


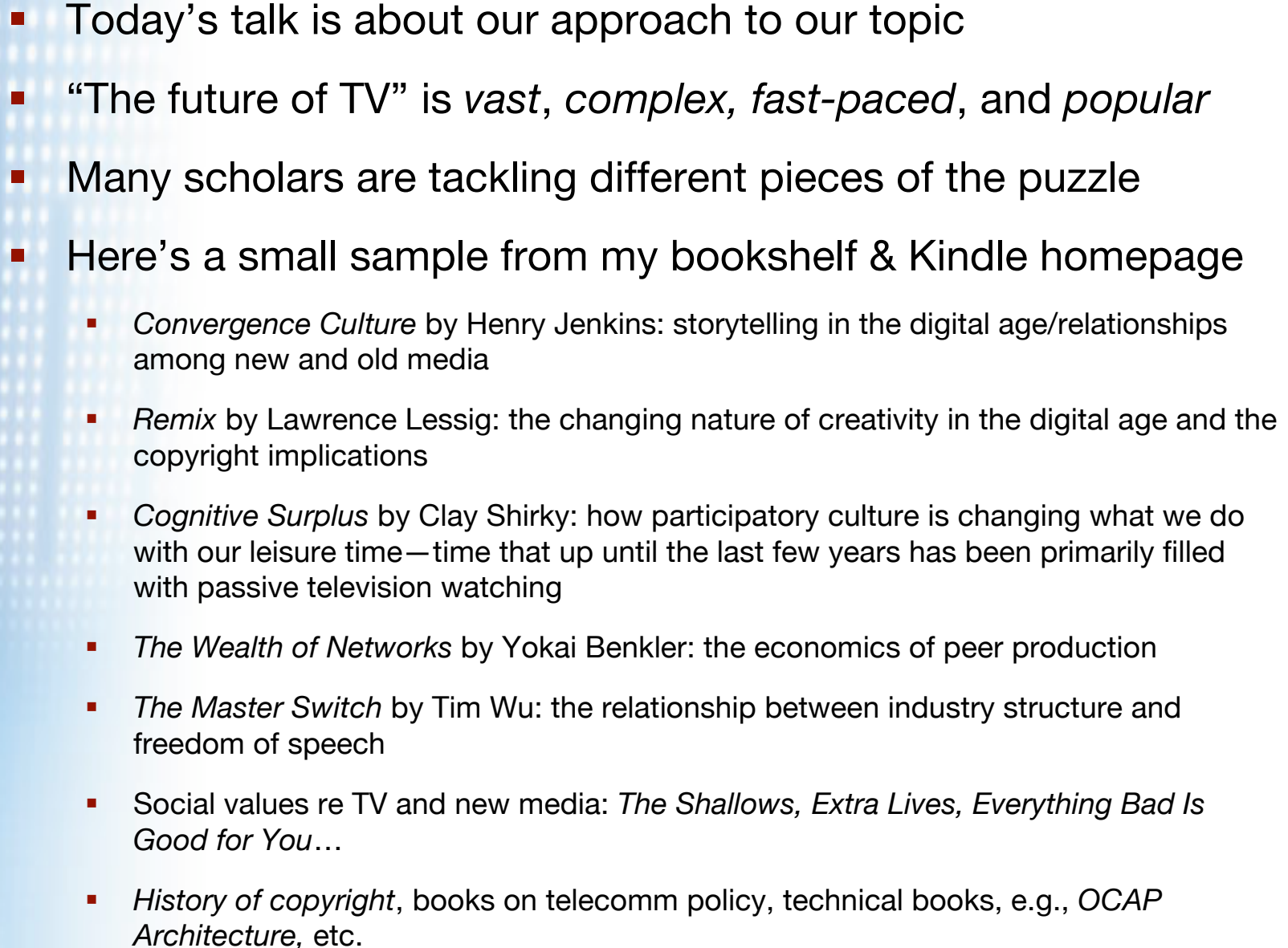



Beyond TV: A Story of Disruption

CFP Book project update

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- Future of video book project launched in 2010
 - Charlie Fine, Natalie Klym, Dave Clark, Andy Lippman
 - Coordinates different branches of MIT/CFP research
 - Value Chain Dynamics WG: video case study driving the book project; WG meetings focus on specific book topics: unified services, QoE, future of content
 - Privacy and Security WG: identity management for social TV
 - Interconnection WG: implications of video on architecture, management, interconnection; new sources and types of video beyond entertainment and interpersonal communications
 - Information Ecology (Media Lab): social TV, future of TV experience
 - Research Lab in Electronics (RLE): QoE
 - Comparative Media Studies: definitions of television

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- Today's talk is about our approach to our topic
 - “The future of TV” is *vast, complex, fast-paced, and popular*
 - Many scholars are tackling different pieces of the puzzle
 - Here's a small sample from my bookshelf & Kindle homepage
 - *Convergence Culture* by Henry Jenkins: storytelling in the digital age/relationships among new and old media
 - *Remix* by Lawrence Lessig: the changing nature of creativity in the digital age and the copyright implications
 - *Cognitive Surplus* by Clay Shirky: how participatory culture is changing what we do with our leisure time—time that up until the last few years has been primarily filled with passive television watching
 - *The Wealth of Networks* by Yokai Benkler: the economics of peer production
 - *The Master Switch* by Tim Wu: the relationship between industry structure and freedom of speech
 - Social values re TV and new media: *The Shallows, Extra Lives, Everything Bad Is Good for You...*
 - *History of copyright*, books on telecomm policy, technical books, e.g., *OCAP Architecture*, etc.

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- Our challenge: What can CFP contribute to the discussion?
 - What's our unique value add?
 - How can we have lasting relevance?
 - Connect the dots: take a multidisciplinary, holistic approach and provide an understanding of the dynamics of change
 - The premise of the CFP
 - Create an analytical framework: TV/media as a sociotechnical system

- Our approach is rooted in social theories of technology
 - Technology operates in a “complex social field”
 - How and why do technologies emerge, and why do they take the forms they do? How are they selected and used by society?
 - Assumes *technology is a product of society*
 - **Raymond Williams** (1921-1988): technology as social practice; focus on selection and use vs cause and effect; “we have the power to disturb, disrupt and distract the cold logic of technology”

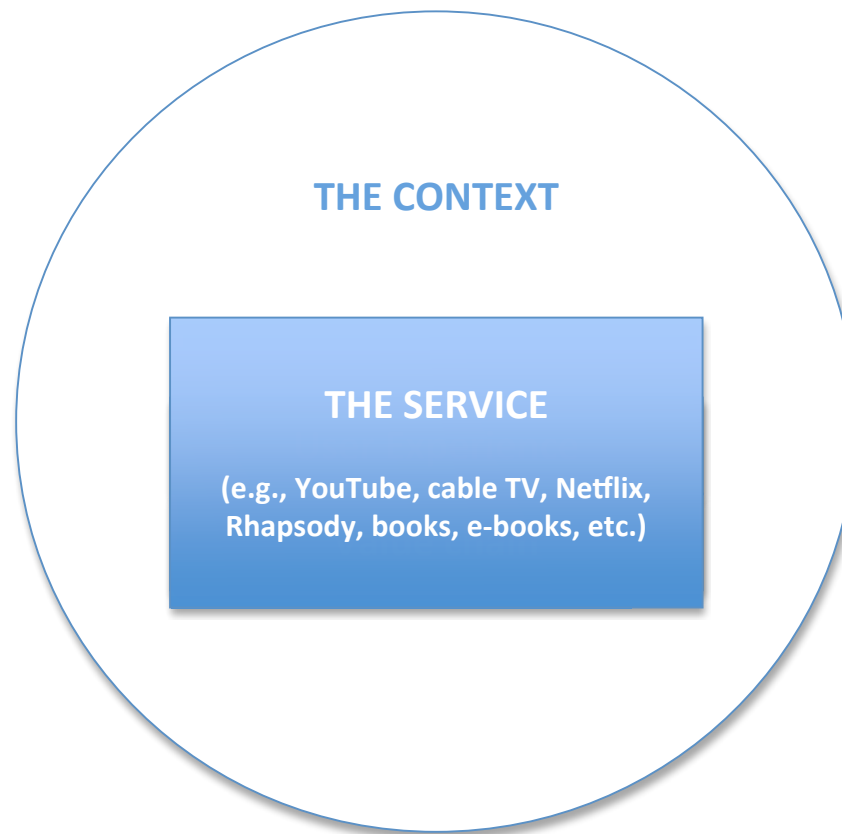
- These tend to react against technological determinism
 - Technology acts upon society
 - Ignores social and cultural circumstances of technology
 - Assumes *technology is an independent sphere that drives society*
 - **Marshall McLuhan** (1911-1980): the medium is the message; it has intrinsic properties

- But maybe the two can be friends...



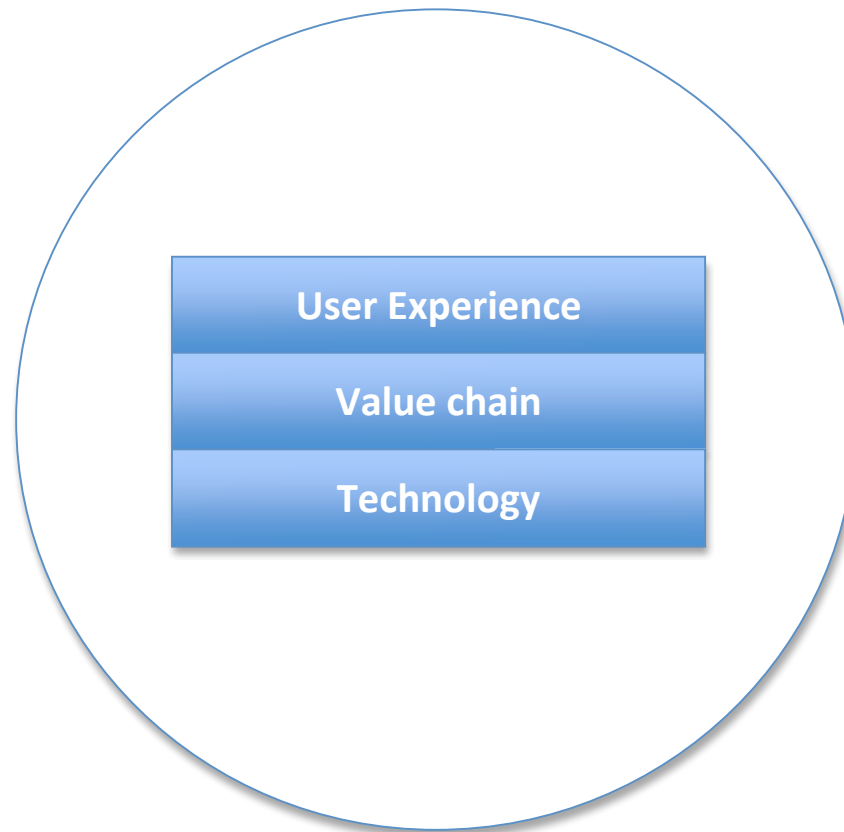
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- We apply this approach to both television and media more broadly
 - Books, magazines, music, etc., all subject to similar dynamics
 - Are increasingly intertwined
 - These are the storytelling industries
 - A special category of communications
 - Organize information into ideas and narratives, create meaning
 - Specific and important social implications: cultural expression, democracy

An analytical framework: media as a social system

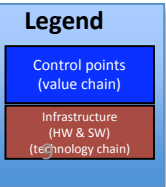
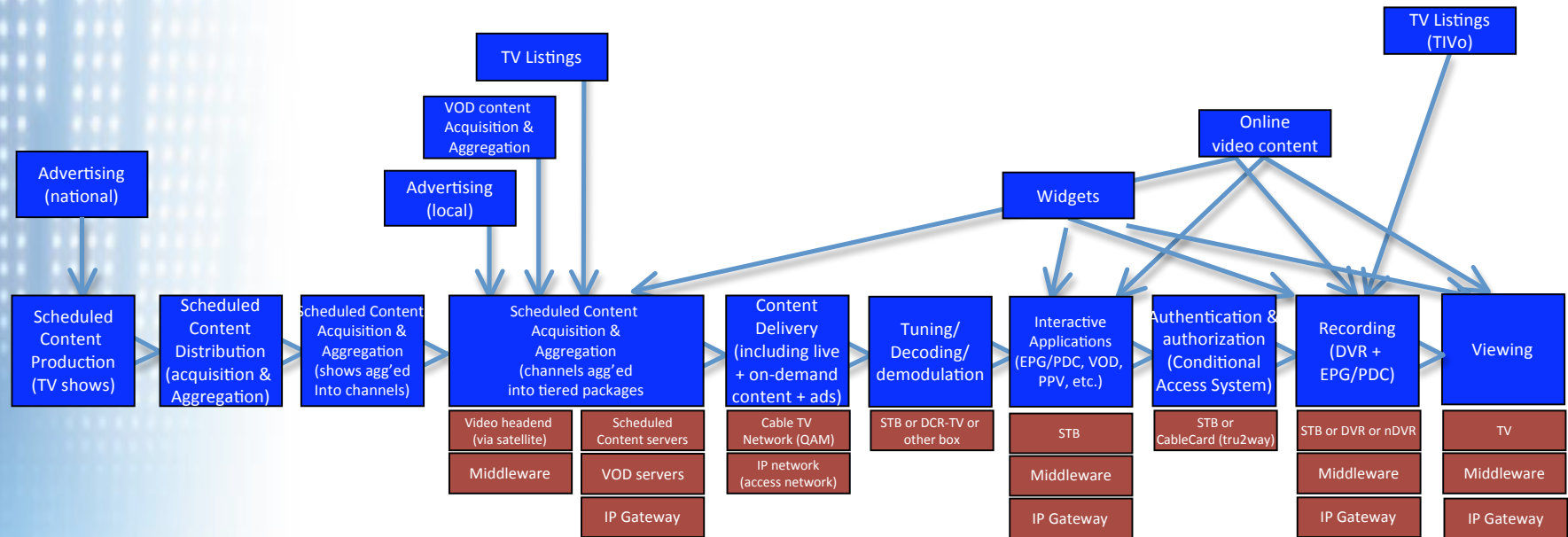


An analytical framework: media as a social system

The Service

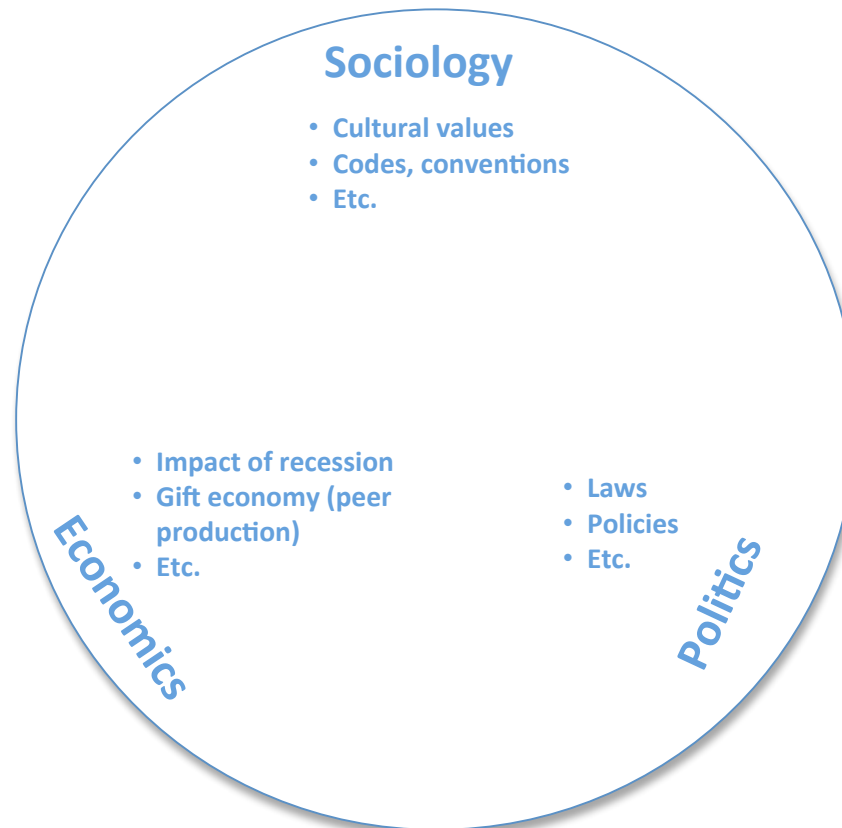


Origins of the 3-layer service model: VCDWG's "control point constellation"



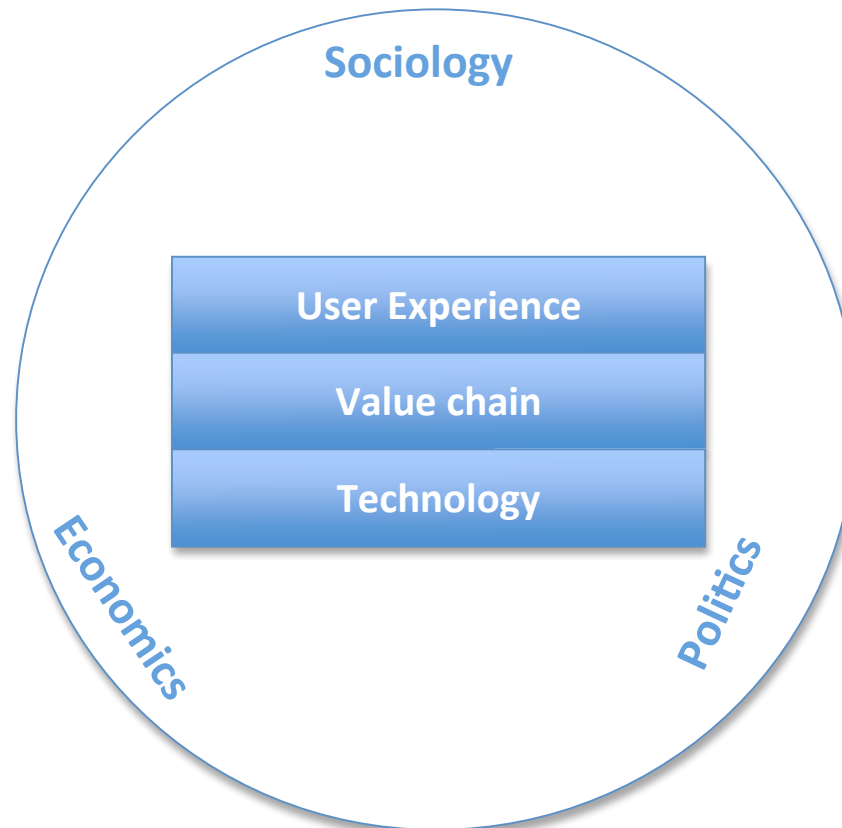
An analytical framework: media as a social system

The Context




- Disclaimer: We're still working on these categories...

An analytical framework: media as a social system




- All elements combined comprise the overall circumstances of production, distribution, and consumption of tv/media
- Disruption implies a change in the system as a whole

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- We group the major—disruptive—shifts in television history along several lines of development (or trajectories) in the delivery infrastructure
 - Each delivery platform is the basis of a particular television *system* (with variations by region).
 - Pre-industrialization (late 1800s – 1920s)*
 - Over the air broadcast (1930s – present)
 - Cable & satellite (1940s – present)
 - Internet (wired/wireless, private/public) (2000s – present)
 - These systems co-exist and interact with each other, and with other media systems
 - They are not static, or stable; incremental innovation occurring within and across systems

** No services implemented yet, focus on origins of multiple televisual technologies and conceptualizations*

- The framework serves to
 - Identify and simplify a complex set of dynamics
 - Chart an evolutionary path of “discontinuous change,” emphasizing the tussles between incumbents and entrants during the transitions between old and new industries
 - Encourage a media-specific approach to disruption
 - Provide the basis of a research matrix (our research buckets)

Trajectories	PRE-INDUSTRIALIZATION Late 1800s-1920s	OTA 1930s-present	CABLE/SATELLITE Late 1940s-present	INTERNET 2000s-present
SERVICE ELEMENTS				
Technology				
Value chain				
Experience				
CONTEXTUAL ELEMENTS				
Sociology				
Economics				
Politics				



“...to all the executives in this industry that are trying to run businesses that are part of this ecosystem, it is exhausting — *exhausting* — keeping up with everything that is changing rapidly.”

Melinda Witmer, EVP, Time Warner Cable

We hope to leave you enlightened, and a little less exhausted...