FACILITATING SOCIO-PLEASURE AS MEDIATED BY UBIQUITOUS TECHNOLOGY

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This research aims to increase understanding of
how ubiquitous interactive systems could facilitate
Socio-Pleasure: the enjoyment derived from interaction with others.

A framework, termed **THE Medium model**, is presented; It describes
the factors that could affect socio-pleasure and it is used
to classify and design technologies.

Keywords: Social interaction, ubiquitous technology, socio-pleasure, THE Medium model, positivism

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As reflected in Maslow's hierarchy of needs, and as further demonstrated and evaluated in empirical studies [1], is that
humans have a basic need of contact with others.

People seek and require supportive relationships for their health and well-being.

[1] Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin* (117), 497-529.

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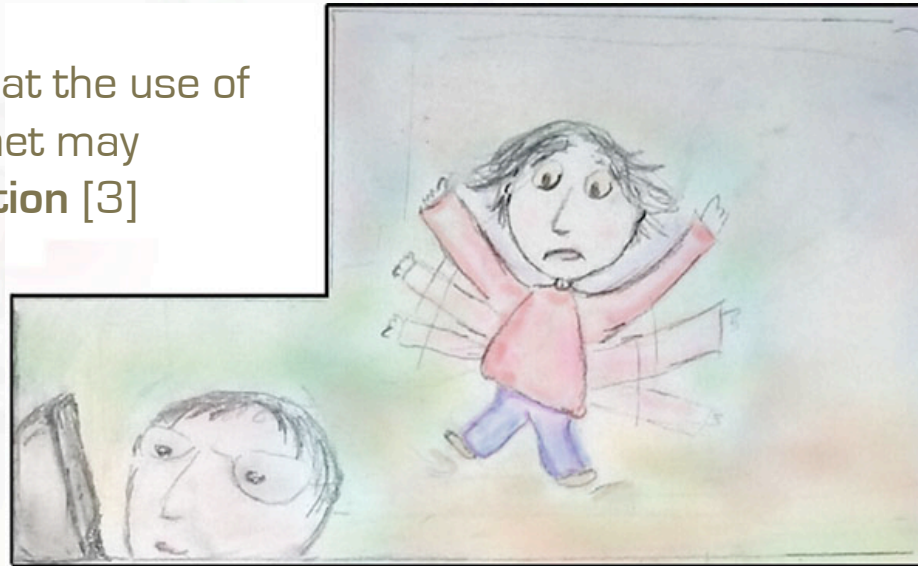{MARIJE.KANIS, WILLEM.BRINKMAN, ROBERT.MACREDIE} @ BRUNEL.AC.UK

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However, some believe that
current technologies do not always support this need very well

E.g. research suggests that the use of computers and the Internet may contribute to **social isolation** [3]

and technology exhibits shortcomings when compared to face-to-face interaction [4] .

[3] Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet Paradox Revisited. *Journal of Social Issues 58*(1), 49-74.

[4] Markus, M. L. (1994). Finding a happy medium: explaining the negative effects of electronic communication on social life at work. *ACM Transactions on Information Systems (TOIS), 12*(2), 119-149.

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The expanding context in which technology is used, affords new opportunities for **interacting with** computers or, better still, **people**.

However, we need to understand **how ubiquitous interactive systems could facilitate Socio-Pleasure**; positive & social interactivity

THE Medium model is proposed as a starting point for addressing this issue.

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Category	Factors that could affect socio-pleasure
TIME	Duration of interaction(s)
	History of interactions
	Synchronous/ Asynchronous (e.g., iChat/eMail)
	Zeitgeist
	Positive moment in time (e.g., birthday)
HUMAN	Personal characteristics (e.g., Age, Gender, Personality, Physical attractiveness)
	Physical contact & expression
	Trust & Security (e.g., self- disclosure)
	Face-to-Face interaction (visibility)
	Person's cognitive state (e.g., attention)
	Person's Physical state (e.g., under exertion)
	Shared activity (e.g., play)
	Similarity (e.g., shared beliefs, interests)
	Reciprocity
	Person's cognitive state (e.g., attention)
	Person's mental state (e.g., persons' emotions)
	Negative/Positive emotion toward other(s)
	Familiarity
	Availability
	Expectation of interaction
ENVIRONMENT	Proximity (distance)
	Place & space
	Presence/Propinquity (=nearness in place)
	Culture
	Weather conditions
	Neg./ Pos. environmental impression
MEDIUM [No Technology Desktop technology Mobile Technology Augmented reality Ubiquitous Technology]	Medium's characteristics (e.g., content, structure, behaviour, aesthetics)
	Medium's perceived benefits
	embeds a motivational force
	embeds a 'socially transforming interface'
	embeds an escape mechanism
	is unusual, a novelty

THE Medium Model for Socio-Pleasure
Studies from **CSCW, social and positive psychology**, and in particular **theories of on-line communities**, have identified **factors that impact on social well-being and bonding**.
After reviewing these in depth, and basic questions such as when, who, where and what, four key categories emerged from the literature:
Time; Human; Environment; and Medium.
These formed the basis of THE Medium model encompassing factors that could affect socio-pleasurable interaction.

Table 1: THE Medium model & factors likely to affect socio-pleasure

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THE Medium model as a design and analytical tool

• Although, not in control of every factor (e.g., zeitgeist, personal characteristics),

this model shows that **developers have a wide spectrum** of factors to consider when designing for socio-pleasure.

• These **factors differ in importance** at **various social stages** and in differing contexts (e.g., increasing social awareness, breaking the ice, community building and maintaining relationships).

• This model does not necessarily show that ubiquitous technologies can facilitate better socio-pleasurable interactions than other technologies, but shows that **ubiquitous technologies have characteristics such as flexibility in time, human visibility and environment that could be capitalized on.**

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Conclusion

We presented THE Medium model as a framework for designing socio-pleasure.

Using THE Medium model as a design tool, immediate future work will involve prototype implementation and empirically evaluation that will refine the model, leading to design principles for supporting positive social interactions through technology that is moving towards ubiquity.

THANK YOU!

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