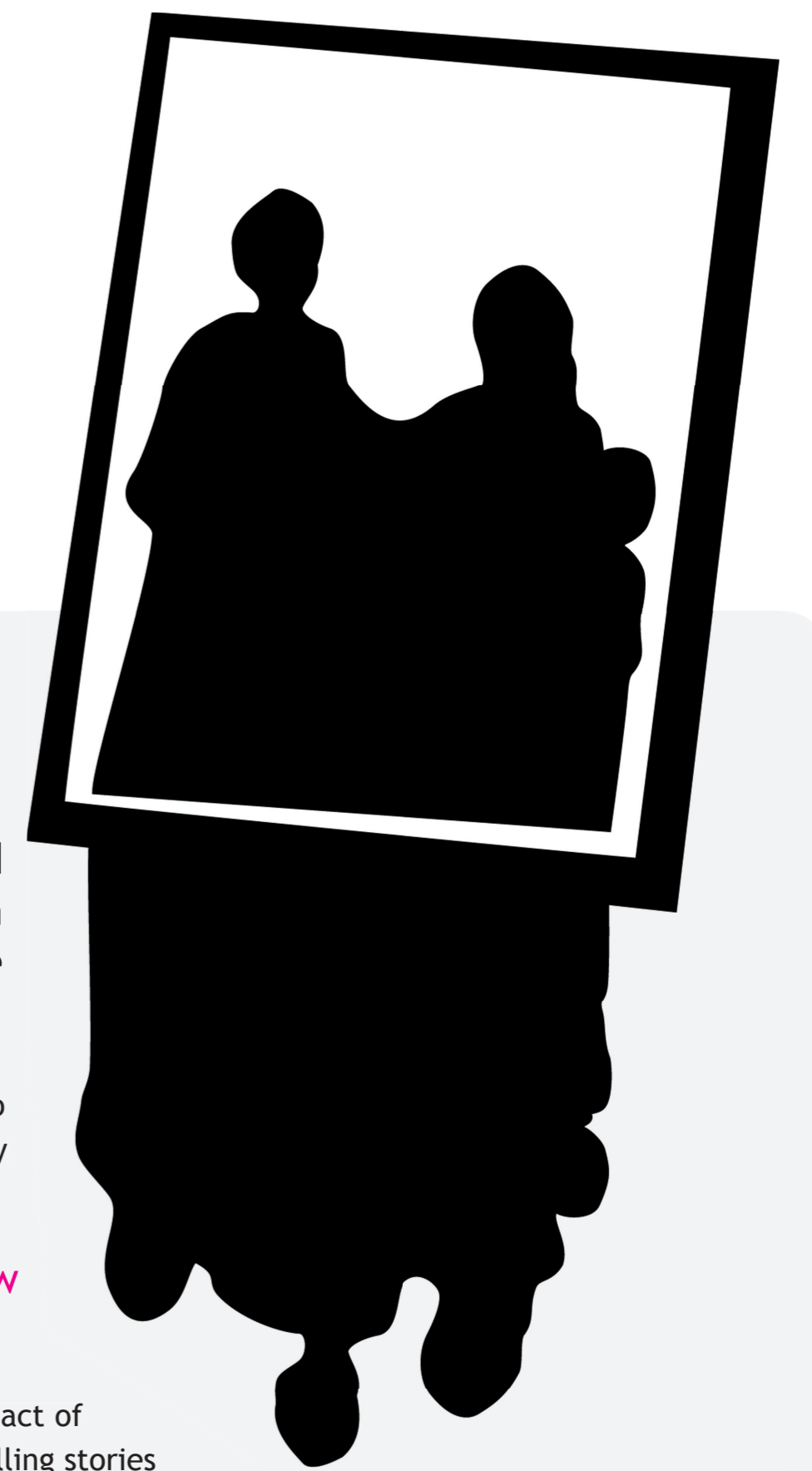# Designing Domestic Photographic Experiences to Support Autobiographical Memory

Abigail Durrant, University of Surrey

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PhD Supervisors: Prof. David Frohlich & Dr Evanthia Lyons
MSRC Supervisor: Dr Abigail Sellen

The research

In efforts to pioneer new technologies for capturing and consuming photographs, Human-Computer Interaction (HCI) research has provided accounts of what people do with photographs but less explanation for how they become meaningful to people, in particular, their role in remembering life experiences. The central aim of this research is to design and test product concepts that support the emerging practice of domestic digital photography based upon psychological insight from how photographs support acts of autobiographical remembering.

Historically, we have conceptualised memories as static representations that are 'retrieved' from the storage box of the mind. This 'storage box' metaphor has been unwittingly designed into digital photographic technologies, especially computer applications for organising and displaying photographs. Such applications promote their storage capacity above traditional tools, potentially encouraging people to document their lives through the creation of much larger photographic archives.

One of the most significant outcomes of digital photography is the increased volume of photographs people are creating and this generates new and complex desires for their capture, storage and display.

These emerging digital archives are increasingly valued as memory prostheses. But a photograph is always just a trigger to memories and is used performatively to shape and renew them. The act of remembering can be re-conceptualised as a meaning-making process by which memories are 'recreated' not 'retrieved', to portray a particular image of oneself in a given social context. By telling stories about their personal and shared experiences, people nurture and shape their self-identity and those of others.

Our new future photographic technologies must support the human desire to forget, and imagine, as well as remember. Also, what makes photographs meaningful to people that is *not* concerned with memory? We can learn about our future photography needs from our traditional practice, from the social significance we place on capturing photographs to the decisions we make that determine the framed display of some and the forgetting of others.

Intended Outcomes of PhD research:

- **Understand the meaningful role of photographic artifacts in the home**;

- **Understand how the process of identity-formation in the home relates to photographs**;

- **Produce socially-engaged inspirations for design**;

- **Augment creative, social engagement with life experiences (memories)**;

- **Design and iterate product concepts and prototypes**;

- **Meet design challenges presented by the needs and values of the domestic domain**;

- **Inform strategic technology innovation for domestic photographic practice**.

Study design: 'Family Portrayal'

People often don't have control over how they're represented in their family home. In fact, there is often a 'curator' of a family photo-display and personal expression can be transformed or disarmed by the interests of the family-at-large. The first study of the PhD project will look at how the presence of photographic displays serve to control the life stories that family members, in particular, teenagers, are able to tell and how this is negotiated.

How do photographs 'empower' and 'constrain' representations of individual family members in the home?

The term 'empower' is used here to acknowledge the motivational, aspirational and political aspects to identity-formation during family interaction. A study focused around this question could greatly inform both the PhD agenda and methodology. Cultural assumptions surrounding labels such as 'family' and 'home' will be challenged in the process.

The research will target parental homes with teenagers between the age of 16 and 18, involving at least one parent and one teenager from each household, and will be qualitative in nature, taking the form of creative and task-based interventions into their lives. Tasks are designed to provoke storytelling around individual photographs, attending to the tension between 'self-identity' and 'family portrayal'.

- Overall the research process will be participatory and reflective (1). **The study comprises four stages**:

- Upon an initial visit, the researcher presents each participant with a study pack, containing a camera and tasks, printed on cards, (see figures). In response to the tasks, and in their own time, **participants are asked to create a new photograph collection by combining photographs sourced from their existing collections with newly captured photographs**, (Part I).

  Focussing upon 'self-presentation' and 'meaning-making' with photographs, tasks demand subjective interpretation by participants, so as to encourage less stereotypical responses and a revelatory engagement with their photographs.

- **This new collection facilitates a one-to-one session** with participant and researcher, (Part II), in which meanings attached to photographs are discussed. One of the tasks of the session is to choose a limited number of photographs that 'express what family means to you'.

- **A family-group session with at least one parent/ guardian and teenager follows**, (Part III), focussing on family interaction with photographs.

- **These sessions will inspire design explorations in the form of concept sketches**, attending to solutions that meet participant desires as revealed through the study, (Part IV). These explorations will inform both subsequent PhD studies and the design of a keepsake for participants to take home at the end of the study.

3. bring me a photograph

a. that represents an ideal portrayal of family
b. that makes you feel anger towards your family
c. that portrays you as your family want you to be

Design as a Research Activity

The PhD research combines expertise from at least three areas of research: Human Computer Interaction (HCI) on user requirements for photographic and mnemonic computer technologies; Social Psychology on autobiographical memory and identity; and Interaction Design on socio-digital systems. Its inter-disciplinary nature implies a contribution of new insights about the future role of photography to all of the above.

Why inter-disciplinary?

- **With regard to the PhD agenda, it is easy to see the potential contribution from both design and social science.**

  New platforms for capturing, organising and sharing digital photographs have seen the emergence of novel social rituals. Vice versa, cultural assumptions have shaped technology innovation. The innate persuasiveness of a designed object is often under-estimated, as are as the changing social uses of it.

- **However the research agenda presents interesting methodological tensions, especially between the creative design process and psychological science.**

  Historically, design has been concerned with producing artifacts and social science with producing knowledge.

- **As a design researcher, what kind of data do I want to obtain from my first study?**

  The study design outlined here attempts an inter-disciplinary research process by exploring *psychological* issues of control as afforded by the *material* presence of a photograph on display. It focuses upon people *and* artifacts.

  The study aims to understand 'what' material and aesthetic functions of photographic artifacts are meaningful to people in constructing autobiographical memories. But it also aims to understand 'why'. How can additional psychological insights about family interaction shape the researcher's design sensibility and how can creative approaches to understanding the world inform social science research?

  New research tools are required in order to position design questions about the future home environment within a social psychology framework.

  It is hoped that the development of novel inter-disciplinary research approaches through the first PhD study will contribute to defining a role for the socially-engaged designer in a technology research environment.

References

(1) Sengers, P., Boehner, K., David, S., Kaye, J. 'Reflective Design'. *Proceedings of the 4th decennial conference on Critical computing: between sense and sensibility CC '05*. ACM Press 2005.

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