## Are mobile phones changing social networks? A longitudinal study of core networks in Kerala

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## Abstract

The paper stresses the need to undertake longitudinal studies to analyze the social impact of technology. Palackal et al. propose one such study to analyze the effect of widespread adoption of mobile phones on core networks. While some argue that mobile connectivity enriches our social bonds by keeping us in touch with our networks anytime-anywhere, others claim that mobiles only strengthen the primary ties, producing a bounded solidarity (Ling 2008). Due to increased participation in strong ties, we are shielded from indulging in weak ties, thereby leading to social insulation and network closure. Geser (2005) calls mobiles "antirevolutionary", saying that modern era demands a dependence on various weak ties, and regressing to narrow "pre-modern" relations is bad. Palackal et al. conduct a longitudinal study and show that there is a significant positive correlation between adoption of mobiles and shrinkage of core networks. They also show that the core networks eventually get centered around friends and family in the same locale, thereby verifying bounded solidarity thesis.

## **Critical Review**

Interviews of people from both professional and informal sectors of Kerala were conducted in 2002 and 2007. Given that Kerala had the highest proportion of mobile usage in India (Malayala Manorama, Business Magazine April 8, 2007), we could ignore the limitations of microsociological effects. Another appealing aspect of Kerala is the already existing strong connectivity, owing to a large number of Malayalis who work in the Middle East. This enables us to look at mobiles as devices that add a layer of mobility, instead of the traditional view that mobiles provide connectivity in developing countries. The interview questionnaire asked for the location of core nets, mode and frequency of interaction among other things. The advantage of enquiring about core nets is that they would mostly remain the same across time, and would lead to unambiguous answers. It was observed that the size of core nets decreased over time and the proportion of friend/family nets increased over work nets. The authors attribute these observations to the positive network effects of mobile technology rather than social change (say, urbanization) as communication is central to strong ties and new modes of communication greatly affect these ties. The authors thus reify that periodic evaluation of technology is necessary to measure its social impact.

We have studied family hearths (Morley 1986)<sup>1</sup> in the class and looked at the research conducted by Lim (2008) in parts of South Asia. We discussed how radio, TV, and computers brought families together at one place in their houses. From Palackal et al.'s findings, we can see that there is a continuity of how technology brings us together mobiles are the new hearths, albeit in a more personalized manner. The various technologies we use to interact with our core networks turn into hearths eventually - whether it is a TV, mobile phone or a WhatsApp group. They do have an individualizing effect, but the fact that our local family ties are always close to us brings a sense of togetherness that a hearth offers. We looked at "media multiplexity theory" in Shriram Venkatraman's book<sup>2</sup> that suggests that we will always look to strengthen our strong ties, as we yearn for the warmth that they provide. People connected via stronger ties will use more media to communicate than those via weaker ties  $(Haythornwaite)^3$ . The same is reinforced from the empirical research which shows that mobile usage has reached near saturation in Kerala, as the device provides not only connectivity but mobility too.

The warmth that these technological hearths provide has led to the formation of echo chambers, and we have discussed possible political manipulation in one of the classes. We've seen how Cambridge Analytica easily mapped the characteristics of close friends of individuals based on the questions these individuals have answered. While they could achieve only approximate models of friends, their assumption that strong ties behave similarly turned out to be pretty accurate. There are models used by other tech companies that rely on the similarity between the members associated via strong ties - like Netflix predicting a similar set of movies to the husband account and the wife account. Palackal et al.'s work clear up that this is not just solely the power of algorithms that crunch the data, but also the technology itself that encourages strong ties. Various recommender systems rely on the similarity of strong ties and the fact that technology keeps them in constant communication ensures that these similarities won't change drastically over time, making it easier to model.

"The medium is the message" - we've read about Marshall McLuhan's<sup>?</sup> views on technology while studying the approaches to new media. McLuhan said that technology itself shapes and controls the scale and form of human association. He also said that while we take a myopic view

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and process the messages, the medium brings in subtle changes to the society. In a way, he implied technological determinism - as in, technologies determine the social fabric of society. While we know that this is not entirely true, and there are various aspects of social shaping of technology to consider, the research by Palackal et al. shows that technology is indeed changing the social structure by reducing an individual's core network size. However, it is important to note that the structure has not changed to a modern never-seen-before entity. There is a continuity of pre-modern relations (Geser 2005) as mentioned in the paper. So essentially, we are reverting to a previous structure. We've seen in Davis and Chouinard's Affordance Theory<sup>4</sup> that an essential condition for affordance is the structural embeddedness of a user. As the data suggests, people are getting increasingly involved in only narrow strong ties - leading to them being further embedded in the same structure. This means that affordances that demand an alternate set of structural norms will not seep in quickly. Maybe this is the reason why strong core networks are prevalent even today - the new devices demanding an alternate structure are unable to break into the closely knit strong structures.

We've also looked into Karen Evans'<sup>5</sup> excerpt, who argues that technology has only enhanced the pre-existing relations and has not led to any significant change in community structures. Social networks only provide means to continue our offline interactions online and that only those who have good offline connections are connected online. She also reported that connections are getting more local. These views are in accordance with what we've discussed above - the structures are getting stagnated, and it is becoming increasingly difficult to seep into them. The empirical results provided by this paper are thus supportive of what we've studied in the course so far, and help us look deeper into the sociological concepts of social structures and continuity of technology in a much broader sense.

The trends of bounded solidarity are observed on social media too. I mostly interact only with my wingmates on a Messenger group, instead of interacting with a wider audience via Facebook. My "offline" interactions include talking to wingmates in their rooms, corridors or canteens, and it turns out my "online" interactions are dominated by chatting with wingmates too. The chat group somewhat transfers me to my wing, even if I am at some other location, thereby drying up any potential to form weak ties with people in the present location. When I started a Twitter account, I shared my thoughts via tweets with a wide audience, but eventually, I interacted more with a particular group of anonymous people. We exchanged numbers and created a WhatsApp group. From then on, my activity on Twitter greatly reduced, and what could've been potential tweets landed as texts on the group. There is a tendency to move towards platforms where strong ties are encouraged, as we value and cherish our strong ties more than the weak ones (offline or online). On the whole, we are catering to a nanoaudience instead of a global audience.

There are some perils of interacting only with strong ties. People find it difficult to participate in small talks with strangers and handle the gaucherie involved. It leads to the formation of echo chambers, leaving no scope for introspection. Inappropriate behavior is normalized, and you won't be questioned on the same . It is easy to develop information cascades and with strong network effects at play, we become extremely vulnerable to external agents that try to control our choices. Governments are trying to curb data flow to tech companies to ensure that such manipulation of users is ceased. While it is a laudable move, the findings of Palackal et al. show that mobile technologies themselves promote strong ties, which in turn act as precursors to echo chambers. If not by mining data, there could be other ways to manipulate users given they are stuck in such narrow ties. Maybe the paper provides a pointer to escape echo chambers - let's create technology to encourage more non-local and weak ties.

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