

Evolution of the Mediaspace

Kari-Hans Kommonen

Arki / Media Lab Helsinki

University of Art and Design Helsinki

khk@uiah.fi • <http://arki.uiah.fi>

17.3.2006 • Amsterdam, the Netherlands

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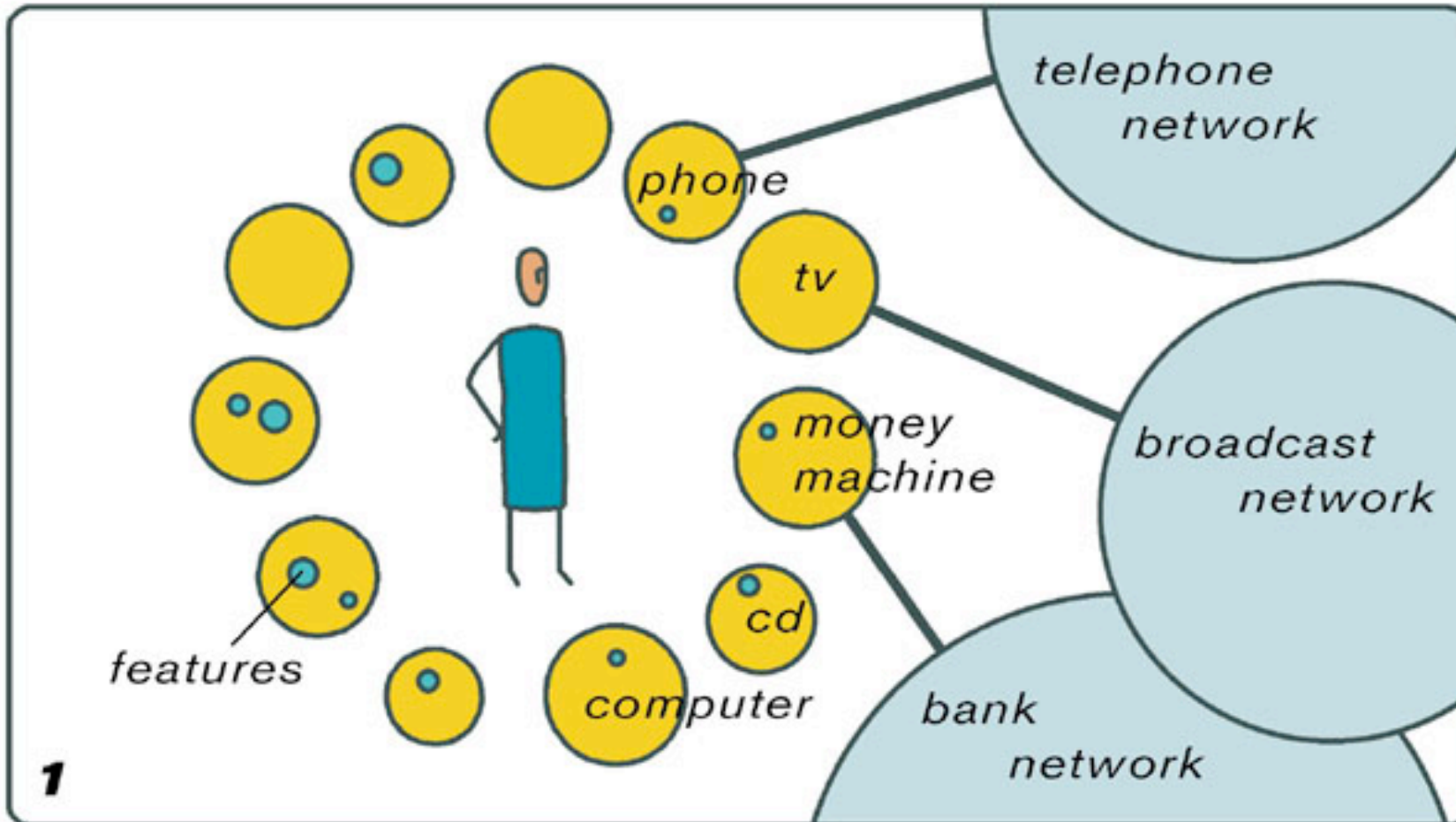
- digitalization
- changes in society
- mediaspace
- social media production
- P2P-Fusion

Digitalization

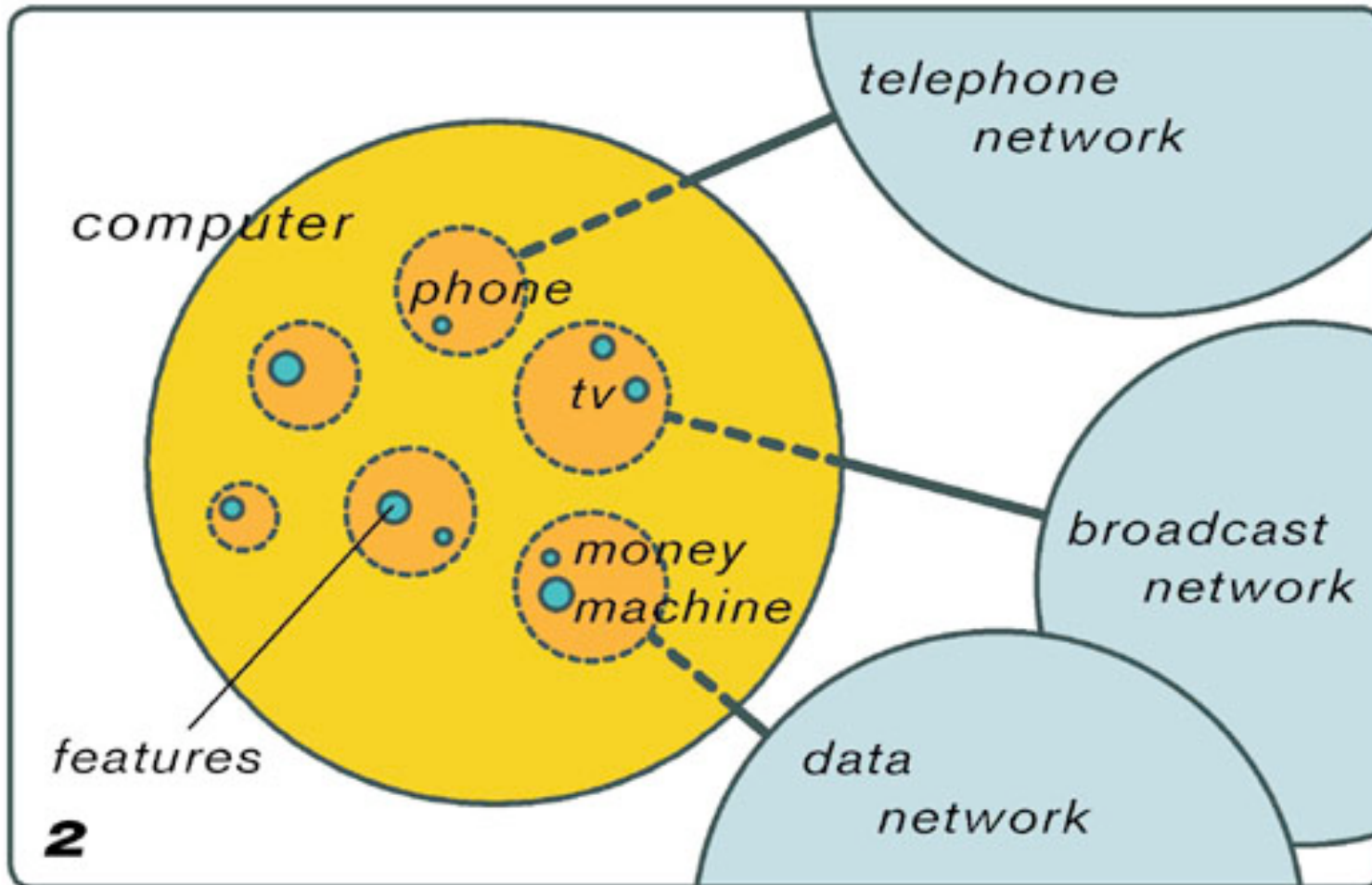
Transforms

- electronic devices into digital computers
- information used in/by them into digital bits
- their communication channels into digital networks

Evolution of the digital dimension



Computer

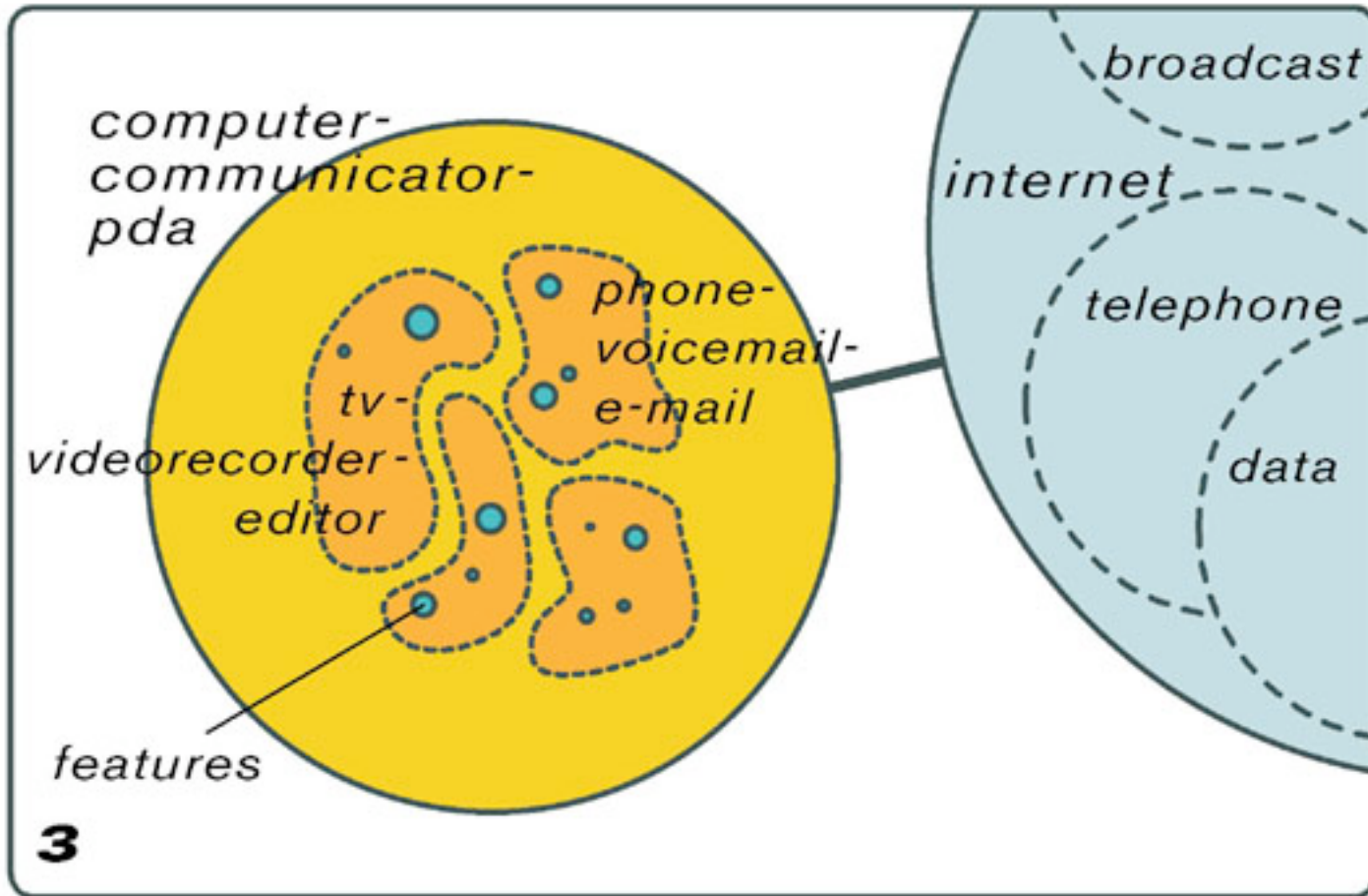


Metamedium

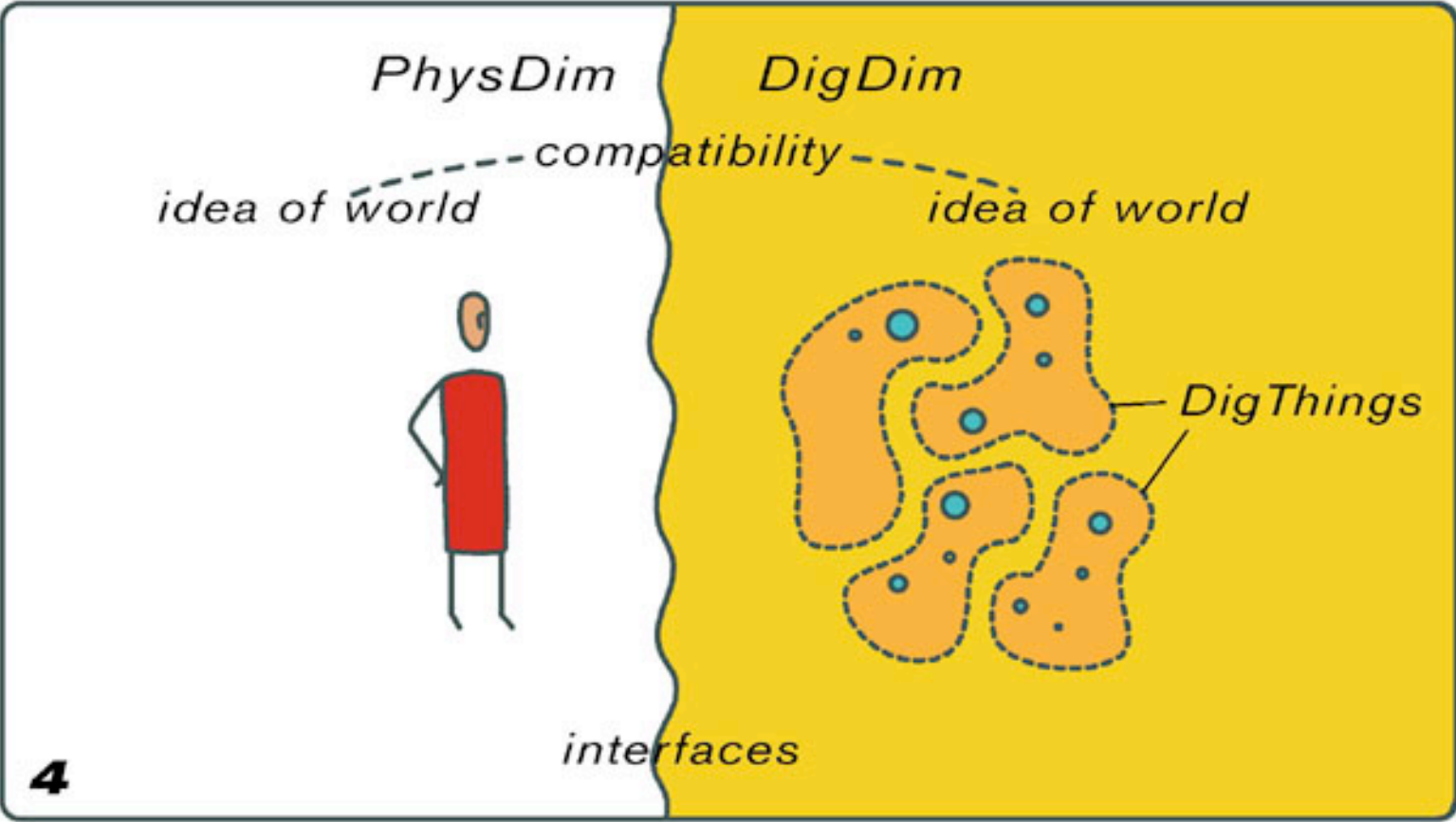
Alan Kay, Adele Goldberg: Personal Dynamic Media

“Although digital computers were originally designed to do arithmetic computation, the ability to simulate the details of any descriptive model means that the computer, viewed as a medium itself, can be all other media if the embedding and viewing methods are sufficiently well provided. Moreover, this new “metamedium” is active—it can respond to queries and experiments—so that the messages may involve the learner in a two-way conversation.”

Multipurpose digital devices



Digital Dimension



Digital influence in society

The design of society is changing, and many of the new designs are digital, because digital technology is dramatically more flexible and more efficient for realizing many applications.

Digital systems tend to replace old systems in all areas of life – for example money, trade, transport, access control, identification, media, and so on, because of their efficiency.

Digital influence in society (cont.)

People can not choose themselves whether they want to use or support digital solutions – they are required to, because the choices are made in powerful organizations (corporations, governments) by experts, and alternatives (which, as they are less efficient, are more expensive to maintain) are often removed.

Some changes are so dramatic that entire professions or industries disappear, are transformed, or move to other geographic locations.

-> digital design influences society and life very much – but most people have very limited possibilities to influence the developments

Redesign of Society

Digitalization of society drives the redesign of society

- everyday life
- structures, systems, functions, processes
- making a living, competing
- media

Key issues:

- how to get X done?
 - my activities, place in society, contributions, abilities
 - > who can design and how
- how to discuss X?
 - how things are?
 - what kind of society do we want?
 - > who can discuss and how

Access

In the digital society, the hardware is ubiquitously available – but the key question is access to software.

Intellectual Property Rights become the most important tool for access control.

Media is where society thinks

The society negotiates its beliefs and designs in the various media that its members share.

Redesign of the media environment leads to redesign of the societal thinking process.

Media access in the past

How can I influence?

How can I speak?

Who can I reach?

What can I participate in?

“Can I write in the newspaper or speak on TV?”

Media access today

How can I influence?

How can I speak?

Who can I reach?

What can I participate in?

Increasingly depends on software not hardware

Media access today

How can I influence?

How can I speak?

Who can I reach?

What can I participate in?

Increasingly depends on software not hardware

(Increasingly depends on IPR)

Change in media environment

Digitalization and the global, ubiquitous network bring about fundamental structural transformations for the media environment.

Tools of consuming – tools of producing

Receiver – transmitter

Many, cheap, simple – few, expensive, capable

Mediaspace

Metamedium

Universal network access

Ubiquitous, programmable

Key characteristics

hard boundaries -> soft boundaries

one-to-many -> many-to-many

consumer/receiver -> creator/distributor

mass media -> diverse media

Peer-to-peer foundation

Essentially the mediaspace is a peer-to-peer environment – but as it is a programmable metamedial space, it can be designed to work like any old structure – as well or as badly

Social Media Applications

- low tech, interest driven, individual production
- distributed, shared in communities
- software powered practices
- new media design: new structures, functionality, social practices, societal thinking, new professions

Examples:

- blogosphere
- Flickr
- Wikipedia
- podcasting

Key developments

- ➔ move towards better utilization of P2P
- ➔ emerging social media practices
- ➔ evolving new designs for IP systems

P2P-Fusion

- EU-IST project
- Negotiations in progress – hopefully starting 6/2006
- Builds a platform & tools and social media applications for legal creative reuse of audiovisual media

Partners

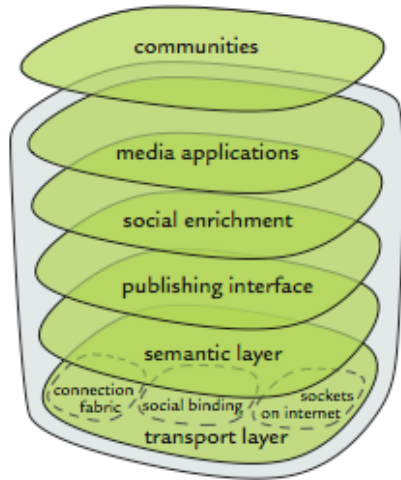
Finland: Media Lab Helsinki, Helsinki Institute for Information Technology

Netherlands: TU Delft, Kennisland, Sound and Vision

Hungary: Budapest University of Technology and Economics, National Audiovisual Archive

Software • Media • Design • Social processing • Archives • User communities • Creative Commons

Key components



- P2P Mediaspace (Tribler)
- Semantic layer (DiMaS)
- embedded licensing (Creative Commons, others)
- social processing (annotation, rating, recommendation, translation, collaborative editing, collections)

- media applications
- new social media practices

Features

- cutting and delivering media fragments and fragment collections (support for collaborative, social editing)
- sophisticated access management (restricted communities)
- built-in support for emerging social processing practices
- open source
- modular architecture supporting plug-ins
- social media applications toolkit

Scenario: Cooking Community

“My mother has promised me that she will teach me how to make the Carelian Stew the right way. She will make a cooking video for me, explaining how she and her mother have always made this dish.

She begins by making an inventory of what she needs so that things would be easy to reach and she would not have to do a lot of editing later. She is quite experienced with making these videos, she has already made several ones for the family cooking library, so she knows how to save her own troubles by preparing just a little.



She begins by recording on video on her mobile phone (with fairly high quality video) her narrative overview of how the food is prepared, and what ingredients are needed.

While narrating, she realizes that she should actually show how to select the meat in the store, and decides to shoot that part on video later and mix it in.

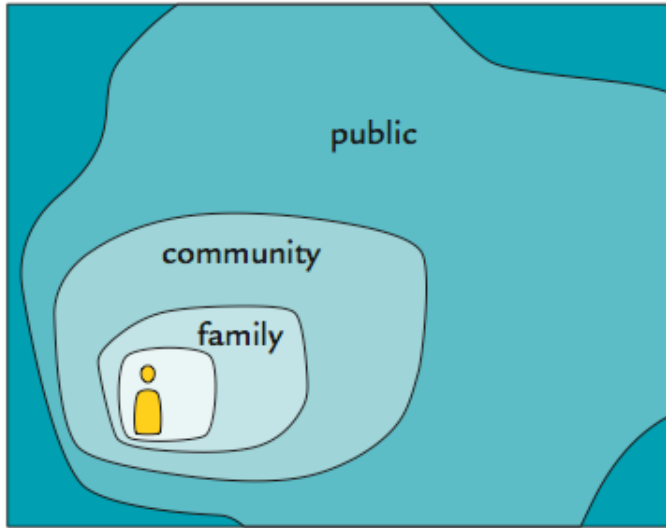
Then she proceeds to prepare the food and places the phone-camera on a spot in her kitchen that she has cleared for this purpose. Once in a while she brings the camera down to take close-ups of the various ingredients and work phases. She “edits while she shoots” so that she does not get a lot of extra footage.

However, in the end the raw material she shot still requires some editing to become a program that is enjoyable and informative. But most of this editing is simply removing unwanted fragments. She also makes little marks at points where the video shows the basic ingredients and adds the ingredient information as metadata, so that these can be displayed in a shopping list helper. She also makes a trailer that advertises the video – a short narrative overlaid on top of a few of the best visuals from the video.

After the rough editing, she is happy to publish the video for her family. In her cameraphone recording software, she saves the video with certain preset access rights (and at the same time, default licensing options) that restrict access to only her immediate family.

As she saves the video, the publishing system takes it forward, following the access restrictions she has given. It gets archived in her own system and distributed to the family members through the Peer-to-peer Network. To the various family members, it becomes visible in their Personal Mediascape according to each one's personal configuration.

As a keen cook, I have set my configuration so that whenever my mother is kind enough to make a video, it is a high priority event for me. I know she wants to hear comments immediately, so I receive the video as a Novelty Item on my Personal Priority Channel. This is a selection of audiovisual input that contains materials specially recommended to me by my friends and family.



On my way home, sitting on the bus, I begin to view the trailer of the video on my mobile handset. I give immediate feedback – a small annotation that says thank you to my mother – this food is one of my favourites. I decide to make the dish today. At home the video is waiting on my TV system, and I turn it on. While I am cooking, I navigate the video with my handset as a remote control. The structure of the program with metadata describing the content is visible on the remote, so it is easy to navigate to the part I need to see.

I think this is one of her best videos – also because the dish is so delicious. I ask her for permission to make it public for our Cooking Community. We have quite an avid community of family cooks among our friends. We have chosen to keep this community and its videos public and openly available to anyone. Through friend-to-friend connections, the Cooking Community has grown to cover lots of different cooking genres and even continents.

I have several friends abroad whom I know would like this style of food. My mother has already agreed in her access rights assignment that I have the right to use her video in my own compilations, and that it should then move on with a Creative Commons license.

I make a new version of the video with English subtitles, and some slightly embarrassing family stories taken out. As my mother did not have time to make the meat selection part, I go and add that. Finally I publish the video into the Network.

In a week, we receive a lot of feedback – several Success Reports with nice images of the results, as well as links to other videos that tell about related dishes from other cultures. I have set my preferences so that I receive these on my Personal Priority Channel, because they are direct responses to material I published.”

In short

P2P-Fusion aims to make the audiovisual creative activities easy and user friendly and free them from complexities and investments related to servers and bandwidth

... a step towards a peer-to-peer universal user friendly audiovisual mediaspace.