



Preserving Digital Photos



Mark Schulman

The Promise of Digital Photography



The Way Things Used to Be



Rise of Digital Media



- 2002 Digital cameras outsold film cameras
- 2004 Kodak announces it will no longer sell film cameras in developed world
- 2006 Nikon stops production of all but two models of film camera
- 2010 World-wide camera phones > 1 billion

Almost all digital cameras also take video



Advantages of Digital Photos

- Costs almost nothing
- Easy to take thousands of photos
- Editable
- Can last forever
- Can make unlimited perfect copies
- Will never fade, smear, or tear



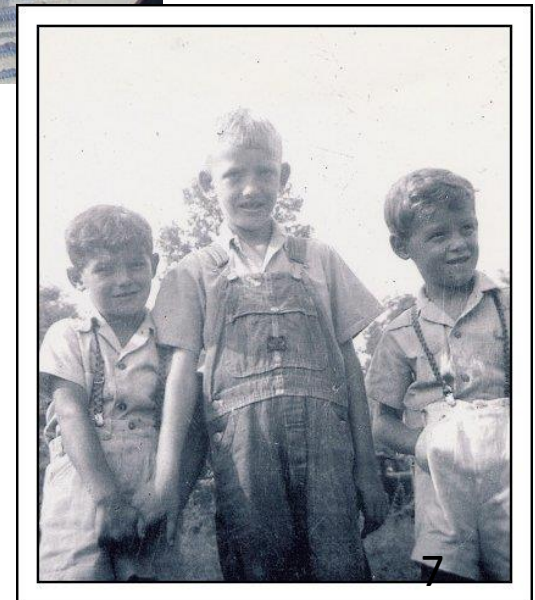
The Downside

- Intangible
- Most people don't know how to preserve them

011010011110100
101101000110010
0001111000



The Box



Something to Think About

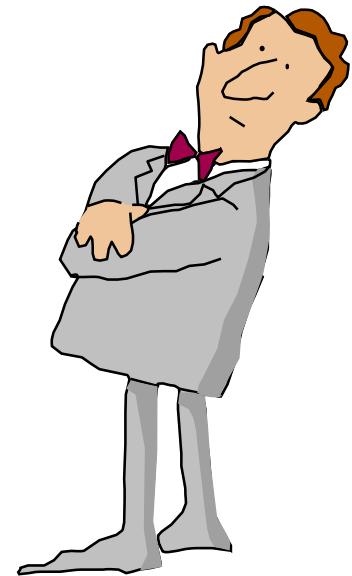
“ Our family history
ended the day we
got a digital camera.”

Preserving Your Photos



You want to make sure that ...

- your photos survive
- your photos are identifiable
- your photos are found



Making Sure Your Photos Survive



Copies Copies Copies!



- Your photos should never exist only on your computer's hard drive or on your phone
- All hard drives eventually fail – long-term reliability is unknown
- Easy to erase accidentally
- Files on your hard drive might not be found



What Will Survive?

100 years from now ...

- What will physically survive?
- What will people be able to use?



We Thought They'd Last Forever



Poor Choices



Memory cards (limited life)



Flash drives (limited life)



Diskettes (obsolete)



Hard drives (maintenance)



The Right Track



- Good quality CDs or DVDs
- Don't use ...
 - re-writable discs
 - Blu-Ray discs

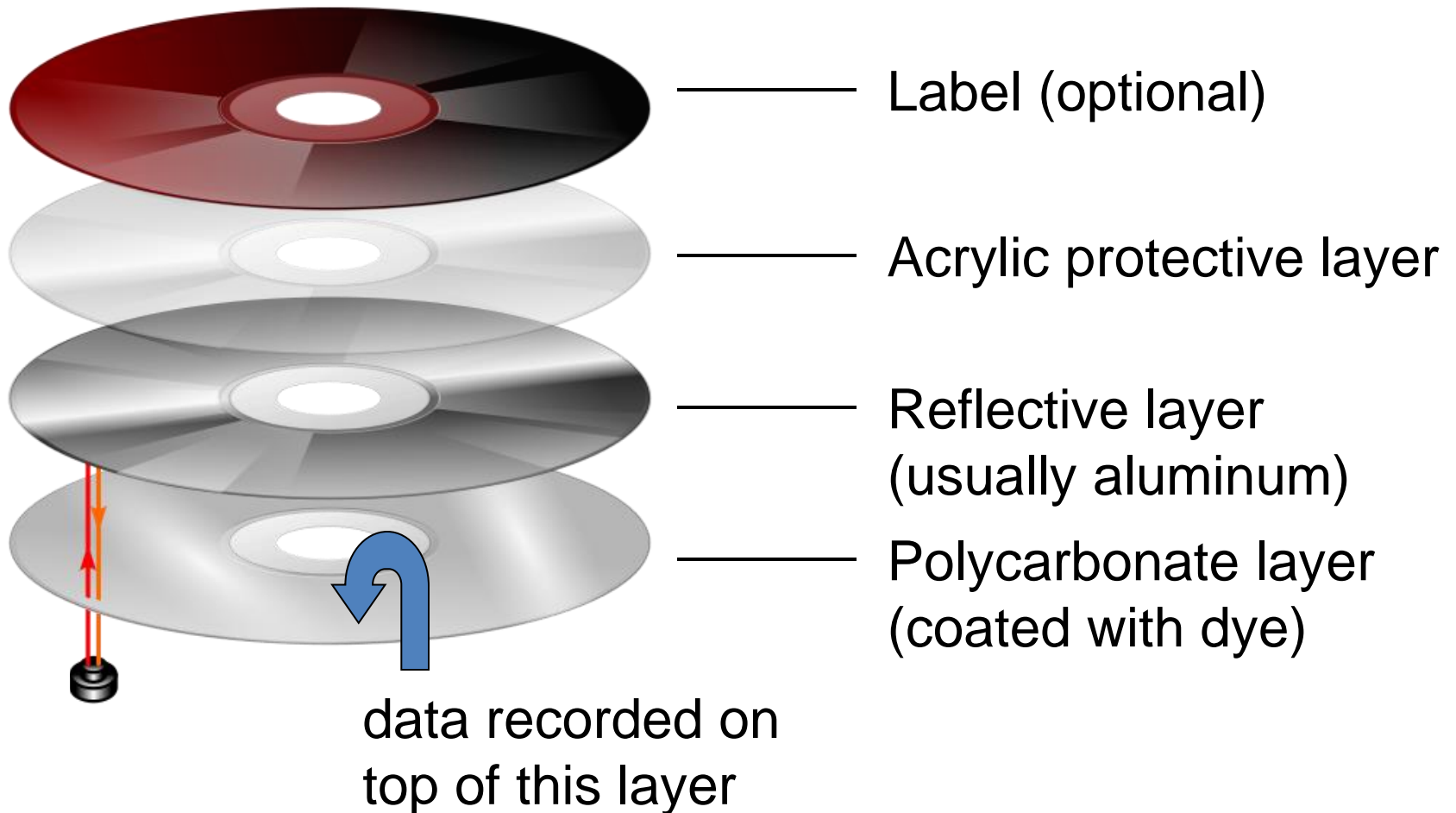


**CD-R
DVD-R
DVD+R**



**CD-RW
DVD-RW
DVD+RW
DVD-RAM
Blu-Ray**

Anatomy of a CD



What Can Go Wrong?

- Aluminum corrodes
- Dye degrades
- Physical damage



Archival CDs & DVDs

- Uses gold instead of aluminum
- Special long-lasting dyes
- 100+ years (?)



Archival DVDs

Verbatim UltraLife Gold Archival DVDs
5-pack with cases - \$10.95 on Amazon



Help Your CDs & DVDs Survive

- Store in a cool, dry, dark place
- Store in plastic cases
- Label the cases
- Don't write on the discs
- Don't use stick-on labels
- Buy name brand (JVC, TDK, Memorex, Maxell, Verbatim, Sony, others)



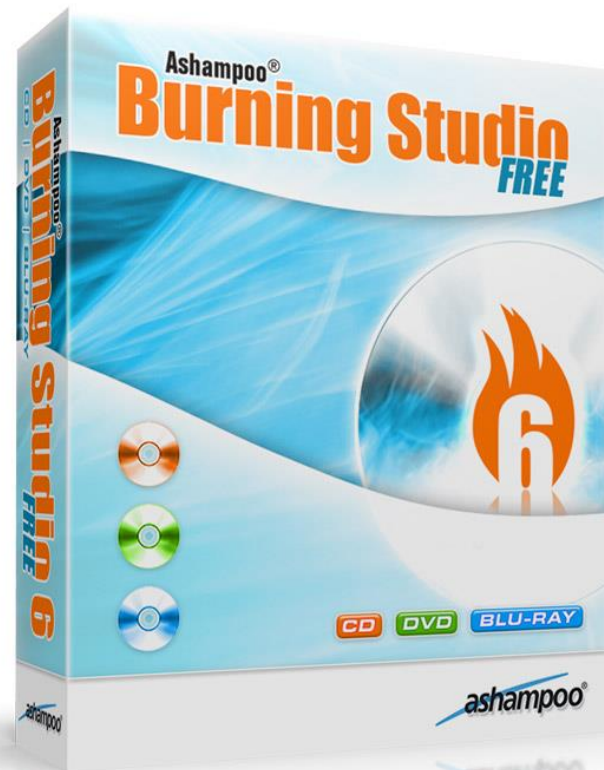
Make Copies!



- You can make endless perfect copies
- Keep copies elsewhere (work, friends)
- An idea: the New Years Day tradition
- If you don't know how to make CDs or DVDs, learn!



What I Use



www.ashampoo.com

Online Services



- Great for sharing photos
- Good for “yet another place” to store your photos
- Don’t count on them as permanent storage

Printed Photos

- How long do printed photos last?
 - A. It depends
 - B. Nobody knows



How Long will Prints Last?



“ In 20, 50, or 100 years, we’ll know what really worked and what didn’t ... but until then all we can do is guess. ”

— **Richard Seiling**

Photographer and owner of West Coast Imaging

Our Best Guess



Color prints and negatives	40 years
Inkjet photos under ideal circumstances	75+ years
Most inkjet photos	2 years



Making Prints Last



- Top of the line photo printers
- Manufacturer's ink
- Premium photo paper (not fast dry)
- Keep out of direct sunlight
- If displayed, keep under glass

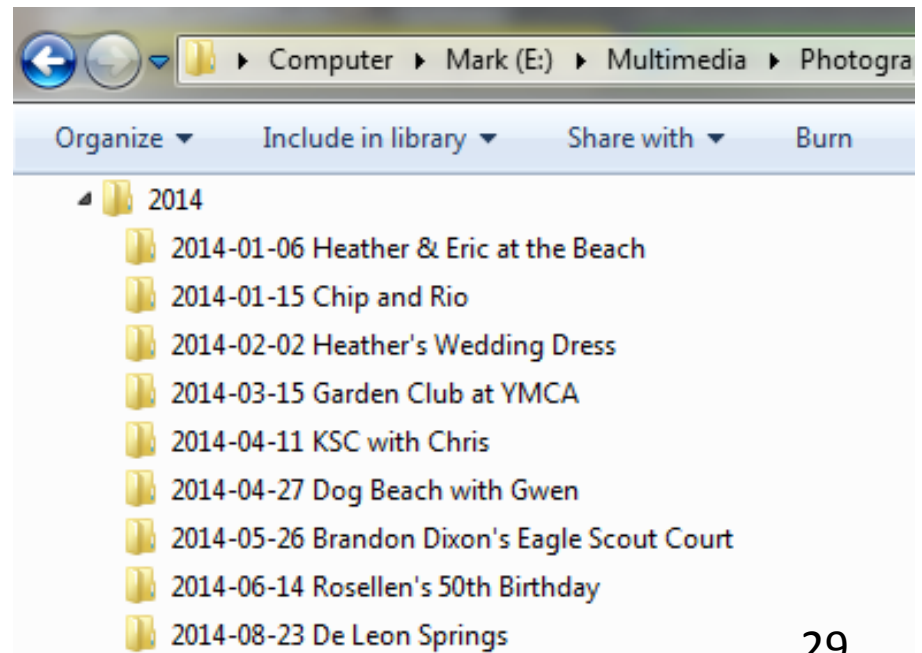


Making Sure Your Photos are Identified



Identifying Your Photos

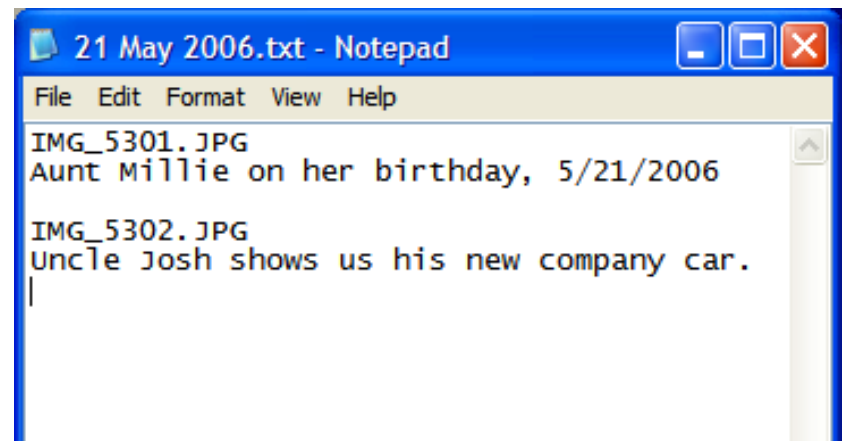
- You can't write on the back of a digital photo
- Organize your photos into meaningful folders



Identifying Your Photos

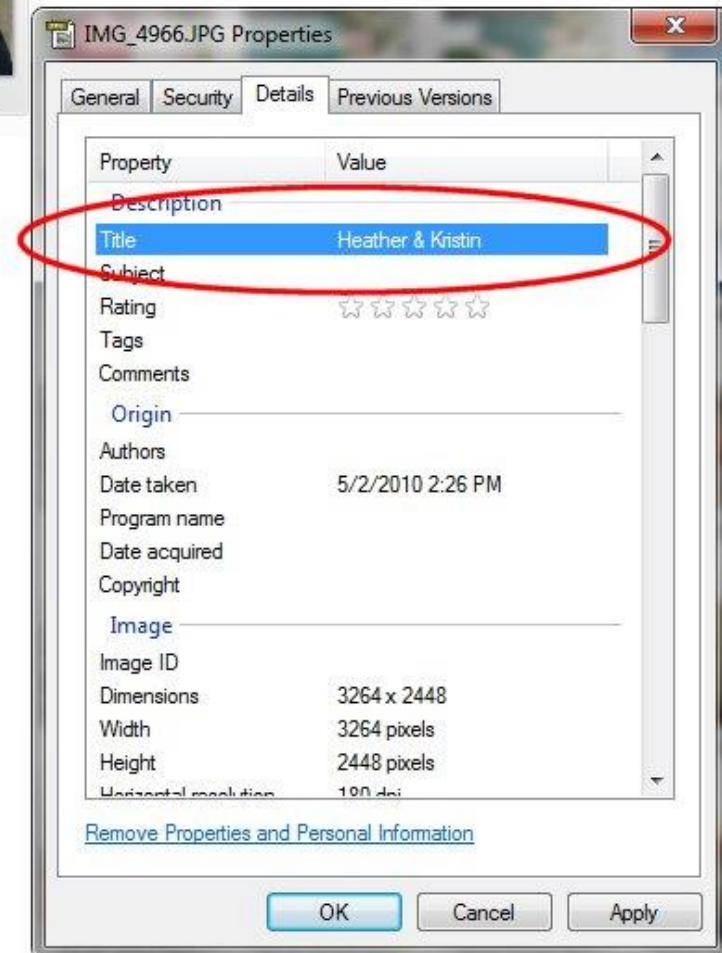


- Use Notepad to create text files with information about your photos
- Don't rely on ...
 - Word documents
 - Photo-organizing software, such as Picasa



Additional Option: EXIF* Data

- Embedded in the JPG file
- Can't be accidentally lost
- Obscure - might not be found



*Exchangeable Image File

Making Sure Your Photos Are Found



Losing Digital Photos



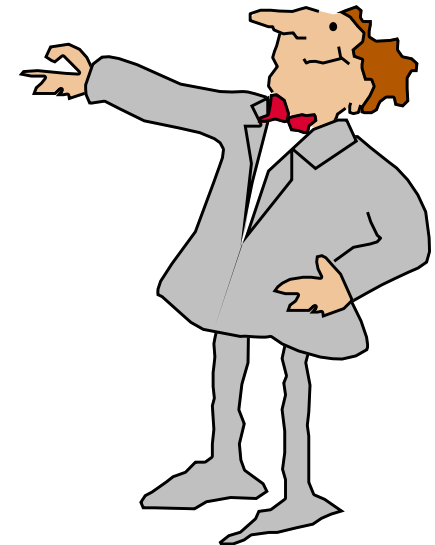
- Digital photos don't stand out like a box of printed photos does
- Photos stored only on your computer's hard drive are easy to lose
- An individual CD or memory card is too easy to miss



Make Your Photos Findable



- Put CDs/DVDs of photos with your important papers
- Tell people where they are, especially kids
- Label CD/DVD *cases*
- Key point: Make sure people realize what they've found



Create a Book

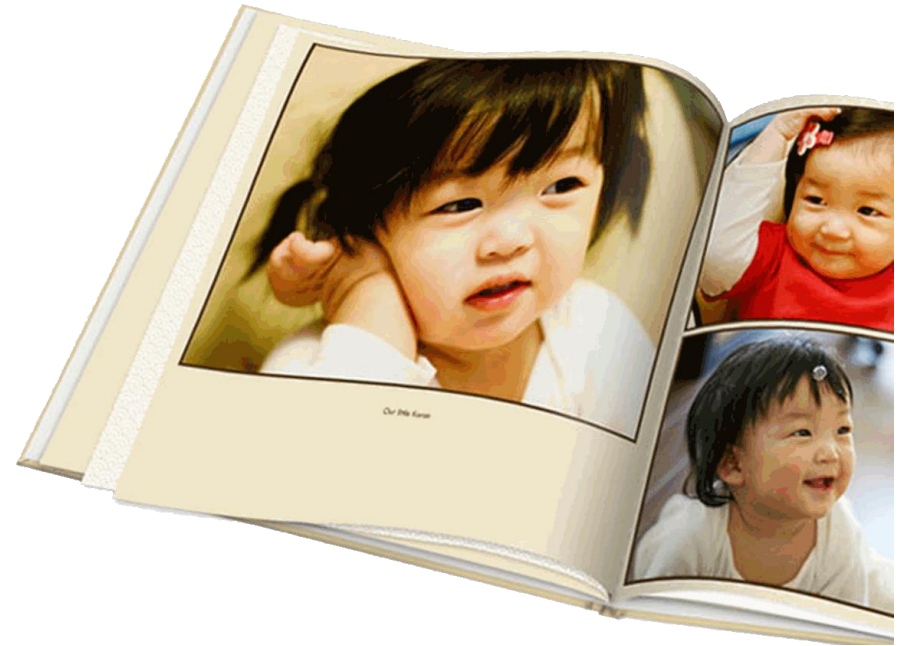
Create a photo book ...



... and put your CD in the back of the book

A Few Book Publishers

- blurb.com
- mypublisher.com
- shutterfly.com
- MixBook
- Pinhole Press



Deluxe hard-cover book with Groupon: \$10
+ shipping

Less Expensive ...

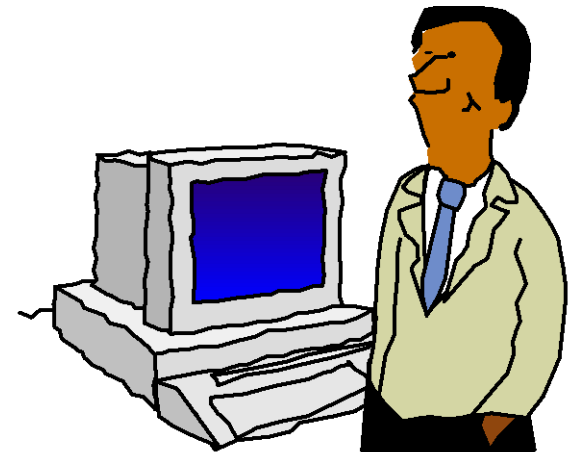
- Print a selection of photos and make an album
- Put your CD/DVD in the back



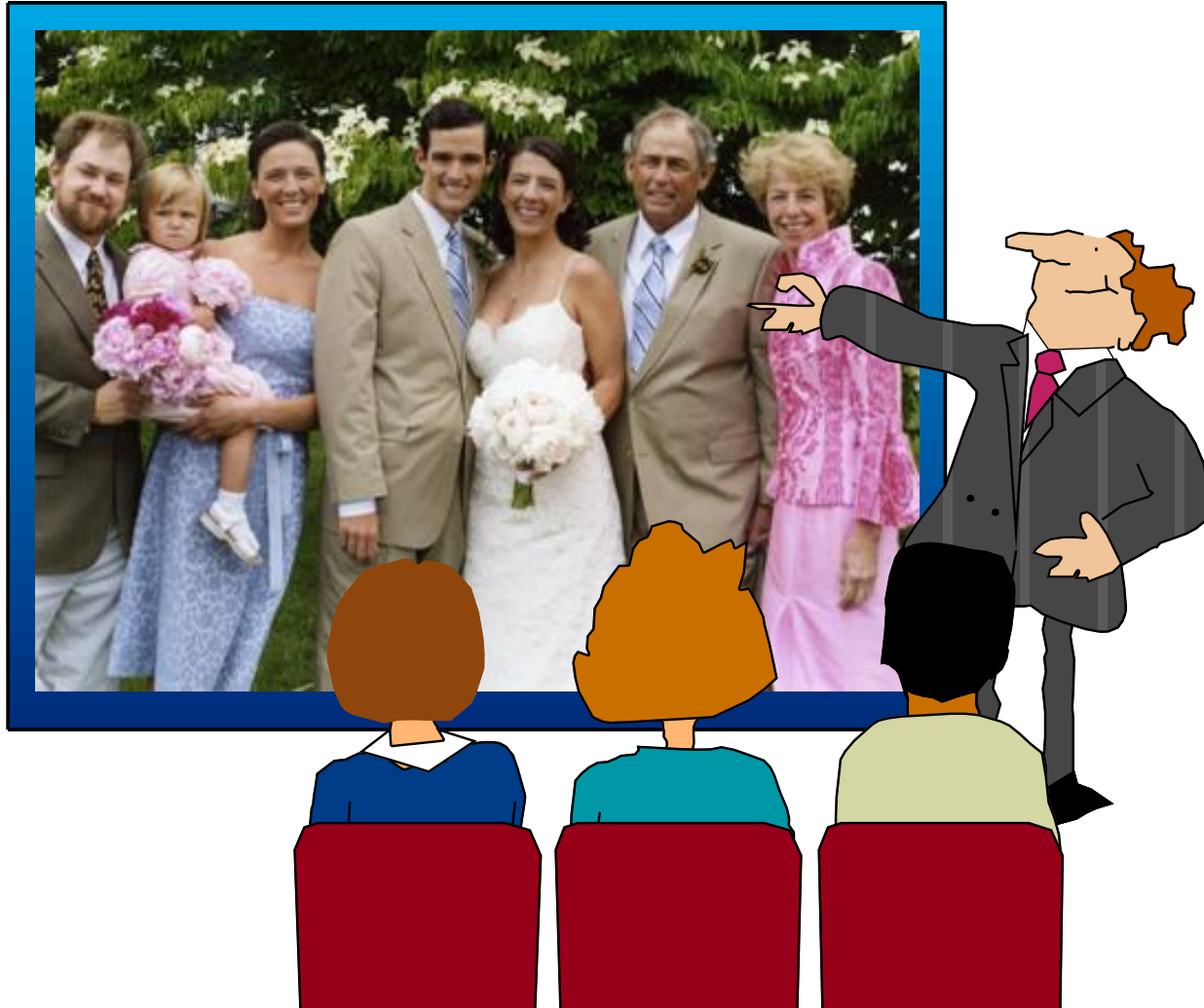
The Family Archivist




- Collects materials from family members
- Makes sure lots of copies exist
- Makes new “fresh” copies occasionally
- Watches for technology changes
 - file formats
 - storage media



Conclusion





Presentation and notes at:
<http://mark.schulmans.com>

Contact me at:
mark @ schulmans . com