This week we differentiated between injunctive and descriptive social norms, and attempted to understand the complex interaction between norms and expectations. We saw numerous examples of poorly-crafted public messaging relating to social norms, and we enumerated best-practices to forestall the negative effects and improve compliance and uptake. I was intrigued by the social effects of observed norm violation, and by the effects of norm restoration on compliance. A major theme was that social norms frequently interact with expectations in opaque and counterintuitive ways, producing unintended effects.

Cialdini and Kallgren (1990) argue that there are two types of social norms that impact behavior: injunctive norms (what most others approve of) and descriptive norms (what most others do). They find that these norms can act antagonistically to one another, with impacts varying depending on whether the norm is salient (or primed) in a particular context. This priming can be accomplished by activating related, "nearby" norms, though the effect fades with distance. Interestingly, minor norm violation (a single piece of litter) can motivate norm restoration by increasing the norm's salience, but major norm violation (much litter) erodes compliance despite salience.

Cialdini, Demaine et al. (2006) conclude that public service messaging can unwittingly normalize either desirable or undesirable conduct, and that in the context of theft from national parks, descriptive normative information was most likely to increase theft, whereas injunctive normative information was most likely to reduce theft. In addition, they found that phrasing the message in negative terms focused attention, thereby increasing the size of the effect. It seems that optimal messaging would involve injunctive normative messaging phrased negatively.

Cialdini (2007) explored how to leverage norms to increase compliance with insurance regulations. He found that existing practice often inadvertently sends the message that noncompliance is common, activating the descriptive norm in undesirable ways. He proposes instead emphasizing the harm caused by even minor

violations and an injunction stressing the costs imposed on the group by violators. Crucially, people attribute compliance (or violation) to their own unmotivated choice, even in situations where environmental manipulation dramatically increases or decreases compliance. Increased compliance can be achieved by reframing negative descriptive information as positive descriptive information focused on a positive future that subjects will jointly achieve.

Schultz et al. (2007) studied the use of normative messaging to promote household energy conservation, finding that descriptive normative messaging detailing local energy use increased use for those below the mean and decreased use for those above it. Adding an injunctive message conveying either social approval or social disapproval eliminated the boomerang effect. Aarts and Dijksterhuis (2003) found that locations with well-established situational norms (such as libraries) can automatically activate those norms. Keizer et al. produce two related findings. First (2008), they found that when people observe norm violation, they are more likely to violate other (unrelated) norms, causing disorder to spread. Second (2013), they found that when subjects observed others actively restoring order and upholding prosocial norms, those subjects were more likely to follow such norms themselves.

Gelfand and Harrington (2015) examine motivations to obey or violate norms, finding that descriptive norms serve important epistemic, coordination and identity functions. They argue that descriptive norms will be most salient in situations of uncertainty or threat, of managing impressions, and of power and dependence. Chen and Hong (2016) add the proviso that because of differing beliefs concerning individual agency, the discrepancy between descriptive norms and injunctive norms may have different meanings across cultures. Gelfand (2018) speculatively divides the world into tight and loose cultures discerning a tradeoff that applies in many but not all cases. Some cultures, it seems, combine the benefits (or the drawbacks) of tightness and looseness. In an earlier study, Gelfand et al. (2011) found that tightness or looseness in a culture may relate to distal ecological threats such as resource scarcity or territorial conflict, socialization in societal institutions (broad or

narrow), and an impenetrable concept which the authors label "micro-level psychological affordances".

Much seems to hang on subjects' expectations of others' behavior. Bicchieri and Xiao (2008) modified the dictator game by exogenously priming dictators' expectations in the direction of either selfishness or fairness. They demonstrate that payoff-relevant information about others' actions has a significant effect on a dictator's own pro-social behavior. Information about what others would do (descriptive norms) can determine what we do. What others think (injunctive norms) can also determine our behavior, but only if we think they would actually do it. In other words, the injunctive norm must align with the descriptive norm to be effective.[1] Similarly, Kwan et al. (2015) find that mere exposure increases familiarity and boosts compliance. Weaver (2015) finds that norm violation is more common in disordered environments. O'Brien and Wilson (2011) determined that subjects are able to accurately assess safety conditions based on environmental cues, and that respondents incorporated those safety assumptions into local interactions. Nettle et al. (2014) found that experimental subjects unconsciously absorbed the trust levels of the environments in which they operate.

The human flair for simulation of the future greatly complicates predictions of behavior. Norms can lose their operative force instantly if we begin to suspect that others will not actually comply with them, and norms can arise spontaneously when we observe others struggling to impose or maintain order. Our expectations seem to play a crucial role by delineating those situations in which costly effort is "worth it". The fact that those expectations can be exogenously manipulated suggests a role for social engineering in norm formation, as tight societies like Singapore have explored. Gradual changes in expectations can explain sudden changes in behavior across whole communities. It remains to be seen whether this process can be consciously controlled to bring about social improvement.

[1] Of note, Bicchieri and Xiao use different labels for Cialdini's descriptive and injunctive norms, labelling the former "empirical expectations" and the latter "normative expectations".