Secrecy: Unshared Realities

Zaijia Liu and Michael L Slepian

Much of the social psychological literature considers how people engage with their social worlds. Shared reality theory proposes that people do so for one of two reasons: to connect with others, and to obtain others' perspectives and insights to understand the world around them. Although the literature on shared reality has focused on the ways in which people develop and maintain shared realities with those around them as well as the consequences of achieving such shared realities, we propose that a critical future avenue for this work is to explore what happens when people choose to not share realities. People do not always seek to share their experiences with close others, but sometimes keep secrets. We propose that while shared reality theory is founded upon why and how people connect with others, it can also make predictions for the mechanisms of secrecy and how it relates to well-being. Secrecy could thwart both relational motives and epistemic motives with harm to well-being by making people feel less connected to others, and by preventing people from obtaining others' insights and perspectives with respect to the secret. New theoretical insights would be gained from integrating research on shared reality with research on secrecy, and future work should investigate the intersection of the two.

Address
Columbia University, USA

Corresponding author: Slepian, Michael L (michael.slepian@columbia.edu)

Social psychological research often considers how people interact with their social worlds, examining how we think about social groups, when we seek friendship, romance or influence, when we discriminate or conform, and when we help or aggress. It has been suggested that the complexity of our cognitive architecture reflects the evolutionary challenges of maintaining social bonds in large and highly social groups, facilitated by communication and language [1]. Although communication and language certainly allow for the exchange of information, there are many instances in which one may choose to specifically conceal information. For any category of social relation (e.g., a friend, a romantic partner, a family member, a coworker), people do not only connect with such people, but they also sometimes hold back, and keep secrets. One might keep a traumatic experience secret from friends, conceal aspects of prior relationships from a romantic partner, keep one's finances secret from family, or conceal unsavory personal details from coworkers. Although it is well established that people seek to connect with others by sharing and disclosing personal information to reveal what they are like [2●,3●●], and share emotional struggles to facilitate recovery [4,5●,6,7●●,8], this is not always the social road we take. People also keep secrets from other people.

Secrecy

In a recent series of studies, Slepian *et al*. [9●●] asked 2000 participants about a secret that they were currently keeping, from which they derived 38 common categories of secrets. Providing thousands of new participants with the list of these 38 common categories of secrets, participants were asked if they had ever had the experience, and if so, whether they had ever kept it secret; 97% of the participants *currently* had at least one secret (from the common set of secrets), with the average participant having 13 of those categories of secrets, 5 of which they have never told a single person.

Prior work thus demonstrates that people often have many secrets, and the content of people's secrets converges on a set of similar themes (e.g., infidelity, finances, discontent, trauma, romantic desire, work; see the Common Secrets Questionnaire from [9●●]). Secrecy has also been linked to negative health and well-being [10,11,12●,13●●]. Yet, secrecy is arguably understudied. We suggest that this reflects the difficulty of bringing secrets into the laboratory. One cannot realistically or ethically randomly assign someone to cheat on their spouse and keep it a secret for several years. One can, however, measure the experience people have with such secrecy and related downstream outcomes (e.g., [14]). Thus, recent work has examined how people experience their real-world secrecy to gain traction on this issue. By measuring the experience people have with secrecy, and how this relates to well-being, subsequent studies can then experimentally shift those experiences to demonstrate causality.

Slepian and colleagues [9●●] examined two broad contexts in which people experience secrecy, (1) a secret can come to mind when one is in a social interaction where

concealment is required (i.e., active concealment), and (2) a secret can come to mind outside of a concealment context (i.e., mind-wandering to the secret). The researchers found that people far more often mind-wander to their secrets (outside of concealment contexts) than they conceal the secret in social situations. Additionally, when entering — as simultaneous predictors of well-being — the frequency of actively concealing a secret and the frequency of mind-wandering to the secret outside of concealment contexts, Slepian and colleagues [9••] found that the frequency of mind-wandering to secrets predicted lower well-being, whereas the frequency of concealing secrets had no independent effect on well-being.

Concealing a secret within a social interaction is certainly taxing [15••,16,17••,18], but far more frequently, the secret will spontaneously enter into one's thinking, even when not relevant to the context at hand. People likely anticipate that they will need to occasionally conceal a secret, but they may not foresee the frequency with which thoughts of the secret will come to mind unbidden. Having a mind that keeps wandering toward thoughts of a secret could be taken as a signal of some problem [19••,20,21••], whereas concealing a secret might instead feel like one is accomplishing one's secrecy goal. That is, the goal of a secret is to conceal when required. Occasionally concealment happens, and it is relatively planned for. Although taxing [15••], as long as one does not let the secret slip, active concealment constitutes successful goal pursuit.

The reviewed evidence suggests that the problem with having a secret may not be the mechanics involved in actively concealing it, but rather having to live with the secret, and having to think about it. In the current paper, we put forth new predictions about what makes having to live with a secret so difficult, drawing insights from shared reality theory [22••]. Having a secret may be harmful to well-being because secrecy promotes a feeling of being less connected to others (i.e., one is alone with the information), and also through feeling that one does not understand the secret well (i.e., without discussing it with others, one may not know what others think of the secret, may fail to develop a meaningful narrative around the secret, or lack a sense of how to productively think about the secret and cope with it). Before outlining our predictions in detail, we first review shared reality theory, and relevant findings on the development and maintenance of shared reality.

Shared reality theory
Shared reality theory [22••,23•,24] suggests that people are motivated to achieve alignment between their understanding of some aspect of the world with that of other people. Specifically, a shared reality is achieved when one's inner states (i.e., attitudes, feelings or evaluations) align with another person's [22••,25]. Simply happening to have similar inner states such as mood or physiological

responses would not constitute a shared reality; those inner states must be in reference to the same target. Shared reality theory proposes two broad motivations for seeking shared reality, epistemic motives and relational motives [22••,25]. Specifically, when people are motivated to gain a better understanding about the world around them (epistemic motives) or to feel more connected to other people (relational motives), they seek to achieve a shared reality with others.

The origins of shared reality theory stem from the saying-is-believing paradigm [26]. In one version of this paradigm, participants are required to describe the characteristics of a target person to an audience, and are led to believe that the audience either likes or dislikes the target person. Across multiple studies, research has shown that participants will tune their communication in line with an audience's expectations (see [22••,25]). Thus, a successful creation of shared reality involves communication with another person [27]. Moreover, achieving a shared reality can feed back to change one's cognitive representation of the target thought [22••,25,28–30,31•], even influencing one's memories of the original target information in a manner consistent with others' perspectives [22••,25,32–36].

People seek shared reality only to the extent it fulfills epistemic or relational motives. For instance, audience tuning effects are stronger for communication toward ingroup (vs. outgroup) members with whom participants are typically more interested in connecting [23•,24,33]. Likewise, people are more likely to align their view and message about a target with someone who shares the same status as them [22••,25]. Similar effects have been found for communicating with people who are more likeable or similar to the participant, people who would fulfill relational motives [37–40].

For epistemic motives, audience tuning effects only occur when an individual is trying to attain a shared understanding with others. For example, people no longer tune their communication to an audience when they are not trying to understand the other's perspective, but rather have some other goal (e.g., to entertain, to be polite [24]). Moreover, one's representation of a target is not biased toward an audience's perspective unless one believes alignment has been achieved [32]. Individual differences in seeking epistemic truth (e.g., need for closure) and experimentally induced epistemic uncertainty (e.g., ambiguity) lead people to more strongly tune their message toward audience expectations, and exhibit greater bias in memory toward those audience expectations [23•,25,33,41,42••,43].

Secrecy: unshared realities
As reviewed, people seek to create shared realities with others to become close and connected to other people,

thus fulfilling relational motives, or to learn from others to better understand the external world, thus fulfilling epistemic motives [22••,25]. In this way, creating shared realities with others allows people to survive in the complex and social world. Without social connections or an understanding of others' perspectives and views, people would be alone, lost, and ill equipped to navigate the complexities of our social world.

And yet, connecting with others and hearing their views is not always our goal. When someone feels that a piece of information, if it were to get out, would bring them costs, they may elect to keep it a secret. Research in shared reality reliably demonstrates the conditions that promote the seeking of shared reality (e.g., we seek to create shared reality with people we like or feel similar to [23•,24,37,38]). Likewise, the consequences of achieving shared reality have been well explored. For instance, upon creating a shared reality, cognitive representations and evaluations of the object of thought are altered [31•,32,33,39]. But what about the consequences of denying shared reality?

Prior work suggests that the harm of secrecy seems not to be a function of having to actively conceal a secret, but rather having to live with and think about the secret [9••,44,45]. Shared reality theory presents a lens through which to make sense of these findings. That is, while the goal of secrecy is to conceal information, and while such concealment is taxing [15••,16], concealment (when required during a social interaction) could be seen as being effective (i.e., accomplishing one's secrecy goal). Yet, the more a secret returns to one's thoughts, the more it might seem that a problem is arising from the secret, and shared reality theory suggests two such problems with having a secret. When thoughts of a secret come to mind, one may be reminded of (1) the ways in which the secret hurts relational motives (making people feel less connected to others), and (2) the ways in which the secret hurts epistemic motives (preventing people from obtaining others' insights and perspectives with respect to the secret).

Future research could explore the ways in which secrecy thwarts shared reality motives and how the attainment or lack of attainment of these motives relates to well-being. For example, having a secret on the mind from frequent mind-wandering might lead one to feel the secret is creating two problems, (1) thwarting relational motives (leading to feelings of isolation), or (2) thwarting epistemic motives (leading to uncertainty with the secret), both of which in turn should predict lower well-being. Likewise, the more one has the need to belong (seeking relational motives), or the need for closure (seeking epistemic motives), the more burdensome secrecy might be.

Alternatively, it could be that each experience with secrecy is associated with a distinct attribution of thwarted shared reality motives. For instance, mind-wandering to secrets outside of concealment contexts is often done outside of social interactions. Thus, the more a secret returns to one's mind when on one's own, the more one might feel alone with the secret (thwarted relational motives). In contrast, concealing a secret during a conversation might highlight that one is losing the opportunity to talk about the secret with that person, and thus losing a chance to obtain their perspective, insight, or guidance (thwarted epistemic motives). Future work should explore how the experience people have with secrecy relates to the attributions they make.

Additionally, shared reality theory may provide insight into the process behind confiding secrets in others [46,47]. Prior work finds that people confide in compassionate and assertive others, but not polite or enthusiastic others [48]. Thus, people may be more likely to selectively share secrets with compassionate individuals driven by empathic caring who would fulfill relational motives (rather than polite individuals who are more concerned with social norms and rules). People also selectively share secrets with assertive individuals, and perhaps this is because these are individuals who are willing to take action and help talk through the secret, which would fulfill epistemic motives (rather than enthusiastic individuals who merely enjoy social interactions). Research should explore whether distinct shared reality motives prompt different goals when it comes to confiding, and whether, in turn, this influences whom people confide in.

Conclusion
Secrecy prevents achieving certain shared realities with others. Correspondingly, secrecy should predict harm to well-being through preventing people from connecting with others, and through preventing people from obtaining others' insights and perspectives. The literature on shared reality has thus far focused on the ways in which people develop and maintain shared realities with those around them as well as the consequences of achieving such shared realities. We propose a critical future avenue for this work is to explore what happens when people seek to deny shared realities. A more comprehensive understanding of the nature of social connections and the processes behind their formation will likely require looking at what happens when people seek to sidestep those social connections. And likewise, a full picture of how people seek to verify their understanding of the broader environment will likely need to shed light on the darker corner of what happens when, rather than seeking or promoting the truth, people hold back the truth and keep secrets.

Conflict of interest statement

Nothing declared.

References and recommended reading

Papers of particular interest, published within the period of review, have been highlighted as:

- of special interest
- of outstanding interest

1. Dunbar RI, Shultz S: **Evolution in the social brain**. *Science* 2007, **317**:1344-1347.

2. Collins NL, Miller LC: **Self-disclosure and liking: a meta-analytic**
 • **review**. *Psychol Bull* 1994, **116**:457-475.
 A classic and comprehensive paper on the effects of self-disclosure.

3. Tamir DI, Mitchell JP: **Disclosing information about the self is**
•• **intrinsically rewarding**. *Proc Natl Acad Sci* 2012, **109**:8038-8043.
 This paper uniquely demonstrates the intrinsic reward value of sharing realities with others through self disclosures.

4. Curci A, Rimé B: **The temporal evolution of social sharing of emotions and its consequences on emotional recovery: a longitudinal study**. *Emotion* 2012, **12**:1404.

5. Nils F, Rimé B: **Beyond the myth of venting: social sharing**
 • **modes determine the benefits of emotional disclosure**. *Eur J Soc Psychol* 2012, **42**:672-681.
 This paper demonstrates the importance of the listener in effects of social sharing.

6. Rime B, Mesquita B, Boca S, Philippot P: **Beyond the emotional event: six studies on the social sharing of emotion**. *Cogn Emotion* 1991, **5**:435-465.

7. Rimé B: **Emotion elicits the social sharing of emotion: theory**
•• **and empirical review**. *Emotion Rev* 2009, **1**:60-85.
 This paper provides a comprehensive review social sharing of emotion.

8. Rimé B, Finkenauer C, Luminet O, Zech E, Philippot P: **Social sharing of emotion: new evidence and new questions**. *Eur Rev Soc Psychol* 1998, **9**:145-189.

9. Slepian ML, Chun JS, Mason MF: **The experience of secrecy**. *J*
•• *Pers Soc Psychol* 2017, **113**:1-33.
 This paper reveals which secrets people commonly keep, how common secrecy is, and the ways in which people experience secrecy and how they relate to well-being.

10. Frijns T, Finkenauer C: **Longitudinal associations between keeping a secret and psychosocial adjustment in adolescence**. *Int J Behav Dev* 2009, **33**:145-154.

11. Larson DG, Chastain RL, Hoyt WT, Ayzenberg R: **Self-concealment: integrative review and working model**. *J Soc Clin Psychol* 2015, **34**:705-774.

12. Pachankis JE: **The psychological implications of concealing a**
 • **stigma: a cognitive-affective-behavioral model**. *Psychol Bull* 2007, **133**:328-345.
 This paper provides an excellent review and model for the consequences of concealment.

13. Quinn DM, Chaudoir SR: **Living with a concealable stigmatized**
•• **identity: the impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health**. *J Pers Soc Psychol* 2009, **97**:634-651.
 This paper provides an elegant demonstration of the pathways through which one's experience of having a concealed identity predicts health.

14. Slepian ML, Bastian B: **Truth or punishment: secrecy and punishing the self**. *Pers Soc Psychol Bull* 2017, **43**:1596-1611.

15. Critcher CR, Ferguson MJ: **The cost of keeping it hidden:**
•• **decomposing concealment reveals what makes it depleting**. *J Exp Psychol Gen* 2014, **143**:721-735.
 This paper presents an elegant demonstration of the ways in which active concealment is taxing.

16. Newheiser AK, Barreto M: **Hidden costs of hiding stigma: ironic interpersonal consequences of concealing a stigmatized identity in social interactions**. *J Exp Soc Psychol* 2014, **52**:58-70.

17. Newheiser AK, Barreto M, Ellemers N, Derks B, Scheepers D:
•• **Regulatory focus moderates the social performance of individuals who conceal a stigmatized identity**. *Br J Soc Psychol* 2015, **54**:787-797.
 This paper demonstrates that concealment does not necessarily harm social interactions.

18. Lane JD, Wegner DM: **The cognitive consequences of secrecy**. *J Pers Soc Psychol* 1995, **69**:237-253.

19. Morewedge CK, Giblin CE, Norton MI: **The (perceived) meaning**
•• **of spontaneous thoughts**. *J Exp Psychol Gen* 2014, **143**:1742-1754.
 This paper demonstrates the special power that spontaneous thoughts and mind-wandering has on the perceived meaning of those thoughts.

20. Morewedge CK, Norton MI: **When dreaming is believing: the (motivated) interpretation of dreams**. *J Pers Soc Psychol* 2009, **96**:249-264.

21. Critcher CR, Gilovich T: **Inferring attitudes from**
•• **mindwandering**. *Pers Soc Psychol Bull* 2010, **36**:1255-1266.
 This paper demonstrates the ways in which people infer their own attitudes from mind-wandering behavior.

22. Echterhoff G, Higgins ET, Levine JM: **Shared reality:**
•• **experiencing commonality with others' inner states about the world**. *Persp Psychol Sci* 2009, **4**:496-521.
 A comprehensive and concise review of shared reality theory and its antedecents and effects.

23. Echterhoff G, Higgins ET, Groll S: **Audience-tuning effects on**
 • **memory: the role of shared reality**. *J Pers Soc Psychol* 2005, **89**:257-276.
 This paper demonstrates the ways in which achieving a shared reality can feedback and alter one's representation of a target thought.

24. Echterhoff G, Higgins ET, Kopietz R, Groll S: **How communication goals determine when audience tuning biases memory**. *J Exp Psychol Gen* 2008, **137**:3-21.

25. Echterhoff G, Lang S, Krämer N, Higgins ET: **Audience-tuning effects on memory: the role of audience status in sharing reality**. *Soc Psychol* 2009, **40**:150-163.

26. Higgins ET: **Achieving shared reality in the communication game: a social action that creates meaning**. *J Lang Soc Psychol* 1992, **11**:107-131.

27. Higgins E, Echterhoff G, Crespillo R, Kopietz R: **Effects of communication on social knowledge: sharing reality with individual versus group audiences**. *Jap Psychol Res* 2007, **49**:89-99.

28. Hardin CD, Conley TD: **A relational approach to cognition: shared experience and relationship affirmation in social cognition**. In *Cognitive Social Psychology: The Princeton Symposium on the Legacy and Future of Social Cognition.* Edited by Moskowitz GB. Erlbaum; 2001:3-17.

29. Hirst W, Echterhoff G: **Remembering in conversations: the social sharing and reshaping of memories**. *Annu Rev Psychol* 2012, **63**.

30. Kopietz R, Echterhoff G: **Remembering the 2006 Football World Cup in Germany: epistemic and social consequences of perceived memory sharedness**. *Memory Stud* 2014, **7**:298-313.

31. Boothby EJ, Clark MS, Bargh JA: **Shared experiences are**
 • **amplified**. *Psychol Sci* 2014, **25**:2209-2216.
 This paper demonstrates how shared experiences can influence evaluations of a target thought.

32. Hausmann LR, Levine JM, Tory Higgins E: **Communication and group perception: extending the saying is believing effect**. *Group Processes Intergroup Relat* 2008, **11**:539-554.

33. Echterhoff G, Kopietz R, Higgins ET: **Shared reality in intergroup communication: increasing the epistemic authority of an out-group audience**. *J Exp Psychol Gen* 2017, **146**:806.

34. Kopietz R, Echterhoff G, Niemeier S, Hellmann JH, Memon A: **Audience-congruent biases in eyewitness memory and judgment: Influences of a co-witness' liking for a suspect**. *Soc Psychol* 2009, **40**:138-149.

35. Kopietz R, Hellmann JH, Higgins ET, Echterhoff G: **Shared-reality effects on memory: communicating to fulfill epistemic needs**. *Soc Cogn* 2010, **28**:353-378.

36. Stone CB, Barnier AJ, Sutton J, Hirst W: **Forgetting our personal past: socially shared retrieval-induced forgetting of autobiographical memories**. *J Exp Psychol Gen* 2013, **142**:1084.

37. Sinclair S, Huntsinger J, Skorinko J, Hardin CD: **Social tuning of the self: consequences for the self-evaluations of stereotype targets**. *J Pers Soc Psychol* 2005, **89**:160-175.

38. Sinclair S, Lowery BS, Hardin CD, Colangelo A: **Social tuning of automatic racial attitudes: the role of affiliative motivation**. *J Pers Soc Psychol* 2005, **89**:583-592.
This paper provides an excellent example of how shared reality motives shape consequential social processes.

39. Pinel EC, Long AE, Landau MJ, Alexander K, Pyszczynski T: **Seeing I to I: a pathway to interpersonal connectedness**. *J Pers Soc Psychol* 2006, **90**:243-257.

40. Echterhoff G, Kopietz R, Higgins ET: **Adjusting shared reality: communicators' memory changes as their connection with their audience changes**. *Soc Cogn* 2013, **31**:162-186.

41. Echterhoff G, Higgins ET: **Creating shared reality in interpersonal and intergroup communication: the role of epistemic processes and their interplay**. *Eur Rev Soc Psychol* 2017, **28**:175-226.

42. Higgins ET, Pittman TS: **Motives of the human animal: comprehending, managing, and sharing inner states**. *Annu Rev Psychol* 2008, **59**:361-385.
••
This paper provides a comprehensive review of the function and mechanisms of epistemic motives.

43. Pierucci S, Echterhoff G, Marchal C, Klein O: **Creating shared reality about ambiguous sexual harassment: the role of stimulus ambiguity in audience-tuning effects on memory**. *J Appl Res Mem Cogn* 2014, **3**:300-306.

44. Slepian ML, Camp NP, Masicampo EJ: **Exploring the secrecy burden: secrets, preoccupation, and perceptual judgments**. *J Exp Psychol Gen* 2015, **144**:e31-e42.

45. Slepian ML, Masicampo EJ, Galinsky AD: **The hidden effects of recalling secrets: assimilation, contrast, and the burdens of secrecy**. *J Exp Psychol Gen* 2016, **145**:27-48.

46. Slepian ML, Greenaway KH: **The benefits and burdens of keeping others' secrets**. *J Exp Soc Psychol* 2018. in press.

47. Slepian ML, Moulton-Tetlock E: **Confiding secrets and well-being**. *Soc Psychol Pers Sci* 2018. in press.

48. Slepian ML, Kirby JN: **To whom do we confide our secrets?** *Pers Soc Psychol Bull* 2018 http://dx.doi.org/10.1177/0146167218756032. in press.