Loneliness in the Digital Age: Building Strategies for Empathy and Trust

Abstract
Loneliness is a complex emotion that impacts upon an individual’s sense of social-relatedness, health and wellbeing. While a large amount of scholarship has tackled the issue of chronic loneliness, the issue of transient loneliness has thus far not received significant attention in academic research. In this position paper, we discuss the role that technology may play in ameliorating experiences of transient loneliness for individuals most at risk of it, and reflect on how technology can promote empathy for, and between, people who are temporarily separated from their loved ones and home communities. We outline a large-scale research project that involves collaboration across health and social psychology, the creative arts, design and HCI exploring these issues, and speculate upon new applications of social technologies that may enhance empathic relations between disparate groups and individuals.

Author Keywords
Empathy; Trust; Loneliness.

Introduction
‘Loneliness is a complex and usually unpleasant emotion which typically includes anxious feelings about a lack of connectedness or communality with others. As such, loneliness can be felt even when surrounded by other people.’ [2, p.1]
Victor moved the United Kingdom on the 1st of January 2014. This was the first day that the EU borders had 'opened up' and allowed him and his fellow Bulgarians to move to the UK to find work. While there had been a huge amount of mass-media coverage of a ‘tidal wave of immigration’, Victor was the only ‘new arrival’ on his plane to the UK. Arriving on his own, he left behind his fiancé and eight year-old son. For his first job he moved to a rural part of eastern England where he worked on farms picking fruits and vegetables during harvest. He lives in housing near the farm with 6 other workers—a fellow Bulgarian, two Romanians and three Polish men.

Victor is very busy in his new life. He wakes early and works until late. Working on the farm during the summer is hot and hard work. He doesn’t find much time during his work days to ponder on his family left back home. He tries to call home at least once a week, but in his location he is restricted on his access to the Internet and computers so unable to use Skype. He shares a mobile phone with other migrants at his home—therefore, he has limited opportunities and credit to phone internationally and sending SMSs is just not practical.

**Figure 1: Victor’s story**

Loneliness is one of the most significant challenges facing western society. In the UK, surveys over the last decade have regularly suggested that 1 in 10 people are ‘lonely’ while just under a million citizens experience loneliness on a chronic level [2]. Populations identified as “at risk” of loneliness are also often identified as been at risk of reduced wellbeing and emotional suffering [4]. The magnitude is such that loneliness is often identified as a contributing factor to ill health, premature mortality, and offending [5].

While a large body of work addresses issues of **chronic loneliness**, little attention has been played to the **significance of transient episodes of loneliness** and the role that empathy and trust formation play in ameliorating these feelings. Empathy and trust are both antecedents of loneliness as well as being worsened by it [1]. In this paper, we provide an overview of an interdisciplinary research programme that is examining how short spells of loneliness develop in the daily lives of individuals who are temporarily separated from their home community. We have set out to explore how we might design new interactive social technologies that support the formation of empathy between separated family members and community members, and thereby maintain individual and social wellbeing.

**Transient loneliness and separation**

In the health and psychology literature, loneliness is often framed as a ‘chronic’ condition. As such, research within health, psychology and HCI has focused on those groups identified most at risk of experiencing chronic forms of loneliness—such as older people (e.g. [11, 15]). While work in this area is clearly worthwhile, this does negate the significance that spells of loneliness can play in any person’s everyday life. This is particularly significant for individuals who find themselves in periods where they are temporarily separated from their relations, peers and social/community networks; this can include a diverse range of people such as migrant workers, offenders having to reintegrate back into society, workers posted to overseas locales and children and students starting at a new school, college or university.

Empathy and trust are especially important to the types of groups that find themselves in these states of temporary separation. Let us take an imagined, but likely, story of a new ‘economic migrant’ moving from Bulgaria to the UK following the opening up of the EU borders (as described in our scenario in Figure 1). In Victor’s scenario, loneliness emerges, in part, as a consequence of being separated from family for a temporary but undefined period of time. But what is also significant here is the perceived strangeness of the new ‘land’ Victor finds himself in, and his sense that this new world works at a different pace compared to his life in Bulgaria. But perhaps more unsettling is that he frequently feels looked down on—perhaps more unsettling is that he feels socially isolated or just under a stranger's leave on him, and when he is unable to communicate with his family at the times he normally would do so.

**Social technologies for empathic relations**

The establishing of empathic relations might benefit Victor and his family at a number of levels and in multiple ways. His family in Bulgaria might benefit from having a greater awareness of his new routines and
limited resources, and the associated restrictions this places on his time. He would benefit from being able to communicate his feelings and concerns back home in a structured and sensitive manner. Further, his relations with his temporary neighbors might benefit by establishing common ground and social bonds with the new communities within which they live.

The HCI community has been engaged in research for some time that has been addressing societal concerns of social isolation and loneliness in a number of contexts, but most especially around ageing (e.g. [14, 15]); again however this work has tended to concentrate on aspects of chronic and long term loneliness. Perhaps of more relevance to transient loneliness is work by the design, HCI and ubicomp communities that has seen the development of phatic technologies [13] and ‘remote hug’ devices [10]. This work however typically requires complex, bespoke mechatronic devices and systems; in order to fit in with Victor’s transient working life, and be economical to service and maintain, any new technological intervention would have to be cheap, robust and compact or realized as a software service. We therefore propose two possible design approaches to address loneliness in the lives of people such as Victor:

Supporting inattentive attentiveness: A core component of some approaches to empathic practice is silence and active listening [7]. In contemporary forms, the dominant social media services and platforms lack sensitivity to the role that attentive silence and active listening can play in synchronous and asynchronous communication [6]—indeed, ‘silence’ is often portrayed negatively online, such as when you are not ‘endorsed’ on LinkedIn, or not ‘liked’ on Facebook. Building on prior work of Wallace et al. [12], we will build a number of technology probes that support empathic dialogues between separated families and communities. These will probe the ways in which relatively simple digitally augmented artefacts, worn on the self, could support practices of remote active listening, relating and understanding.

Crafting empathic digital identities: We are also exploring how social networking and media services could be enhanced by designing in tools for presenting online identities and conversing with others that may promote empathy. ‘Slow interaction’ [3] is a useful notion to build upon here, as it highlights the role of temporality in how people might ‘reach out’ to others and form new bonds with strangers. As such, we could expand upon work on delayed messaging services (e.g [8]) and look at whether giving greater time to composing profiles and messages may lead to greater effort or consideration from those using them and thus improve the quality of interactions. For example, we might envisage how existing communication channels—SMS services on phones, voice and video messaging, micro-blogging and social media services—could be reconfigured to support people in carefully crafting a message over time by responding to timely and structured prompts. These may take temporarily separated individuals through a step-by-step process of learning to express their feelings in ways that facilitate empathy, and also support others to engage empathically with others. We can also envisage the ways that such careful crafting of an online identity could support relationship building and understanding with the new community being moved to.

Future work
What we have presented thus far is truly speculative and is a foundation for a three-year interdisciplinary
research project. During the project we aim to focus on three core examples of ‘temporarily separated’ groups who are: i) at risk of loneliness as a result of separation and ii) in a situation where the nature of their loneliness might be ameliorated by empathy. In working with such cases, we are particularly interested in how the constituents of empathy are different in different contexts and situations. For example, a case study with economic migrants where loneliness might be a result of cultural unfamiliarity and isolation from a foreign community would likely reveal highly different roles for empathy as compared to a member of military staff returning from deployment at war. At the same time, it is envisaged that there would be parallels and commonalities across such cases.

Having identified a number of groups to work with, we will proceed through a work-plan comprising of:
1) Primary data collection to understand existing experiences of online loneliness (managed in the online or offline world) and offline loneliness (managed in the online or offline world) and how this relates to perceptions of social bonds. 2) Co-designing a number of prototype digital technologies with members of each case study group that support new modes of expressing empathy between participants, their home communities, and those residing in their temporary settings. 3) Developing models of creative practice to support the building of empathy-rich environments to support the management of transient and episodic loneliness across and between community members.

References
[9] Murphy, S., and Avramova, M. Exposed: Bulgarian fixers tell new arrivals to UK... We will fake documents so you can claim benefits. http://tinyurl.com/pl74hyy
[14] Wherton, J., and Prendergast, D. The building bridges project: Involving older adults in the design of a communication technology to support peer-to-peer social engagement. LNCS 5889, 111-134.