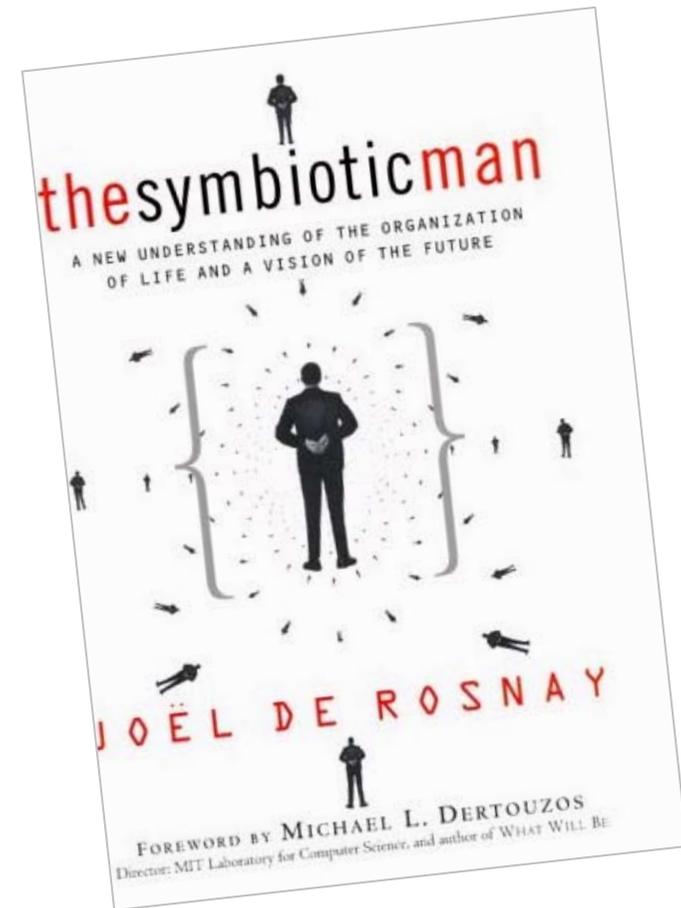


“What is the internet?
It's not an information
technology, it's a
relationship technology”



Joel de Rosnay is the rare visionary who uncloaks the future with the richest of insights. He describes the internet as a relationship technology and is fascinated by the new structures of relationships that are emerging. His books chart the history and the future of our relationships with technology and the Agor Vox online newspaper he helped build in France has pioneered the publishing models of citizen journalism. While the media industry is focussed on Web 2.0, he's unravelling Web 3.0.

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Speed read

Rosnay delivers a clear vision of key stages in the digital journey

The internet is now a complex informational ecosystem, and using a systems approach to its dissection helps reveal the models of commerce and content that will work best

Classical economics is grounded in the allocation of scarce resource, but digital communications challenge the very heart of this – the economic change that comes from the internet will be far greater than the effects we've seen today

Members of the online community should be treated as the interpreters, crafters and creators of digital content; 'pronetarians' is his term

Device convergence will now accelerate, and the mobile phone will emerge with a new lease of life through wifi and externalized keyboards

The next paradigm of web communication - Web 3.0 – will blend the physical and virtual realities together into a new hybrid

Professor Joël de Rosnay

“By 2020 the internet will have disappeared. It will be like electricity,” Joël de Rosnay is simply stating how we'll feel about access to the network. “This will change many things; change our economy and how we interact.”

Often we're restricted to the near term by simply not being able to see through the whirlwind of change around us. And that's why Rosnay's vision and language is so helpful.

“What is the internet?” He argues that “it's not an IT technology, it's a relationship technology”, and with that can unpack the ideas of social media and Web 2.0 as being about people and putting them at the heart of communication.

Web 1.0: the informational ecosystem

Many have argued that the Web 1.0 era was about the passive use of media. The internet's communication accelerated the spread of knowledge and its transaction tools removed inefficiencies in markets. What emerged through the nineties was a fantastically extensive and infinitely extensible informational ecosystem. The system is rich in its own nodes and networks and feedback systems that create a learning architecture. The open flexible nature gave it hyper-extensibility, and with everyone connected having the potential to act as a co-developer, the scale of potential knowledge was always going to be vast. Rosnay neatly describes this as “a planetary brain”.

“The classical industrial model is based on economies of scale, mass distribution and the scarcity of resources, you have to manage the distribution of scarce products.”

The implications are vast. At Digital we've argued from the start that today's information economy is just a taster of what will come, and that there will be vast changes in our industrial model, and with that our social and political models.

Rosnay argues that because “the classical industrial model is based on economies of scale, mass distribution and the scarcity of resources, you have to manage the distribution of scarce products.”

His implication is that this gives rise to the models of classic industrial mass media, which in turn creates and then entrenches a corporate culture of how brands communicate to consumers.

Reflecting on this, it's hard to see where the chicken-and-egg cycle breaks, and maybe it helps explain part of the crisis the marketing industry finds itself in today.

“The classical industrial model is based on economies of scale, mass distribution and the scarcity of resources, you have to manage the distribution of scarce products.”

Pronetarians: blogs are the media of the masses

But Rosnay highlights how the informational ecosystem of the internet is now changing, and “turning upside down”. He cites blogs and citizen journalism as “the media of the masses, not mass media”, and uses Marxist structures to demonstrate a change in the ownership of the means of information production. These are complex arguments, and the subtleties could easily be lost, but it leads him to the concept of an information society proletariat who is embedded in the network and able to create content and conversation

“Blogs are the media of the masses, not mass media”

Rosnay asserts the idea of a “pronetarian” (rather than pro-lit-arian) and a new model of the ownership of the means of production, and in this model a battle is clearly coming with the “info-capitalists” who own the licenses for information.

“Pronetarians will produce their own TV, both good and very bad,” he qualifies, commenting on Joost and the new models for content distribution that are starting to emerge in media, but Rosnay asserts that the same approaches will start being echoed in radically different sectors: finance, insurance, consulting and education. The force behind online banking exchange Zopa – the late Richard Duval – made similar points when we interviewed him two years ago. In a

net enabled economy, the actors can be at the edge rather than in the centre, and new business models such as Ebay are purely the connectors for the hundreds of millions of actors who lie at the edge.

Agora Vox: putting theory to the test

The pages of the Agor Vox newspaper help uncover new models for citizen journalism. It is already the 12th most popular newspaper in France and though its origins were in news and politics, it seems to be mushrooming into sports, health and just about anything people want to write about. Agora Vox uses models of editing similar to Wikipedia and it seems to prove that community self-policing models can work well in general news media when participants are creating the content rather than the media groups.

Rosnay shares the passion for citizen journalism that we explored in our Digital Thought Leader interview with the BBC's Pete Clifton, but unlike the BBC, Agora Vox has only a skeletal core resource.

Devices and evolution

The collapsing costs of networking means that in telephony the revolution catalysed by Skype has been free telephony. Once wifi is universally accessible and the clients for voice over IP (VoIP) have become universally deployed, the communication sector will have completed another massive transition.

Peer-to-peer file sharing service BitTorrent is an interesting case in point. Video is the ultimate media channel in terms of its hunger for data, but with BitTorrent there is a model for scalable TV content sharing, and, in theory, multiple pages with advertisers' contents.

But for Rosnay this is just the start, because he's looking towards the emergence of new balances of power in these models; “participatory democracy will change some of the political structures to let bottom-up messages shine through”.

Understanding the long term

Joël de Rosnay is a navigator, one of the few people who can take you on a solid journey into the longer term. For many the challenge of engaging with the digital networked economy is the chaos they see at first glance: new trading models, new technologies, new industry structures, and a fluidity that can be unnerving to investors.

Since the mid nineties I've characterised this as the whirlwind we've all been caught up in, and how the glimpses of what lies ahead can be so frustratingly elusive. Yet the short term development of the digital networked society really is not that hard to predict: join up the dots

Meet your Digital Thought Leader



Professor Joël de Rosnay, CEO Biotics International

Professor Joël de Rosnay is at the forefront in the fusion of biology and technology. In this discussion he explores ideas behind the next generation web, and talks about the relationship between technology and people. Joël is an accomplished author and “The Symbiotic Man: A New Understanding of the Organization of Life and a Vision of the Future” provides a deeper insight on many of these issues.

of what's already been created, add in the mass marketisation of products and services, and logic takes care of the rest.

Even the medium term is starting to feel more understandable now, because we have fifteen years of back data to look at. The digital network society may not have linear progression, but fifteen years of the web can build a sense of intuition about how concepts that grow up in isolation can glue together: social media, messenger tools, mobile television – all simple combinations of well established principles.

But in the longer term our fields of vision just aren't wide enough: too much noise, not enough signal. And it's here where Rosnay's contributions are so valuable.

What are the revenue models?

Talking about the new economic models, Rosnay is clear about the patterns that have already emerged.

For Rosnay, the long tail is still key. This is the power law model from mathematics that neatly summarises the relationship between the number of people who visit a site and the number of sites there are. The fight is always to be in the head of the long tail, and Rosnay argues that this is all about the traditional model of scarce resources. In terms of economic models, he argues that you make money through being an aggregator (like Google's aggregation of advertising or Ebay's aggregation of items for sale). Additionally he argues that the economics favour organisations that filter content to make it accessible. Search engines are the most immediate example of this, but the social bookmarking services and tagging services all provide valuable navigation, trust and references.

What's next? Web 3.0

The hype of Web 2.0 may feel like it's undermined the importance of social media, but whatever your view, the blended strands of user generated content, social networks, permanence and conversations, represented a fundamental shift from the centralised model of web publishing that dominated the nineties. Rosnay provides some navigation about what comes next, and whether it ends up being labelled 'Web 3.0' or not, there's clearly another paradigm shift on the way. This is about the relationship between people and the network, and how that's evolving and growing. At a simple level the network is a convenient extension of our memories, a place to store databanks of information such as contacts and addresses.

“Collaborative production of digital information that involves the masses is as important as the introduction of the steam engine, machines and intensive automatism at the beginning of the industrial age.

Today the new tools of economic empowerment based on the implementation of digital technologies (software and production tools on personal computers and the web), effectively give power to the proletariat and drive a revolution, which is both faster and deeper in terms of political, social and business implications, but also bring with them totally new problems.

Pronetariat is a term I use to refer to a new class of users of digital networks who are able to create, produce, broadcast and sell open (or non-proprietary) digital content by applying the principles of the new economy.”

Professor Joël de Rosnay

It's also an extension of our physical homes: the photo-albums of an older generation are replaced by spaces on Flickr, the movie collections of the VHS generation replaced by a stream from BitTorrent. But Rosnay argues these are just elementary starting points for a deeper symbiotic relationship.

The phone is a useful focus for what this means in practice. Within the next five years phones will have completed their evolution into computers, functionality will have merged, and access to the devices will have broken out of the confines of today's power users to wash across the mass market. The functions of mobile phones will broaden and Rosnay sees the future of our computing concentrated in the mobile. The screen and handwriting outputs and inputs will be externalised from the phone, and with GPS and compass technology phones will have acquired an accurate sense of space and positioning.

This lays the foundations for what he sees as a new type of intelligence, an ambient intelligence that makes sense of the messy physical world that surrounds us. Thanks to the collapsing cost of chips, it's not as sci-fi as it appears because an environment coated in RFIDs combined with some of today's motion capture technology is in our grasp. That would deliver a clickable environment, a hybrid virtual reality that is much more about the real world than any virtual one. By describing someone walking around an RFID rich room, Rosnay maps out the translation of activity and movement from one environment into the other. Suddenly the world of William Gibson seems a lot nearer.

“A clickable environment, a hybrid virtual reality that is much more about the real world than any virtual one.”

From atoms to bits

Going from atoms to bits was one of Negroponte's leaps in thinking. Before most people had experience of computers, he was mapping out how they'd change our value system and challenge the notion that value had to be held in physical objects rather than data. That was the kind of accuracy that is as terrifying as it is challenging, and thinking back to how readily rejected it was at the time, I can't help reappraise where Rosnay is heading.

He sees us going from bits back to atoms again, though without the same constraints on time and space that we have been use to. It's a complex argument, but one he demonstrates with a story about the manufacture of 3D products. Prototypes of new 3D 'printers' (I'm struggling for the right language here) have demonstrated the ability to manufacture, on the fly, simple plastic shapes from their raw data.

His illustration is with logo bricks, which can, apparently, be created from a model of their data, in theory allowing them to teleport, Star Trek style, from one space to another. If the prototypes succeed in proving that costs can be less than €500, then there is certainly a massive shock on the way to the retail and manufacturing industries. Like Negroponte's Atoms to Bits, it's hard to fathom out where that heads, but sceptics will assert that complex moving parts will need a different approach to replication than the simplicity of Lego bricks.

Our take

Absorbing all of this, you're tempted to start imagining a techno utopia, which all problems are fixed, but Rosnay is a realist. He concludes that the internet could still be the biggest threat we all face: “More information pollution, more hackers and more challenges; understanding it and interpreting it is the key.”

In identifying these waves of new problems, he observes an urgent need for one particular solution. 'Infonetics' would be the creation of a framework for what can be done with all the information that's now been created; not just the raw information, but the information about the information. It's a rallying call that needs to be heard, and as the data trails we all leave become richer and more malleable, I can't help but want it to be a campaign that goes far and wide.

Meet other Digital Thought Leaders

Here are three other Digital Thought Leaders who are pioneering user-generated content. Their brands and models are each different, but in times of huge economic and social change, this type of knowledge becomes a critical success factor. That's why we created the Digital Thought Leaders interviews: to bring you closer to people and brands shaping the digital networked economy.



Vince Broady, Founder, GameSpot.com

Ten years ago, Vince set out to create an online magazine for gamers. What he's succeeded in building is one of the web's pioneering community sites, with millions of avid gamers chatting, messaging and now videoing for each other. GameSpot is a laboratory of early adopters.

Antoine Clement, Elle.fr

For sixty years Elle's magazines have been media icons. Under renewed enthusiasm they're embracing the web, and they're taking on board the new models of publishing. With 39 editions and 20 websites, Clement's brands have come a long way from a single media proposition. But only continued innovation will let them succeed in an increasingly challenging online market.

Craig Newmark, Founder Craig's List

This vast network of local communities covers 175 cities in more than 30 countries. The List offers a free place to post adverts and information, and it's triggered a wholesale migration of classified advertising in North America.



Digital Book Club



2020 Les Scénarios du futur
Joël de Rosnay, préface de François de Closets
Des idées & des Hommes, 2007



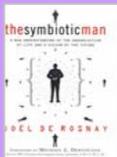
La révolte du pronétariat: des mass média aux média de masses
Joël de Rosnay, avec la participation de Carlo Revelli
Fayard, 2006



Une vie en plus: la longévité pourquoi faire?
Joël de Rosnay, Jean-Louis Serva-Schreiber, François de Closets,
Dominique Simonnet
Seuil, 2005



La plus belle histoire du monde
Hubert Reeves, Joël de Rosnay, Yves Coppens, Dominique Simonnet
Seuil, 1996



L'homme symbiotique
Seuil, 1995



Les Rendez-vous du futur
Fayard, 1991



L'Avenir en direct
Fayard, 1990

L'Aventure du vivant
Seuil, 1988

Training and Development from Digital Strategy

If your firm wants to harness the power of Web 2.0 publishing strategies, blogs, rss feeds and analytics, then why not talk to the team here at Digital? Our network of senior associates can deliver the hands-on expertise you need to change the way your team behaves, enabling them to understand and implement new publishing strategies. We can work with you to support the rapid prototyping of new ideas and the building of simple tools that will allow you to use these new insights to improve your conversion rates, unlocking more of the value from the digital channel investments you've already made. Our range of training services spans executive briefings for boardroom colleagues to hands on workshops for data analysts and marketing managers. Call us to find out how we can help your team achieve more.

About the author

Danny Meadows-Klue has been a commentator on the digital networked industries since 1995. He managed the UK's first online newspaper and has helped run web businesses ranging from mass market



portals and consumer magazines, to online stores, search and email services. Among his industry roles he is the co-founder and former chairman of the UK and European Internet and Interactive Advertising Bureau, and has been lecturing on digital marketing for more than a decade. He set up Digital Strategy Consulting in 2000 to help firms accelerate their businesses through digital networks.

About Digital Thought Leaders series

In times of huge economic and social change, knowledge becomes a critical success factor. We created the Digital Thought Leaders interviews to bring you closer to people and brands shaping the digital networked economy. They are based on private interviews or lectures we've participated in, and are published monthly. We also publish similar insight papers to accompany our own talks and training workshops, to unlock the potential of your team.

Resources & Links

DigitalStrategyConsulting.com/thoughtleaders for more interviews - contact us to sign up for the email edition of Digital Thought Leaders

And share with us your comments about this interview

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- Media in the digital networked society

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Making sense of a digital world

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