Sharing values and social ontology

Claims about shared values are relatively common in political discourse: Democratic societies value freedom and equality; Americans value freedom from state interference in religion; The Marines value loyalty, fidelity, and faithfulness; the Teamsters value craft seniority; and the Zapatistas of Chiapas stress the value of indigenous practices of walking together. In spite of their prevalence, these assertions about things that we value together remain somewhat mysterious. Are they attempts to explain a group's behavior? Are they values that individuals typically adopt *qua* group members? Or are they something else all together? Our aim in this paper is to explore the nature and normative status of shared values, in hopes of getting clearer about these issues.

We begin by asking how values emerge within different kinds of groups, and examining how shared values guide and stabilize collective action. We argue that shared values vary along several dimensions, including their centrality to shared projects, the degree to which they are actively cultivated, and the extent to which group members have control over revisions to these values. But we suggest that simple forms of evaluative learning can help to explain how shared values with different deontic statuses emerge in different kinds of groups, as well as how those values can come to have stronger normative weight than individual values. In section 3, we then turn to the effect of the etiology of shared values, and we argue that the means by which shared values are cultivated will have a significant effect on the uptake, ownership, stability, and revisability of shared values. By focusing on the U.S. Military and the Zapatista movement in Southern Mexico, we explore the patterns of costs and benefits that emerge when shared values are passed downward from the top of a group, and when they bubble-up through local patterns of engagement. Finally, we close by briefly considering whether shared values are likely to place the strongest normative constraints on individual action when there is a reciprocal dependence between individual values and collective interests and if so, what the implications of that fact for non-ideal theories of collective action might be.

1. Minimally sharing values

Assumptions about shared values play a significant role in the coordination of many kinds of group behavior, as well as the allocation of common resources. The assumption that a potential cooperative partner has similar values can provide a starting point for thinking and acting together. And where values are likely to diverge, a better understanding of shared values can sometimes foster increased empathy in political debates, as well as more successful concessions across divergent demographics. But in many cases values are shared only minimally and indeed quite passively, with individual values remaining central to ongoing coordination. Our goal in this section is to explore how these types of values emerge, and guide group behavior.

Consider three cases where divergent values have evoked disputes over land-use in Yellowstone National Park and the surrounding areas (*The Economist* 2015). Cattle ranchers who want to protect the safety and stability of their herd have clashed with ecologists who want to restore the ecological stability through the reintroduction of gray wolves as apex predators. Snowmobilers who want unfettered access to public roads have clashed with animal activists who are concerned with the negative impacts of noise and exhaust pollution on wildlife. And cattle ranchers who want to prevent the spread of brucellosis through their herd have clashed with environmentalists over the preservation of the roaming rights of the remaining herds of American bison.

Different values commonly arise within these demographics, and the disputes often result from conflicts between these divergent values, or from the different weights that people place on the values that they share. Environmentalists and ecologists tend to privilege the values of ecological diversity and stability, favoring these values even when they conflict with the economic interests of cattle ranchers, or with the snowmobilers interests in access to public space. Animal activists typically privilege the value of animal welfare and the preservation of natural habitats. And ranchers and snowmobilers tend to privilege the value of liberty, property rights, and access to public lands; as a result, they are often suspicious of interventions by the federal government and environmentalists, who are generally regarded as intruders imposing their own values from the outside of a closed community (Farrell 2015: 108-113).). Importantly, background regularities play a critical role in the nature and structure of these minimally shared values. Ranchers raise cattle under

varying economic conditions, with varying levels of access to common resources, so they tend to converge on values that will sustain their livelihood. Likewise, snowmobilers are not drawn to the sport because they value access to public lands, but shared values emerge because they need wide open spaces to enjoy their chosen hobby. The vast majority of values are shared in at least this minimal sense: they emerge reflexively through a process of cultural and social attunement, as evaluative learning processes provide us with an intuitive sense of which things we should value, and which ends we should pursue (cf., Railton 2014).[1]

A more accurate understanding of these minimally shared values can improve political discourse, so long as we remember that the values that shape these debates are the values of particular individuals (Farrell 2015). A rancher can abandon some minimally shared values without ceasing to be a rancher. And where this happens, others need not follow their lead. Similarly, environmentalists and ranchers alike can dismiss an environmentalist rancher as a statistical anomaly. Yet that anomaly may nonetheless affect the distribution of values among ranchers and environmentalists, as people begin to see new values as available alternatives (cf., Shotwell 2009). In each case, the social diffusion of new values arises through variations in the prevalence and distribution of individual values. As cultural learners we preferentially imitate in-group members whose beliefs are backed up by 'credibility enhancing displays'; and where the people who belong to the same groups or demographics as us dedicate time and effort to acting in accordance with particular values, we tend to see their behavior as an honest signal that we should value these things as well (Henrich 2009; Norenzayan & Gervais 2013). Consequently, while the existence of shared values does not fully explain why particular members of a demographic the values that they do, the prevalence of shared values does explain why individuals who happen to have particular values act together to preserve what they perceive to be valuable. In other words, the social significance of these minimally shared values depends on their role in individual thought and behavior.

Note, however, that this analysis does not imply that minimally shared values are epiphenomenal. They shape social practices, affect individual patterns of action and deliberation, and frame the way that members of particular demographics perceive salient features of the world. And they do so by guiding the behavior of group members *qua* group members. As a result, changes in background conditions can influence the values that individuals possess, and endorsing values as shared can reinforce one's identity as a group member (see Marcos 1996b/2001). Once in place, shared values can in turn provide structure for future activities. So even minimally shared values can come to have a greater significance than analogous individual values. Finally, because we attune to the behaviors of people around us, minimally shared values can influence background regularities rather than merely being influenced by them. By acting in ways that converge with the actions of other group members, we therefore drive the entrenchment of shared values and increase their pervasiveness; and this pattern of reinforcement can make it harder to diverge from the expression of such values.

---

[1] Recognizing that values are often shaped by background social structures helps us to ground an analysis of minimally shared values in the rapidly expanding consensus that we are self-guided learners who rely on three types of learning systems to encode representations of our evaluative landscape, and to make ongoing evaluative decisions (Crockett 2013; Cushman 2013; Huebner 2012; Seligman et al 2013). First, Pavlovian systems generate evaluative expectations about the rewards and threats that we are 'biologically prepared' to learn about (Cummins & Cummins 1999; Rescorla 1988; Seligman 1971). These evaluative representations are the foundation for our evaluative maps of the world. Second, forms of model-free learning produce evaluative expectations that link *our actions* to these same rewarding or aversive outcomes, and this allows us to become sensitive to the presence of a much wider range of reward-predicting stimuli (Glimcher 2011; Liljeholm & O'Dougherty 2012; Schultz, Dayan, & Montague 1997). Together, these mechanisms attune us to the patterns of risks, rewards, and opportunities we are most likely to encounter; and while we encounter subtly different aspects of the world, in different affective states, with different expectations, these self-correcting forms of evaluative learning allow us to track stable patterns in the normative structure of our world (Railton 2014). Perhaps most importantly they attune us to stable patterns of social norms and regularities, treating conformity as intrinsically valuable, and deviance from shared practices as an error to be corrected (Klucharev et al 2009, 2011; Milgram & Sabini 1978; Montague 2006). Finally, we posses model-based systems that are anchored by these more basic forms of evaluative representation, but which allow us to plan for the future and imagine what might happen before we act (Fitch & Martins 2014; Seligman et al 2013). These three systems operate in parallel, influencing thought and behavior through their collective dynamics (though noisy and stressful environments push us to rely more heavily on model-free and Pavlovian processing). And as information flows through these systems, they produce semi-determinate, value-laden maps of the world we inhabit; and our values thus come to reflect our assumptions about what is likely to happen as we act (Haas in prep; Huebner 2016; Kishida et al 2015). We contend that these value-laden maps provide us with a background of minimally shared values that can help to stabilize local forms of cooperation and deliberation.

This process of evaluative learning yields a problem within social ontology: minimally shared values arise in the absence of structured collective action, and since the individual remains the sole locus of valuation, minimally shared values are difficult, if not impossible to revise in a goal-directed fashion. The only way to change them is by modifying the structural conditions that give rise to them, or by generating a large-scale shift among the individuals that happen to share them. And the patterns of reciprocal feedback between individual values and structural regularities make such changes exceedingly unlikely. That said, some forms of collective deliberation and collective action may be able to help us to discover preferable values, or at least values that we can all agree to. And where the groups that we belong to provide us with reasons to value particular actions, and where they provide us with an evaluative learning environment where we can learn to expect that people will behave in accordance with preferable values, more actively shared values can provide the foundation for a form of evaluative bootstrapping (cf., Huebner 2016; submitted), a topic to which we turn in the next section.

2. Actively Sharing Values

Values are often shared more actively within well-structured groups. And group members often use such values intentionally to coordinate their behavior in light of group-relevant goals. Frequently, such values can come to play a critical role in the pursuit of ends that are constitutive of group membership. And where values are actively shared and managed, ongoing forms of collective decision-making can open up novel opportunities for evaluative revision. Where this goes well, the values of a group fall into alignment with the needs and interests of group members; and the resulting values can then guide forms of group behavior that accord with the values that the group has taken on. In this section, we examine three kinds of shared values that are cultivated within groups to constitute a shared background against which shared plans can be implemented. In each case, we find that shared values are internalized by individuals and routinized as guiding aspects of shared-practices, through a process that shares much in common with the kinds of evaluative learning that we discussed in the last section.

More specifically, we argue that values can come to be entrenched within a group though at least two distinct practices of normative shaping. First, the organizational structure of a group can generate evaluative expectations. These expectations are internalized by members and become common knowledge within the group. The members of an academic department, for example, may come to expect that they will all behave in ways that are sensitive to group-relevant practices. Once this expectation is in place, and once it is common knowledge that department members have this expectation, the human preference for conformity will generate internalized motivations to pursue this shared value (Klucharev et al 2009, 2011; Milgram & Sabini 1978). Second, the members of a group can decide that they will punish patterns of deviance, either by engaging in forms of active social shaming, or by excluding those who fail to give uptake to shared values. Members of a department may sanction a new colleague who fails to adopt a shared value, or who fails to act in accordance with it. As a result, actively shared values may come to play a constitutive role in guiding the behavior of individuals *qua* group members, and group members who deviate from these values can reasonably be criticized for acting in ways that are inconsistent with the values of the group. So long as a department continues to view something as a constitutive value of group membership, sanctions are likely to play an important role in coordinating group decision making, and sustaining the norms governing group membership (Henrich & Boyd 2001).

To see what this amounts to, consider a philosophy department that values intellectual and ideological diversity (Huebner & Hedahl submitted). Each department member might research different cultural and philosophical traditions, develop strategies for making their courses less colonialist, and discuss philosophy with people who have been trained outside of the Anglo-European tradition. These values may then ground individual practices of syllabus design and affect individual teaching strategies. But to be the values of the department, and not just the values of individual faculty members, these shared values must also influence, and be influenced by, department-relevant decisions that are not straightforwardly reducible to the decisions of individual group members (cf., List & Pettit 2011). This can occur either because department members expect one another to make particular kinds of decisions, or because people who deviate from shared practices are excluded from future decision making. But once these values are in place, they will

underwrite hiring plans as well as course offerings, and their impact will play an ongoing role in shaping the department. For example, job candidates will have to evaluate their willingness to adopt this value, treat as a reason for acting, and perhaps even abandon antecedent conflicting values. And this will be because the group values intellectual and ideological diversity.

Sometimes, shared values like these will be tightly coupled to group membership and group identity. As a result, revisions will be unlikely. For example, when a diversity committee is convened at a university, we should be able to predict with a high degree of certainty that the members of this committee will see the value of curricular diversity as essential to group membership. Such predictions should also be highly robust, as people who abandon this value should be unlikely to remain as members of this committee, and the centrality of this value to group membership should explain why new members will always share it. Finally, patterns of interpersonal feedback and criticism that are established by the orienting goals and values of this committee should make it difficult to modify this value without radically changing the nature of the group, or perhaps even dissolving it. (We acknowledge that many such committees are convened in name only, hence the use of the modal auxiliary 'should').

In other cases, however, it will be possible for a group to shape its shared values in an ongoing way, so long as such changes accord with the organizing principles upon which a group is founded. In cases of top-down control, for instance, values that are adopted by a leader (e.g., the department head, the college dean, or the provost), may be passed to group members through centrally organized patterns of training and criticism. This process can be highly effective where someone in a position of power has a clear sense of which values are preferable (or where they acquire such a sense from the decisions of a well-functioning diversity committee); and patterns of institutionalized sanctions, as well as robust forms of training, can be used in such cases to modify the values of individuals. By contrast, cases of bottom-up evaluative control rely on forms of interpersonal communication, criticism, and unsupervised forms of mutual adjustment to entrench new values through forms of social learning. This approach is probably more common in academic settings, and it can be successful where there is a robust and stable enough agreement within a group about what the right values should be. So long as individuals privilege conformity with the group over conformity with the broader society, new values can become stable in such groups. As members enter and leave a department, and as external pressures compel changes in departmental policies and practices, goal-directed decisions can be made collectively, which will change the values that are constitutive of group membership. But significantly, these shifts will always arise as a result of shared decisions to collectively adopt and support department-level policies that will lead to the cultivation of such values.

Finally, forms of value-shaping can occur in ways that affect dynamic patterns of collective action, as well as forward-looking forms of activity for the members of a group. For example, a roller derby team might decide to value defensive fundamentals above all else. The coaches on this team might influence the team's behavior by taking these values into account as they create practice agendas, provide feedback to skaters, and create competitive line-ups. As a result, individual skaters will internalize values that privilege defensive fundamentals; and once the prevalence of these new values became common knowledge, the members of the team would adjust their priorities in light of the values of their teammates. Through the endorsement of these values, group members will begin to play a more robust role in stabilizing the values that guide joint-activities; as a result, the psychological pressures to preserve interpersonal consistency will increase in ways that sustain forms of means-end coherence that are structured around group-relevant activities (Bratman 2014; Pacherie 2012). Individual values can thus become shared values because of their role in the guidance of team behavior. Minimally, this might mean that individual team members reliably privilege shared values when deciding about individual team-related behavior, such as whether to spend a free night devoted to their fitness, focusing on their skating skills, or watching footage of future opponents. But more robustly, such values can also influence how the team practices, what plays are called, and how team members play together in ways that are responsive to real-time variations on the track (This difference becomes particularly salient in this particular example since roller derby is one of the only sports in which both teams play offense and defense *simultaneously*). The upshot is that actively shared values can often become normative standards against which individuals calibrate their own patterns of valuing and they can thereby influence individual behavior, coordinated behavior, and collective behavior as well.

3. Etiology and normative status

With this background in hand, we turn in this section to a deeper examination of the psychological and normative effects of different strategies for producing and propagating shared values within a group. As noted previously, some values originate as decisions made by group leaders, and then spread through top-down forms of value-management. Even where values begin at the top of a group, however, we contend that mechanisms of cultural and social attunement provide the key mechanism by which individuals come to share them. On the other hand, shared values can emerge as common patterns of valuing, and then spread through bottom-up forms of social pressure and correction, which are exerted to sustain conformity with shared values. In this section, we analyze how different difficulties are likely to arise in groups that privilege top-down over bottom-up flows of evaluative representations, and *vice versa*. Moreover, we consider how the direction in which shared values flow will often affect patterns of internalization, as well as the conditions under which revision is likely to take place. To do so, we analyze two case studies that lie on opposite ends of this spectrum. First, we consider the U.S. military, in order to evaluate shared values that are instilled from the top-down. Second, we examine the Zapatistas of Chiapas in order to consider an attempt to instilled shared values from the bottom-up.

3.1 Top-Down Values: The U.S. Military

There is perhaps no better example of how values are propagated in a hierarchically organized, top-down structure than the U.S. Military. In fact, there are very few institutions that talk about values as much as military organizations. West Point preaches "Duty, Honor, Country" (Ambrose 1999); the U.S. Army has codified the values of "Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage"(Kusch 2011); the U.S. Navy proclaims core values of "Honor, Courage, and Commitment"(Core Values Charter 2007); the U.S. Air Force has the core values of "Integrity first, Service before self, and Excellence in all we do"(Little Blue Book 1997); and the Marine motto "*Semper Fidelis* "(always faithful) expresses a shared value as well.

Some of these values are minimally shared by service members, at least initially. For example, people in the military tend to value things like honesty and integrity. Perhaps unsurprisingly, the possession of these values is not entirely contingent. The military focuses recruitment efforts on individuals that antecedently posses these values, as military missions often require actions that align with these values. But more importantly, the military stresses the significance of these values in the forms of drilling, training, and explicit evaluative education that service members take part in. But there are two things to notice about these values. First, the shared values of the military emerge through the deliberations and commitments of people in positions of power. So they must first be set out explicitly as values that can be passed downward through forms of training and teaching. At least initially, many of these values will begin as abstractly posited values; but importantly, new recruits must be able to acquire these values rapidly and reliably, and they must do so in ways that allow these values to play a role in coordinating behavior in situations that induce high levels of stress and enormous cognitive loads. This process offers a key insight into the mechanisms by which these values are entrenched. Since we tend to act habitually in situations of high stress and high cognitive load, deeply entrenched forms of evaluative cognition must be generated (Crockett 2013; Schwabe & Wolf 2013). As a result, training must occur in a way that can inculcate shared values that will guide habitual forms of behavior. And to overwrite habits that would prove problematic in these situations, training must occur in a way that prevents the kinds of environmental conditions that would lead trainees to backslide into previously accepted values. Whatever one thinks about the flaws of the training that one finds in the U.S. Military, it provides one of the few examples of a highly controlled environment where shared values can successfully be inculcated into group members in a rapid and reliable fashion. But this might seem merely to generate individual values that are deeply held; so, one might wonder what is it that makes these values collective?

These values often display their collective character when they are contravened. In recent memory, for example, Army Brigadier General Jeffrey Sinclair was accused of sexual assaulting a subordinate and threatening to kill her (Zucchino 2014), a contractor in Southeast Asia bribed scores of Naval Officers in order to increase his own business interest (Whitlock 2016), and Air Force missiliers were caught texting each

other answers to proficiency exams (Cooper 2014). After these types of incidents, individuals are held accountable for their misdeeds and leadership typically promises a re-dedication to values and ethics (Wong & Gerras 2015). This often takes the form of an increased focus on rectifying the deficiencies of individual moral values, through shifts in patterns of recruitment, retention, and training. In light of our arguments above, the reason for this should be clear: The military takes these failures to reveal problems with individually-held, but nonetheless shared values. Where such values are lacking, this reveals either an individual failure, or a failure of the training regimen that should have cultivated the appropriate values. And with values like honesty, fidelity, and commitment, the U.S. military acts to manage the possession of these individual values from the top-down. Perhaps ironically, in doing so, these values become more collective in their nature, as they are further shaped by the collective practices in which they operate. While honesty and fidelity are values typically possessed by *individual* members of the military, they are nonetheless intentionally cultivated, shaped, and entrenched through a training program that is subject to group level pressures; and this is significant, as these training programs can be altered when empirical evidence indicates that members aren't acting in accordance with those values. As the military tries to assess training programs and alter them to properly inculcate the desired results, values become integrated into ongoing collective efforts, and thereby become more actively shared values.

These values become even more robustly shared when leadership also takes an interest in shaping the background conditions, such that individual actions are more likely to be aligned with shared values. Consider, for example, difficulties with Iraqi Security Forces as the U.S. forces have tried to transition out of that country. While the exact number of desertions, defections, and outright refusals to fight remains unclear, it is clear that in several recent incidents, thousands of Iraqi Security Personnel either refused to fight or abandoned their post (e.g., in the Battle for Bashra in 2008 [Cordsmen & Mausner 2009, 24] and fights with Daesh forces in Mosul in 2014 [Fahim and Al-Salhy 2014]). Regardless of whether the problem involves some deficiency of individual virtue, it would be incredibly shortsighted of leaders not to seek out the systemic conditions that made such displays more likely. In fact, in the wake of these incidents, military leaders concluded that it is almost impossible to separate questions about individual courage and fidelity from questions about planning, training, leadership, and the background conditions in which courage and fidelity must be displayed (Cordsmen and Mausner 2009, 25-26). The value of courage is thereby a more robustly shared value because failures lead not only to a change in training and recruitment, but also a change in collective behavior in an attempt to make such failures less frequent.

Finally, values can become even more robustly shared when top-down structural mechanisms make collective action in alignment with those values more likely. The structural mechanisms that guide and sustain the valuing of military strategic thinking is a great example here, for unlike honesty and fidelity, strategy is not treated as a matter of individual virtue alone. Individuals are responsible for knowledge of doctrine and for valuing strategy; and individual service members are routinely reminded of the importance of the knowing doctrine and precepts of strategy. In the United States, for instance, both are stressed heavily as part of the core educational experience at Senior Service Schools (Joint Pub 1 2013). In addition, there are structural requirements that ensure that the organization *itself* will possess these values. In large military bureaucracies, the ability to align individual actions with the overarching strategy and doctrine is paramount. Military doctrine thereby explicitly requires strategic thinking that is integrated with, and unified across, individual actors, and across different subgroups within the larger collective endeavor. According to joint doctrine, military strategy requires, "a comprehensive approach that synchronizes, coordinates, and when appropriate, integrates military operations with the activities of other governmental and nongovernmental organizations to achieve unity of effort" (JP 3-0 I-8). And large military bureaucracies thereby aim to entrench this form of strategic thinking as a robustly shared military value.

3.2 Bottom Up Values: El Movimiento Zapatista

While there is a military presence among the Zapatistas of Chiapas, their theoretical and practical orientation couldn't be more different from what we find in the US Military. Indeed, there is perhaps no better example of how values are propagated upward in a decentralized system than we find among the Zapatistas. Subcomandante Marcos (1995/2001, 269), for example, summarizes their core values as follows:

"we want, for all the men and women of this country, and of the entire world, three things which are fundamental for any human being: democracy, liberty, and justice" including "the right to have a good government, the right to think and act with a freedom which does not imply the slavery of others, the right to give and receive what is just". More generally, the Zapatistas see themselves as participants in a shared struggle to entrench these values through democratic practices that require consulting everyone who is affected by a decision or a policy (Marcos 1996a/2001, 118). By employing radically democratic processes they cultivate robustly shared values that are continually reinforced, and which can guide local forms of decision making that allow them to address many of their most pressing economic and social problems (Starr et al 2011, 103).

Over the past twenty years, the Zapatistas have also developed a collective and relational understanding of autonomy, which they see as an expression of dignity. The value of dignity is learned through practices of democratic engagement, and forms of prefigurative practice designed to decolonialize individual psychologies, and thereby entrench forms of self-respect that help them to see one another as normative equals. But the key thing to notice is the bi-directional flow of information between democratic practices and the valuing of dignity: neither can exist without the other, and each sustains the possibility of the other. Put differently, dignity is an individual value that sustains collective practices, and the resulting collective practices are grounded on the pursuit of social equality and the cultivation of deeply shared goals and values. As with the case of honesty and integrity among members of the US military, these distinctive ways of valuing dignity come to be shared through a process of internalization, which is grounded in shared background assumptions, as well as locally prevalent normative practices. But this form of dignity is not something that can be studied abstractly, "you live it or it dies, it aches inside you and teaches you how to walk" (Marcos 1995/2001, 269). And thinking about what this means offers insight into the mechanism by which it becomes entrenched at the individual level.

Consider an early communique that examines the process through which Zapatista values are cultivated, and through which they come to be shared. Strikingly, this process looks a lot like the forms of social learning and internalization that we have discussed thus far. Marcos (1996b/2001, 11) asks readers to imagine a woman who "struggles for democracy, liberty and justice, the same as the Zapatistas" but who is not yet recognized—by herself or by anyone else—as a Zapatista; day after day, she struggles for equality and dignity within her family and her culture. Her struggle is her own. But through it, she eventually learns to treat Zapatista values as her own values; this happens as she begins to see the import of these shared values for her ongoing behavior; and at this point she finds herself saying, as the other Zapatistas already do: *¡Ya basta!*

> "At first she is surprised at her own words, but later, based on the strength of repeating them, and above all, living them, she stops being afraid of them, being afraid of herself. She is now a Zapatista, she has united her destiny to that of the Zapatistas in that new delirium which so terrorizes political parties and the intellectuals of the Power, the Zapatista Front of National Liberation." (Marcos 1996b/2001, 11)

In one respect, the presence of these Zapatista values is not new, and they are no less her own because they are shared. But by recognizing that they are shared values, and that she is part of a *shared struggle* against structural exclusion and marginalization, she can come to see the Zapatista movement as a "mirror of her rebellion, of her hope" (Marcos 1996b/2001, 11). Put differently, as her values to become shared values, she gains the ability to treat herself as part of a collective struggle for dignity. And the cultivation of shared values from the bottom-up fosters a deep feeling of ownership over these values.

Like the top-down values of the military, the bottom-up values of the Zapatistas often come to be much more robustly shared than this initial example seems to suggest. And the reason for this derives from the fact that the Zapatistas engage in practices that are designed to shift the relevant background regularities in ways that will lead people to occupy a new normative space; this in turn fosters the cultivation of equality and democracy, yielding a process of social bootstrapping that is based on patterns of feedback between individual values and collective practices. Through this process, individual Zapatistas come to recognize that they have a right to create a better world *together with other Zapatistas,* by struggling to entrench shared ideals of democracy, liberty, and justice. Across a variety of interactions, ranging from *escuelita* to public communiques,

from local deliberations to interactions with the Mexican government, the Zapatistas strive to cultivate forms of dignity and equality, as well as a corresponding willingness to listen to others, all of which makes this kind of social bootstrapping possible. In fact, they frequently argue that these values are the only plausible foundation upon which democratic practices can be built.

Importantly, these are not just empty words, or explicit claims about values that are never entrenched in practice. The Zapatistas have built institutions that are designed to foster health and education, and they have set up "training opportunities for youth who would otherwise have to migrate in search of paid work" (Starr et al 2011, 106). As a result, skilled labor now comes predominantly from inside the community, and does so in ways that tend to strengthen local economies. They have also developed a far more democratic local economy, which is centered on workers agricultural cooperatives (to reduce dependence on imported chemicals and seeds), as well as workers cooperatives for producing clothing, and crafts, and transportation cooperatives for moving goods and people. The distinctively form of dignity also facilitates forms of democratic self-determination that have allowed the Zapatistas to establish and enforce local policies (e.g., their ban on alcohol consumption) and to carry out interactions with outside organizations such as the Mexican military and foreign charities (Starr et al 2011, 112). In each case, the shared values that undergird these practices are explicitly understood as constitutive of group membership, even though they always emerge from the bottom, and percolate up through patterns of mutual engagement to yield patterns of ongoing and coordinated activity. And in each case, goals emerge from a desire to maintain local control over available resources, and to do so in ways that unseat neoliberal ideology.

Finally, it is important to note that shared Zapatista values are managed exclusively by communal forms of social control. The core mechanism for the cultivation of shared values derives from the sense that other Zapatistas are to be trusted, as they share similar values and commitments. "When a family demonstrates commitment through practice (quitting the government programs, not sending its children to the government school, etc.), it is a trusted member. When it abandons this practice, it is trusted no longer; it is no longer Zapatista." (Starr et al 2011, 114). And within these groups where members trust one another and listen to one another, backward-looking forms of punishment have been replaced with forward-looking forms of sanction that serve to deepen, rather than compromise group membership. Put differently, they retain the communicative and exhortative function of blame as constitutive of forward-looking practices of behavior-shaping and value-shaping; but they set aside the appraisal functions of blame that tend to dominate contemporary liberal approaches to responsibility (cf. Zheng 2016). Consequently, even the most robust forms of punishment are designed to highlight shared values of equality and dignity. 'Punishment' typically takes the form of increased contributions to the community (e.g., by planting trees, building schools, of working on material infrastructure that is necessary for community flourishing); and these forms of 'punishment' are temporary and followed by a full return to community membership without a criminal record (though in extreme cases, permanent expulsion from the community can occur; cf., Starr et al 2011, 106).

3.3 Changing values

Despite numerous differences between the values of the U.S. Military and those of the Zapatistas, we contend that the conditions under which novel shared values emerge are similar in these two groups. As we argued in Section 2: 1) the groups to which we belong often provide us with reasons to value particular things; and 2) the groups to which we belong often provide an environment where we can cultivate novel shared values. In each of these cases, shared values emerge as patterns that are extracted from shared background assumptions, and they are built upon a foundation of existing patterns of evaluative reasoning. And in each case, a form of social bootstrapping operates through feedback relations between individual values and shared values. In light of our arguments thus far, we thus suggest that the cultivation of shared values requires: 1) a foundation to build upon (e.g., antecedently shared values, goals or interests), 2) a way of discovering points where new values should be cultivated, and 3) a method for integrating new values into ongoing group behavior. Unsurprisingly, differently structured groups tend to satisfy these constraints in different ways.

As the Zapatista movement has evolved, for instance, it has had to adapt to changes in the economic and political landscape of Mexico that would have been unpredictable when the movement went public in 1994. The Zapatistas have constantly worked, however, to find novel ways of sustaining local forms of power and challenging the psychological and social forces that entrench neoliberal attitudes. We see this most explicitly in the ongoing attempts to foster robust forms of democratic control over shared practices. Attendance at community consultations is compulsory, and participation in community governance rotates through the community (Starr et al 2011, 113). Since everyone plays a role in shared decision-making, at every level of aggregation, community members come to understand precisely what is at stake in ongoing self-governance. Consequently, the bottom-up strategies for evaluative learning that we find among the Zapatistas allow for enhanced feelings of ownership over new values that are adopted, as well as increases sensitivity to local patterns of variation. Everyone feels like group decisions are their own; and by cultivating deeply democratic values, the Zapatistas have opened up space for a process of social bootstrapping through emergent consensus.

Through processes of mutual deliberation, the Zapatistas continually update their shared values in light of the specific needs and interests of particular community members (this is why it is hard to pin down *specific* Zapatista values beyond dignity and equality: their more specific values are constantly changing). This is possible in part because the Zapatistas value listening to one another, and they have worked to cultivate observable tendencies to listen in public deliberations (Starr et al 2011, 108). Where disagreements arise, most of us try to call attention to the mistakes others have made, or to the errors in their assumptions. Familiarly, this practice often backfires, generating forms of gridlock that become insuperable because of divergent values (the cases we discuss in Section 1 are paradigmatic examples of this phenomenon). The Zapatistas provide an alternative type of practice for navigating evaluative disagreements, yielding a form of value-shaping that allows group members to move past initial disagreements, and toward shared commitments that can underwire the guidance of shared actions. Drawing on resources from liberation theology (Friere 1970), and from practices of walking together in struggle (Lynd 2012), they suggest that evaluative learning should always proceed by 1) listening, 2) getting clear about why others value the things that they do, and 3) coming to a shared understanding of why others have the concerns that matter to them. This process requires treating others as normative equals, with equal power, and with their own experiences that can shed light on shared problems and shared commitments. And significantly, discussions made in this context can often open up possibilities that were not previously acknowledged (Huebner submitted). The reason for this is simple: This context provides a firm foundation for constructing and maintaining values that are consistent with the needs and interests of everyone involved. Where this process is successful, it can create shared values that are novel, and sensitive to the diversity of previously operative values.

Top-down hierarchical structures like those found in the US Military, by contrast, allow for more rapid and targeted forms of control over the revision, interpretation, and specification of what a group's values are, and of what those values require of individual members. Since each decision about shared values is made by a person (or a small group of people) in a position of power, there is substantially less variation regarding the class of values that are to be pursued, as well as less variation in judgments about how to implement the cultivation of these values. Moreover, since revisions are guided by centralized decisions, they can be made without recourse to local patterns of variation that might otherwise stand in the way of instituting new values. Consequently, in this context, shared values can often change quickly when it is necessary for them to do so.

Consider the policy transition that took place after two decades of 'Don't ask, don't tell' (DADT). The repeal of DADT involved a large-scale change in values, an acceptance of behavior that had been banned, and a move away from the temporary—and at the time novel—value that DADT had put in place: that a military member's personal life was not the concern of her fellow service members or commander. Despite grave concerns—Senator John McCain famously worried about the grave damage to the morale and readiness of U.S. forces—the repeal of this policy is now viewed by many, including many who were opposed to the decision, as a near non-event with no impact on readiness or overall morale (Belkin et. al 2012, 10-14). Indeed, many officers report that removing DADT has helped them to better ensure troop readiness because Commanders had felt reticent to ask personal questions, lest they learn something they would have to report (Belkin et. al 2012, 14-15).

The reason the change, once it was finally implemented, was so seamless lies partly with the fact that these new values were revised from the top-down, and integrated with existing, and widely-accepted shared values. In the Marine Corps, for example, the policy change was accompanied by a message from the Commandant General Amos, which placed these values within a larger framework antecedently embraced by Marines: "As we implement repeal, I want all leaders at all levels to reemphasize the importance of maintaining *dignity* and *respect* for one another throughout our force. We are Marines. We care for and respect *all those* who wear this uniform" (emphasis original) (O'Keefe 2011). Importantly, this was not merely an assertion made from the top, the change was immediately coordinated into training and education, which were designed to entrench the change of shared values within the membership. Indeed, there is no way that such a change in shared values could be so broad in scope and so immediate were it not driven from the top-down, placed within a larger set of previously accepted values, and incorporated into training and education. As a Navy SEAL who personally opposed repeal put it: "We're professionals; we'll do what we've done in the past" (Belkin et al 2012, 12). While many expected the change to be massively divisive, it was, for all intents and purposes, a non-event. By placing this change in values within the broader existing structure of shared values, leaders were successful more often than not in ensuring that even if members rejected the reasoning of the change in values *qua* individual, they accepted it as it was presented to them: *qua* Marine, *qua* soldier, etc.

While the differences between these groups are significant, the similarities between the top-down and bottom-up cases modification of values are even more striking. Perhaps most importantly, in both cases, particular values are modified against a background of consistent, accepted values. Both groups thereby found a way to carry out forms of *creative adaptation*, which allowed them to move forward and to develop new ways of being Zapatistas and new ways of being Marines. The results involve shifts in which normative expectations are perceived as legitimate by the members of the groups themselves (cf., Andrighetto et al 2015). Direct forms of sanction by peers may sometimes play a role in evoking such changes, but direct punishment is surprisingly rare in real-world groups (Guala, 2012). So it is more likely that changes like these arise as group members form evaluative expectations about what other group members value, or what the group itself believes to be worth pursuing. The Zapatistas strive to cultivate a situation where the evaluative expectations of other Zapatistas are immediately perceived as legitimate, and as worth attending to. As a result, points of evaluative consensus become sources of new values. Members of the military tend to perceive military policy, as well as the evaluative expectations of commanding officers, as legitimate. As a result, they find it easier to accept top-down commands as grounds for evaluative revision. In both cases, these changes in values are placed within the larger set of shared values and the changes are advanced as useful—perhaps, in some cases, even necessary—for the continued success of the collective endeavors in which members are engaged together.

3.4 Distinctive Challenges

Just as each of these strategies for cultivating and sharing values has distinctive benefits, each strategy also has its unique limitations. Values that are inculcated from the top-down face challenges grounded in the content of shared values, as well as worries about how shared values will interact with antecedently held individual values. As a result, it becomes hard to make them stable over the long-run. Values that are propagated from the bottom-up, by contrast, depend on shifts in background conditions that allow them to remain far more stable in the long run, but this also makes them harder to entrench and nearly impossible to export. Here, we consider each of these difficulties in turn.

The content of shared values that are passed from the top-down, almost by definition, will be chosen by a few people. These people are often separated from the larger set of a group's membership, and this yields several related concerns about the content of novel values. To begin with, we cannot assume that a leader will always choose the appropriate values, in whatever way one might want to disambiguate the term 'appropriate'. In some cases, the values may be objectively questionable or suboptimal; but more likely, they may simply be inappropriate given the group's larger aims and interests (cf., Hayek 1945; Kropotkin 1995; Trotsky 1935). Often, a group's leaders will be unaware of how its membership will respond to a particular change the group's values; and often their information will be out of date by the time they make their

decisions about what should be done. This ignorance could, in extreme cases, lead to leaders choosing values that are not appropriately situated for members within the set of existing shared values, thereby leading to shirking of collective associative responsibilities by those lower in the hierarchical structure, a state of affairs that can ironically lead to a breakdown in the very structures that changes in values were meant to protect (Feaver 2005).

Top-down values also require robust patterns of drilling and training to ensure that group-relevant values will continue to be sufficiently central that they are not overridden by contrasting individual values. But we cannot assume that the patterns of drilling and training will generate the precise tendencies to value that are required. This drawback is perhaps less pronounced in well structured, hierarchical groups. Even here, however, resource limitations quickly place limits on the ability for values to be altered from the top-down. There are current cases in the Navy, for instance, where individual sailors may be required to fulfill as many as 1500 hours of mandatory training per year (Commander 2012). Unsurprisingly, in such an environment, training is often marked as "completed" without actually inculcating any new patterns of behavior (Wong & Gerras 2015). (To cite just one particularly striking example, one of the authors of this article may or may not have written this sentence while undergoing required Operational Security training). Top-down values also face difficulties when it comes to ensuring that patterns of interpersonal correction will generate tendencies to value that accord with the needs and interests of the group. This limitation derives, in part, from the fact that individuals who share evaluative commitments are likely to make similar mistakes and to correct one another in ways that push them back toward values that they were trying to overcome. But just as significantly, group membership is rarely pervasive in the lives of group members, and conflicting forms of evaluative learning will often lead to forms of evaluative backsliding, with no stable mechanism to push members back toward the value they are aiming to cultivate. In short, shared values pushed from the top-down at least risk becoming *their* values (that is the values of leaders) rather than genuinely *our*s.

Values that are constructed from the bottom-up, by contrast, are often difficult to transfer to similarly situated collective enterprises. For instance, in spite of the normative salience of its shared values on other similar organization (e.g., the other groups throughout Mexico that were targeted by *La otra campaña* and the *Movimento dos Trabalhadores Rurais Sem Tera* in Brazil), it has proven difficult to export Zapatista values to others. We contend that part of the reason for this difficulty stems from the etiology of these shared values. As we have argued above, evaluative updating occurs through changes in individual values. In cases where values bubble up from the bottom of a group, they do so as a result of interactions with others who share those same values. This is not simply a matter of group identification, although group identification does arise among the Zapatistas. One of the key benefits of bottom-up structures of value-propagation is that values remain context dependent, local, and changeable; and they do so because social bootstrapping allows individual values to converge while continuing to 'ache inside each individual and teach each individual to walk' (Marcos 1995/2001, 269). Simplifying somewhat, we might say that it is through ongoing cycles of reciprocal evaluative updating that stable patterns of valuing emerge (Tummolini & Stirling in prep). Once we recognize this, however, it becomes clear why such values are nearly impossible to export. Since they depend on individual patterns of local updating, which flow upward through a group, any attempt to adjust values must begin with the existing values of individuals. Where there are shared struggles, minimally shared values can emerge, and provide a foundation for cultivating more robustly shared values. However, unless there are other group members who share those values, who are willing to foster their cultivation, and who are willing to sanction deviation from those values, they are unlikely to stabilize as persisting and deeply held values. Because of the dependence of Zapatista values on Zapatista democracy and visa-versa, the emergence of converging values in a non-Zapatista space becomes increasingly unlikely.

This limitation also implies is that attempts to entrench equality and dignity in social practice, even among the Zapatistas, cannot be successful unless there are ongoing patterns of reciprocal updating to sustain their stability and robustness. And even where changes in values do emerge, they are often slow. In part, this is why the Zapatistas sometimes fail to live up to their expressed ideals. For example, "only a quarter to (rarely) half of the *junta* representatives are women, short of the intended gender equity" (Starr et al 2011, 106). There is an ongoing recognition that this is a failing, and many Zapatistas recognize that they need to work harder to confront the structural issues that make it harder for women to play a robust role in the *juntas*. But modifying family values from the bottom-up is no easy task. And conflicting values persist between

family organization and concerns with social justice. Since all evaluative decisions are made from the bottom, the only forms of pressure that can be used to overcome these conflicts are forms of lateral social pressure. But when almost everyone shares male-centered family values, the kinds of social pressures that could be used to disrupt those values become much less likely. The difficulties of changing deeply entrenched values by using bottom-up forms of social pressure constitute a second major difficulty for shared values that percolate up through the structure of a group.

4. Reciprocal shaping shared values

We have argued that the US Military and the Zapatista movement privilege different aspects of the same process for shaping shared values, triggering different patterns of risks and rewards. Given the limitations that we have called attention to, it seems that shared values would be more likely to be stable, context relevant, and experienced as one's own if it were possible to integrate top-down structures of control with bottom-up flows of evaluative learning. Unfortunately, we are skeptical that such integration is fully realizable, and even if it is possible, it's not clear how much top-down control is even desirable. Nonetheless, some sort of blending of these approaches may prove useful—perhaps, even necessary—in order to live a life in which we "cease to be mere fragments" (Rawls 1999, 452); and, while the analogy is far from perfect, we'd like to close by considering some important parallels between these strategies for value-shaping and value-updating, on the one hand, and current research on team-reasoning and cooperation, on the other. In doing so, we hope open up some new space for thinking about the possibility of robustly shared values that are genuinely reciprocal in nature, but we see this closing section as largely exploratory rather than decisive.

Some critics of standard decision-theory have argued that the most plausible solutions to coordination problems require a shift away from individualistic judgments, and toward team-based forms of reasoning. The basic idea is simple, when individuals reason as team, they consider the coordinated set of actions that would bring about a team's goal, and they see themselves as making a contribution against this frame (Gold 2012). There are many ways of specifying the details of this hypothesis (cf., Bacharach 2006; Sugden 2003); but in each case, the assumption is that coordination arises because participants see themselves as participants in a shared project. We believe something similar happens in some kinds of shared valuing, where a shift to we-mode valuing arises among the members of a group. In this case, the key thing to notice is that top-down pressures can be used to shape the tendency to adopt we-mode thinking by providing new situations where participants will say "this is what we care about now." As noted earlier, however, it is difficult to guarantee that these signals will be taken up and that they will be internalized deeply enough to prevent I-framed values from overtaking them.

Yet these points of failure are precisely the points where bottom-up cultivations of shared values tend to succeed. By carefully tracking, and dynamically updating against the values and interests of other group members, it is possible to develop and sustain patterns of coordination without a top-down signal. As we noted in the previous section, the bottom-up cultivation of shared values occurs as individuals change their own values and preferences in light of their interactions with other group members. This doesn't require a we-framing; instead it occurs as individual-frames shift in ways that are context dependent, local, and situation relevant; this yields an alternative form of social bootstrapping that occurs as a result of convergence through ongoing cycles of reciprocal updating. Importantly, recent models of cooperation have started to recognize that coordination can arise through these dynamic patterns of updating, even without we-framing (Tummolini & Stirling in prep).

So what does this imply for the possibility of reciprocally shared values? In small groups, reciprocal feedback may be relatively easy to generate and maintain. Groups can agree to set out shared goals and values that can serve as top-down signals for evaluative learning. And structures of mutual accountability and mutual identification are often readily available and sufficient to sustain the kinds of interactions necessary for reciprocally reinforced shared values. Larger groups, on the other hand, need to cultivate strategies for maintaining and sharing values without constant intervention, and that almost universally leads to them to privileging values that flow from top or privileging values that flow from the bottom. This means, perhaps

tragically, that in our currently fragmented and fractured world, robustly shared values that are both stable and truly our own may prove to be quite rare.

Nonetheless there may hints of a way forward, a possibility of fusing the benefits of shared values inculcated from the top-down with those from the bottom-up—even in the largest of organizations. Consider, for example, the U.N.'s well-known Millennium Development Goals (MDGs) to "spare no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty." (United Nations 2000:4) The MDGs represent a specification of values. They were put forward and vigorously pursued with the United Nation acting as a responsible, coordinating, and regulative mechanism. In other words, the U.N. provided a framework and a number of "wide-ranging practical steps" to further develop these shared goals together (Millennium Development Goals Report 2015). In effect, The U.N. acted as a hub, providing a novel specification of an existing value, an irreducibly collective goal, an explicit plan for acting together, and an explicit agreement as to the normative standards for evaluating the behavior of group members (cf., Ostrom 2010). Yet these shared values were not *merely* driven from top-down. They also activated individuals not only to do their part to meet shared goals, but also to do their part to further shape those shared values themselves (McClean 2015). The MDGs thereby allowed opportunities for all affected parties to participate in the revision process as more information became available. They gave members the authority to monitor and correct each other, and rely on graded sanctions (e.g., calling in; gentle nudges; explicit criticism; expulsion) and an accessible low-cost means of dispute resolution can allow for the further shaping of these values—from both the bottom and the top (Ostrom 1990; 2005). In effect, the U.N. put forward values that enabled people to modify the goals they share at a more local level, thereby allowing for the local generation of new and innovative partnerships required to live together in light of those values. The result was "the most successful anti-poverty movement in history…[lifting] more than one billion people out of extreme poverty" (United Nations 2015:3) as well as a template for creating values that our fully ours, rather than simply mine and thine—even in a world that too often favors atomization, separation, and mere aggregation. Unfortunately, how far a fully reciprocal process like this can be pushed remains an open question. Yet heterarchical power structures have existed at various points in human history (Manzanilla 2012; Ostrom 1990; Potter & King 2008); and it may well be time to begin thinking about them again.

Works Cited

Ambrose, S. (1999). Duty, Honor, Country: A history of west point. Baltimore: John Hopkins University Press.

Andrighetto, G., Grieco, D., & Tummolini, L. (2015). Perceived legitimacy of normative expectations motivates compliance with social norms when nobody is watching. *Frontiers in psychology*, *6*.

Bacharach, M. (2006). Beyond Individual Choice: Teams and Frames in Game Theory. Natalie Gold and Robert Sugden (eds). Princeton: Princeton University Press

Belkin, A., Ender, M., Frank, N., Furia, S., Lucas, G., Packard, G., Schultz, T., Samuels, S., Segal, D. (2012). One Year Out: An Assessment of DADT Repeal's Impact on Military Readiness. Los Angeles: Palm Center at the University of California Los Angeles.

Bratman, M. (2014). Shared Agency: A Planning Theory of Acting Together. New York, Oxford University Press

Commander, Naval Surface Force. (2012). Surface Force Readiness Manual. Department of the Navy, Mar 9.

Cooper, H. (2014) Air Force Fires Nine Officers in Scandal Over Cheating on Proficiency Tests. New York Times. Mar 27.

Cordsmen, A. & Maysner, A. (2009). Withdrawal from Iraq: Assessing the Readiness of Iraqi Security Forces. Center for Strategic and International Studies. August.

Core Values Charter (2007) Secretary of the Navy, DoD Directive 5500.7. Nov. 29

Cushman, F. (2013). Action, outcome and value: A dual-system framework for morality. Personality and Social Psychology Review, 17 (3), 273-292.

Crockett, M. (2013). Models of morality. Trends in Cognitive Science, 17, 8, 363-6.

Cummins, D. D., & Cummins, R. (1999). Biological preparedness and evolutionary explanation. Cognition, 73(3), B37-B53.

Economist (2015) "Ranchers vs Bison-Huggers", http://goo.gl/uJRRGT 3 January 2015; Retrieved 31 May 2015

Fahim, K. & Al-Salhy S. (2014). Exhausted and Bereft, Iraqi Soldiers Quit Fight. New York Times. JUNE 10.

Farrell, J. (2015), The Battle for Yellowstone: Morality and the Sacred Roots of Environmental Conflict. Princeton: Princeton University Press.

Feaver, P. (2005) Armed Servants: Agency, Oversight, and Civil Military Relations. Cambridge: Harvard University Press.

Fitch, W., & Martins, M. D. (2014). Hierarchical processing in music, language, and action: Lashley revisited. Annals of the New York Academy of Sciences,1316(1), 87-104.

Freire, P. (1970). Pedagogy of the oppressed (MB Ramos, Trans.). *New York: Continuum, 2007*.

Glimcher, P. (2011). Understanding dopamine and reinforcement learning: the dopamine reward prediction error hypothesis. Proceedings of the National Academy of Sciences, 108 (Supplement 3), 15647-15654.

Gold, N. (2012). Team Reasoning and Cooperation. In Samir Okasha & Ken Binmore (eds.), Evolution and Rationality: Decisions, Cooperation and Strategic Behaviour. Cambridge University Press

Guala, F. (2012). Reciprocity: Weak or strong? What punishment experiments do (and do not) demonstrate. *Behavioral and Brain Sciences,35*(01), 1-15.

Haas, J. (in prep). Two theories of normative cognition and motivation.

Hayek, F. A. (1945). The use of knowledge in society. American Economic Review, 35, 519–530.

Henrich, J. (2009). The evolution of costly displays, cooperation and religion: Credibility enhancing displays and their implications for cultural evolution.Evolution and Human Behavior, 30(4), 244-260.

Henrich, J., & Boyd, R. (2001). Why people punish defectors: Weak conformist transmission can stabilize costly enforcement of norms in cooperative dilemmas. Journal of theoretical biology, 208(1), 79-89.

Huebner, B. (2012). Surprisal and Valuation in the Predictive Brain. Frontiers in Theoretical and Philosophical Psychology 3:415.

Huebner, B. (2016). Implicit Bias, Reinforcement Learning, and Scaffolded Moral Cognition. In Implicit bias and Philosophy (M. Brownstein & J. Saul, eds.) Oxford: Oxford University Press.

Huebner, B. (submitted). Planning and prefigurative politics. In Essays on Dennett (B. Huebner, ed.). New York: Oxford University Press

Huebner, B. & M. Hedahl (submitted). Collective values, interests, & desires.

Joint Publication 1 (2013) *Doctrine for the Armed Forces of the United States,* U.S. Department of Defense, March 25.

Kishida, K. T., Saez, I., Lohrenz, T., Witcher, M. R., Laxton, A. W., Tatter, S. B., ... & Montague, P. R. (2016). Subsecond dopamine fluctuations in human striatum encode superposed error signals about actual and counterfactual reward. Proceedings of the National Academy of Sciences, 113(1), 200-205.

Klucharev, V., Hytönen, K., Rijpkema, M., Smidts, A., and Fernández, G. (2009). Reinforcement learning signal predicts social conformity. Neuron 61, 140–151.

Klucharev, V., Munneke, M., Smidts, A., and Fernández, G. (2011). Downregulation of the posterior medial frontal cortex prevents social conformity. Journal of Neuroscience, 31, 11934–11940.

Kropotkin, P. (1995). The conquest of bread and other writings. Cambridge: Cambridge University Press.

Kusch, J. (2011). Employing the Seven Army Values to Win Hearts and Minds. The Journal of Values Based Leadership, 4 (2).

Liljeholm, M., and O'Doherty, J. (2012). Contributions of the striatum to learning, motivation, and performance: an associative account. Trends in Cognitive Science. (Regul. Ed.) 16, 467–475.

Little Blue Book. (1997). *United States Air Force Core Values* Booklet. U.S. Air Force. Jan. 1.

List, C., & Pettit, P. (2011). Group agency: The possibility, design, and status of corporate agents. Oxford: Oxford University Press.

Lynd, S. (2012). Accompanying: Pathways to social change. PM Press.

Manzanilla, L. R. (2012) Neighborhoods and elite "houses" at Teotihuacan. The neighborhood as a spatial and social unit in Mesoamerican Cities. University of Arizona Press, pp. 55–73.

Marcos, S. I. (1996a/2001). Second declaration of *La Realidad* for humanity and against neoliberalism. In Our word is our weapon: selected writings. (J. Ponce de León, ed.). New York: Seven Stories Press.

Marcos, S. I. (1996b/2001). Twelve women in the twelfth year: The moment of war. In Our word is our weapon: selected writings. (J. Ponce de León, ed.). New York: Seven Stories Press.

Marcos, S. I. (1995/2001). Dignity cannot be studied; you live it or it dies. In Our word is our weapon: selected writings. (J. Ponce de León, ed.). New York: Seven Stories Press.

McClean, D. (2015). On the Uses of Covenant: A Pragmatist Perspective. European Conference on Pragmatism 2. Paris, France, Sep 10.

Milgram, S., & Sabini, J. (1978). On maintaining urban norms: A field experiment in the subway. Advances in environmental psychology, 1, 31-40.

Montague, R. (2006). Why Choose This Book? New York: Dutton Press.

Norenzayan, A., & Gervais, W. M. (2013). The origins of religious disbelief.Trends in Cognitive Sciences, 17(1), 20-25.

O'Keefe, E. (2011) Top Marines pledge to 'step out smartly' to repeal 'don't ask, don't tell.' Washington Post, Jan 31.

Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge: Cambridge University Press.

Ostrom, E. (2005). Understanding institutional diversity. Princeton: Princeton University Press

Ostrom, E. (2010). The Challenge of Self-Governance in Complex Contemporary Environments. Journal of Speculative Philosophy 24 (4):316-332.

Pacherie, E. (2012). The phenomenology of joint action. In Axel Seemann (ed.). Joint attention: New developments (pp. 343-389). Cambridge: MIT Press

Potter & King (2008) A heterarchical approach to lowland Maya socioeconomies. Archeological Papers of the American Anthropological Association 6.1(1995):17–32.

Railton, P. (2014). The Affective Dog and Its Rational Tale: Intuition and Attunement. Ethics, 124(4), 813-859.

Rawls, J. (1999). *A Theory of Justice*, Revised Edition. Cambridge: Harvard University Press.

Rescorla, R. (1988). Pavlovian conditioning: It's not what you think it is. American Psychologist, 43, 151-160.

Seligman, M. E. (1971). Phobias and preparedness. Behavior therapy, 2(3), 307-320.

Seligman, M., P. Railton, R. Baumeister, & C. Sripada (2013). Navigating into the future or driven by the past. Perspectives on Psychological Science, 8(2), 119-141.

Schultz, W., Dayan, P., & Montague, P. R. (1997). A neural substrate of prediction and reward. Science, 275(5306), 1593-1599.

Schwabe, L., & Wolf, O. (2013). Stress and multiple memory systems: from 'thinking 'to 'doing'. Trends in cognitive sciences.

Shotwell, A. (2009). A knowing that resided in my bones. In S. Sherwin, S. Campbell, & L. Meynell (eds.). Agency and Embodiment. State College: Pennsylvania State University press, 58-75.

Starr, A., Martínez-Torres, M. E., & Rosset, P. (2011). Participatory Democracy in Action Practices of the Zapatistas and the Movimento Sem Terra. Latin American Perspectives, 38(1), 102-119

Sugden, Robert (2003). 'The logic of team reasoning'. Philosophical Explorations 6: 165-181.

Trotsky, L. (1935). The soviet union today. New International, 2(4), 116–122.

Tummolini, L. & W. Stirling (in prep). Understanding collaboration: A conditional game-theoretic approach

United Nations. (2000). United Nations Millennium Declaration. Resolution adopted by the General Assembly. General Asssemby, United Nations. Fifty-fifth Session. Agenda Item 60 (b).

United Nations. (2015).Millennium Development Goals Report (Catherine Way, ed.) New York: United Nations.

Whitlock, C. (2016) Highest-ranking Navy officer yet sentenced in sex-for-secrets scandal. Washington Post. Mar 25.

Wong, L. & Gerras, S. (2015) Lying to Ourselves: Dishonesty in the Army Profession. Carlisle Barracks, PA: U.S. Army War College Press.

Zheng, R. (2016). Attributability, Accountability and Implicit Attitudes. In Brownstein, M. and Saul, J. (Eds). Implicit Bias and Philosophy: Volume 2, Moral Responsibility, Structural Injustice, and Ethics. Oxford University Press.

Zucchino, D. (2014) Brig, Gen. Jeffrey Sinclair gets reprimand, no jail time in sex case. Los Angeles Times. Mar 20.