrictions of civil society. With the ability to reshape ourselves, we also have the potential to reshape how our society works — but only if we realize the power we hold.

Questions for Discussion

Seeing that only 7 percent of human communication is verbal, and we strip away the other 93 percent of non-verbal, tonal and physical communication by interacting through digital technologies, what are some of the societal side effects we can expect?

What key difference between the generations that adapted to digital technologies and those that grew up with digital technologies does Rushkoff point out and why is it relevant to identity?

Respond to this proposal:
No one should ever post anything anonymously online unless under threat of physical or legal persecution. And even then, the ideal behavior would be for everyone to post their similar sentiments and thus make persecution impossible.

Explore Further

Sherry Turkle on Digital Nation: http://www.pbs.org/wgbh/pages/frontline/digitalnation/interviews/turkle.html

Turkle, Sherry. *Alone Together: Why We Expect More from Technology and Less from Each Other.* (New York: Basic Books, 2011).
Online Alternative (excerpt): http://www.nieman.harvard.edu/reportsitem.aspx?id=102403

7: Social

In Chapter 7, Rushkoff uncovers one of the Internet's first and most powerful biases. The Internet is for being social. It's biased toward contact. With the boom of social networks and trending topics, marketers have co-opted the Internet's ability to connect. But peer-to-peer communication has always been the Internet's strength. So no matter how many followers a brand has, the real power comes in the connections those followers from with one another. It's those peer-to-peer connections that we turn to when we need real advice or consolation, or any other intangible feeling a true friend can offer. But as we continue to count our friends instead of really contact them, we are changing their nature, perhaps even robbing ourselves of what real human friendships uniquely offer.

Questions for Discussion

What about the history of the Internet makes it biased toward contact?

What is the "monetization of friendship" and how does it occur in the Internet's social spaces?

New media theorist Howard Rheingold argues:
"People act and learn together for a rich mixture of reasons. The current story that most of us tell ourselves about how humans get things done is focused on the well-known flavors of self-interest, which make for great drama –– survival, power, wealth, sex, glory. People also do things together for fun, for the love of a challenge, and because we sometimes enjoy working together to make something beneficial to everybody. If I had to reduce the essence of Homo sapiens to five words, 'people do complicated things together' would do. Online social networks can be powerful amplifiers of collective action precisely because they augment and extend the power of ever-complexifying human sociality. To be sure, gossip, conflict, slander, fraud, greed and bigotry are part of human sociality, and those parts of human behavior can be amplified, too. But altruism, fun, community and curiosity are also parts of human sociality –– and I propose that the Web is in existence proof that these capabilities can be amplified, as well. Indeed, our species' social inventiveness is central to what it is to be human."

What do you think of that? What might push the quality of social networks to one side or the other of Rheingold's two possibilities? What is your experience of Facebook? Do you find your relationships made more complex by their existence online? Are you online relationships deepening for you?

Explore Further

Rheingold, Howard. "Participative Pedagogy for a Literacy of Literacies." http://freesouls.cc/essays/03-howard-rheingold-participative-pedagogy-for-a-literacy-of-literacies.html

8: Fact

In Chapter 8, Rushkoff explores how our ideas spread socially, replicating our ideas like genes replicate our physical features. Ever since the feudal system overpowered the bazaar, stories about kings and brands became more important than the facts of everyday life. But in the digital landscape, we operate in something much more like the bazaar, where the truths about everyday life are again the most important stories to tell. And when the media space is biased toward truth telling, the easiest way to accomplish anything is to tell the truth.

Questions for Discussion

What is a meme, and how are they like our own genes?

While analog media are "read only," digital media are "read-write," allowing for a deep interaction between the user and the producer. What effect does this transition have on our communication and how does it put us back in the bazaar?

According to Rushkoff, we live in a realm where a person's value is dependent on the strength of their facts. What does the author mean by this, and what is one example of this from recent news events?

What is your opinion of WikiLeaks? Does the factual bias of the net favor their efforts to release and spread the truth? Are we, as a society, ready for such levels of honesty? Are we learning anything we didn't already know? If not, then why the big deal?

Explore Further

Postman, Neil. T*echnopoly: The Surrender of Culture to Technology* (New York: Vintage, 1993).
Excerpt: http://www.ibiblio.org/cmc/mag/1995/mar/hyper/npcontexts_119.html

9: Openness

The Internet was designed to run on a shared architecture, and thus developed a bias toward openness. But Rushkoff does not believe this means the floodgates should be open to repurposing and stealing everyone's content. Because we operate in a digital world innately biased toward openness we sometimes forget where the line is drawn — or to draw the line at all. In this chapter, Rushkoff looks to address the problem of digital piracy and the commodification of content by showing how the laws and regulations we use to govern the open Internet were developed for a closed, controlled, analog world. Unlike the marketplace for fixed goods our digital space is also a product of shared cost structures, something our financial institutions engineered out of our currencies a long time ago.

Questions for Discussion

What about the Internet's bias toward openness makes it a particularly sticky battleground for content rights lawyers? What is so different about digital property from physical property?

How Digital Rights Management strategies work? Why do some of them make the situation worse instead of better?

Instead of being biased toward hoarding like existing currencies, local and peer-to-peer currencies depend on what factors to ensure a more open flow of capital? Why would they work, or not, today?

Explore Further

Lessig, Larry. *Free Culture*. http://www.free-culture.cc/freecontent/
Excerpt: http://www.oreillynet.com/pub/a/policy/2002/08/15/lessig.html

10: Purpose

In the final chapter of *Program or Be Programmed*, Rushkoff proposes our best solution for taking advantage of all the biases of digital technology — to become the programmers ourselves. As popular understandings of technologies have always been one step behind the technologies themselves, we have become complacent users rather than active programmers. This allows those in power to maintain control, simply by designing the technology for or against their natural biases leaving us to either fall in line or struggle against the natural flow. By taking the reigns as programmers, we can occupy the highest leverage point in a digital society. We can shape the world any way we see fit.

Questions for Discussion

How is digital technology like speech, text and the printing press? In what ways have users lagged one leap behind technological advances?

What are the four stages of interaction Rushkoff points out in his example of the gamer, and what is the relationship between user and program at each stage?

After reflecting on the book, what for you is the real promise of digital media, and what might we do to come to realize it?

Explore Further

Kelly, Kevin. *What Technology Wants*. (New York: Viking, 2010)
Online Alternative (video): http://www.kk.org/thetechnium/archives/2009/12/what_technology_2.php

ADDITIONAL CONVERSATION TOPICS:

Literacy and Democracy

Here's a conversation Rushkoff initiated with his own class on media literacy:

Back in the early twentieth century, there was a great ongoing debate between two social theorists — Edward Lippmann, the man who invented public relations, and John Dewey, the famous education theorist from Columbia Teachers College.

Dewey argued that democracy was only possible with an educated population. Lippmann argued that democracy was essentially impossible — people are just too lazy and stupid. Instead, he believed, an enlightened elite should lead us and clever PR people convince the masses to do (and vote) as they said.

Television, advertising and corporate media appear to promote the Lippmann position, while progressives and idealists tend to believe in the possibility of a truly informed and educated population. Some newer political movements argue that this education is itself a product of elitism, and leads to lack of faith.

And, of course, it seemed to many of us in the early net days that Lippmann's compliance industry would be overthrown by people with net connections and infinite information at their fingertips. But the way the net has moved toward spectacle and opacity seems to be pushing things back the other way. The tools that once promised to educate us and give us new avenues for agency can also be distracting. Especially if we don't know how they work — if we are not truly literate.

What do we think of Lippmann's perspective? Was he right? Is the notion that people learn the biases of the media they use (and the intentions of the programs they employ) just wishful thinking? Was Dewey wrong? Or does the net breathe new life into his vision of an educated electorate, and of a population with intelligence and autonomy?

Economics and Commerce

How is media literacy similar to economic literacy? Is money a medium, and if so, what are its biases?

If we don't know the biases of money, how might we find out? Who invented the money we use? Did it replace other kinds of money? What was the intent of this particular kind? Who does it benefit, and whom does it work against?

Religion and Meaning

As humans become more able to program their world — either through computers, genomics, robotics, or nano — how does this change their relationship to religion, God and spirituality? Does a world of programmers still see Creation as a possibility?

Similarly, if we accept the notion of humanity evolving toward some kind of collective organism, what does this mean for our "personal" relationships to God? Is there a spiritual bias to technology?

American Hegemony

Does the fact that America is behind in teaching computers to kids portend the end of US technological and military superiority? Are the generals right, and are we a single generation away from losing our advantage?
Is this even of importance? Is it jingoistic for Americans to bemoan being surpassed by China and India? Or will companies like Google and Facebook guarantee that America will always be on top and ahead?

ADDITIONAL MATERIALS:

Rushkoff, writing for Mashable.com about the way marketing threatens social media:

Why Marketing Threatens the True Promise of Social Media

Social media is everywhere, and it is finally accepted as much as, well, as much as the Internet itself. Sadly, though, in reaching this level of ubiquity, we have ended up surrendering the real promise of this medium.

I fought for so many years to convince people that the Net was a social medium in the first place. Until recently, everybody seemed to believe that "content is king," and that all this messy socializing between people was of little value. It was all about getting people onto a sticky website so they'd make purchases. Their conversations and innermost thoughts were once considered utterly un-monetizable.

But thanks to Twitter, YouTube and Facebook, social media has arrived as a justifiable expense for businesses looking to do whatever it is that's intended to replace advertising. And as a result, people who should know better -– many of us who have some understanding of how social media actually works –- are busy working for companies who want to turn this social landscape back into a marketplace.

This isn't about pointing fingers or laying blame. It's about stopping ourselves before it is too late. We still have a chance for social media to generate the biggest change in how culture and commerce operate since the invention of the printing press. But it will require that we recognize what is so special about it, how it disrupts the status quo, and why it'd be such a shame to give all this up without a fight.

The most disruptive feature of social media is that it allows us to connect with one another relatively directly. (Even Facebook's architecture of central servers is completely unnecessary for social networking to occur, as new tools like Diaspora are quickly demonstrating.) The direct connection via media –- for socializing, or even for commerce — has been controlled by both governments and businesses for the past 600 years. That's right: This is our best opportunity in six centuries to connect with our peers via technology without the oversight of powerful interests.

After the fall of the Roman Republic, Europeans spent close to a thousand years living under the awful oppression of feudalism. There were lords who owned all the land and peasants who worked on it.

Nothing much happened until merchants started traveling around and spreading the innovations from one area to another. People became good at particular crafts and started selling things to one another, developing little marketplaces that slowly grew in size. Towns developed their own currencies based on grain and other commodities, and people started to get rich.

They had liberated themselves from absolute dependence on the landowners and created a peer-to-peer economy. They got healthy, bigger than at any time in history until the 1980s, and they worked less than four days a week. As a result of the rise of this new "bourgeoisie," the lords had less power and money. They decided to crash this new economy.

Local moneys were declared illegal; people had to borrow "coin of the realm" from the central treasury. And if that wasn't enough, local business was also stifled. Instead of working for themselves, people had to become "employees" of one of the king's officially sanctioned monopolies — what we would today consider "corporations." People got poor, conditions got worse, the plague broke out ... you know the rest. We call it the Renaissance, but it was really the end of a peer-to-peer culture and economy that has never been matched. Until now.

With the web — and more specifically, with social media — we have the chance to engage with one another in the ways that could restore a P2P society in which people create and exchange value directly with one another. Instead of depending on corporations for jobs, goods, and even investment, we can work for and with one another. Instead of relating indirectly through centrally constructed mythologies and brands (you're a fan of Nike, too?!) we can relate directly with one another.

The real possibilities of social media, however, are quickly devolving to the limited applications of social marketing. In the past twenty years, I watched open source get reduced to the corporate-friendly concept of "crowd sourcing," and my own concept of "viral media" get watered down to "viral marketing." I refuse to watch the social promise of interactive media get redefined by those hoping to make a fast buck off our Facebook friendships. Not without a fight.
Instead of connecting to one another, we are increasingly connected to and friended by the same old brands and institutions that the Internet once stood a chance of upending. And worst of all, we the people

are getting into the act, learning to sell our friends to the highest bidder. Whether it's a Zynga game inviting us to turn over our address books for points, or an advertiser offering us a chance to win a prize for "friending" them publicly, we are now in the business of marketing our friendships to those who hope to exploit the bonds we have created with others. In doing so, we reduce the real value of those bonds, as well as the entire potential for peer-to-peer connection.

The real opportunity of social networking looks a lot more like Burning Man and WikiLeaks than it does like P&G's word-of-mouth campaign or whatever Twitter is hatching in its new analytics lab.

We are building the social organism together. That's all the Internet has been doing from the beginning. But it seems as soon as we develop a new tool or strand of connectivity, it is hijacked by business, robbed of its power, and then replaced by mechanisms that connect us to things, rather than people.

Will social networking finally accomplish the Internet's real goal? We have yet to see. But in the meantime, how we use it — and what we think it to be — will go a long way toward determining its fate.

ADDITIONAL MATERIALS:

Documentary and Television:

Visit http://pbsdigitalnation.org — where you can watch Rushkoff's ninety-minute documentary about many of the issues in this book, and watch footage of interviews, the military, and many other relevant locations.

Visit BBC's The Virtual Revolution, at http://www.bbc.co.uk/virtualrevolution where you can watch four one-hour episodes about digital culture, as well as all of the raw footage shot for the shows. Rushkoff is interviewed at length for the project, along with many of the other authors in the book's bibliography.

ADDITIONAL MATERIALS:

Interviews

This interview was conducted in October 2010 by the Shareable.net staff

Michel Bauwens: If we indeed take control of our technology, how do you see the balance between individual control, relationships between peers, and the power of any new collectives that may arise in this networked world? Do you see the balance between individuality and collectivity changing?

Rushkoff: Well, if we take control of our tech, as you put it, then we get to decide how that dynamic changes. I don't think we get to fully take charge of it, though. I think we get to partner with it, and with our various biological and evolutionary imperatives. I feel like the best we can hope for is conscious participation in all this.

There is almost certainly an evolutionary drive toward increasing complexity in the face of entropy. That's practically a definition of life. Technology is so powerful and attractive to us because it holds the promise of greater complexity and greater connectedness. Atoms to molecules to cells to organelles to organisms. What's next? No one knows for sure, but it sure ain't Facebook.

I have been saying from the beginning—the early '90s anyway—that we are looking at collective organism. But unlike some kind of fascist Borg, we don't have to lose our individuality. It is actually enhanced as more people become aware of everyone else. Not a hive, but more of a coral reef.

Some of these rather invasive technologies are really just preparation for a world where everyone will know what

you are thinking anyway.

Yelizavetta Kofman: On the one hand, being a Gen Y'er I like to think that I'm more on the programming than programmed side of the Digital Age. And I believe in the spontaneous, magical, democratic power of the Internet. On the other hand, as someone who one day hopes to make a living, I wonder if the Internet has to 'go corporate' for my generation to be able to build careers from all the creative 'programming' things we do? Can we really keep providing resources, ideas, writing, and art for free online without devaluing these things?

Rushkoff: Well, I think you have it backwards. The reason you have to work for free is because this stuff IS corporate. The way to make a living in this space for real would be to establish a genuine means for peer-to-peer exchange. YouTube and Facebook and Google are making plenty of money off your labor.

Making money, or earning a living, is not anathema to freedom and democracy. They are the same thing. That's what democracy came out of: people fighting for the right to make a living instead of having to work for the feudal lords.

Mira Luna: Online media facilitates an abundance of superficial relationships and broad, but again superficial, depth of collective wisdom. If the new economy is one based on closer relationships and deeper knowledge of context and place, instead of abstract numbers in accounts, then how do we get to a deep economy through a primarily superficial form of communication? Is a local economy desirable or possible as the web of consciousness spreads around the world? Are real

accountability, transparency, and responsibility still possible while creating a more a sustainable and just global economy?

Rushkoff: Well, I'm not sure that any economy goes deep. Economics may be essentially superficial. After all, what is it really but a way for people to keep track of the value others have created, in order to make sure some people don't exploit the work of a few. (Well, actually, the economic system we know and love today was created explicitly for the purposes of monarchs and their cohorts extracting value from laborers—but that's beside the point.)

If any economy is really just a ledger to prevent freeloading, then we can't expect it to reflect the deeper values and relationships and place. You're talking about an ecology of interactions and transmissions. That ecology—at least right now—is much more complex and multifaceted when it occurs in real life, among people who know each other as creatures and not just usernames. But there are ways in which we need to interact as a species on greater scales, and the net allows for a lot of this. We simply can't forget that such engagements are necessarily simplified. They aren't bad, they're just limited.

I think that transparency and accountability are possible, sure. I'm not as sure that people really care about them as much as they should, though. I feel as if most people would rather be lied to, so long as they don't have to think too much. I don't see new media changing this, yet. It may in many cases be making it worse—especially as people so steadfastly refuse to accept responsibility for what they're doing with these tools.

Rachel Botsman: How do you think the concept of 'money' will have changed by say 2030? How do you think will we trade and exchange?

Rushkoff: The money we use now is basically a thirteenth century operating system trying to serve as a platform for a twenty-first century digital economy. That's why banks are under such stress. Centralized money lending was invented to keep monarchs wealthy, and it depended on chartered monopolies and other strict top down control.

I think we will see the emergence of a number of digital alternatives to centralized money. They may look something like time dollars or lets systems, in that people will maintain a balance closer to zero rather than trying to accumulate savings. But they won't have to be local, because identity and history can be verified online.

The next step, of course, will be for us to contend with the fact that we have enough stuff to go around even if people don't work that much. Then, currency will look very different.

Paul M. Davis: As the online world enables many more opportunities for collaboration, how do we ensure that the contributions and benefits are distributed in an equitable way? How do we avoid the inequities between the haves and have-nots that are inherent within the current media labor market? And how do we make sure that the benefits are as freely accessible to all, as the process and means of production are?

Rushkoff: Well, first we have to make sure that any benefits at all are available to those who actually create value. So far, it looks like the net is being used by the

largest of corporations to extract value from creators for no compensation at all. YouTube and blogs and everything else are supposed to serving as publicity for some other aspect of our careers, but what other aspects are there?

So it doesn't look simply inequitable to me; it looks like exploitation.

The way out, and the way to guarantee that the benefits, once generated, are equitably distributed is to develop peer-to-peer models of value exchange. Disintermediate the corporations, really. That's what I've done with this book. People get my book for close to half of what it would cost through a traditional big publisher, yet I still get more profit per book. They have more money left to buy a book someone other than me. I have more to donate to Wikimedia and archive.org, which is where I'm putting the 20% I don't have to share with Bertelsmann.

Neal Gorenflo: Life, Inc. and *Program or Be Programmed* seem to be much more strident calls to action than prior work. And while Life, Inc. is about corporate capitalism and your new book is on media, I sense they may have more in common than what's on the surface. What are the parallels between your last two books, and what kind of change do they mark for you personally and intellectually?

Rushkoff: Both of them are about people coming to recognize the way their world works. In Life Inc, I wanted people to see that the economy isn't just this way because of nature; it was designed by people at a particular moment in history to do a very particular thing.

It's not commerce; it's a scheme to prevent peer-to-peer commerce and extract value from colonies. We still use it today because we forgot that there were many different ways for an economy to be run (or allowed to operate). They were all outlawed by kings in the 1200's, is all.

The new book removes the metaphor. I realized that telling people money was an obsolete operating system made no sense because people don't know what an operating system is. We are painfully illiterate in all things digital. We accept each Steve Jobs device and each Facebook iteration as if they were created to make our lives better. We don't know what this stuff is really for, because we can't even imagine that digital devices have agendas.

Jonah Sachs: We assumed that taking power away from the gatekeepers of information by ushering in the viral age would make us instantly smarter and more authentic. A decade later, is it happening? Or the opposite?

Rushkoff: It's not happening because we didn't take the power away. We gave it away. The only people who cared deeply about the new mimetic potentials of this stuff were marketers.

But the technology itself has impacted those gatekeepers. They can't lie without being discovered, they can't hide behind their brands, and whatever they do eventually comes to our attention. The problem is that most of us simply don't care. Along with the increase in our potential to know has come abhorrence for knowledge. As if using your head means denying your gut.

And those of us who *do* know rarely take action. All the knowledge is paralyzing. That's part of why I am advising

people to set more local goals.

Paul M. Davis: If the traditional publishing industry is dead, as you stated in your Arthur Magazine piece, does this not only upend the production and distribution model, but also the entire notion of what the form of the "book" can and should be? How do you see the form evolving in the years to come?

Rushkoff: I don't think I said it's dead. It just doesn't serve all of our needs. It needs to change. It is currently keeping too many people employed at jobs that don't create value or increase the quality of the literature. And those jobs are there to cater to other corporations in the obsolete distribution scheme. As we move to more peer-to-peer models of distribution, we can pass more value directly from the consumer to the writers and editors.

People just have to be willing to buy directly from publishers, rather than to use the current aggregators (Amazon and Barnes & Noble). All we need to do is aggregate on a higher level. Someone (maybe I'll just try to do it, actually) needs to create a big searchable index of all the books for sale. And it just links directly to the publishers, who can use any fulfillment scheme they like. The site can make its money with ads and book reviews, but not take any money from the publishers to connect readers to consumers. Of course, Google Books is more than willing to do this right now. People would simply have to change their habits.

Neal Gorenflo: You've played keyboard with Psychic TV, taught college, produced acclaimed books and TV, made an impassioned critique of corporate capitalism in Life, Inc., and have gone against techno-utopian grain

with your new book *Program or Be Programmed*. What connects these projects? What is driving you? And what is the most important thing you've learned in all of this?

Rushkoff: Everything I've done is about helping people differentiate between the map and the territory. What is really here, and what has put here? What are the true given circumstances, and what are arbitrary products of our own creation? I want people to see the programs - social and otherwise - that are running our world. We participate in them as if they were accepted operating principles of reality, when they are just social constructions.

What I've learned in all of this is that—for the most part—people are happier not knowing. They would rather have a guiding mythology and believe it to be the truth, rather than to know the people who came up with that myth, or what those people may have intended to do with it.

This interview was conducted for *Publishing Perspectives* magazine, and first appeared at http://publishingperspectives.com/

By Chad W. Post

One of the keynote speakers at this year's TOC Frankfurt, Douglas Rushkoff is a media theorist who has authored several books on the subject, including Cyberia: Life in the Trenches of Cyberspace, Media Virus: Hidden Agendas in Popular Culture, Playing the Future: What We Can Learn from Digital Kids, Open Source Democracy, and Get Back in the Box: Innovation from the Inside Out. He's also a graphic novelist whose Testament was critically acclaimed. Last year, Random House published Life, Inc.: How the World Became a Corporation and How to Take it Back, Rushkoff's critical look at the history and rise of corporations.

His latest book—*Program or Be Programmed: Ten Commands for a Digital Age* — is available from OR Books and is a very provocative look at living in our digital world. Through ten "commands" (such as "Do Not Be 'Always On,'" "One Size Does Not Fit All," and "Do Not Sell Your Friends"), Rushkoff examines the biases of digital technologies, urging readers to reflect on how to remain human in this age of smartphones and wired everything. *Program or Be Programmed* carves out a space between the pundits claiming that the Internet is ruining life as we know it and those who feel that the Internet will help create a democratic utopia.

Publishing Perspectives: Your last book, Life, Inc. came out from Random House, but *Program or Be Programmed* is being published by the relatively new OR Books—a very interesting press that's much smaller than RH in terms of distribution (OR Books are only available through their website), name recognition,

advances, etc. What made you decide to go with OR?

Douglas Rushkoff: First and foremost, I wanted the books to be cheaper for the reader. With the traditional publishing system, there are too many middlemen, and too many people needing to justify their place in the food chain. This ends up costing a lot of money, and ultimately costing a lot of time, too.

I also wanted to release a couple of months after I finished the book, instead of a couple of years. I am tired of writing books that correctly predict a phenomenon that hasn't happened yet, but then come out after the thing has happened. Writing about technology, in particular, is pretty tricky if you have to do it a couple of years in advance.

I also wanted to work with a house that wasn't fixated on sell-in figures or first week sales, but one that preferred to see a book as something that could take a few weeks or even months to become popular. Big publishers are trapped responding to corporate owners who are looking for growth to match their debt structures. Unfortunately for them, publishing is not a growth industry but a sustainable industry. So the models don't work for real books — only for runaway bestsellers. Then the focus turns to marketability of titles rather than sustainability or importance of ideas.

OR, in particular, is run by an old friend, John Oakes. We've been looking for a way to work together for years, and this seemed like the right project at the right time.

PP: How has the process of publishing with OR been different from that of publishing with RH? Specifically, are there different marketing strategies?

DR: I'm not really privy to the marketing. From the surface, the publishers are selling to completely different constituencies. Random House is selling to Barnes and

Noble while OR is direct marketing to consumers. So these are really different models, I'm sure. Random House has to think about a whole big picture — everything from Ingram to Amazon. John only has to think about the buy button on his own site. No sell-ins, no returns. He's got an easier job, from that perspective.

The main differences for me have been my level of direct involvement, which with OR Books has been greater. For me, this is a good thing, because I've been in books for a while and think I make valuable contributions. I've gotten to influence everything from the cover and font to press release and the strategy approaching NPR.

Of course, they're freer to involve me because there's no corporate politics or set policy. People in "real" publishing have bosses and departments and methods. So editors aren't told sell-in figures, publicists have to weigh booking one author vs. another on the same show, and people are doing a lot of their work blind.

The advantage, of course, is that when you work under a big corporate imprint, you get a network of salespeople to put you into stores, you get noticed by reviewers and publications that balk at independent presses, and you get the possibility of academic or other releases. Plus, you get paid before you write the book. The big publisher can fund a year or two of research and writing and that's no small thing. And at just a few publishers — and I'd have to say Random House is one of them — you get to be part of the continuity of publishing culture. It took decades or more to be built, and there is a sense that you're working in a tradition.

Whether I work with a big publisher or a little one, though, I know I'm largely responsible for getting the word out. It's a different world than it used to be, and authors are responsible for making the contacts that announce the existence of a book. So far, independents are a little better at accepting this reality. On the other hand, big publishers tend to have at least someone in the publicity department who can actually get the booker of almost any show on the phone. Or a marketing person who can talk directly to one of B&N's buyers. There are still a few human networks at play that matter. It's just that they aren't activated for a vast majority of the books being published by these places.

PP: Where did the idea behind *Program or Be Programmed* come from?

DR: I guess the original idea was my first encounter with networked computers in the 80's. I wrote Cyberia, celebrating (and to some extent parodying) the ability of early cyberpunks to rewrite reality from the bottom up. These were the days of Mondo2000 and the WELL, when it seemed like anything was possible. Learning to program wasn't just about computers, but about reality itself.

Over the years, I've seen people not only lose that sensibility about these technologies, but lose sight of the fact that digital technologies are programmed at all. People accept the tools and interfaces that they're presented with as if they were pre-existing conditions of the universe.

And then we end up with all these conversations and books about whether digital technology is good for us or bad for us — does it make us smarter or dumber. As if they were these things that just got handed to us by God and are going to have some effect on us. We seem to be forgetting that we make these things, or that someone makes these things, and that they are embedded with their agendas. So kids look at Facebook, say, and they think this piece of software has been designed to help them make friends. If they even think about it that much. They don't think of it as software that has been programmed.

They just think Facebook is there to help them make friends. And they don't realize that's not what Facebook is really programmed for. Its purpose — the purpose of its founders and its components — is different.

So the genesis of the idea was to tell people that if they remain unaware of how their programs work — of what the programs are for — they will end up less the users of their technologies than the used.

PP: Some of "commands" are pretty straightforward and personal—thinking of "Do Not Always 'Be On'" and the anxiety most everyone feels trying to "keep up" — whereas others are a bit more abstract and rooted in huge socio-historical issues — such as "One Size Does Not Fit All." Regardless, all (except maybe "*Program or Be Programmed*") seem to urge caution. If there's one message you want people to take away from this book, what is it?

DR: If you don't know anything about the software, then you are the software.

PP: In the past you've written quite a bit about the power and promise of all things digital, and in comparison, this book seems a bit more pessimistic. From the intro: "A society that looked at the Internet as a path toward highly articulated connections and new methods of creating meaning is instead finding itself disconnected, denied deep thinking, and drained of enduring values." But as you also say, the Internet isn't going away anytime soon. Instead, it will probably continue to play a larger and larger role in our lives. What do you think would happen if we were able to recuperate a sense of humanity — an idea behind a lot of your commands— and retake control of technology? By becoming "programmers" can we change the world?

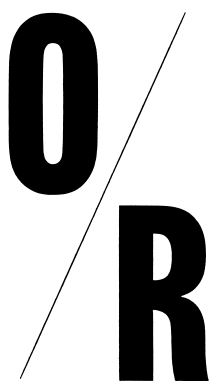**DR:** I've been hearing this question since about 1995. "In the past, you were so optimistic, and now you are pessimistic." So I'm wondering where this glorious past is, unless it's like yesterday. *Program or Be Programmed* contains pretty much the most optimistic sentences I've ever written, telling readers that "this is the moment we have been waiting for" and that we are participating in "nothing less than the conscious intervention in our own evolution as a species."

I think what you're really reacting to is whether a particular paragraph makes you happy or sad. It is sad that most of us remain so painfully unaware of how our technologies work. It is sad that computers started out so easy to work, and that as they have become more complex we humans have become more simple. It is sad that in the US we don't teach computer programming in school, while in India and China they do. I just state the facts.

My opinion — my argument — is that it is not too late. That's optimistic. I don't think we have grown too stupid or too lazy to become — at the very least — partners with our digital technologies, working toward greater autonomy for ourselves rather than just a greater number of predetermined choices.

Of course, by becoming programmers we can change the world. Programmers are building the world — embedding agendas into technologies that will live on long after we are gone.

O/R

Program or Be Programmed is available at www.orbooks.com.

Please contact orders@orbooks.com
or call 212 514 6485 for more information.