Perspectives

ATLAS

Assistive Technology Laboratory at Stanford

Technology and design benefitting individuals with disabilities and seniors in the local community — February 8, 2013

Welcome to this edition of ***Perspectives***, the e-newsletter of the Stanford course, **Perspectives in Assistive Technology**.

What is the course? - **Perspectives in Assistive Technology** is a Winter Quarter course at Stanford that explores issues surrounding the design, development, and use of assistive technology benefitting people with disabilities and seniors. More information can be found on the course website.

Invitation to attend - You are invited to attend all class lectures. They will be held in the Thornton Center - Classroom 110 on Tuesday and Thursday afternoons at **4:15 to 5:30pm** and are free and open to the public.

Next class session - **Tuesday, February 12th at 4:15pm**:

Memories, Lost & Found: Engaging Families, Caregivers & Those with Memory Loss

Rita Ghatak, PhD[1] & Philip R. von Stade, Jr.[2]
[1] Stanford Medical Center & [2] Memory Glass Foundation

Abstract: Rita Ghatak will begin the lecture by discussing the difficulties of cognitive impairment including a brief definition of dementia, common clinical features, as well as the concerns and stress experienced by caregivers and families. She will focus on memory, psycho-social and economic burdens, and the importance of memory and engagement tools. Philip R. von Stade, Jr. will follow up by introducing an interactive device that can assist patients and caregivers and can lead to development of additional innovative assistive technologies.

Biosketches: Rita Ghatak studied in India at Delhi University and Jawaharlal Nehru University, and did her post-doctoral work at Stanford. Rita is the founder and Director of Aging Adult Services at Stanford University Medical Center where she directs the programs of Geriatric Health, Lifeline, Checking-In, Dementia Management, Caregiver Support, Partners In Caring, Chronic Disease Self-Management, and Vial of Life. Rita is a published psychologist / gerontologist, holds significant positions in different eldercare coalitions, and teaches several courses, conducts research, and is involved in policy planning.

Philip R. von Stade, Jr. graduated from Stanford with a BA in Design in 1974. A 32 year career in the US and overseas was largely devoted to developing and leveraging cutting-edge technologies for a wide variety of industries, with a special emphasis on marketing and market research applications. Phil has spoken at hundreds of corporation and conference meetings and his software and concepts are still used as a mainstay in many of the largest consumer marketing companies. Since 2010 he has been increasingly active in research in the field of memory loss, especially with respect to Alzheimer's, caregiver support, and preservation of family histories. He is the founding director of Memory Glass LLC, which develops software tools to help caregivers and families interact with those suffering from memory loss.

"My **Grandparents** had the most amazing stories.

I wish we had recorded them..."

Agenda

- Quick Class Survey
- Design Problem
- Target Market
- A Dash of Neurobiology
- Product Demo + Real Life Videos
- Issues

Class Survey

- Alzheimers
- Non-Family over 80
- Shared a Photo Album with a Senior
- Recorded family history

Design Problem

- Encourage Storytelling - Make it Fun!
- Collect the Stories
- Curate (Organize) the Stories
- Share the Stories
- Make the Process Repeatable

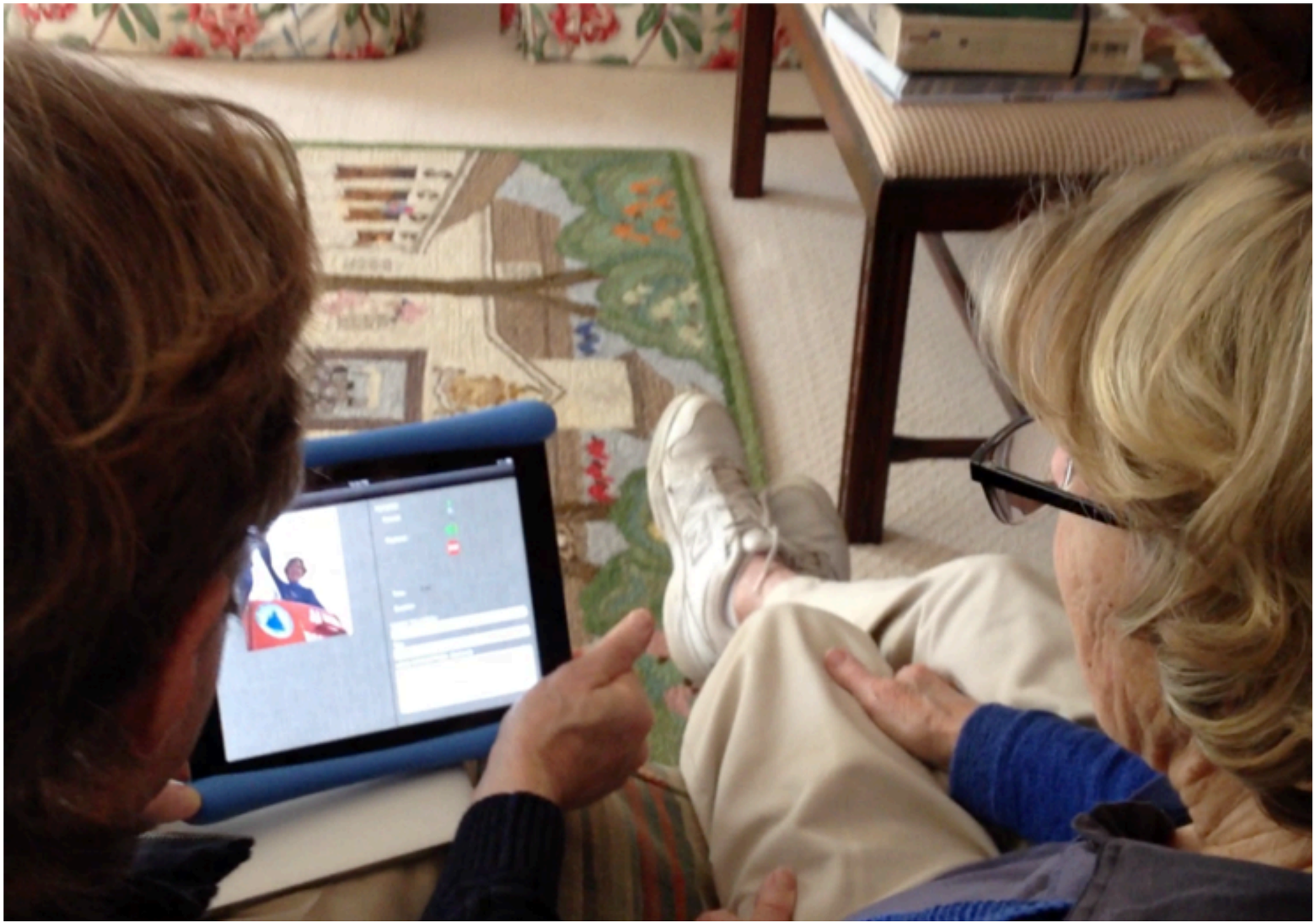
Because it's Fun!

Because Social Engagement is the Big Reward....

Can We Develop A Tool To Facilitate Social Engagement?

Can We Make It Easy?

Can We Make It Easy?



Target Market

Who are we trying to help?

And who will actually buy and use this?

1 IN 3 BABIES BORN TODAY
WILL LIVE TO BE 100.
Let's get ready for a longer retirement.
Prudential
Bring Your Challenges
001038 #242551
12'6" x47'
CLEARCHANNEL

Seniors Are A HUGE Market

Age 65+

- 2012..... 40,000,000
- 2030..... 70,000,000

Our Aging Population

- Longer, healthier lives!
- Age-related ailments.... **memory loss**
- Alzheimer's and related dementia
  - Age 65 – 10%
  - Age 85 – 50%
- Growing need for family support + caregivers
  - 5.5m Alzheimers
  - 20m Caregivers

Increasingly Smaller World

- Family grow up and move away
- Friends retire to other parts of the country
- Friends and family become ill and die
- Our own mobility is reduced

Increasingly Smaller World

Family

Old Friends

Community

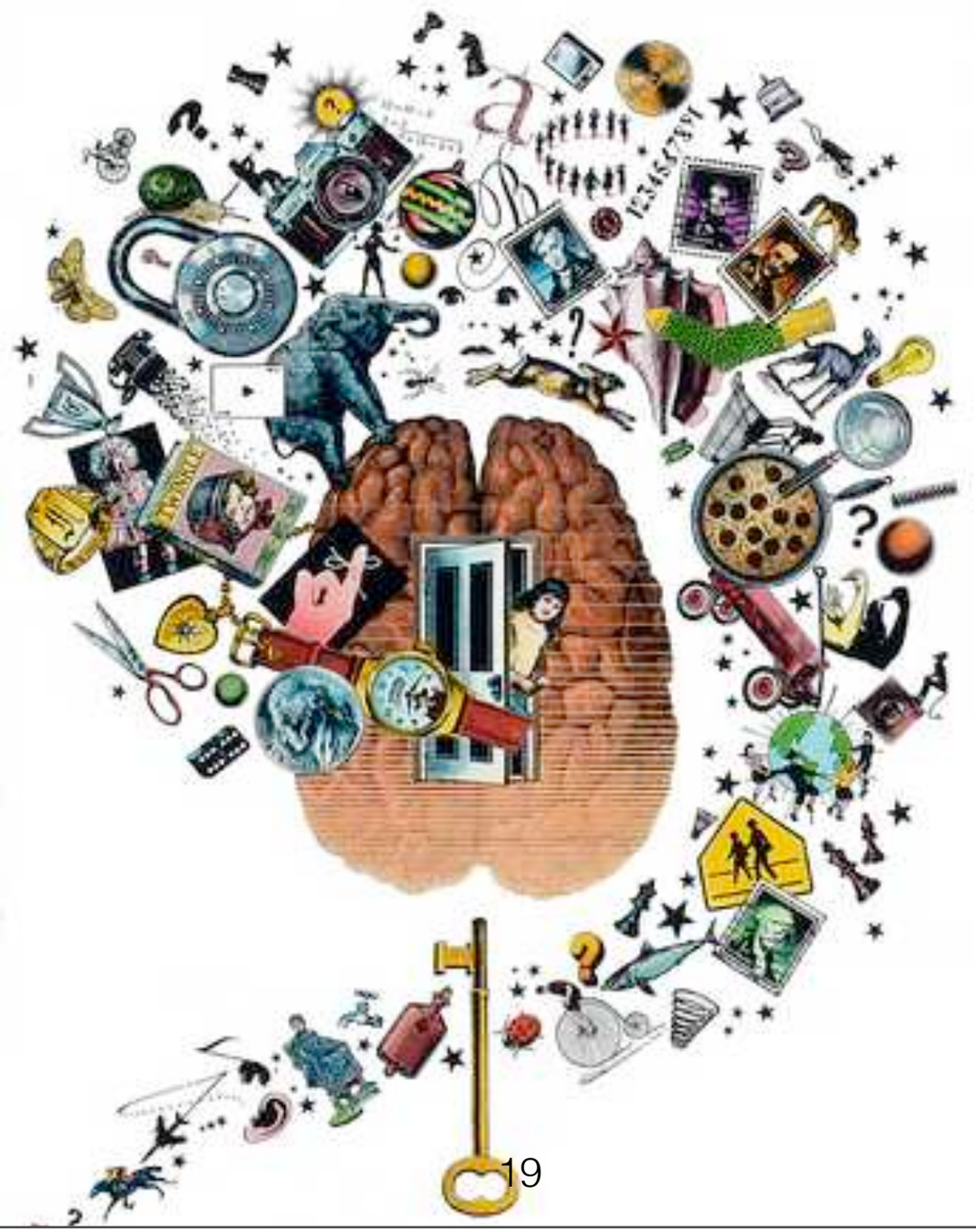
Perspectives

ATLAS

Assistive
Technology
Laboratory
at
Stanford

A Dash of Neurobiology

the importance of images

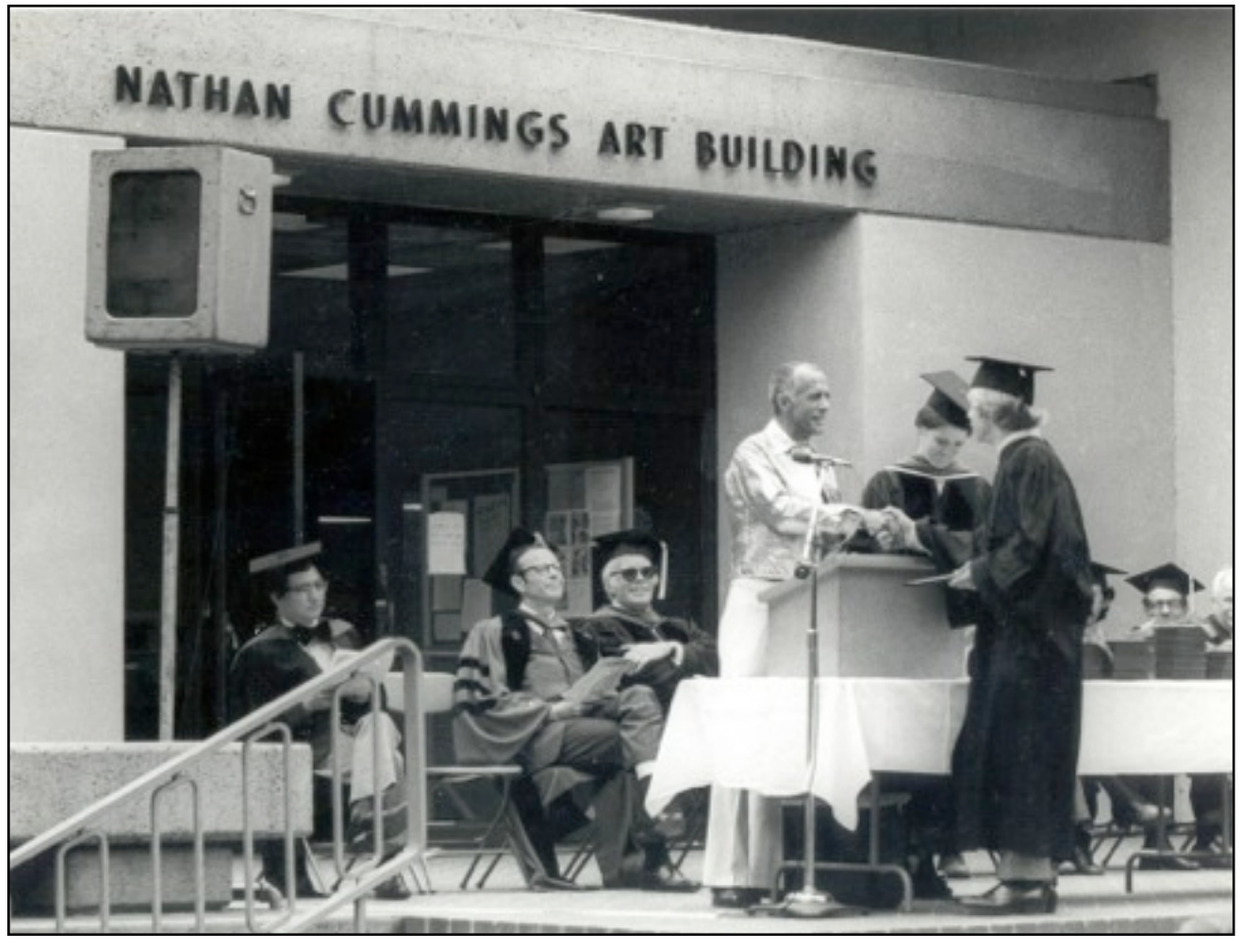


Obsessed with Photography

Share the Stories

Brings Families Together Across Generations

Remember the Past



Memory

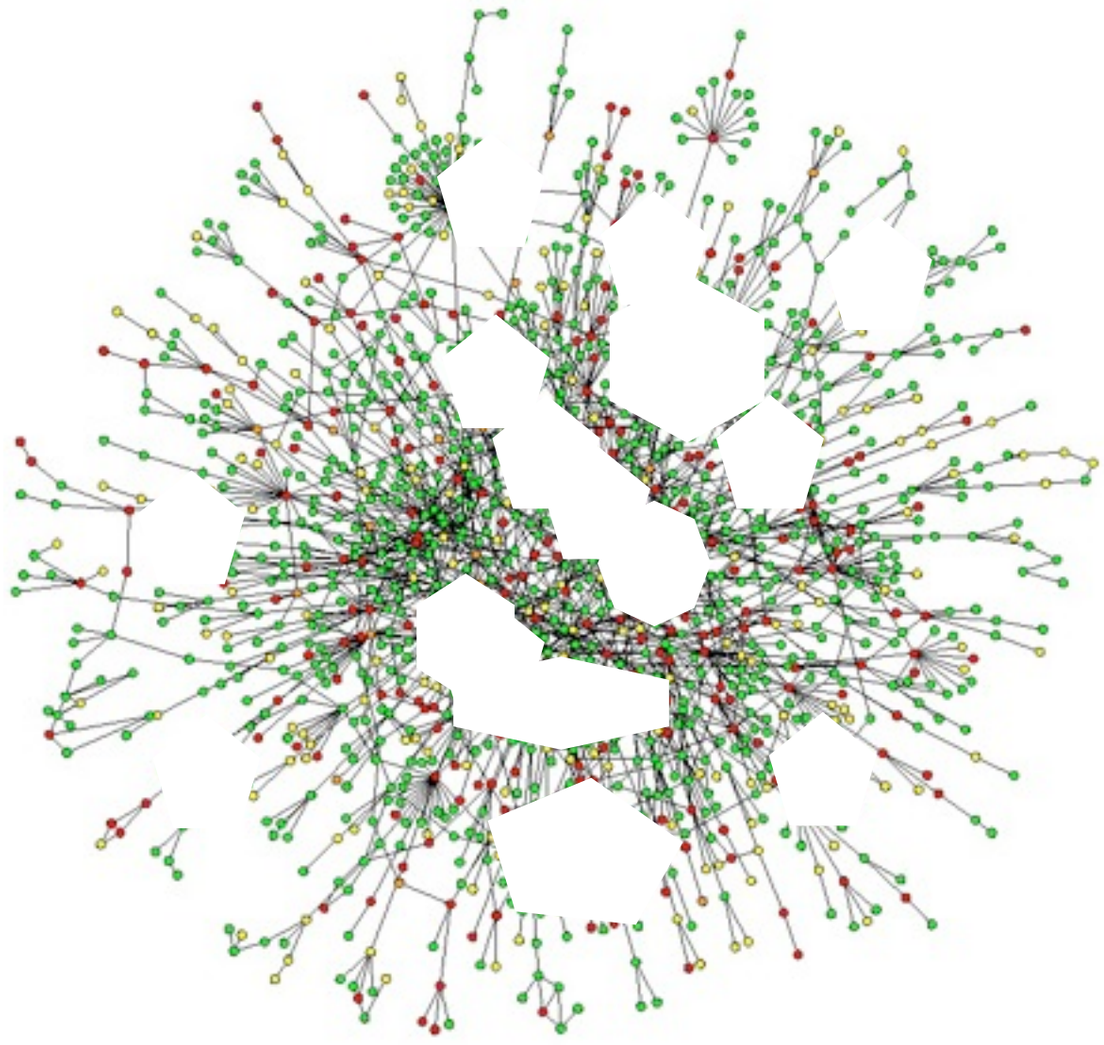
- Short term / Working
- Muscle / Procedural
- Semantic
- ***Autobiographic*** / Long Term / Episodic

Autobiographic Memory

The essence of who we are.

Autobiographic Memory

Damage from age and disease can block or remove connections.



Images Hold the Key

Images Hold the Key

One old photograph can unlock
dozens of forgotten memories,

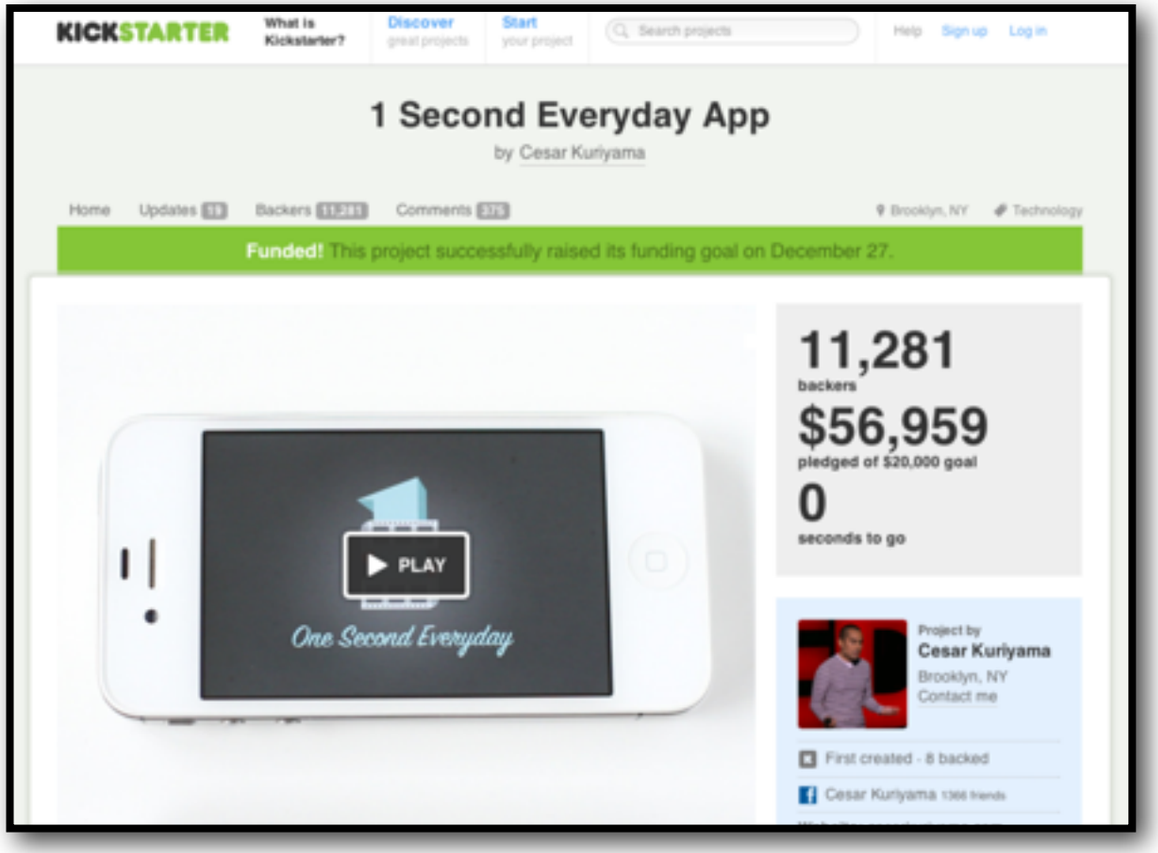
places
time periods
people,
feelings.

"My **Grandparents** had the most amazing stories.

I wish we had recorded them..."

Memory Glass

Other Solutions



Memory Glass

- Helping those with memory loss
- Improving the lives of caregiver families
- Preserving their stories
- Through technology,
  outreach
  and research

9:54 AM
Contacts
Friday
9
Calendar
Clock
07 12
Weather+
Settings
280
Maps
Reminders
Messages
Notes
3
App Store
Skype
FaceTime
The Recipe Box
Memory Glass
Mail
1
Facebook
Safari
Videos
Photos
Camera

Memory Glass

Timeline

Friends

Family

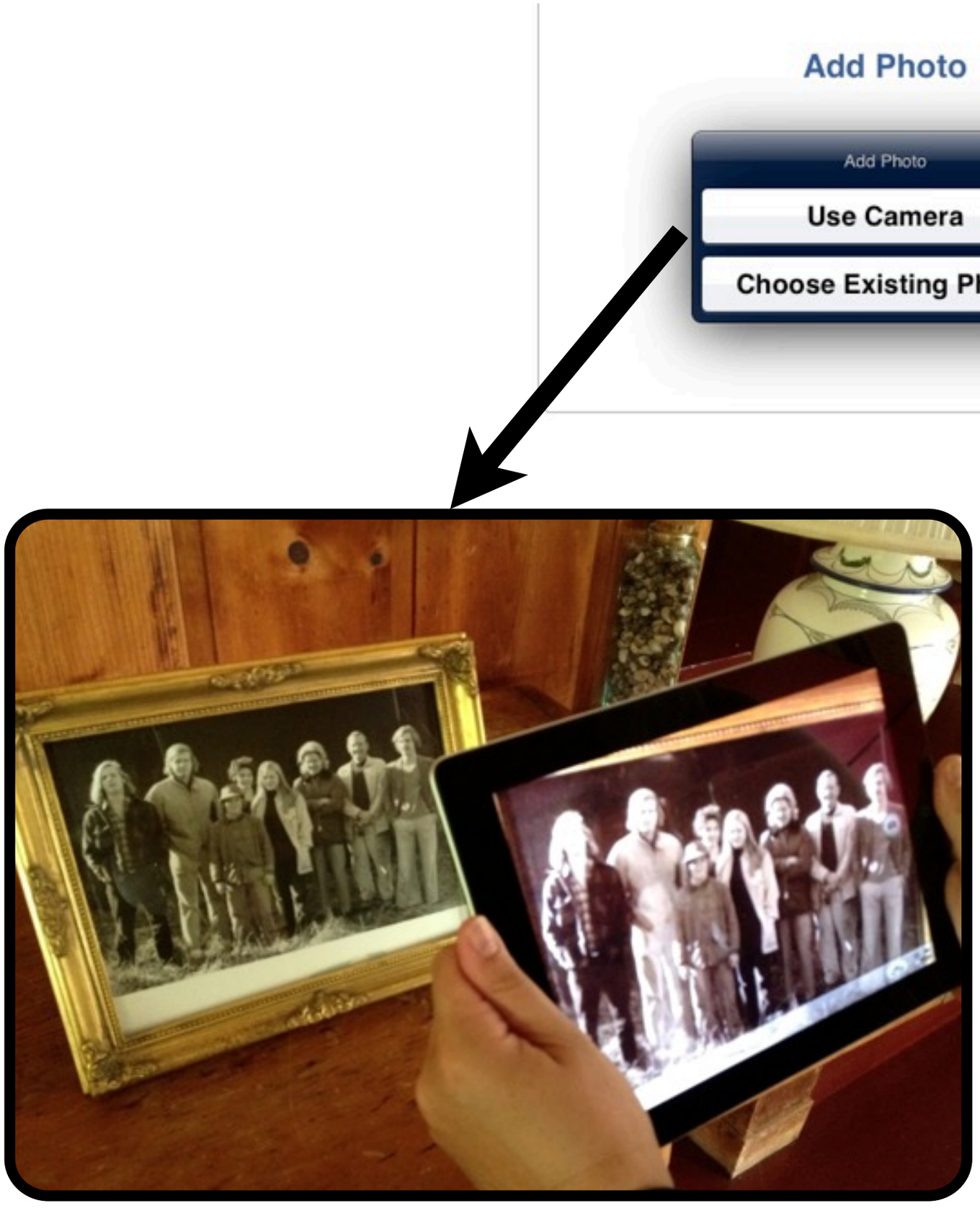
Travel

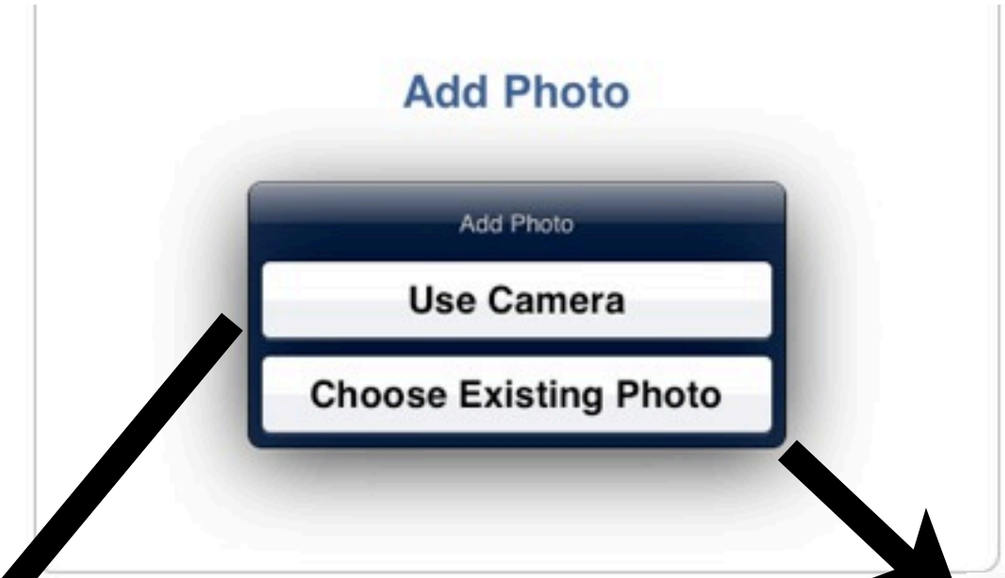
Stories

Favorites

WELCOME

A
Merry Christmas
and a Happy
New Year
From Bobby, Marjorie

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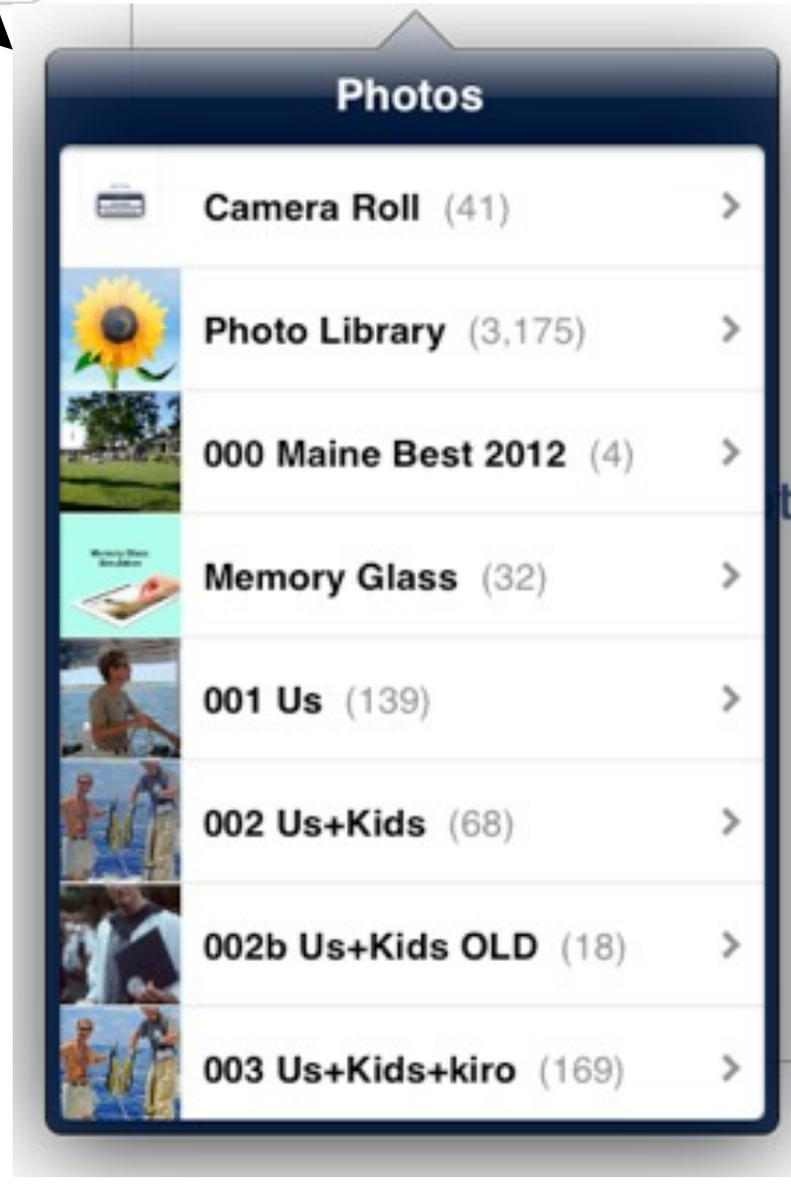
Use Camera
Choose Existing Photo


Photos
Camera Roll (41)
Photo Library (3,175)
000 Maine Best 2012 (4)
Memory Glass (32)
001 Us (139)
002 Us+Kids (68)
002b Us+Kids OLD (18)
003 Us+Kids+kiro (169)

WELCOME

A
Merry Christmas
and a Happy
New Year
From Bobby, Marjorie

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A
Merry Christmas
and a Happy
New Year

From- Bobby, Marjorie

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A

Merry

and a

New Ye

Tuesday, February 12, 13

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A
Merry Christmas
and a Happy
New Year

From- Bobby, Marjorie

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A
Merry Christmas
and a Happy
New Year

From- Bobby, Marjorie

WELCOME

A
Merry Christmas
and a Happy
New Year
From Bobby, Marjorie

January 01, 1967

Record New Story

Marjorie: Cape Horny

Marjorie: Albatross

January 01, 1967

January 01, 1967

January 01, 1967

Record New Story

Marjorie: Cape Horny

Marjorie: Albatross

January 01, 1967

January 01, 1967

January 31, 1967

WELCOME

A
Merry Christmas
and a Happy
New Year
From Bobby, Marjorie

January 01, 1967

Undo Save

DATE:

Is this date correct?

1999-08-01

Or use the spinner to correct the date

1970s	1997	June	
1980s	1998	July	Day
1990s	1999	August	1
2000s	2000	September	2
2010s	2001	October	3

Location

PROUTS

Title

Kayaking

Description

Lovely day

January 01, 1967

Mom Kayaking For Fun14

Mom Kayaking For Fun And A Lo...

Mom Kayaking For Fun

16th

12th

13th

Yeah.

Another 11

Adding 18

Record New Story

January 31, 1967

iPad 5:13 PM 71%

Undo Save

RECORD:

Record:

Playback:

STOP

Time: 0:02

Duration: 0:05

STORY TELLER(S):

Maryanne

Title:

The Cream Eaters

LONG DESCRIPTION: (Optional)

January 01, 1967

WELCOME

A
Merry Christmas
and a Happy
New Year
From Bobby, Marjorie

Timeline

Friends

Family

Travel

Stories

Favorites

iPad 6:54 PM 35%

< Main Menu | Marjorie's Family | Labels | Edit | + | ?

Grandson

Brett
Lewis

Self

Marjorie
von Stade

Husband

Philip
von Stade

Daughter

Cappy
Lewis

iPad 6:54 PM 35%

< Back | Phil Sr's Album | Cover Photo | + | ?

Tap photos to add or remove.

1941, On the beach, Florida

1942, On the beach, Florida

1943, On the beach, Florida

1943, On the beach, Florida

1948, On the beach, Florida

1950, On the beach, Florida

1950, On the beach, Florida

1951, On the beach, Florida

1952, On the beach, Florida

1960, On the beach, Florida

Name: Philip von Stade Birthday: 1928-06-10
Relationship: Husband

s 11.24.8f

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< Main Menu | Marjorie's Family | Labels | Edit | + | ?

Grandson

Brett
Lewis

Self

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von Stade

Husband

Philip
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Daughter

Cappy
Lewis

Grandson - Brett

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< Main Menu | Marjorie's Family | Labels | Edit | + | ?

Grandson

Brett
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Self

Marjorie
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von Stade

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Cappy
Lewis

Timeline

Friends

Family

Travel

Stories

Favorites

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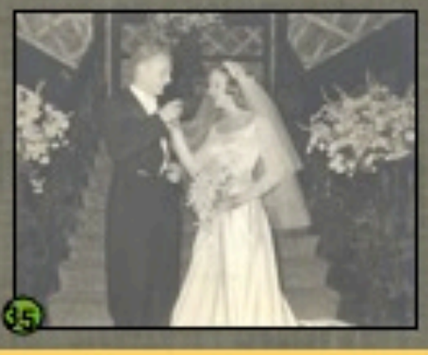
< Main Menu

Marjorie von Stade

?

Edit



World Events

Jan 7, 1931 Born!

10years

20years

30years

1930

1940

1950

1960

Memory Glass

Simple

- Simple features inspire **rich stories**

- Focus is on **one biography**
  - not complex genealogy

Simple

- **Photos:** and documents, even video and music
- **Stories:** voice + text comments on each item
- Views – Timeline, Maps, Events, People
- Touch screen, easy zoom, easy sound
- No need to be connected to internet
- Share

Real Life – Testing

Marjorie

Marjorie

- **Voice** – Soft
- **Story** – hesitates, breaks

Gets better with use. Do multiple takes.

Memories go way beyond the photo...

- **iPad Case** – Easier to Hold
- **Interviewer** – Prepared Questions a Good Idea!
- **Second Recording Device** (Backup your testing!)

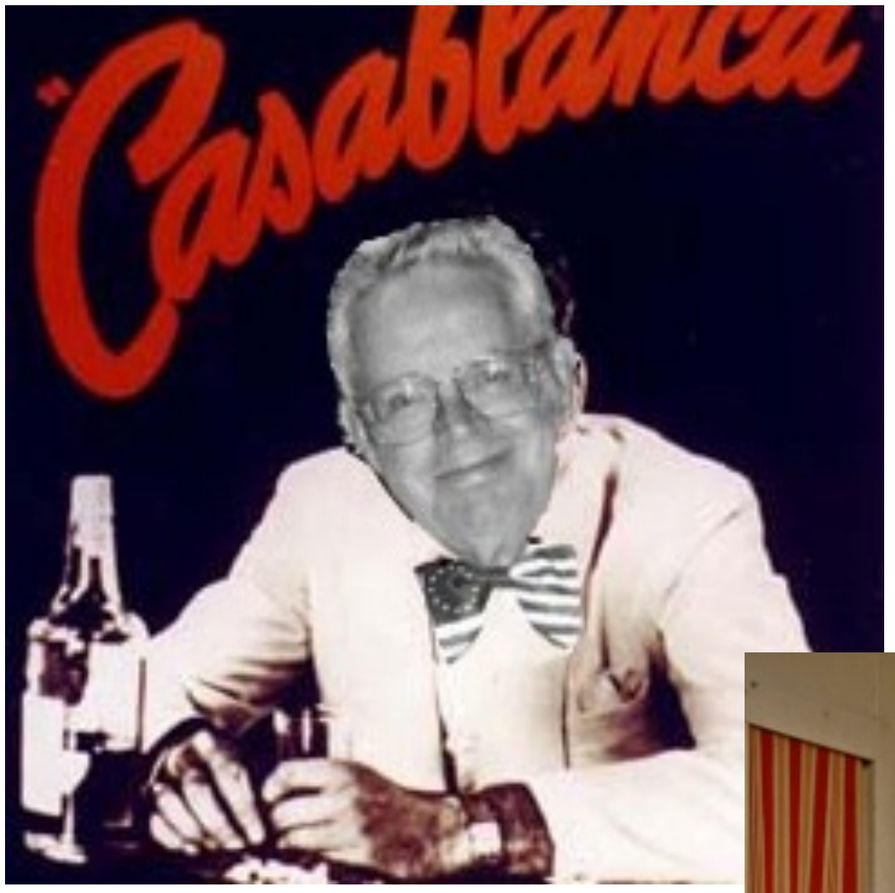
Roger

74

Roger

Roger

Roger



Roger

- **Voice** – VERY Soft
- **Environment** – Background noise, too many people
- **Story** – hesitates, breaks

Gets better with use. Do multiple takes.

Make sure it's a 'Good' day.

Start this year.... not next year.

Josee

Josee

☆ **Phil+MaryAnne von Stade <pmavonstade@aol.com>**

To:
philvonstade@memoryglass.org philvonstade@memoryglass.org <philvonstade@memoryglass.org>

Story recorded

February 7, 2013 1:37 AM
Hide Details
Inbox - AOL:PMAvonStade

1 Attachment, 1.3 MB | Save ▾ | Quick Look

Josee - Leaving Mauritius, 1959

☆ **Phil+MaryAnne von Stade <pmavonstade@aol.com>**

To:
philvonstade@memoryglass.org philvonstade@memoryglass.org <philvonstade@memoryglass.org>

Story recorded

February 7, 2013 1:37 AM
Hide Details
Inbox - AOL:PMAvonStade

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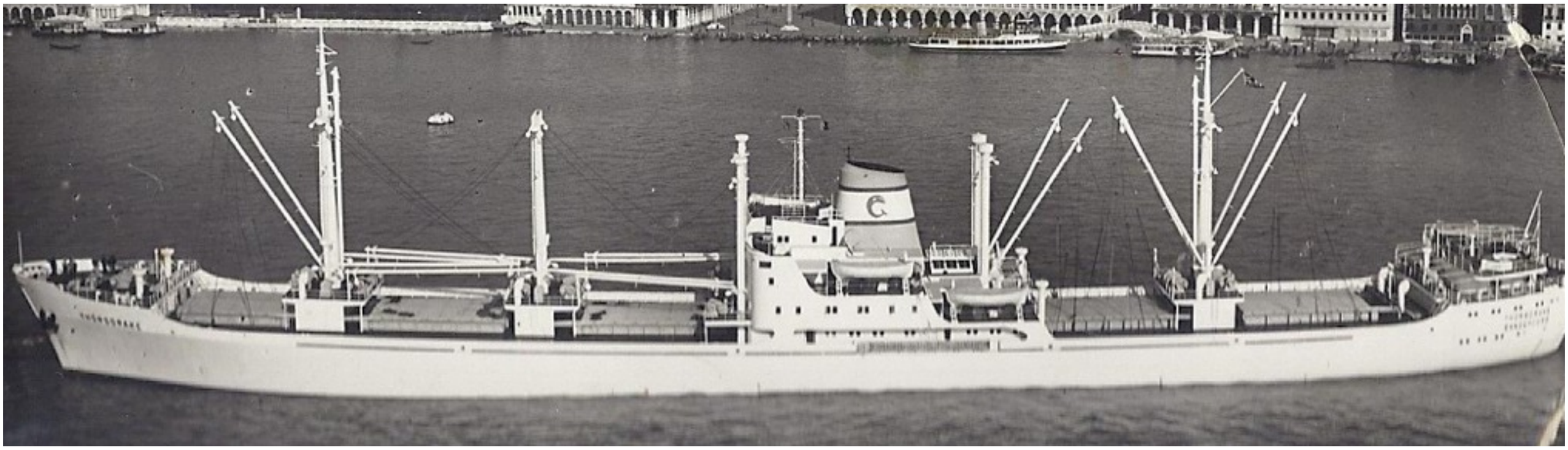

Josee - Pierre Left the Window open!

Josee

- **Voice** – Soft
- **Environment** – Quiet....
- **Story** – French, Emotions (in this case good!)

Memories go way beyond the photo...

Outreach (Marketing)

- **NGOs**: AARP, Alzheimer's Association, StoryCorps
- **Civic**: Masons, Rotary, Scouts
- **Government**: NIH, NIA
- **Caregivers**: Good Samaritan Soc., Leading Age
- **Corporations**: Apple, Ancestry.com, Facebook
- **Universities**: Berkeley, Stanford, MIT, UPenn, Yale

Can We Develop A Tool To Facilitate Social Engagement?

Impact

- Thousands of people with memory loss
- Countless caregivers
- Millions of stories

Thank You!

PhilvonStade@gmail.com
(203) 856-8066

Questions?

- Technology (Sound, Storage, Sharing...)
- Market / Users
- Marketing
- Competition / Alternatives
- Research