

# Are We Evolved to Live with Mobiles?

An Evolutionary View of Mobile Communication

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# An Evolutionary Perspective on Mobile Communication

- Mobile phone usage often interpreted through a moral/value lens
- By contrast, an evolutionary perspective holds that:
  - Human behaviors are driven by the pursuit of physical and social survival and reproductive success
  - Mobile communication reflects the exercise of evolutionary heritages
    - Individuals behave in a social group both for themselves as individuals and relative to the group
  - Not a genetically determined force!
    - Rather it is a prism that helps us understand the genesis and selection of behaviors which manifest themselves in the use of mobile communication

# An Evolutionary Perspective of Mobile Communication

- We draw on evolutionary lines of thought:
  - Focusing on the recurring adaptive problems of *survival, sex and mating, parenting and cooperation* to reanalyze observations of mobile phone use
- Four dimensions explored:
  - **mobile networks**
  - **public performance of mobile communication**
  - **inferential strategies of using mobile phones**
  - **gender differences**

# Mobile Grooming Networks

- Social grooming is an important mechanism through which primates build bonds with each other:
  - A dyadic activity allowing a pair of primates to peck and groom each other's hair
  - The evolution of language has afforded humans a more efficient way of performing social grooming
- Proposition 1a: *Reflecting the evolved adaptations of building cooperation through reciprocity and friendship*:
  - People use mobile phones to maintain cooperation and coordination with their social networks in the form of exchanging phone numbers and text messages

## Mobile Grooming Networks (cont'd)

- Proposition 1b: *Resembling primordial ways of communication:*
  - People engage in mobile communication through phatic talk, gossip, and multiplication of short calls with others in the social group
- Proposition 1c: *The primordial ways of communication over the mobile reflect adaptive mechanisms designed to build group cohesion:*
  - Time and effort invested in “grooming” with their social contacts reassured of their social existence in the group;
  - Language use among in-group members, but not understood by out-group members (efficiently identifies and reinforces insider membership, creates barriers to outsiders)

# Public Social Interaction via Mobiles

- Proposition 2a: Mobile communication in public social settings:
  - *Represents the exercise of the adaptive mind-reading ability useful to ancestral (and contemporary) humans for survival and reproduction*
  - E.g., mobile phone users perform different body positioning and movement with co-present individuals to divert their attention or to command their adjustments (“in sync”)
  - E.g., for reasons of physical or social safety, people may pretend to be using their mobiles (strategic deception)

## Public Social Interaction via Mobiles (cont'd)

- Proposition 2b: Mobile phone users' enactment of diverse signals in public space:
  - *Represents the adaptive psychological mechanisms useful to ancestral humans for survival and reproduction*
  - Serves the function of presenting oneself with favorable images associated with fashion, status and social inclusion (therefore socially advantageous)

# Evolved Self and Social Inferential Strategies of Mobile Communication

- Proposition 3a: Normative perceptions of mobile phone use in public space:
  - *Represent humans' evolved reasoning about what is permitted, obligated and forbidden in the situation of social hierarchy*
  - But the reasoning formed may depend on whether and how the perceiver uses the phone in public settings



# Evolved Self and Social Inferential Strategies of Mobile Communication (cont'd)

- Proposition 3b: *Mobile phone use represents different forms of evolved biased judgments:*
  - Spiritual practices via mobiles reflecting humans' illusion of control of spiritual and transcendental forces
  - Optimism about gratifications sought through mobiles
  - Paranoid beliefs about potential harms mobiles pose to social exclusion
  - Overreliance and loss of control

# Gendered Mobile Communication

- Proposition 4a: *Public performance of mobile communication reflects different sexual intentions by men and women:*
  - Men aim to attract desirable partners by displaying status in the form of sleek devices
  - Women care about being socially competent by getting more phone calls/messages

## Gendered Mobile Communication (cont'd)

- Proposition 4b: *Consistent with the evolved gender differences as manifested in parental investment and mating strategies:*
  - Women tend to use mobile phones for social and connectivity purposes while men focus on technical and instrumental functions;
  - But women's use of mobile phones for safety and security reason reflects *women's evolved adaptations to secure physical protection for themselves and for their offspring from humans and nonhuman predators*

# Future Research

- Phenomenon of social isolation and alienation
  - Lack of opportunities to test real “friends” in contemporary environment
  - Probe the nature and content of relationships established and maintained through mobile communication
- Social status gauge through mobiles
  - Continuing enhancement of technological features
  - Need to observe qualitative and quantitative change of public performance of mobile communication
- Strategies for the dominant and the subordinate
  - Smart mobs, backchannel mobile communication
  - Implications for social policy

Thank you! Questions?

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