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### **BUILDING A CALL TO ACTION:**

# SOCIAL ACTION IN NETWORKS OF PRACTICE

by

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 B.U.S., Organizational Learning & Instructional Technology & Spanish, University of New Mexico, 2005
 M.A., Organizational Learning & Instructional Technology, University of New Mexico, 2008

# DISSERTATION

Submitted in Partial Fulfillment of the Requirements for the Degree of **Doctor of Philosophy Organization, Information & Learning Sciences** 

> The University of New Mexico Albuquerque, New Mexico

> > July, 2018

#### **BUILDING A CALL TO ACTION:**

#### SOCIAL ACTION IN NETWORKS OF PRACTICE

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#### ABSTRACT

The three research papers completed as part of this dissertation explore how people contributing to #BlackLivesMatter build knowledge, using social construction of knowledge (SCK), and what they are building knowledge about, using critical consciousness, because understanding how these processes play out on Twitter provides a way for others to understand this social movement. Paper 1 describes a new methodological approach to combining social network analysis (SNA) and social learning analytics to assess SCK. The sequential mixed method design begins by conducting a content analysis according to the Interaction Analysis Model (IAM). The results of the content analysis yield descriptive data that can be used to conduct SNA and social learning analytics.

The purpose of Paper 2 was to use the typology of digital activism actions identified by Penney and Dadas (2014) from interviews with digital activists to validate them in a quantitative study. Paper 2 found that the actions taken by people who are helping to facilitate face-to-face action (p < .0000001, r = -0.076) or provide face-to-

face updates (p < .0000001, r = -0.060) were negatively correlated with the actions of people who were facilitating online actions suggesting that digital activists should be treated as a unique population of activists.

Paper 3 used the outcomes of a content analysis and lexicon analysis performed on #BlackLivesMatter data to determine 1) the levels of SCK and critical consciousness present in online data and 2) social learning analytics to ascertain the extent that SCK and critical consciousness can predict social action. Results of the content analysis and lexicon analysis found all levels of SCK and critical consciousness in the data. Results of social learning analytics conducted using Naïve Bayes classification indicate that SCK and critical consciousness can only predict information sharing behaviors of online social action like personal opinions, forwarding information, and engaging in discussion. Evidence of information sharing behaviors on Twitter provides a high degree of confidence that further research including replies and other interactions between users will reveal robust SCK.

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# **Chapter 1 Introduction**

# **Three Paper Dissertation Format Organization and Papers**

This dissertation will follow the hybrid (three-paper) dissertation format. This format differs from the traditional dissertation because three research papers take the place of Chapters 2-4. The elements of the three-paper format along with the three papers composed as part of this dissertation are as follows:

- Chapter 1 Introduction
- Paper 1 Methodological Foundations
  - Sánchez, D. (In press). Researching social construction of knowledge & group dynamics. In C. Gunawardena, C. Frechette & L. C. Layne (Eds.),
     Culturally inclusive instructional design: A framework and guide to building online wisdom communities. New York, NY: Routledge.
- Paper 2 Basic Empirical Research
  - Sánchez, D. (2016). Digital Justice: An exploratory study of digital activism actions on Twitter. *Journal of Educational Technology Development and Exchange*, 8(2), 1-22.
- Paper 3 Advanced Empirical Research
  - Sánchez, D. (To be submitted in 2018). Building a call to action: Social action in networks of practice.
- Chapter 5 Conclusion

Note that the contents of Chapter 1 and Chapter 5 pertain to Paper 3 because Papers 1 and 2 were completed prior to the completion of these chapters.

## **Intended Audiences and Publication Venue**

The intended audiences for my research are scholars dedicated to learning analytics and SNA as well as those working for social justice. A secondary audience are community members and activists because the outcomes of my social justice scholarship can inform the ways this population works towards social change. One journal that seems to show the most promise for publishing my final research paper is New Media and Society because it has recently published research on social media and big data analysis methods as shown

## in Error! Reference source not found..

Table 1. Publication Venue.

Name	Description	Impact Factor
New Media and Society	<ul> <li>New Media &amp; Society is an international journal that provides an interdisciplinary forum for the examination of the social dynamics of media and information change. The journal engages in critical discussions of the key issues arising from the scale and speed of new media development, drawing on a wide range of disciplinary perspectives and on both theoretical and empirical research. The journal includes contributions on:</li> <li>the individual and the social, the cultural and the political</li> </ul>	4.18
	<ul> <li>dimensions of new media</li> <li>global and local dimensions of the relationship between media and social change</li> </ul>	

Need

This study investigates the social construction of knowledge (SCK) and conscientization

(also known as critical consciousness) on #BlackLivesMatter. Few studies have

investigated SCK and critical consciousness outside of formal learning environments.

This study will examine SCK and critical consciousness on Twitter, which is an informal

learning environment. Research establishes that Twitter is used in the service of social

action. For example, Twitter was used to mobilize protesters and share their movement

on a global scale during the Arab Spring that ousted Egyptian Dictator Hosni Mubarak. However, the majority of the literature regarding Twitter and social action comes from studies that employ qualitative methods (Bonilla & Rosa, 2015; Brym, Godbout, Hoffbauer, Menard, & Zhang, 2014; Harlow & Guo, 2014; Juris, 2012; Lim, 2012; Penney & Dadas, 2014). Forming a complete understanding of how Twitter is used to support social action is not possible without studies that use actual Tweets as the foundation for their research. This study will fill this gap by using a dataset of Tweets to examine SCK and critical consciousness in the context of social action.

#### **Purpose & Research Questions**

The overall purpose of this study is to predict whether SCK or critical consciousness can predict face-to-face and/or digital social action. The research questions that this study seeks to address are broken up into two studies according to the two primary research constructs as follows:

Study 1

- Does SCK occur in networks of practice on Twitter? At what levels?
- Does SCK in Twitter predict face-to-face and/or digital social action?

Study 2

- Does critical consciousness occur in networks of practice on Twitter? At what levels?
- Does critical consciousness in Twitter predict face-to-face and/or digital social action?

#### **Delimitations**

The delimitations were set purposefully by the researcher in order to limit the dataset to data pertinent to the research questions. The search string that was used to scrape data from Twitter was limited to tweets that included both #BlackLivesMatter and #FreddieGray. The reason that this search string was used was to provide appropriate focus for the study. Another delimitation was setting the timeframe for the data scrape. The data set includes Tweets from April 21 to April 28, 2015. This delimitation was introduced purposefully to capture Tweets before, during, and after various social actions associated with the Freddie Gray demonstrations.

#### Limitations

One limitation that influences this study is that this study did not involve additional coders to validate results of the content analysis. Another limitation is the lack of postings at high levels of SCK. A final limitation is that this study used all the IAM phases and critical consciousness stages to predict social action in their respective studies.

#### **Paper 1 – Methodological Foundations**

# Chapter 13

# **Researching Social Construction of Knowledge and Group Dynamics**

Damien M. Sánchez

#### Introduction

The purpose of this chapter is to discuss three research methods, interaction analysis (IA), social network analysis (SNA), and learning analytics (LA) that can be employed to analyze social construction of knowledge (SCK), the online social environment, and group dynamics within wisdom communities. These three methods draw from both qualitative and quantitative research paradigms. The chapter will first discuss how SCK can be measured by employing IA, and then explore how this analysis can be extended further to understand the social environment that supports knowledge construction by using SNA and LA. We will discuss each method and illustrate how they can be implemented in a research study.

Social Construction of Knowledge and Interaction Analysis (IA) WisCom, founded on sociocultural theory, emphasizes the collaborative and transformative way in which knowledge is co-constructed and the interdependence of social and individual processes in the co-construction of knowledge. Therefore, in order to understand learning in collaborative groups, it is important to analyze the patterns of interaction and collaboration as well as group process and development using methods such as discourse analysis (John-Steiner & Mahn, 1996). IA looks at "the interaction of human beings with each other and with objects in their environment. It investigates human activities, such as talk, nonverbal interaction, and the use of artifacts and

technologies" (Jordan & Henderson, 1995, p. 39). Thus, IA considers interaction as a function of the reciprocal influence among human beings, objects, and their environment. Jordan and Henderson (1995) observe that IA approaches learning as a distributed, ongoing social process, in which evidence that learning is occurring or has occurred must be found in understanding the ways in which people collaboratively engage in learning. Brown, Danish, Levin, and DiSessa (2016) point out the distinction between knowledge analysis and IA. Knowledge analysis drawing from cognitive science is committed to the study of how knowledge is represented in the mind and how mental representations are acquired and modified, while IA based on sociocultural theory and situated learning is committed to the study of situated practice involving individuals, artifacts, and culture, focused on understanding systems of interaction and how practices are adopted and adapted. Understanding context is a key feature of interaction analysis. Context is sensitive to changing details of the situation as participants interact with the environment and people around them. IA is the appropriate method to analyze learning in collaborative groups built on WisCom principles.

Gunawardena, Lowe, and Anderson (1997) developed the IAM to qualitatively examine interactions among a collaborative group during the process of knowledge construction. The IAM was employed to examine the interaction that occurred in an online global debate to determine whether knowledge was constructed within the group through dialogue and discourse, and whether participants changed their understanding or developed new knowledge as a result of group interaction. Based on social constructivist and sociocultural views of learning, the model describes five phases of knowledge co-construction: sharing and comparing constitute Phase I; dissonance is the focus of Phase II; negotiation and co-construction comprise Phase III, testing tentative constructions is incorporated in Phase IV, and statements and application of newly co-constructed knowledge are at the heart of Phase V. See

<b>PHASE I: SHARING/COMPARING OF INFORMATION</b> A. A statement of observation or opinion	[PhI/A]
B. A statement of agreement from one or more other participants	[PhI/B]
C. Corroborating examples provided by one or more participants	[PhI/C]
D. Asking and answering questions to clarify details of statements	[PhI/D]
E. Definition, description, or identification of a problem	[PhI/E]
<ul> <li>PHASE II: THE DISCOVERY AND EXPLORATION OF DISSO OR INCONSISTENCY AMONG IDEAS, CONCEPTS OR STATEMENTS. (This is the operation at the group level of what I calls cognitive dissonance, defined as an inconsistency between a robservation and the learner's existing framework of knowledge and thinking skills.)</li> <li>A. Identifying and stating areas of disagreement</li> </ul>	Festinger new
B. Asking and answering questions to clarify the source and extent of disagreement	[PhII/B] [PhII/C]
C. Restating the participant's position, and possibly advancing arguments or considerations in its support by references to the participant's experience, literature, formal data collected, or proposal of relevant metaphor or analogy to illustrate point of view	
PHASE III: NEGOTIATION OF MEANING/CO-CONSTRUCT KNOWLEDGE	ION OF
A. Negotiation or clarification of the meaning of terms	[PhIII/A]
B. Negotiation of the relative weight to be assigned to types of	[PhIII/B]
argument	[PhIII/C]
C. Identification of areas of agreement or overlap among conflicting	[PhIII/D]

concepts	
D. Proposal and negotiation of new statements embodying compromise,	
co-construction	[PhIII/E
E. Proposal of integrating or accommodating metaphors or analogies	
PHASE IV: TESTING AND MODIFICATION OF PROPOSED SYNTHESIS OR	
CO-CONSTRUCTION	
A. Testing the proposed synthesis against "received fact" as shared by the participants and/or their culture	[PhIV/A
B. Testing against existing cognitive schema	[PhIV/E
C. Testing against personal experience	[PhIV/C
D. Testing against formal data collected	[PhIV/E
E. Testing against contradictory testimony in the literature	[PhIV/E
PHASE V: AGREEMENT STATEMENT(S)/APPLICATIONS OF NEWLY-CONSTRUCTED MEANING	7
A. Summarization of agreement(s)	[PhV/A
B. Applications of new knowledge	[PhV/B
C. Metacognitive statements by the participants illustrating their understanding that their knowledge or ways of thinking (cognitive schema) have changed as a result of the conference interaction	[PhV/C

Figure 13.1 for a detailed description of the IAM, including types of operations for each of its five phases. The model itself serves as a framework that defines SCK as a function of interaction.

#### **Social Network Analysis**

SNA can be defined as a method of identifying the relationships among social entities (e.g. dyads, triads, and larger groups) and analyzing the implications of these interaction patterns (Wasserman & Faust, 1994). The key output of SNA is the sociogram which was first introduced in the early 1930s by Moreno (1953) and ushered in the study of sociometry which largely laid the foundation for social psychology. The intent behind the sociogram is to illustrate the relationships between people by connecting points representative of people or groups in a network. The use of the sociogram has changed little since the 1930s but it has become much easier to create them due to advances in technology. Technology has also contributed to the emergence of LA as a method for analyzing online networks.

#### **Learning Analytics**

The genesis of LA was propelled by the advent of advanced computing power and big data. Campbell, DeBlois, and Oblinger (2007) define analytics as a combination of "large data sets, statistical techniques, and predictive modeling" (p. 42). The goal of LA is to produce actionable intelligence from complex predictive statistics. An example of such actionable intelligence is Amazon's use of recommenders which work by tracking user behavior and using specific algorithms to provide content based on those choices (Konstan & Riedl, 2012). Internet users should all be familiar with recommenders, which for example, are behind online advertisements that encourage the purchase of a protective phone case after a given user purchased a new phone.

One of the early contributions to analyzing online interactions was made by J. A. Levin, Kim, and Riel (1990) who proposed a multipronged model to illustrate the social environment and participation patterns in online interactions. Their study focused on the Intercultural Learning Network comprised mostly of primary, secondary, and university students and instructors. Their analytical techniques consisted of four types of analyses: participant structures analysis, intermessage reference analysis, message act analysis, and message flow analysis. These analysis techniques foreshadowed IA, SNA, and LA. By quantifying the references between messages in their intermessage reference analysis the authors prefigured modern LA. Message act analysis was a qualitative content analysis method of assigning meaning of statements into various categories indicating the beginnings of IA. They also provided a glimpse into the future of SNA with their use of "message maps" that displayed the interrelationships among messages using directional arrows. These message maps bear a strong resemblance to modern sociograms which also use directional arrows to illustrate the relationships between groups of people. In addition, J. A. Levin et al. (1990) took the first step in combining LA and SNA by using descriptive statistics from the intermessage reference analysis to build their message maps which show the ebb and flow of messages over time. Having briefly established the historical application of IA, SNA, and LA to online communities, we now turn to how IA, SNA, and LA are applicable to analyzing wisdom communities.

Interaction Analysis using the Interaction Analysis Model (IAM) Utilizing IAM, researchers can qualitatively analyze knowledge building processes within a collaborative group. This qualitative analysis can be further expanded to include social processes in collaborative learning using quantitative analyses such as SNA and LA. IAM is well suited to analyze interactions in wisdom communities because its foundation of sociocultural knowledge building is similar to that of WisCom. The IAM has been used widely (Buraphadeja & Dawson, 2008; Lucas, Gunawardena, & Moreira, 2014) for determining social construction of knowledge online. The phases and related operations

of knowledge building described in IAM are depicted in

PHASE I: SHARING/COMPARING OF INFORMATION.	
A. A statement of observation or opinion	[PhI/A]
B. A statement of agreement from one or more other participants	[PhI/B]
C. Corroborating examples provided by one or more participants	[PhI/C]
D. Asking and answering questions to clarify details of statements	[PhI/D]
E. Definition, description, or identification of a problem	[PhI/E]
PHASE II: THE DISCOVERY AND EXPLORATION OF DISSO OR INCONSISTENCY AMONG IDEAS, CONCEPTS OR STATEMENTS. (This is the operation at the group level of what I calls cognitive dissonance, defined as an inconsistency between a n observation and the learner's existing framework of knowledge an thinking skills.)	Festinger new nd
A. Identifying and stating areas of disagreement	[PhII/A]
B. Asking and answering questions to clarify the source and extent of disagreement	[PhII/B] [PhII/C]
C. Restating the participant's position, and possibly advancing arguments or considerations in its support by references to the participant's experience, literature, formal data collected, or proposal of relevant metaphor or analogy to illustrate point of view	
PHASE III: NEGOTIATION OF MEANING/CO-CONSTRUCT KNOWLEDGE	ION OF
A. Negotiation or clarification of the meaning of terms	[PhIII/A]
B. Negotiation of the relative weight to be assigned to types of argument	[PhIII/B] [PhIII/C]
C. Identification of areas of agreement or overlap among conflicting concepts	[PhIII/D]
D. Proposal and negotiation of new statements embodying	

compromise,

co-construction

E. Proposal of integrating or accommodating metaphors or analogies [PhIII/E]

# PHASE IV: TESTING AND MODIFICATION OF PROPOSED SYNTHESIS OR

# **CO-CONSTRUCTION**

- A. Testing the proposed synthesis against "received fact" as shared [PhIV/A] by the participants and/or their cultureB. Testing against existing cognitive schema
- D. Testing against formal data collected[PhIV/B][PhIV/C][PhIV/C]
- E. Testing against contradictory testimony in the literature [PhIV/E]

# PHASE V: AGREEMENT STATEMENT(S)/APPLICATIONS OF NEWLY-CONSTRUCTED MEANING

A. Summarization of agreement(s)	[PhV/A]
B. Applications of new knowledge	[PhV/B]
C. Metacognitive statements by the participants illustrating their understanding that their knowledge or ways of thinking (cognitive schema) have changed as a result of the conference interaction	[PhV/C]

#### Figure 13.1.

PHASE I: SHARING/COMPARING OF INFORMATION.	
A. A statement of observation or opinion	[PhI/A]
B. A statement of agreement from one or more other participants	[PhI/B]
C. Corroborating examples provided by one or more participants	[PhI/C]
D. Asking and answering questions to clarify details of statements	[PhI/D]

E. Definition, description, or identification of a problem	[PhI/E]
PHASE II: THE DISCOVERY AND EXPLORATION OF DISSO OR INCONSISTENCY AMONG IDEAS, CONCEPTS OR STATEMENTS. (This is the operation at the group level of what I	Festinger
calls cognitive dissonance, defined as an inconsistency between a pobservation and the learner's existing framework of knowledge at thinking skills.)	
A. Identifying and stating areas of disagreement	[PhII/A]
B. Asking and answering questions to clarify the source and extent	[PhII/B]
of disagreement	[PhII/C]
C. Restating the participant's position, and possibly advancing arguments or considerations in its support by references to the participant's experience, literature, formal data collected, or proposal of relevant metaphor or analogy to illustrate point of view	
PHASE III: NEGOTIATION OF MEANING/CO-CONSTRUCT KNOWLEDGE	ION OF
A. Negotiation or clarification of the meaning of terms	[PhIII/A]
B. Negotiation of the relative weight to be assigned to types of argument	[PhIII/B] [PhIII/C]
C. Identification of areas of agreement or overlap among conflicting concepts	[PhIII/D]
D. Proposal and negotiation of new statements embodying compromise,	
co-construction	
E. Proposal of integrating or accommodating metaphors or analogies	[PhIII/E]
PHASE IV: TESTING AND MODIFICATION OF PROPOSED SYNTHESIS OR	
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A. Testing the proposed synthesis against "received fact" as shared	[PhIV/A]

by the participants and/or their culture	
B. Testing against existing cognitive schema	[PhIV/B]
C. Testing against personal experience	[PhIV/C]
D. Testing against formal data collected	[PhIV/D]
E. Testing against contradictory testimony in the literature	[PhIV/E]
PHASE V: AGREEMENT STATEMENT(S)/APPLICATIONS OF NEWLY-CONSTRUCTED MEANING	F
	F [PhV/A]
NEWLY-CONSTRUCTED MEANING	

*Figure 13.1.* The Interaction Analysis Model (IAM) developed by Gunawardena, Lowe, and Anderson, 1997, used with permission.

The IAM phases can be mapped to WisCom's collaborative inquiry cycle (CIC). For example, IAM Phase I sharing and comparing occurs within the second phase of CIC (Initial Exploration) as people share their own knowledge, thoughts, and definitions of the case posed in the Learning Challenge. Construction of new meaning may begin to occur at this stage of sharing and comparing information as Scardamalia and Bereiter (1993) have noted. As the wisdom community develops, resources and diverse perspectives are shared which sparks reflection and negotiation of new meaning before it is finalized and preserved. These actions are captured in IAM Phases II, III, and IV. Eventually, the CIC can lead to transformative learning, which coincides with the application of new knowledge in Phase V of the IAM. Research by Ojo (2010) on transformative online education showed that transformation can be seen not necessarily as a way in which an individual actually *changes* their perspective but, instead, becomes *aware of others' perspectives*.

Analysis of an online faculty development program designed on the WisCom framework conducted with Sri Lankan faculty, illustrated that SCK occurred within a group supported by e-mentors as they negotiated the steps of the case based learning (CBL) process (Gunawardena et al., 2011). The retrieval and recall step of CBL coincided with Phase I sharing and comparing of the IAM. CBL steps "Interpret" and "Adapt" were found to move learners through the process of socially constructing knowledge, Phases I through III, by necessitating learners to agree on past solution elements of value, applying those elements to the current context, and then agreeing as a group how those elements be defined within the new solution (Phase IV). Finally, collaborative drafting of the final solution illustrated that Phase V application of socially constructed knowledge occurred during the evaluation and storage steps of the case-based learning cycle.

In collaborative learning, an individual's thinking is influenced by the thinking and perspectives of others in the group. Through the process of agreement, disagreement, and dissonance of individual conceptual structures, and collective negotiation of meaning, a shared structure of meaning emerges for the group. However, constructing knowledge, based on personal experiences and individual understandings, does not happen in a vacuum. Both the learner's experiences and understandings of the world are situated within and affected by the learner's cultural, institutional, and historical social contexts as described by sociocultural theory and discussed in Chapter 2. This is important to keep in mind as knowledge building processes may differ across cultures. Lopez Islas (2004)

analyzed knowledge construction in online discussion forums at Monterrey Tech-Virtual University in Mexico, using the IAM and found that open disagreement with ideas expressed by others is not appropriate in the Mexican context, and therefore, participants moved to knowledge construction without moving through the cognitive dissonance phase as described in the IAM. A similar finding was observed in the study using IAM to examine social construction of knowledge in asynchronous discussions between American e-mentors and Sri Lankan protégés (Gunawardena et al., 2008). The Sri Lankan participants did not openly disagree at the level of ideas but moved to negotiation of meaning and co-construction of new knowledge based on consensus building. Therefore, the authors had to re-examine "dissonance" as specified in the IAM in cultural terms. The question is whether cognitive dissonance is a necessary condition for higher forms of reasoning or knowledge construction, or whether it is merely an expectation from a Western argumentative point of view (Gunawardena & Jayatilleke, 2014). We need to further examine whether knowledge construction can happen without cognitive dissonance (Phase II of IAM) in diverse online networks as Scardamalia and Bereiter (2014) have pointed out that "In Knowledge Building, adversarial argumentation has a role, but collaborative discourse is the driver of creative knowledge work" (p. 401). Researchers are encouraged to engage in IAM coding to determine whether the model is appropriate for inquiry based learning processes in diverse cultural contexts. An Excel spreadsheet similar to the one displayed in Figure 13.2 supports the IAM coding process as it provides a column for each of the operations, as well as the opportunity to add any additional operations that might emerge such as project management and co-mentoring functions.

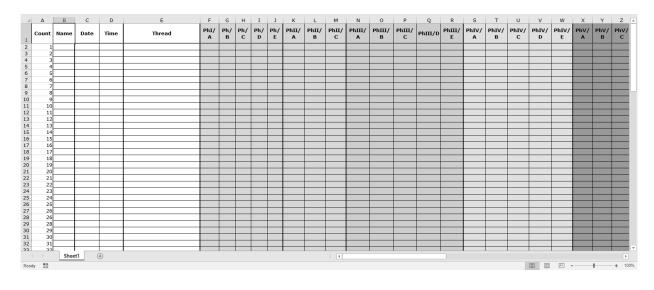


Figure 13.2. Sample IAM Coding Sheet.

Each post, the unit of analysis, from the transcript is copied into the Thread column and the researcher then codes the post according to the IAM phases and operations. Counts for each of the operations are automatically added providing a summary of each of the phases. Another recommendation is to color code the text in the Thread column in order to more easily track which statements are related to IAM operations. The IAM analysis maps the knowledge building process of a collaborative group, which can then be compared with WisCom's CIC.

Employing the results of IAM to conduct SNA and LA can add value to the overall analysis. In fact, Gunawardena, Flor, Gómez, and Sánchez (2016) found that LA and SNA enrich IAM by expanding understanding of the socio-emotional dynamic that accompanies the knowledge construction process. For example, spikes in positive sentiment may signal a shift in the discussion to higher phases of knowledge coconstruction. In addition, key phrases related to dissonance such as "however" or "I disagree," may signal shifts in the SCK process. Next, how SNA and LA can shed further light on the findings of IAM analyses are discussed.

#### Social Network Analysis (SNA)

In WisCom learners work in small groups to share and construct knowledge in interaction with each other. SNA is uniquely suited to researching this groupwork because "The social network approach examines both the content and the pattern of relationships in order to determine how and what resources flow from one actor to another" (Haythornthwaite, 1996, p. 324). The patterns of interactions that take place within WisCom groups can be tracked and meaningfully visualized using SNA. A specific example of how SNA, specifically sociograms, explains group interactions is provided in Figure 13.3.

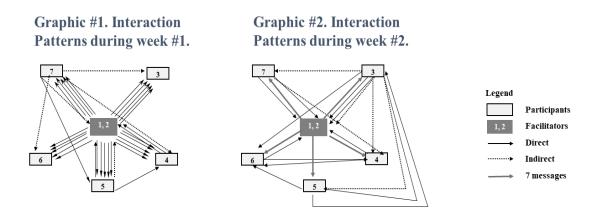


Figure 13.3. Facilitator Communication Patterns.

Figure 13.3 illustrates an early example of the temporal dimension in learning networks where facilitators play an increasingly diminished role in week two as the learning community takes charge of their own learning and their Zone of Proximal Development (ZPD) (Vygotsky, 1978). The sociogram on the left shows that during the first week of instruction the facilitators (1, 2) sent out most of the messages to the students as shown by the arrows pointing away from the middle node. A communication pattern such as this is expected because during the first step of the CIC the primary responsibilities of the facilitator is to establish clear expectations and set the stage for student inquiry into the learning challenge. The sociogram on the right shows that during the second week the number of messages from the facilitators decreased greatly, and participants (3, 4, 5, 6, and 7) started to initiate communication with one another and the facilitators as illustrated by the arrows pointing from participant to participant and from participants to the facilitators. When participants start to initiate communication in this fashion facilitators can take a step back and let the community guide itself as their ZPDs are beginning to intersect.

SNA provides a visual means of identifying well-connected members of a community. A well connected member may indicate a person who is connecting with many ZPDs and therefore is a natural choice to function as a mentor. Once mentors have been identified and have started working with others, SNA can also map mentor functions within a learning community and how their involvement impacts learner participation based on the number of connections/communications.

SNA can help identify information brokers (participants who are central to the network because of their many communications/connections) and visually map how resources traverse the community (Cross, Laseter, Parker, & Velasquez, 2006). Centrality is a measure of prominence that is measured by the number of ties (communications/connections) in which a person is involved (Wasserman & Faust, 1994). A person is central to a network when he or she is involved in many communications/connections thus making them visible to others and indicating a high level of activity. Such activities in the online learning context include sharing and

facilitating in the form of preparing a group for construction of new knowledge and engaging students in discussion (Gunawardena et al., 2016). Cross et al. (2006) argue that information brokers often stop learning effectively because their major focus is sharing information. The implication of this finding for WisCom is that information brokers identified in sociograms should be given guidance on mentoring and coaching because those with many connections are critical to the success of the community. Sociograms also depict Legitimate Peripheral Participation (Lave & Wenger, 1991) and show how some participants need to be brought into the community from their place in the periphery by motivating them to interact and collaborate. Centrality is associated with online learning outcomes because those who are on the periphery perform less favorably when compared to those who are central to the network because they have less of an opportunity to exchange ideas with others (Lin, Huang, & Chuang, 2015). As such, the concept of centrality is a useful construct for evaluating WisCom because those who are not central to the network are much less likely to make substantive contributions to the community or have appropriate access to the knowledge contributed by others. In WisCom, more connections between participants might indicate more information sharing and thus the likelihood that transformative learning may occur.

#### Learning Analytics (LA)

A specific branch of LA called Social Learning Analytics (SLA) is directly applicable to analyzing Collaborative Learning. SLA is defined as a "distinctive subset of learning analytics that draws on the substantial body of work demonstrating that new skills and ideas are not solely individual achievements, but are developed, carried forward, and passed on through interaction and collaboration" (Buckingham Shum & Ferguson, 2012, p. 5). SLA allows for the foundations of SCK to be incorporated into SLA by defining appropriate metrics aligned with SCK which can be applied to data from any number of online sources. "Social learning analytics differs from its business intelligence precursors in being informed by learning theory, particularly in the use of language for the co-construction of knowledge in collaborative working environments, where learners are viewed as social actors in complex networks" (Williams, 2016, p. 8). Once language and appropriate metrics have been identified through content analysis, or grounded theory building, SLA can be used to generate participation metrics and update outcomes on a dashboard. When used in this fashion, SLA becomes a powerful tool for facilitators to quickly determine whether there are emergent issues with the community without having to read all posts in a community discussion. This allows the facilitator to focus on developing high quality just-in-time assistance.

An example of how LA can be used to provide just-in-time assistance is provided by Arnold and Pistilli (2012) who describe how Course Signals at Purdue University predicts future student performance. Predictions are based on data including student performance and effort, and account for environmental variables like high school GPA, and student demographics. Based on the results, a dashboard displays a green, yellow, or red signal light for the student and instructor to see. Green indicates good performance, yellow indicates moderate performance, and red indicates poor performance. This application of LA can be adapted to analyze collaboration in WisCom. Instead of using student performance metrics, more applicable measures to WisCom such as number of communications, interaction patterns, mentions of key concepts, and knowledge development can be used to illustrate SCK. WisCom depends on formative evaluation to

keep the community on track and encourage critical reflection. Dashboards populated with robust SCK measures provide instructors with a powerful form of formative evaluation which can supply the insights needed to quickly identify if a group is going off track, so the appropriate intervention can be identified and implemented.

SLA can also be used to research WisCom's Collaborative Inquiry Cycle (CIC) because it provides key data that can be used to assess the quality of contributions. Data plays a central role in facilitating the inquiry that goes on within WisCom although it typically comes in the form of resources like articles and links in the third step of the process. Augmenting these resources with analytics has the potential to enhance the quality of the inquiry within the community. For example, research by Haya, Daems, Malzahn, Castellanos, and Hoppe (2015) has shown that analytics provides the data needed for teachers to engage in meaningful inquiry/reflection by rating and providing comments on video content. Similarly, their research also indicates analytics improves student reflection on their own learning. In addition, Persico and Pozzi (2015) found that analytics supports teacher inquiry during the design, adaptation, and evaluation of learning initiatives by providing access to data about previous and ongoing learning processes. These studies provide useful approaches to operationalize LA in the service of WisCom. Analytics can be conducted using data from comments and ratings on learning resources as well as using metrics related to the learning process. In order to generate analytics from these data, the work of Konstan and Riedl (2012) should serve as a framework as it clearly defines how companies like Amazon and Netflix use comments and rating systems to predict consumer behavior. For example, introducing analytics at the resources step of the CIC can provide information on how many times a new link has

been referenced by others, how valuable a new article might be based on the number of keywords it contains, or how a participant's comment codified new knowledge or changed the course of the discussion. Analytics can thus provide participants with a quantitative method of assessing their own contributions to the community and what he or she might be able to do to become a stronger collaborator which would lead to an improved CIC.

#### Benefits of Combining IA, SNA, and LA

SNA and LA are complimentary methods which when combined provide an efficient way to assess the social dynamics of knowledge construction and thereby shed more light on results obtained from IA. An example of how SNA can compliment IA and ultimately LA to analyze collaborative learning, is provided by Heo, Lim, and Kim (2010). The results of their SNA indicated that the student team with the most frequent online interaction and the highest level of cohesiveness also performed the worst on a collaborative course assignment. It turns out that the group in question was only engaging in information sharing, the simplest level of IAM, albeit at a high frequency. If the authors had used descriptive data from their IAM analysis to conduct analytics, they would have been able to produce even more impactful findings such as projecting whether the amount of interactions at the information sharing level will diminish overall outcomes across all groups. In this case, the SNA established the nature of the relationships within groups using sociograms. Conducting LA would have added to these findings by using descriptive statistics about the language used to exemplify the IAM phases to establish probabilities associated with the nature of the relationships.

Gunawardena et al. (2016) demonstrated the complimentary use of IA, SNA, and LA in a study to analyze SCK and group dynamics. They found that SNA provided the social context for the interactions they analyzed using IAM, while LA indicated the socioemotional context that accompanies knowledge construction. These findings suggest that IAM, SNA, and LA can be used in combination by researchers to study group process and construction of knowledge. Lucas and Moreira (2015) point out "content analysis per se disregards the temporal dimension of interactions and should, therefore be complemented by other methods that can help researchers better understand such processes and facilitate additional in-depth analysis" (p. 1505). SNA provides the temporal dimension while LA provides a novel way to understand the outcome of the content analysis by operationalizing themes to predict future trends. SNA provides an answer to WHY a given phenomenon occurs by tracing relationships while LA provides an answer to HOW a given phenomenon occurs by operationalizing specific language-related research

A key element that allows LA to answer the HOW question is found in lexicons that support Sentiment Analysis (Liu, 2012). To conduct a Sentiment Analysis, data should be coded for positive (good, wonderful, fantastic, etc.) and negative (bad, awful, terrible, etc.) words . These words are then included in a lexicon which produces scores for the transcript that indicate whether the overall sentiment was positive or negative. The lexicon used in Gunawardena et al. (2016) was an extension of a traditional Sentiment Analysis where a lexicon was created to assess Social Presence in an online course. To assess Social Presence, instead of positive and negative words, words that contributed to or detracted from the creation of Social Presence were used. Words appropriate for each

of these categories were identified by conducting a content analysis of the transcript. The resulting scores indicated how much social presence was being created in the course. This study also employed SNA but it only provided information regarding how people were connected not necessarily why people were connecting regarding course content. Indeed, SNA reveals relationships between people in a community but without knowledge of what is being said how connected people are only tells part of the story. When a Sentiment Analysis is added, the relationships take on new meaning allowing researchers to answer how the relationships established in the SNA are impacting outcome variables via their positive or negative sentiment.

#### **Conducting SNA and LA**

This section will provide a brief overview of how to conduct SNA and LA. The upcoming discussion does not cover every aspect of SNA or LA and the reader will be referred to sources that provide comprehensive reviews of each technique.

Conducting SNA and LA is a Mixed Methods approach to research. The mix of these methods starts with the qualitative content analysis data coding and moves to quantitative SNA and analytics using the outcome of the content analysis.

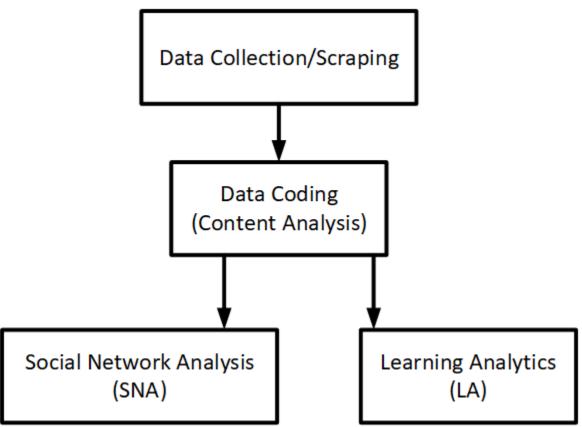


Figure 13.4 outlines the steps that should be followed to conduct SNA and/or LA:

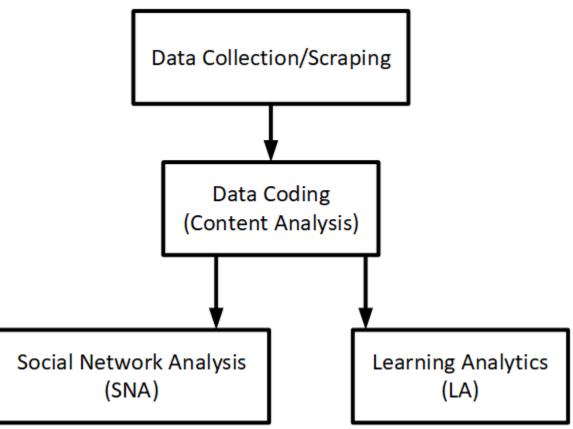


Figure 13.4. Major Steps in SNA/LA.

Data Collection and Data Coding need to be completed whether the researcher is conducting a SNA or LA study. Data Coding according to a qualitative content analysis is specifically required for both SNA and LA because researchers must supply the parameters needed for a computer to parse the data. Note that the Scraping and Data Coding steps need to be completed sequentially while the SNA and LA steps can be completed concurrently. The following sections will further explain each of the steps displayed in Figure 13.4.

# **Data Collection/Scraping**

Scraping is defined as "collecting online data from social media and other Web sites in the form of unstructured text" (Batrinca & Treleaven, 2015, p. 90). The first step in conducting SNA and LA is to gather the data for analysis. Data can be manually collected via an export from a Learning Management System (LMS) or automatically collected using an Application Programming Interface (API) to retrieve the data. In many online learning contexts, the data will be readily available in discussion forums stored on an LMS. This data can be manually exported into useable formats such as Word or Excel. Where no obvious export options are available, the researcher should consider copying and pasting the content into Word. An alternative is to save the given forum webpage as a PDF and then use Optical Character Recognition (OCR) to recognize the text in the PDF in order to work with it.

Automation of data collection is enabled by the existence of an application programming interface (API) on the host system. Data scraping methods use APIs to communicate with the databases of the host system (LMS, Twitter, etc.) to collect pertinent records. Social Media sites often include APIs enabling data scraping. A useful automated tool for scraping is Microsoft Flow, which is available in the Office 365 package. It has a number of existing templates that pull data from social media sites like Facebook and Twitter. Using these templates is a matter of selecting the appropriate template, providing a topic of interest, and then defining a data source (Excel sheet) located on cloud storage such as Google Drive or Dropbox. Flow will automatically populate the Excel sheet with the specified data once these steps have been completed.

#### **Data Coding (Content Analysis)**

With a rich dataset in hand, the process now turns to using a content analysis to code the data so that SNA and LA can be conducted. First keep in mind that research conducted on collaboration must deal with language and discourse, and thus the words that people use as they interact online. This places all such research squarely in the realm of Natural

Language Processing (NLP) which means that researchers must provide the computer with the necessary parameters needed to parse large volumes of text meaningfully. Coding should be performed prior to conducting an SNA because the relationships between actors needs to be provided (i.e. who sent or received a given message) for the computer to produce a sociogram. Coding is particularly useful for a type of SNA known as a Co-word Analysis which replaces people with words as the unit of analysis. The intent behind a Co-word Analysis is to illustrate the relationships between main concepts. Such an analysis is only possible when content analysis coding is completed prior to conducting the SNA because actors (words) need to be defined. For example, any words that occur together can be used to create a sociogram. However, taking this approach will identify many generic pairs like "of the," "I think," and "it is." These pairs are meaningful but they do not make any theoretical contributions. In order for a Co-word Analysis to provide a theoretical contribution, the word pairs must be categorized according to theoretical constructs. This will help ensure that the pairs identified are intimately related to the construct of interest. In a similar vein, coding is necessary for LA because categories related to language must be established and used to produce descriptive statistics that provide the data to be used in LA. Content analysis coding is even more important to LA because LA requires categorical data. Assigning words to categories related to theoretical constructs provides the needed categories and enables LA. In order to identify the appropriate parameters, the researcher must first establish a lexicon of pertinent terms and the categories to which they belong. Note that researchers do not need to account for all the semantics of a given dataset but instead focus on essential aspects pertinent to research such as communication targets and topics (Liu,

2012). This is where Grounded Theory is a handy tool for the researcher. Liu (2012) describes the three typical approaches that can be taken to develop a lexicon as follows:

- Manual coding words into categories and assigning their orientation by hand
- Dictionary using online dictionaries and thesauri to generate a comprehensive lexicon based on seed words that are representative of the polarized sentiment in the data set
- Corpus given a generic list of seed words discover word orientations (i.e. positive or negative) and other words from a domain corpus

Note that seed words are small sets of words that are generally representative of a given construct of interest. An automated approach to lexicon creation, such as the dictionary approach, offers significant advantages when compared to the manual approach because of the large amount of effort that is required to generate an entire lexicon by hand (Feldman, 2013). However, manually created dictionaries have been found to exclude words with ambiguous meaning which reduces the noise in the analysis (Taboada, Brooke, Tofiloski, Voll, & Stede, 2011). Furthermore, researchers have also recognized that combining manual and dictionary approaches to lexicon generation produces an efficient and precise lexicon (Hu & Liu, 2004, August). This combination approach is recommended for researchers.

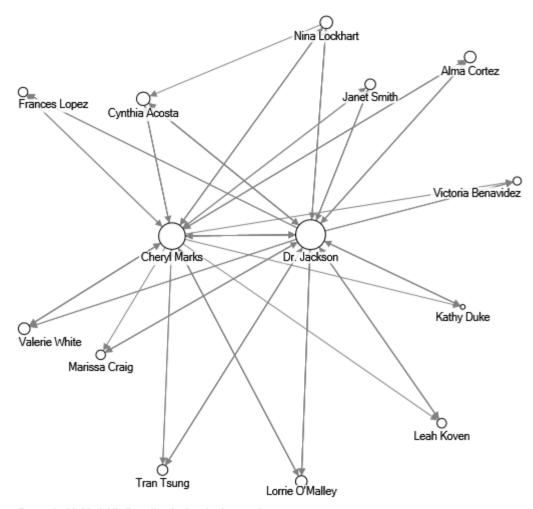
As an example, Gunawardena et al. (2016) discuss a lexicon that was developed and implemented for researching the construct social presence. This lexicon was generated using positive or negative social presence and SNA and LA were conducted to determine the degree of social presence exhibited by the collaborating community. The categories in the lexicon were developed by the researchers and a group of graduate students and were also informed by previous research regarding types of words that are indicative of online social presence. A content analysis was also conducted to add words to the lexicon which were specific to the data being analyzed. Once the lexicon was populated with categories and associated words, the OILS Twitter Scraper (Flor, 2014) was used to produce the descriptive data that was used to conduct SNA and LA for the study. The descriptive data included but was not limited to common single words, word pairs, and counts of positive or negative social presence.

Another useful tool which has been used by researchers to perform the same function is: AutoMap – <u>http://www.casos.cs.cmu.edu/projects/automap/</u>. For a comprehensive review of how to code data for analytics and produce the needed descriptive statistics, readers are encouraged to refer to Liu (2012).

Once the data has been coded according to a content analysis and the descriptive statistics (e.g. generic word counts and categorized word counts) have been produced, the process can turn to conducting the SNA. There are a number of tools available to help researchers conduct SNA including the following:

- NodeXL <u>http://nodexl.codeplex.com/</u>
- ORA Lite <u>http://www.casos.cs.cmu.edu/projects/ora/</u>
- Gephi <u>https://www.gephi.org/</u>

Figure 13.5 presents a sample sociogram derived from SNA: Figure 13.5. Sample Sociogram



Created with NodeXL (http://nodexl.codeplex.com)

Figure 13.5. Sample Sociogram of an online collaborative discussion.

Figure 13.5 is an example of a well devised sociogram because it is easy to read and the relationships are easy to track. Researchers would be well advised to manage the size of the network because sociograms can quickly become so congested they are difficult to decipher. For example, if a sociogram was created for a generic Co-Word Analysis for even a moderately sized transcript it would have so many actors and relationships that it would be unintelligible. It is important to focus on only the most important relationships, which are often strongly associated with theoretical constructs. Taking WisCom as an example, the most important aspects to consider could include reflection, negotiation, and

preservation. When considering people as actors instead of words similar guidance applies. Focus most on the people who are most central to the network and leave people on the periphery aside to avoid creating a chaotic sociogram. For a comprehensive review of conducting SNA and designing impactful sociograms, readers are encouraged to refer to Wasserman and Faust (1994).

The same descriptive data used to conduct the SNA can also be used to conduct LA. A particularly user-friendly tool that requires little to no manual calculations is called Weka. Weka is a collection of state-of-the-art machine learning algorithms and data preprocessing tools that provides support for preparing data, evaluating learning schemes, and visualizing data (Witten, Frank, & Hall, 2011). The software can be downloaded for free at the following link: Weka – <u>http://www.cs.waikato.ac.nz/ml/weka/index.html.</u> For a comprehensive review of conducting LA, readers are encouraged to refer to Witten et al. (2011).

# **Metric Selection and Ethical Considerations**

Researchers who wish to implement SNA and LA to assess social context must pay close attention to the metrics that are being used to establish social context because SNA and LA are powerful methods that have the potential to empower or imprison. Williams (2016) hints at the potential for analytics to empower saying "To deploy the considerable potential of social learning analytics to support and evaluate students' collaborative learning in realistic contexts sits squarely within the liberal tradition of Newman (1852) and Dewey (1938), who saw education as a progressive, personal and social force that primarily should serve the needs of learners" (p. 10). SNA and LA can empower students and researchers alike to improve knowledge and practice through the data they provide.

However, this reality can only come to pass if the metrics used to produce the SNA and LA data are sufficient to describe the multifaceted social context. SNA and LA data can imprison when an oversimplified set of metrics is used because such a practice is sure to miss key factors that will render any actions based on these findings incorrect. Indeed, Konstan and Riedl (2012) advocate for the use of numerous factors to determine the context associated with LA. Understanding the context is an important consideration in WisCom. Determinations regarding a person's future behavior based on a priori data run the risk of overlooking the potential for a person to have a transformative moment and change course in a way that defies expectations. Using a robust set of metrics to establish the social context is a meaningful step in avoiding the potential of objectifying research subjects. SNA and LA can be used effectively with WisCom so long as metrics used to produce these data can accurately assess collaboration, innovation, mentoring, and support in a culturally inclusive online environment.

#### Summary

This chapter has provided an overview of three methods; interaction analysis (IA), social network analysis (SNA), and learning analytics (LA) and how these methods can be used to learn about collaboration and group dynamics. IAM provides an in-depth analysis of how knowledge is co-constructed within a group and can be used as the backbone for implementing SNA and LA. These two powerful methods elucidate the social connections between actors and how the topics of their discussion are interrelated, respectively. Conducting a Content analysis to code data according to the five phases of IAM is the critical first step in operationalizing IAM to assess social construction of knowledge (SCK) using SNA and LA. Words and phrases that are coded to specific IAM

phases are added to a lexicon, which uses the list of words and phrases to produce word counts. Then word counts classified according to the IAM phases are used by software like NodeXL to perform SNA and Weka to perform LA. Sociograms should focus on the most important theoretical constructs to yield meaningful and comprehensible graphs. Analytics should focus on the relationships between theoretical constructs and outcome variables. Researchers should take care in selecting theoretical constructs and outcomes with which to explore big data because SNA and LA tend to simplify tremendously complex systems and remove the human element. IA, SNA, and LA procedures for analyzing SCK and group dynamics and software use directions can be obtained from the author by sending an email to Damien Sánchez at <u>dmxs2g@unm.edu</u>.

#### **Paper 2 – Basic Empirical Research**

# Special Issue on Emerging Trends of Learning Analytics in the Era of Transparency Digital Justice: An Exploratory Study of Digital Activism Actions on Twitter

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Abstract: This paper employs learning analytics to determine the relationships between digital activism action categories. Organizing that took place on Twitter in response to the shooting death of Tony Robinson, an African American teenager, was guided by the digital activism typology developed by Penney and Dadas (2014). The results yielded a positive correlation between seeking connections with activists and providing face-to-face updates from protests, which suggests people who seek connections with activists are likely to participate in live protests. Forwarding Information and Facilitating Online Actions were found to be negatively correlated with all other study variables. These findings lead to the conclusion that the common definitions of an Activist and Slacktivist are insufficient to describe Online Activism because Facilitating Online Actions requires a unique level of engagement as compared to participating in face-to-face protests or sharing information online. People who facilitate online actions should be treated as a unique population among digital activists because of their unique level of online engagement.

Keywords: learning analytics, digital activism, sentiment analysis, Twitter

#### Introduction

On the night of March 6, 2015 Madison, Wisconsin police officer Matt Kenny was called to a civil disturbance being caused by 19-year-old African American teenager, Tony Robinson. Ultimately the encounter ended with Officer Kenny shooting and killing the unarmed teenager. Public outcry was immediate and news of Tony Robinson's death spread quickly on the national news and social media (Simon, 2015). Protests started immediately following Robinson's death as people demanded justice for Tony. Many similar events have been happening across the United States starting in 2012 with the shooting death of 17-year-old African American Trayvon Martin in Florida (Bonilla & Rosa, 2015). African Americans are being brutalized by law enforcement officers across the country and public outcry is starting to be a predicable reaction to these travesties. Activists are using social media, such as Facebook and Twitter, as an organizing tool to facilitate protests and other related activities associated with many instances of police brutality. What was once a face-to-face activity has been taken online, giving birth to digital activism. Digital activism, as defined by Whyte and Joyce (2010), is "The practice of using digital technology to increase the effectiveness of a social or political change campaign" (p. 218). The change campaign that this study investigates is #BlackLivesMatter. This movement was started in response to the acquittal of George Zimmerman in the shooting death of Trayvon Martin (BlackLivesMatter, 2015). The purpose of #BlackLivesMatter includes calling attention to police brutality but encompasses all ways in which African Americans have been disempowered. Since establishing #BlackLivesMatter in 2012, an ever-growing network of activists and

sympathizers has contributed millions of Tweets to the discussion of African American disempowerment.

Although vibrant networks like #BlackLivesMatter were created and are maintained mostly online, little research has investigated the dynamics of these communities in their native online setting such as Twitter. Zhang (2013) examined how youth in Singapore use a wide variety of information and communication technologies like Facebook, Twitter, and Google Docs to engage in digital activism while Harlow and Guo (2014) studied how digital media is transforming the very definition of an activist. Although these articles speak to the recognition of digital activism as a distinct research area, they fail to capture the true dynamics of digital activism because both utilize a qualitative face-to-face methodology. These studies, and others like them, fail to use Tweets produced by community members as part of their analysis. Several studies have used NodeXL to analyze Tweets (Carew, 2014; Lovejoy & Saxton, 2012) but these studies are few and far between.

Analytics provides researchers with the tools needed to conduct meaningful research in online networks like #BlackLivesMatter. Analytics, which combines large data sets, statistical techniques, and predictive modeling, is currently most often utilized in education to help support administrative decision-makers (Campbell et al., 2007). Many different types of analytics exist including academic analytics, learning analytics (Long & Siemens, 2011), and Social Learning Analytics (Buckingham Shum & Ferguson, 2012). The current study employs Social Learning Analytics, which is defined by Buckingham Shum and Ferguson (2012) as a "distinctive subset of learning analytics that draws on the substantial body of work demonstrating that new skills and ideas are not solely individual achievements, but are developed, carried forward, and passed on through interaction and collaboration" (p. 5). This definition is important because in networks focused on facilitating both online and face-to-face activities like #BlackLivesMatter, interaction and collaboration that result in information sharing is essential to the existence of the network. As mentioned by Montgomery, Gottlieb-Robles, and Larson (2004), "the very structure of the Web, which lends itself to the kinds of informational, analytical, and organizational strategies on which activism depends, has become a fundamental component of many social action projects" (p. 88). The aim of this exploratory study is to use Social Learning Analytics to determine the types of information that are shared most frequently as people participate in digital activism and to identify the relationships between the types of information people share.

#### **Literature Review**

In order to understand the types of digital activism information, it is necessary to break down digital activism into its requisite parts in light of #BlackLivesMatter. This section starts by providing basic information about Twitter functionality. Digital activism is then explained in terms of information sharing, network building, and facilitating action. Information sharing is revealed as a cornerstone of digital activism by looking at Social Constructivist Theory and Social Network Theory because #BlackLivesMatter is comprised of a complex network of individuals dialoguing about disempowerment. The factors associated with transitioning this dialog into action is presented next. Having established that digital activism within #BlackLivesMatter involves social learning about the African American community's disempowerment and how this dialogue results in action, the focus turns to an exploration of the specific factors associated with digital activism.

## Twitter

Twitter is being used more and more by activists to share information, coordinate activities, and organize movements during an event (Cullum, 2010). Twitter is a social media tool that allows users to send single messages, called Tweets, to people within their networks. Note that there is no limit to the number of Tweets a user can send; only a limit of 140 characters to the length of each Tweet. Once a user has created a Tweet, users can take a variety of actions to share the information. Twitter (2016) offers the following definitions of its information sharing features:

- Reply A response to another user's Tweet that begins with the @username of the person you're replying to is known as a reply.
- Retweet A Tweet that you forward to your followers is known as a Retweet.
   Often used to pass along news or other valuable discoveries on Twitter, Retweets always retain original attribution.
- Hashtags A hashtag is any word or phrase immediately preceded by the # symbol. When you click on a hashtag, you'll see other Tweets containing the same keyword or topic.

In this study, hashtags will be used to identify relevant content. Retweets will be used to identify what types of information are shared the most. Further details are provided in the Methods section.

## **Social Constructivist Theory**

Social Constructivist Theory, including the Zone of Proximal Development, establishes the vital role socialization plays in the learning process; specifically, a novice learns much more with expert assistance than the novice could without assistance (Vygotsky, 1978). The #BlackLivesMatter movement provides a venue for experts and novices to dialogue about the disempowerment of African Americans (BlackLivesMatter, 2015). It must not be overlooked that the dialog within #BlackLivesMatter is situated in reality as people discuss events and opinions related to their lived experiences. The nature of this discussion aligns well with the idea that learning situated in real social situations produces meaningful learning, ultimately resulting in an understanding of how an individual is related to the welfare of the group to which he or she belongs (Dewey, 1897). In this case, African Americans participating within the #BlackLivesMatter movement are forming an understanding of their individual role in light of the larger African American community. Social learning is occurring within #BlackLivesMatter, which means that information sharing is a cornerstone of the network. Based on their common interests, #BlackLivesMatter has brought together groups of geographically dispersed people to form one powerful network.

#### **Social Network Theory**

Social Network Theory helps to explain how such a diverse group of people can become united as well as how the network functions. Social Network Theory describes the nature of the relationships between actors, such as individuals who are part of #BlackLivesMatter, as they exchange resources, such as information regarding disempowerment (Haythornthwaite, 1996). Contributors to #BlackLivesMatter create large networks of dispersed users who are learning and acting in response to oppressive actions perpetrated against the African American community. Interaction between contributors is enabled by Twitter's Retweet function. When a user Retweets content, it is shared with his or her entire network and each member of the network can also Retweet the content to his or her network. Bruns and Burgess (2012) noted the potentially endless cycle of Retweets allows information to reach wide audiences. The #BlackLivesMatter movement is sustained by interactions between contributors regarding the nature of their disempowerment.

Social Network Theory not only contributes to the understanding of how the network sustains itself, it also offers insight into how contributors interact with one another. Of specific importance is that weak ties facilitate the search for knowledge while strong ties are best for communicating complex knowledge (Hansen, 1999). Weak ties are those characterized by infrequent communication while strong ties are characterized by frequent communication (D. Z. Levin & Cross, 2004). In a network as large as #BlackLivesMatter, weak ties are almost certainly the most common. Finding information that is meaningful to an individual's own context is of the upmost importance. For many users, Twitter can be seen as a new technology. As discovered by Yang, Lu, Gupta, Cao, and Zhang (2012), finding something personally useful is an important factor in determining whether new technology will be adopted. Thus, the ability of users to find relevant information is vital to sustaining and expanding the network. Social Network Theory explains sharing behaviors that sustain the #BlackLivesMatter movement and characterizes the nature of the relationships between individuals in the network. However, Tweet content must also be examined to understand the network more completely.

#### **Freedom from Oppression**

By engaging in dialogue regarding the disempowerment of African Americans, #BlackLivesMatter contributors have an opportunity to understand their individual roles in light of the larger phenomenon of the oppression of African Americans. Freire (1970) defines oppression as, "Any situation in which "A" objectively exploits "B" or hinders his and her pursuit of self-affirmation as a responsible person is one of oppression" (p. 55). The African American community is an example of an oppressed people as the realities of racism, classism, and racial stereotyping, to name a few, have become accepted realities of life as an African American. These negative phenomena have led to their collective disempowerment. However, when an oppressed people start to engage in sustained dialogue about the circumstances of their oppression, like in the case of #BlackLivesMatter, the oppressed start to understand the nature of their oppression and they often take action to initiate change (Freire, 1970). It is evident that action is the natural outcome of the conscious information sharing among members of the #BlackLivesMatter network. #BlackLivesMatter provides the venue for critical dialogue to take place and digital activism provides the vehicle for that dialogue to result in meaningful action.

## **Digital Activism**

Digital activism is a powerful organizing tool that has been used across the world to help successfully organize people in efforts to facilitate social change. One example is the overthrow of Egyptian dictator Hosni Mubarak, which is described by Brym et al. (2014) as a demonstration of how social media has become a key component of the ways in which activists shape social movements. In Egypt, social media was instrumental in sharing information and helping to organize large protests (Lim, 2012). A well-known

example of digital activism in the United States is the 2011 Occupy Wall Street movement. This largely online movement used Twitter, along with Facebook and YouTube, to successfully urge thousands of people to protest in Zuccotti Park, New York and share updates from the protests (Juris, 2012). These two movements share similar characteristics in that both used social media to share information and to organize people to participate in face-to-face actions. While these similarities reveal some potential in ascertaining how social media is used by social movements, additional study is necessary to reveal how digital activism utilizes social media. To create such an understanding, several studies are compared to identify additional activities associated with digital activism and to develop typologies for understanding the use of social media in the context of digital activism.

The first study considered is a report summarizing how to engage youth in online civic engagement (Montgomery et al., 2004). The second study is a qualitative study investigating nonprofit use of Twitter (Lovejoy & Saxton, 2012). The final study is another qualitative study investigating the use of Twitter by the Occupy Wall Street movement (Penney & Dadas, 2014). Table 1 compares the digital activism typologies in each study.

# Table 2. Digital Activism Typologies

Montgomery et al. (2004)	Lovejoy and Saxton	Penney and Dadas (2014)		
	(2012)			

Organizing and recruiting	Information	Facilitating face-to-face protests via advertisements and donation solicitations
Publication and distribution	Getting recognition and	Live reporting from face-to-
I dollcation and distribution	Getting recognition and	Live reporting from face-to-

of materials	thanks	face protests		
Alternative news source	Acknowledgment of current and local events	Forwarding news via links and Retweets		
Orchestration and coordination of demonstrations, lobbying, and direct action	Responses to reply messages	Expressing personal opinions regarding the movement		
Press relations	Response solicitation	Engaging in discussion about the movement		
Viral marketing	Promoting an event	Making personal connections with fellow activists		
Fundraising	Donation appeal	Facilitating online-based actions		
	Selling a product			
	Call for volunteers			
	and employees			
	Lobbying and advocacy			
	Join another site or coach			
	for organization			
	Learn how to help			

Common elements between the typologies presented in Table 1 include adherence to the general elements of digital activism (information sharing, network building, and facilitating action) described previously in this section. Similarly, Lovejoy and Saxton (2012) used Information, Community, and Action as general categories to classify the host of activities in their study of nonprofit use of Twitter. The general elements of digital activism can also be used to classify the activities identified in the work of Montgomery

et al. (2004) and Penney and Dadas (2014). The similarities between these typologies are interesting to note given the unique motivation behind each of the studies. Table 1 compares an institutional report summarizing online youth civic engagement Montgomery et al. (2004), a chronicle of nonprofit business implementations (Lovejoy & Saxton, 2012), and a specific examination of a grassroots organizing effort (Penney & Dadas, 2014). The similarity between the general elements of digital activism presented in this paper and the work of Lovejoy and Saxton (2012) in addition to the convergence of activities in the typologies presented in Table 1 provide a high degree of confidence that information sharing, network building, and facilitating action capture the breadth of the activities associated with digital activism. Given the grassroots context of this study, the digital activism activities identified by Penney and Dadas (2014) were selected to guide the analysis. Definitions of each of these key digital activism action categories, according to Penney and Dadas (2014), are provided below according to their relationship to the general elements of digital activism:

# **Information Sharing**

Forwarding news via links and Retweets

Original or Retweeted messages containing links to outside news sources or pertinent information

Live reporting from face-to-face protests

Messages containing live updates which can include photos, videos, or other multimedia

# **Network Building**

Expressing personal opinions regarding the movement

Messages containing personal opinions or views about aspects of the movement

including commentary on larger social and political issues

Engaging in discussion about the movement

Messages containing positive or negative comments of a political or social nature

regarding the purpose of the movement

Making personal connections with fellow Activists

Messages containing gestures of solidarity or attempts to reach out to others with the intent of doing something either online or face-to-face

# **Facilitating Action**

Facilitating online-based actions

Messages containing directives or information that is intended to result in only online activities

Facilitating face-to-face protests via advertisements and donation solicitations Messages containing time and date information that are intended to increase attendance of face-to-face events. Note that advertisements and donation solicitations were not part of this dataset so these terms will be removed.

The typologies in Table 1 identify associated activities but they do not mention the frequency with which the activities they identified are disseminated within Twitter via Retweets. Lovejoy and Saxton (2012) reported the overall totals and percentages

according to their typology of nonprofit Twitter uses but this simple frequency only identifies the most common activity. Reporting the frequencies of activities according to Retweets will shed light on how information traverses the network and constitutes a contribution to the existing research. Therefore, this study seeks to answer the following research question:

RQ1: What categories of Tweets are most often shared within Twitter? The aforementioned studies suggest that the actions listed in their typologies are related in that they were part of their dataset. In fact, Penney and Dadas (2014) stated that the categories they identified are overlapping in nature. Qualitative research is well suited to inductively identifying categories of information, which each of these studies does well. However, qualitative methods are not capable of assessing whether relationships exist between the identified activities. Therefore, this study seeks to answer the following research question:

RQ2: What are the relationships between the digital activism action categories?

# Method

# Subjects

The subjects for the study consist of 10,296 unique users who produced 15,740 Tweets. #BlackLivesMatter depended heavily upon the engagement of high school students from Madison, Wisconsin to organize protests in response to the death of Tony Robinson. Other contributors include activists associated with organizations such as #BlackLivesMatter and Occupy Wall Street. Note that the presence of these groups was indicated by Tweets originating from their organizational accounts within the primary hashtags searched. Still others included in the data set were concerned Madison

community members and interested parties from across the globe. Note that most of the users were located in the United States. Group affiliations were determined based on Tweet content and no specific demographics were collected.

## Apparatus

Data collection and analysis were performed using the Organization, Information, and Learning Sciences (OILS) Twitter Scraper. Generally speaking, scraping involves the collection of online data from social media and other online sources in the form of unstructured text (Batrinca & Treleaven, 2015). The main purpose of the OILS Twitter Scraper is to gather and analyze Twitter data. The software was written in Visual Basic by Dr. Nick V. Flor of the University of New Mexico (Flor, 2014). The software uses applicable functions from the Twitter Application Programming Interface (API) to pull Tweets off of Twitter into an Excel spreadsheet. The software uses the same search string syntax used by Twitter when searching for specific Tweets via the Twitter website to limit the data pulled into Excel. Raw data such as date, username, Favorites count, Retweet count, Tweet content, and total Tweet count are included in the data scrapes. The software has similar functionality to quantitative analysis programs, such as SAS or SPSS, as it can run correlations, produce covariance matrices, and conduct other standard statistical analyses.

# Procedure

Tweets were scraped using a search string focused on Tweets mentioning both #BlackLivesMatter and #TonyRobinson from March 7 – March 10, 2015. Prior to Tony Robinson's death on the evening of March 6, hashtags associated with him did not exist.

Figure 1 presents Tweet counts associated with each day included in the data set. The explosions in Tweet counts are associated with face-to-face protests on March 7 and March 9. After March 10, Twitter activity associated with Tony Robinson decreases dramatically. The low Tweet count continued after March 10, which combined with a lack of face-to-face protests after the 10<sup>th</sup>, contributed to the decision to make March 10 the final day included in the data set.

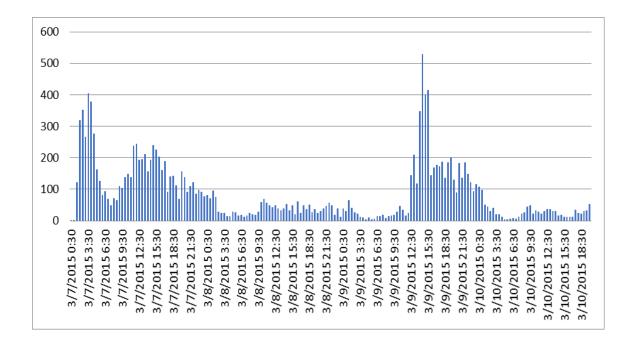


Figure 1. Tweet Frequency Histogram

The analysis of Tweets scraped from #BlackLivesMatter and #TonyRobinson is based on the typology of seven Twitter actions developed by Penney and Dadas (2014). In order to operationalize these categories, the definitions provided in the Literature Review were used to conduct a sentiment analysis of the scraped Tweets. Sentiment analysis is defined by Batrinca and Treleaven (2015) as "the application of natural language processing, computational linguistics and text analytics to identify and extract subjective information in source materials" (p. 90). Sentiment analysis was implemented in this study following the work of Hu and Liu (2004, August). The majority of the work associated with the sentiment analysis was conducted manually by reading through the individual Tweets. Samples of keywords identified during the sentiment analysis are presented below according to the Penney and Dadas (2014) action categories.

# Personal Opinions

"i think", "thoughts and prayers", "murder", "profit", "anguish", "ironic", "assaulted", "black-on-black", "black half", "fear", "disgusting", "savage", "killer cops", "i'm", "pigs", "media", "saddened", "angry", "rest in power", "white supremacy", "slavemaster", "equality", "rabid", "shit", "slain", "racist", "liberalism", "99%", "practice", "exaggerating", "practice", "devastated"

# Discussion

"mugshot", "pic", "racial", "issues", "racial", "dane county", "sentence", "friend", "heart if full", "life and death", "that proud", "proud", "not associating"

# **Connect Activists**

"#shutitdown", "#willystreet", "tamir", "our hands are still up", "on the move", "love",

"solidarity", "fight", "respect", "bucks", "support", "list", "live", "stand", "muslims",

"raising up", "goodluck"

# Forward Information

"19", "image", "media", "unarmed", "die", "officer", "police", "kill", "die", "5 times",

"http", "home", "video", "kill", "meet officer", "thousands", "images/video",

"conference", "corinda", "walk-out", "today in", "new song", "yesterday"

# **Online** Actions

"RT", " tweet", "trend", "hashtag", "share", "sharing", "viral", "#anthonyhill", "urge", "join", "protest page"

# *Coordinate Face-to-face Updates*

"singing", "what do we want", "livestream", "de facto segregation", "aunt and grandma", "lots of people", "updated coverage", "crowd continues", "site", "video of fam", "gather", "street", "streets", "brusky", "williamson", "willy ", "scene", "few", "sign", "red gym", "vigil", "mansion"

# Facilitate Face-to-Face Actions

"red gym", "join now", "come to", "week of action", "tonite", "ewash", "willy st", "willy and few", "headed to madison", "walkout", "walk out", "10:30", "vigil", "urge action", "211", "carroll", "capitol", "capital", "11:15", "@ygbcoalition", "langdon", "1030", "bascom"

Upon completion of the sentiment analysis, the OILS Twitter Scraper was used to determine whether individual Tweets were associated with the digital activism action categories by producing count data for each Tweet according to the action category keywords. Next, the filtering capability in Excel was used to find the Tweets that were not associated with any of the seven action categories. Modifications to the existing category arrays were made by adding or removing keywords to assure all Tweets fit into at least one of the seven action categories. Once the list of keywords associated with each category was complete, the OILS Twitter Scraper was run again to assure correct Tweet action category association counts. Several statistical techniques, described in the next section, were then used to answer the research questions.

#### **Results**

RQ1: What categories of Tweets are most often shared within Twitter?

In order to determine which Tweet categories were most often shared, the raw data collected by the OILS Twitter Scraper was sorted from largest to smallest number of Retweets. Duplicate Tweets were removed using built-in functionality in Excel. In total, 12,397 Retweets were removed, leaving 3,344 unique Tweets. What remained were the original Tweets as well as their Retweets. Original Tweets were removed from the remaining data by filtering the Tweets according to the text string "RT\*" since Twitter includes "RT" at the beginning of any Retweet. A total of 1,057 Tweets reminded after applying this text filter. Finally, the number of Retweets for the remaining Tweets was summed to produce final numbers of Retweets according to each of the seven categories. Results are shown in Table 2.

Table 2. Total Retweets

Personal	Discussion	Connect	Forward	Online	F2F	Facilitate
Opinions		Activists	Info	Actions	Updates	F2F
2,042	631	14,881	13,091	736	4,234	2,752

The Connect Activists and Forward Information categories unexpectedly produced the highest number of Retweets. Expected results include the numbers associated with Personal Opinions, Face-to-Face Updates, and Facilitate Face-to-Face Action. Identifying these categories was facilitated by the language of the tweets and associated multimedia. The clear presence of these categories created the expectation that many instances would occur. The frequency of Online Actions Retweets was much lower than expected, as research conducted by Bonilla and Rosa (2015) indicated a high level of Online Actions

within the #Blacklivesmatter network. In this case, the #BlackLivesMatter network was more concerned with face-to-face activities than with digital forms of protest. Finally, the Discussion category had the lowest number of Retweets, which was an expected finding because initial posts are Retweeted while subsequent discussion takes place in threaded discussions within Tweets.

RQ2: What are the relationships between the digital activism action categories? A correlation matrix was produced to identify relationships between digital activism categories. To produce these correlations, the count values associated with each of the categories, as produced by the OILS Twitter Scraper, were consolidated on a single spreadsheet. The correlation matrix is presented in Table 3.

	Personal		Connect	Forward	Online	F2F	Facilitate
	Opinions	Discussion	Activists	Info	Actions	Updates	F2F
Personal							
Opinions	1.000						
Discussion	0.093*	1.000					
Connect							
Activists	-0.024**	0.113*	1.000				
Forward							
Info	-0.128*	-0.152*	-0.209*	1.000			
Online							
Actions	-0.025**	-0.039**	-0.051*	-0.181*	1.000		
F2F							
Updates	0.081*	-0.088*	0.071*	-0.296*	-0.060*	1.000	
Facilitate							
F2F	-0.109*	-0.075*	-0.026**	-0.199*	-0.076*	0.204*	1.000

**Notes:** \* p < .0000001; \*\* p < .001

All of the relationships tested were found to be significant. *Personal Opinions was found* to be positively correlated with Discussion (p < .0000001, r = .093) and providing Faceto-Face Updates (p < .0000001, r = .081). The positive correlation with Face-to-Face Updates is surprising but plausible because people who are providing Face-to-Face Updates also often communicate positive or negative opinions about the events. *Personal* 

Opinions was found to be negatively correlated with Forwarding Information (p < .001, r = -.128), suggesting that those who Retweet information do not include any personal commentary. Discussion was found to be positively correlated with Connecting Activists (p < .0000001, r = .113). Similar to the negative correlation found between Personal Opinions and Forwarding Information, Discussion was also negatively correlated with Forwarding Information (p < .001, r = -.152). Negative correlations between Personal Opinions and Discussion with Forwarding Information suggest that Forwarding Information is a passive behavior. *Connecting Activists was found to be positively* correlated with Face-to-Face Updates (p < .0000001, r = .071). A negative correlation exists between Connecting Activists and Forwarding Information (p < .0000001, r = -.209), suggesting that Retweeting does not necessarily bring individuals within the network closer together. Forwarding Information was found to be negatively correlated with all study variables. It is interesting to note that there was not a positive relationship between Forwarding Information and Online Actions since both are primarily online activities. Online Actions was also found to be negatively correlated with all study variables. Finally, Face-to-Face Updates was found to be positively correlated with Facilitating Face-to-Face Actions (p < .0000001, r = .204). This relationship makes sense since someone who participates in face-to-face protests would also be likely to provide updates from those events. Table 4 presents the R<sup>2</sup> values for each of the correlations:

	Personal		Connect	Forward	Online	F2F	Facilitate
	Opinions	Discussion	Activists	Info	Actions	Updates	F2F
Personal							
Opinions	1.000						
Discussion	0.009	1.000					
Connect							
Activists	0.001	0.013	1.000				
Forward							
Info	0.016	0.023	0.044	1.000			
Online							
Actions	0.001	0.002	0.003	0.033	1.000		
F2F							
Updates	0.007	0.008	0.005	0.088	0.004	1.000	
Facilitate							
F2F	0.012	0.006	0.001	0.039	0.006	0.042	1.000

On an individual basis, the relationships between the categories do not account for a large percentage of the variation. Therefore, the model presented is not able to effectively predict future behaviors. The variation from person-to-person and community-tocommunity who participate in digital activism on Twitter is likely a factor in the inability of this model to predict outcomes effectively.

#### Discussion

The high Retweet frequency of the Connect Activists and Forward Information categories indicates that members of the #BlackLivesMatter network are well connected, amply informed, and value an individual's presence at a protest as a factor in determining whether their Tweets will be widely disseminated. Tweets within the Personal Opinion and Discussion categories reflected both supportive and critical points of view. Connecting Activists was positively correlated with Face-to-Face Updates, which hints at the vital role people who Tweet from protests have in building and maintaining the network. Forwarding Information was not positively correlated with any of the other study variables, which might mean that this activity constitutes the simplest and least engaged form of digital activism. Online Actions was also negatively correlated with the other study variables. However, engaging in online actions requires much more commitment and engagement than forwarding information. This suggests engaging in online actions is a unique type of digital activism. The categories associated with face-toface actions constitute the highest level of engagement associated with digital activism and are positively correlated with one another.

# **Retweet Frequency**

According to Morozov (2013), it is extremely difficult for digital activist networks to facilitate meaningful face-to-face action. However, the extremely high number of Retweets in the Connect Activists category suggests that there is a great level of interconnectedness between individuals within the #BlackLivesMatter network. In addition, the high number of Retweets in the Forwarding Information category indicates that these well connected individuals are also well informed. Although there is no formal

organization to the #BlackLivesMatter network, the maxim of Twitter content production described by Hands (2011) holds true. She says that 90% of Twitter content is created by 10% of its users (p. 119). Indeed, a relatively small number of #BlackLivesMatter users produced a great volume of the content. These individuals have no obvious relationship to an organization that would increase their influence in the eyes of the network. The study by Xu, Sang, Blasiola, and Park (2014) suggested how content becomes influential. Tweets considered more engaging were more likely to be Retweeted than non-engaging Tweets. In the current study, it seems as though engaging means someone who attended a protest and Tweeted some form of live update as evidenced by the individuals associated with the Face-to-Face Updates and Facilitate Face-to-face Activities categories producing the most Retweeted content.

# **Expressing Personal Opinions Regarding the Movement**

The current study found that expressing personal opinions was a strong trend. Prior digital activism research has shown that people often use social media to express their personal opinions regarding a movement (Bonilla & Rosa, 2015; Brym et al., 2014; Lim, 2012; Weiss, 2014; Zhang, 2013). The current study contributes the positive correlation between Discussion and Face-to-Face Updates with Personal Opinions. Sharing information is the foundation of discussion so the relationship between these variables is expected. Both supporters and critics were sharing their personal opinions. Sample Tweets that exemplify the positive and negative sentiments expressed are provided below.

# Supportive Sample:

Another black child murdered by police. This s\*\*\* is genocide. #TonyRobinson #BlackLivesMatter

#### Critical Sample:

#TonyRobinson was the best that the black community has to offer. No wonder they all end up in jail. #BlackLivesMatter #justice4tony

The Supportive Sample communicates that it is unjust how many African American children are being killed by police. The Critical Sample is a reflection of racism towards the entire African American community, which infers that all African Americans are delinquents. Research conducted by Carew (2014) in South Africa examining the trends associated with the rhinoceros conservation campaign #Iam4rhinos also found many charged personal opinions. Critical Tweets in her study were from supporters of rhinoceros conservation who expressed anger towards poachers. However, Tweets that were contrary to the purpose of the movement were not present. The dichotomy between supportive and critical Tweets carries over into the Discussion category.

# **Engaging in Discussion about the Movement**

The current study found that supportive and critical discussion took place within the #BlackLivesMatter network. Samples of each type of discussion Tweet are provided below.

# Supportive Sample:

"He changed me as a person." Friends of #TonyRobinson #justice4tony #BlackLivesMatter <u>http://t.co/YRuCW0kR5n</u>

## Critical Sample:

The media and #BlackLivesMatter dopes want you to see #TonyRobinson's pic on the left, not his mugshot on the right ht...

Note that the Supportive Sample provided is a quote from one of Tony Robinson's friends. The link in the Tweet will display the video that originated the quote. Numerous studies have found that social media is used to carry on a discussion about a specific movement (Bonilla & Rosa, 2015; Carew, 2014; Harlow & Guo, 2014; Juris, 2012; Lim, 2012). The current study extends these findings by adding that Discussion is positively correlated with Connecting Activists and negatively correlated with Forwarding Information. Discussion is the act of sharing personal opinions regarding a given subject so finding that Discussion is negatively correlated with Forwarding Information, which was operationalized as sharing factual information without interjecting a personal point of view, is no surprise.

Support for the relationship between Discussion and Connecting Activists comes from the work of Weiss (2014) who found that Malaysians prefer to maintain online personal journals to share their own opinions about political issues. The intent of these journals is to connect activists as they discuss issues and get people interested in attending face-toface events. Zhang (2013) also found that social media is used mostly in the context of discussing events and raising awareness about social issues more than it is used as a formal organizing tool by youth in Singapore. Sharing information about a cause brings like-minded individuals together, but willingness to go offline is often lacking. Indeed, both of these studies indicate that the mostly discussion-oriented nature of the activist networks studied do not often result in high levels of participation in face-to-face events.

## Making Personal Connections with Fellow Activists

The current study supports previous findings which indicate that activists make connections with other likeminded individuals using social media (Harlow & Guo, 2014; Juris, 2012; Lim, 2012). Samples of Tweets sent by an organization and an individual are provided below.

# Organization Sample:

RT @OccupyWallStNYC: All our love and solidarity to the friends and family of #TonyRobinson. #BlackLivesMatter

## Individual Sample:

Made a list of people tweeting from #justice4tony events in Madison https://t.co/28I2pnS9vE #TonyRobinson

Note that the Organization Sample was sent by the account linked to the Occupy Wall Street movement. The study conducted by Brym et al. (2014) helps to explain how networks of activists form. Brym et al. (2014) indicated that social media played a significant role in extending protest networks, which facilitated the Egyptian uprising. They also found common traits of activists, such as organizational ties and feeling slighted by society, were easily identified online. The ease of identifying like-minded individuals helped build a large support base for the movement in a short amount of time. It is highly likely that the majority of #BlackLivesMatter contributors feel slighted by society since African Americans have a long history of oppression. Xu et al. (2014) noted that Twitter allows users to easily filter and deliver customized information. These features help people locate like-minded individuals. Therefore, gravitating towards a common experience of oppression has likely contributed to the growing strength of the #BlackLivesMatter network.

The current study extends existing research finding that Making Personal Connections with Activists is positively correlated with Face-to-Face Updates and negatively correlated with every other study variable. The relationship between Making Personal Connections with Activists and Face-to-Face Updates suggests that people who attempt to make connections with other activists online are also likely to participate in face-toface events. Further research is necessary to substantiate this claim.

## **Forwarding News Via Links and Retweets**

The current study found that information was forwarded among users within #BlackLivesMatter via Tweets and Retweets. Previous research has established that Twitter, along with other forms of social media, have been used by those in digital activist networks as a news source (Bonilla & Rosa, 2015; Brym et al., 2014; Lim, 2012; Weiss, 2014; Zhang, 2013). Specifically, Brym et al. (2014) noted how protesters in Egypt relied mostly on social media for news related to protests. Examples of news disseminated within #BlackLivesMatter are as follows.

#TonyRobinson 19 years old. Unarmed. Black. Man. Killed Madison, WI's PD. 3/6/2015 at 6:30pm. #BlackLivesMatter

Wisconsin police confirm #TonyRobinson was unarmed: http://t.co/5c9j6E4wlU #BlackLivesMatter http://t.co/F8NTfUxBZq

The current study found that Forwarding Information was negatively correlated with all of the other study variables. Perhaps these negative correlations indicate that people who Forward Information are unlikely to participate in activism of any kind. A study of advocates for Mexican immigrants in the United States conducted by Harlow and Guo (2014) found that many advocates who participate in digital activism networks do not engage in face-to-face demonstrations. Two studies discussed in an earlier section also point out the difficulty associated with getting digital activists to participate in live events (Weiss, 2014; Zhang, 2013). Existing research, as well as the negative correlations, suggest that Forwarding Information is associated with people who are not likely to engage in live protests.

#### **Facilitating Online-Based Actions**

The other study variable negatively correlated with all of the other study variables is Facilitating Online-Based Actions, which suggests this activity might be related to another aspect of digital activism not been identified in previous research. Sample Tweets associated with this study variable are as follows.

Make this viral please https://t.co/5xzJZAmvxd @aclu @hrw @civilrights #Ferguson to #Madison #BlackLivesMatter #IcantBreathe

We started our day dope, tweeting #BlackOutDay, sadly we're ending our night tweeting #BlackLivesMatter because a cop kil...

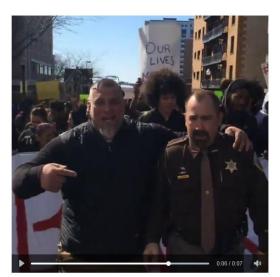
Previous research has established that in other networks members have used online actions to serve as a form of digital protest (Brym et al., 2014; Harlow & Guo, 2014; Lim, 2012; Montgomery et al., 2004). Bonilla and Rosa (2015), who studied digital activism in #Ferguson, are especially relevant because their work provides examples of the level of engagement required when Facilitating Online Action. The ethnography by Bonilla and Rosa (2015) determined that once news of the Ferguson, Missouri police killing an unarmed African American teenager named Michael Brown hit social networks people started to organize digital protests. These activities included taking pictures of themselves with their hands up, since Brown put his hands up showing he was not a threat before he was shot and killed. People also took pictures of themselves mocking the portrayal of Brown as a teenage troublemaker in the media, asking which picture would be used if he or she was killed by law enforcement.

Facilitating Online Actions is akin to the digital activism described by Bonilla and Rosa (2015). It is clear that Facilitating Online Actions goes far beyond sharing Personal Opinions or engaging in Discussion. Furthermore, Facilitating Online Actions is not positively correlated with Face-to-face Updates or Facilitating Face-to-Face Protests. Therefore, the people who are most concerned with face-to-face activities do not associate themselves with Facilitating Online Actions. This negative correlation suggests that facilitating Online Actions is a unique behavior exhibited by a specific type of digital activist. Further research is necessary to substantiate this claim.

## Live Reporting from Face-To-Face Protests

The current study found a wealth of people posting live video and pictures in their Tweets as they participated in Tony Robinson protests. Samples of Face-to-Face Updates as well as associated multimedia are presented below.





Madison is BEASTIN rn HIGH SCHOOLERS DID THIS #justice4tony #TonyRobinson #BlackLivesMatter

http://t.co/L77yuXJJEr

Sheriff Mahoney joins students to demand #justice4tony #TonyRobinson #BlackLivesMatter <u>http://t.co/uaJGlVuERH</u>

Additional studies also found that social media was used to post updates from demonstrations (Brym et al., 2014; Lim, 2012). Each of these studies makes a connection between live reporting and organizing using social media. A good example of how Faceto-Face Updates were used is the study conducted by Juris (2012) on the Occupy Wall Street movement. He found that when the city of Boston was trying to dismantle the protester's encampment activists got the word out on Twitter and people started to sing and dance in the streets until the city relented. Immediately word that the activists were victorious was sent out via Twitter. Indeed providing Face-to-face Updates is related to Facilitating Face-to-face Action as a positive correlation was found between these two study variables.

## **Facilitating Face-to-Face Protests**

The current study found that direct efforts to organize people to participate in protests and other events were made before and during the events. Examples of some of these Tweets are provided below.

Tomorrow 10:30am, YWCA, strategy meeting. Show up Madison #TonyRobinson #BlackLivesMatter #FergusonToMadison

5PM Red Gym @UWMadison students come process and be together following the death of #tonyrobinson #blacklivesmatter

Other studies found that face-to-face protests had substantial online components that helped enable success on the ground (Brym et al., 2014; Harlow & Guo, 2014; Juris, 2012). For example, a study chronicling the use of social media to facilitate activism in Egypt conducted by Lim (2012) found that Facebook and Twitter were instrumental in the success of the social movements that started in 2004 with a small protest and ended with the massive uprising in 2011, led to the fall of President Mubarak. Lim (2012) reported that 50 out of 74 demonstrations that occurred in Egypt had a substantial online component that was instrumental in coordinating the demonstrations. #BlackLivesMatter is yet another digital activism success story that successfully uses social media to facilitate demonstrations.

## Implications

Practitioners who conduct research in online communities can benefit from this study because the #BlackLivesMatter movement exemplifies several recommendations for creating an online community. A study of Occupy Wall Street on Twitter by Gleason (2013) established that informal learning occurs when participating in digital activism. The current study aligns with these findings as the Forwarding Information category demonstrated #BlackLivesMatter contributors learned about the disempowerment of African Americans. In this case, Twitter was used in support of both digital and face-toface activities. Therefore, it is recommended that practitioners consider using Twitter as an informal learning tool to support other educational activities. The current study also found that cohesive communities of learners can be formed from vast numbers of users. who are from different places, and whose communication is limited. To take advantage of such communities, it is recommended that practitioners provide opportunities for potential members to connect with one another according to shared interests or activities. Providing this opportunity will produce a cohesive and active online community, but of course not all members will participate actively. However, the current study demonstrated that even simple actions within Twitter constitute meaningful engagement. Therefore, a further recommendation for practitioners is to provide methods to share and favorite content in online courses to facilitate the ability of members to make meaningful contributions from the periphery (Lave & Wenger, 1991). Practitioners who heed these recommendations will be able to enhance online learning by creating cohesive communities that can support online learning as well as face-to-face activities.

#### **Limitations and Future Research**

The first limitation of this study is that an analysis of discussion within the #BlackLivesMatter network was not conducted. The OILS Twitter Scraper is currently not capable of capturing nested responses associated with Tweets. Future research should investigate the nature of the discussions that occur in the threaded discussions found within individual Tweets. The second limitation of this study is that only the author was

involved in creating the arrays used to assess whether a given Tweet fit into the seven study categories. Future research should involve additional coders to enhance the reliability of the Tweet classification. The final limitation of this study is that it focused on Tweets associated with both #BlackLivesMatter and #TonyRobinson. Twitter is a vast network and a variety of different hashtags were likely used by different groups during the Tony Robinson protests for related purposes. Future research should incorporate a larger number of hashtags and compare how the network of users behind the different hashtags uses them to organize.

#### Conclusion

The relationships established in this study suggest that digital activism actions are more complex than what has been described in previous research. In fact, it appears that the Forwarding Information and the Facilitating Online Activities categories represent unique types of digital activism. As described by Morozov (2013), there are two different types of digital activism: Activism and Slacktivism. Activism is defined as organizing tangible actions in the real world to protest against a given issue using social media. Slacktivism, a combination of the words slacker and activism, refers to people who engage in digital activism but never take their actions into the real world. According to these definitions, the difference between an Activist and a Slacktivist is participating in face-to-face protests. Empirical research has operationalized these definitions in a similar fashion generally painting Slacktivists in a negative light because they lack the conviction to participate in live protests (Bonilla & Rosa, 2015; Carew, 2014; Harlow & Guo, 2014). The current study demonstrates that within Slacktivism, the online actions of Forwarding Information and Facilitating Online Action are quite different from one another. In fact,

Forwarding Information is most closely associated with Slacktivism because it only involves clicking a button to share information and does not require high levels of engagement.

On the other hand, Facilitating Online Action involves a high level of engagement and often results in real-world impacts. For example, Kapin and Ward (2013) noted that even the simple action of Retweeting constitutes meaningful action because it is a way to maintain networks between live events. If such small actions done collectively can be meaningful, the Online Activists who facilitate online actions certainly have the potential to exert their influence. An extreme version of Facilitating Online Actions is described by Montgomery et al. (2004), who described how some groups have organized system overloads of websites and phone services. Overloading communication networks generally requires minimal individual effort as it often involves many people placing a call or sending an email at a given time. Indeed the level of societal impact between closing down streets for marching protesters and overloading a digital network rendering the Internet useless is comparable.

In conclusion, the current study identified that not all Slacktivists are created equal because within this group are people who share information or facilitate online actions. Although Slacktivists do not participate in face-to-face protests, the people who facilitate online actions are much more active and engaged than those who simply share information. This difference suggests the need to establish an additional type of digital activist as well as redefine the definition of a Slacktivist. A Slacktivist should be understood as someone who shares information online but does not contribute to either face-to-face protests or online protests. The new type of activist, which shall be known as

an Online Activist, is defined as an individual who helps facilitate tangible actions online. Digital activism continues to grow in popularity and research should focus on learning more about its dynamics before digital activism becomes the primary organizing method used to spark social change.

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This work is dedicated to the lives of Anita Sánchez and Emilia Duran. Your love established the foundation upon which I shall build the cathedral of my future. *Las quiero siempre*.

## **Paper 2 – Advanced Empirical Research**

# Building a Call to Action: Social Action in Networks of Practice

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Abstract: This sequential mixed methods study investigates a network of practice on #BlackLivesMatter from the Freddie Gray protests in April 2015 gathered using data scraping. The aims of the study are to 1) ascertain the levels of social construction of knowledge (SCK) using the Interaction Analysis Model (IAM) and critical consciousness and 2) determine if SCK or critical consciousness can predict social action using Naïve Bayes classification. Content analysis, lexicon analysis, and social learning analytics were employed in data analysis. Findings indicate that both SCK and critical consciousness are present in the data. However, SCK was mostly present in the first phase of the IAM. SCK and critical consciousness were only able to predict information sharing behaviors associated with social action such as providing personal opinions, forwarding information, and engaging in discussion. Clear associations between SCK and information sharing behaviors exist suggesting #BlackLivesMatter is fertile ground for knowledge construction and engaging in social action.

**Keywords:** Social Learning Analytics; Weka; Interaction Analysis Model; Critical Consciousness; Social Action; Lexicon Analysis; Network of Practice; Naïve Bayes; #BlackLivesMatter

## Introduction

Social media has established itself as a viable venue for many kinds of social action, which is defined in this study borrowing from the definition of nonviolent action provided by Sharp (1973) as efforts to control, combat, or destroy an opponent's power over a marginalized group. Examples of social action are all around us from #MeToo that is shedding light on sexual violence and abuse to the massive outpouring of support for #MarchForOurLives that is gaining support for students' desire to ban assault-style guns. These movements are recent events but movements have already been using social media like Twitter for many years. One of these is #BlackLivesMatter that started in 2013 in response to the acquittal of neighborhood vigilante George Zimmerman in the murder of Trayvon Martin (BlackLivesMatter, 2017). Since that time #BlackLivesMatter has been responsible for organizing protests across America that have brought the longstanding issues of police brutality and racism to the forefront of national consciousness. These protests have prompted many people to become engaged in various forms of social action including nonviolent action (Sharp, 1973), which includes face-to-face activities such as protest assemblies and marches. For example, one woman from Baltimore decided to participate in a protest for the first time after seeing the online video of Freddie Gray being beaten in the streets of Baltimore by police because she thought that the same thing could easily happen to her own son (AP, 2015). The fact that a video posted online was a factor in this woman's decision to participate in a face-to-face protest speaks to the online component of social action known as digital activism, which is defined by Whyte and Joyce (2010) as "The practice of using digital technology to increase the effectiveness of a social or political change campaign" (p. 218). This study will examine both digital

activism and nonviolent action under the banner of social action because this author (Sánchez, 2016) found that online and face-to-face activism are distinct phenomena although they often take place concurrently. The power of a platform like Twitter to engage people in social action should be studied in order to develop an understanding of the changes that are happening in the national consciousness regarding issues of police brutality and racism. In this study the development of consciousness is examined according to conscientization (Freire, 1970), which is defined as "learning to perceive social, political and economic contradictions, and to take action against the oppressive elements of reality" (p. 35). Another term used to describe conscientization is critical consciousness, which is the term that will be used in this paper. This study will explore how a network of practice can build a call to action.

## Context

## **Networks of Practice on Twitter**

Wenger, Trayner, and De Laat (2011) write a network of practice "refers to a set of connections among people, whether or not these connections are mediated by technological networks. They use their connections and relationships as a resource in order to quickly solve problems, share knowledge, and make further connections" (p. 11). Networks happen in all kinds of platforms. Often studied are asynchronous discussions because in many cases they are threaded making it easy to track social interactions because replies to various messages are nested within the original post. Twitter, the communication medium for this study, is not a threaded discussion. Although it provides the ability to reply to other users' tweets using the syntax @user, it is primarily used as an information sharing platform. Twitter uses hashtags to organize information making it

easy to find and share information about a wide variety of subjects (Barash & Golder, 2011). Hashtags themselves do not constitute a network of practice. Instead the social nature of the interactions that take place on #BlackLivesMatter, such as contributing and consuming knowledge, constitute a network of practice. Understanding #BlackLivesMatter as a network of practice is important because it helps to explain how people engage with causes that lead them to social action. Oftentimes, networks of practice do not have specific locations from which its members engage in their problem solving or knowledge sharing. This trait enables people from across America and the rest of the world to gain access to the network so long as they wish to contribute to the group enterprise. In the case of #BlackLivesMatter, the contribution in question generally amounts to commenting about police brutality and racism. No express engagement in social action is required to post to #BlackLivesMatter. The lack of a physical location or even particular tangible action in determining membership allows someone from New York who relates to the experience of someone from San Francisco to engage with one another. Connections like this often spring up between people because another trait of networks of practice is that their membership is fluid with many people regularly coming in and going out. #BlackLivesMatter has core contributors who keep the online discussion going when particular instances of racism and police brutality are not fanning the flames causing public outrage. However, the majority of the people who post to this hashtag do so irregularly. The fluidity of membership in networks of practice can be a strength as noted by Wegner (2010) who writes, "A twitter message sends a question into the connectivity of a network and it boomerangs back with a totally unexpected response, and a brand new person to follow. This is the magic of network" (p. 192). The strength is

the new person and point of view expressed because they add to the diversity of the network. Such diversity is often the foundation for motivation and learning within the network (Dron & Anderson, 2014). The diversity of the opinions that exist concurrently within a network like #BlackLivesMatter increase the likelihood of people learning about topics like police brutality and racism via SCK.

## **Theoretical Framework**

## Social Construction of Knowledge

In this study, learning is defined as the SCK such that the entire gestalt of the messages in the #BlackLivesMatter hashtag need to be understood in order to determine what people are learning on the network of practice. The Interaction Analysis Model (IAM) (Gunawardena et al., 1997), described in the Methods section, is the framework this study uses to assess SCK. Aspects of SCK that contribute to the gestalt of the messages on #BlackLivesMatter include but are not limited to information sharing behaviors such as stating opinions and sharing resources, sparking inquiry by asking questions, and applying learning via engaging in digital or face-to-face social action. On Twitter these behaviors are supported using features such as tweeting to share opinions and retweeting to share resources. "The network provides an ideal context for sharing information, ideas, and questions" (Dron & Anderson, 2014, p. 135). Indeed, networks are ideal venues to examine SCK along the lines of these behaviors. It is critical to determine the gestalt of the messages present on hashtags like #BlackLivesMatter because there are so many divergent opinions present especially when considering thousands of messages. This aggregation helps to determine the overall message and provides the context that is necessary to make cogent conclusions about the learning happening in the network of

practice. With so many opinions being contributed to the network, there is certain to be some conflict between them. Dissonance describes the role this conflict can play in developing knowledge.

#### Dissonance

Festinger (1957) defines dissonance as the existence of nonfitting relations among knowledge, opinions, or beliefs about the environment about oneself or about one's behavior. When a person encounters dissonance he or she can either ignore the nonfitting relations and preserve their existing understanding, or understanding can be modified according to the nonfitting relations. In short, someone can either decide to ignore a new experience or decide to change their understanding because of it. Dissonance plays an important role in SCK because when there is little disagreement (dissonance) in a group discussion the likelihood of the discussion moving to higher phases of knowledge construction is diminished (Gunawardena et al., 1997). However, subsequent studies (Hou, Chang, & Sung, 2009; Lopez Islas, 2004) have determined that higher forms of SCK can be achieved when little to no dissonance takes place. These studies were conducted in educational settings with participants whose cultures (Taiwanese and Mexican respectively) do not openly voice disagreement. The setting of this study suggests high levels of dissonance will be present in the data because the phenomena of interest, police brutality and racism, are wrought with emotion that boiled over during the demonstrations surrounding the killing of Freddie Gray at the hands of Baltimore police. Furthermore, the setting is decidedly Western thus providing a cultural setting to openly voice disagreement.

In this study, dissonance will likely manifest in people encountering experiences that further their understanding of police brutality and racism. For example, dissonance can arise after watching a video of an unarmed Black man being beaten by police and coming to the realization that people of color are subject to this type of treatment more often than Whites. Such a realization is valuable because it can modify internal understanding but its full value is realized when this knowledge is shared with others because it initiates the cycle of action and reflection that is critical to solidifying knowledge. Dissonance will only modify understanding and develop into higher levels of consciousness to the extent that a given individual engages in praxis.

## **Praxis and Social Action**

Praxis is defined as "reflection and action upon the world in order to transform it" (Freire, 1970, p. 51). Praxis is the action and reflection cycle through that puts a person's new understanding of the world into practice. Action is akin to the application of learning. In this study, learning is applied by engaging in social action, which is made up of the digital activism (Penney & Dadas, 2014) or face-to-face nonviolent action (Sharp, 1973). Table 3 provides definitions for the elements of each of these frameworks.

Social Action		
Digital Activism		
Personal Opinions	Sharing personal opinions and views in a "soapbox" fashion	
Discussion	Online deliberation in which people debate issues regarding the movement and other associated issues	
Connect Activists	Strengthening personal ties with other people who are	

*Table 3.* Social Action Digital and Face-to-face Components.

	engaged in activism via informal interactions	
Forward Info	Using retweets and links to share information and media with people who are associated with a given individual in a network	
Online Actions	"e-tactics" such as online petitions, lobbying, and other signs of solidarity like #Handsupdontshoot photos	
F2F Updates	Citizen journalism that includes people livestreaming or posting photos of face-to-face protests and other activities	
Facilitate F2F	"e-moblization" in which online communications are used to announce time and date information for face-to-face protests	
Nonviolent Action		
Assemblies of protest or support	Large coordinated gatherings of people in a given location often accompanied by chanting and other symbolic forms of activism	
Marches	Large coordinated gatherings of people that are focused on disrupting day-to-day life by marching through popular byways	
Protest Meetings	Gatherings of people in which organizers plan larger forms of activism and at times train others how to participate in activism	
Displays of flags or symbolic colors	Displaying banners or wearing any type of object with the symbols or colors the represent a given movement	

Engaging in praxis is the desired outcome of critical consciousness. People engage in praxis that is associated with his or her given level of consciousness until they encounter dissonance. It is dissonance that sparks the potential for a person to advance his or her understanding to a new level of consciousness. In order to advance one's consciousness, engaging in both action and reflection on that action are essential (Freire, 1970).

#### **Research Questions**

The overall purpose of this study is to predict whether SCK or critical consciousness can predict face-to-face and/or digital social action. The research questions that this study seeks to address are broken up into two studies according to the two primary research constructs as follows:

Study 1

RQ1 - Does SCK occur in networks of practice on Twitter? At what levels?

RQ2 - Does SCK in Twitter predict face-to-face and/or digital social action?

Study 2

RQ3 - Does critical consciousness occur in networks of practice on Twitter? At what levels?

RQ4 - Does critical consciousness in Twitter predict face-to-face and/or digital social action?

### Method

### **Social Learning Analytics**

Much of what is known about how Twitter is used for social action (Bonilla & Rosa, 2015; Brym et al., 2014; Harlow & Guo, 2014; Juris, 2012; Lim, 2012; Penney & Dadas, 2014) comes from studies that depend on qualitative methods such as interviewing activists to develop their findings. An important benefit of using tweets to study social action is that it enables researchers to predict future behavior based on prior probabilities using social learning analytics, which is defined by Buckingham Shum and Ferguson (2012) as a "distinctive subset of learning analytics that draws on the substantial body of work demonstrating that new skills and ideas are not solely individual achievements, but are developed, carried forward, and passed on through interaction and collaboration" (p.

5). Note that learning analytics focuses on the learning process and ultimately on improving student performance at an individual level by analyzing student-centric data (Long & Siemens, 2011). The social aspect of this study will be assessed by examining the SCK using the IAM (Gunawardena et al., 1997).

## **Interaction Analysis Model**

The IAM is used widely to assess SCK, which provides the social aspect aligning it with social learning analytics. The IAM is based on Interaction Analysis (Jordan & Henderson, 1995) and it has been used many times to analyze the interactions between people who post to threaded discussion forums. As mentioned previously, Twitter is not a threaded discussion so analyzing interactions is not how the IAM was used in this study. Instead, this study uses the IAM to code individual tweets according to the phase(s) that apply to them using a content analysis. A key feature of the IAM is that it seeks to paint a picture of the entire gestalt of online interactions (Gunawardena et al., 1997). In an environment where interactions can be scarce, the gestalt is painted by looking at the IAM as a whole as it relates to social action. This study is one of the first to use the IAM to work with Twitter data in this fashion. Table 4 provides an overview of the complete IAM process. *Table 4.* Interaction Analysis Model.

PHASE I: SHARING/COMPARING OF INFORMATION.		
A. A statement of observation or opinion	[PhI/A]	
B. A statement of agreement from one or more other participants	[PhI/B]	
C. Corroborating examples provided by one or more participants	[PhI/C]	
D. Asking and answering questions to clarify details of statements	[PhI/D]	
E. Definition, description, or identification of a problem	[PhI/E]	

PHASE II: THE DISCOVERY AND EXPLORATION OF DISSO OR INCONSISTENCY AMONG IDEAS, CONCEPTS OR STATEMENTS. (This is the operation at the group level of what I calls cognitive dissonance, defined as an inconsistency between a observation and the learner's existing framework of knowledge at thinking skills.)	Festinger 1ew
A. Identifying and stating areas of disagreement	[PhII/A]
B. Asking and answering questions to clarify the source and extent of disagreement	[PhII/B]
C. Restating the participant's position, and possibly advancing arguments or considerations in its support by references to the participant's experience, literature, formal data collected, or proposal of relevant metaphor or analogy to illustrate point of view	[PhII/C]
PHASE III: NEGOTIATION OF MEANING/CO-CONSTRUCT KNOWLEDGE	ION OF
A. Negotiation or clarification of the meaning of terms	[PhIII/A]
B. Negotiation of the relative weight to be assigned to types of argument	[PhIII/B]
C. Identification of areas of agreement or overlap among conflicting concepts	[PhIII/C]
D. Proposal and negotiation of new statements embodying compromise, co-construction	[PhIII/D]
E. Proposal of integrating or accommodating metaphors or analogies	[PhIII/E]
PHASE IV: TESTING AND MODIFICATION OF PROPOSED SYNTHESIS OR CO-CONSTRUCTION	
A. Testing the proposed synthesis against "received fact" as shared by the participants and/or their culture	[PhIV/A]
B. Testing against existing cognitive schema	[PhIV/B]

[PhIV/C]
[PhIV/D]
[PhIV/E]
F
[PhV/A]
[PhV/B]
[PhV/C]

The phases embody the ways that people are engaging in SCK from the range of sharing opinions to applying new understandings. The actions people take in regard to SCK, exemplify how they are engaging with the network of practice. In this study, the IAM tells the story of how knowledge is constructed.

# **Operationalizing the IAM**

The IAM was operationalized in this study according to the coding scheme provided in Table *5*. All of the IAM categories were used during the SCK content analysis but not all subphases were found. Only the categories that were found in the data are listed. Coding for the IAM was completed in binary fashion. If the tweet matched the coding scheme for an item, a '1' was entered in the appropriate row/column. All other columns were filled with a '0' indicating the given tweet did not match the criteria in the other subphases.

Code	Description	Value 1	Sample Tweets
PhI/A	A statement of observation or opinion	Tweet expresses a personal opinion or emotion	The lack of MSM coverage is despicable!!! @cnnbrk @FoxNews #FreddieGray #BlackLivesMatter #EnoughIsEnough
PhI/B	A statement of agreement from one or more other participants	Tweet expresses solidarity with the movement or agreement about the nature of police brutality and racism	Solidarity with protesters in #Baltimore. RIP #FreddieGray What is it going to take to turn this thing around? #BlackLivesMatter
PhI/C	Corroborating examples provided by one or more participants	Tweet forwards multimedia like images and links to news stories	Justice Dept. opens Baltimore police probe as hundreds protest death of #FreddieGray #BlackLivesMatter <u>http://t.co/1t5NUWNjOg</u>
PhI/D	Asking and answering questions to clarify details of statements	Tweet asks a question	"@CHHR01 @TGowdySC why is the right wing obsessed with Benghazi when police kill Black people EVERY DAY?? #BlackLivesMatter #FreddieGray"
PhI/E	Definition, description, or identification of a problem	Tweet talks about the root causes of police brutality and racism	<ul> <li>"We are tired of black lives being valued at less than that of animals and inanimate objects.</li> <li>#BlackLivesMatter #FreddieGray"</li> </ul>
PhII/A	Identifying and stating areas of disagreement	Tweet expresses an alternative point of view regarding the nature of police brutality and racism	Sad, but it seems to me that #BlackLivesMatter to some ppl only when there's money to be made. #Ferguson #Baltimore #FreddieGray

Code	Description	Value 1	Sample Tweets
PhII/B	Asking and answering questions to clarify the source and extent of disagreement	Tweets that question people with alternative point of views	Before judging HOW people are protesting, think about WHY they are protesting. #FreddieGray #BlackLivesMatter #mentalhealthmatters
PhII/C	Restating the participant's position, and possibly advancing arguments or considerations in its support by references to the participant's experience, literature, formal data collected, or proposal of relevant metaphor or analogy to illustrate point of view	Tweets that make comparisons between events or statements made using personal experience or other resources	Cop Kills a black men n u get a paid vacation D A black man R A A G A black man R A A A A A A A A A A A A A A A A A A
PhIII/A	Negotiation or clarification of the meaning of terms	Tweets that explain why people of color are afraid of police	<ul> <li>@AttorneyCrump @CNN</li> <li>@wolfblitzer @ArevaMartin</li> <li>They run because they don't &amp;</li> <li>CAN'T trust officers.</li> <li>#BlackLivesMatter</li> <li>#FreddieGray</li> </ul>
PhIII/B	Negotiation of the relative weight to be assigned to types of argument	Tweets that compare the amount of attention being paid to police brutality and racism in light of other pop culture events	<pre>#BruceJennerABC how did this attract this type of attention, this subject deserves this type of coverage? #blacklivesmatter #FreddieGray</pre>
PhIII/C	Identification of areas of agreement or overlap among conflicting concepts	Tweets that synthesize alternative points of view with the reality of how police brutality and racism impact	Insurance will cover damage to police cars. Insurance won't bring back black lives lost to police violence. #FreddieGray

Code	Description	Value 1	Sample Tweets
		people	#BlackLivesMatter"
PhIII/E	Proposal of integrating or accommodating metaphors or analogies	Tweets that compare police to lawful organized crime	if the government was a criminal organization which is not 2 far fetched the police would be the muscle #freddiegray #blacklivesmatter
PhIV/D	Testing against formal data collected	Tweets that use data collected from external sources to make their points	12956959 total arrests divided by 1200 killed by police equals 0.00009261 deaths occurs for every arrest. #FreddieGray #BlackLivesMatter
PhV/B	Applications of new knowledge	Tweets that chronicle live protests and other types of social action	"LIVE with @Rebelutionary_Z from Baltimore. #BlackLivesMatter #FreddieGray
			http://t.co/uUDs7T0mx7"

## **Critical Consciousness**

In this study, what types of knowledge are constructed is explained by critical consciousness. This framework accounts for the stages people pass through as they learn about societal issues and how they influence day-to-day life. In this study, critical consciousness is ultimately an indicator of how well someone can deal with police brutality and racism intelligibly and from a critical frame. Table 6 displays the stages of critical consciousness as established by Freire (2005).

Table 6. Critical Consciousness Stages.

Stage	Description
Intransitive	People are silent about the circumstances of their oppression and take no action.
Semi-Intransitive	People submerged in the historical process characterized by introverted communities that cannot apprehend problems outside of their sphere of biological necessity. Represents a near disengagement between a person and existence.
Naïve Transitive	People who oversimplify problems and have a romantic view of the past that tend to have little interest in investigation and focus on polemics instead of dialogue.
Transitive	People are able to contend with problems outside their sphere of biological necessity by testing evidence that leads to a replacement of disengagement with almost total engagement and dialogue.

Disagreement and emotion play a critical role in helping people develop critical consciousness via their propensity to cause dissonance. In order for people to develop higher levels of consciousness, it is essential that they become aware of the contradictions between structural elements in society and everyday reality (Freire, 1970). For Freire, contradictions are fundamental mismatches between one's understanding and new knowledge or experience. The conflict between individual understanding and new knowledge or experience is strikingly similar to dissonance. Note that dissonance, which is one of the primary constructs in this study, is a cornerstone of the IAM appearing in the second phase of the process. Freire (1970) writes that awareness of these contradictions is necessary to advance through the stages of critical consciousness. The IAM and critical consciousness share an emphasis on dissonance that should reveal important facets about how and what people learn when engaging in social movements like #BlackLivesMatter.

## **Operationalizing Critical Consciousness**

This study builds off of the definitions of critical consciousness established by Freire (2005) but operationalizes them in unique ways so that they apply directly. One main deviation this study makes from the definitions of critical consciousness is at the intransitive stage. The definition provided by Freire states that people at this stage are silent and take no action. This would make it difficult to code for because silence should equate to people not speaking out. However, Freire (2005) writes "It should be noted that silence does not signify an absence of response, but rather a response which lacks a critical quality" (p. 21). Tweets in this study that best embody a lack of criticality are those that are directly oppresive and communicate racist sentiments. Freire's work is centered around oppression and what people need to do to free themselves from it. Including statements that function as instruments of oppression follows this tradition. Therefore, this study categorizes oppressive language, as evidenced by their racist and negative connotations, as part of critical consciousness.

The semi-intransitive stage is characterized by the use of colonized language in the coding condcuted in this study. This colonized language is associated with the sphere of biological necessity Freire mentioned in his original definition in that it supports the dominant narrative without question. The dominant narrative about #BlackLivesMatter, espeically during the time that data for this study was collected, is that the protesters were

a bunch of anti-government thugs. This narrative took root especially once violence started to break out in Baltimore. Note that dominant narrative means not the most fequent or widely believed but the narrative that is supported by those who seek to maintain the status quo. Tweets that contribute to this dominant narrative without being derogatory or dehumanizing were classified as semi-intransitive.

Naïve transitive was characterized in this study by tweets exemplifying a basic level of understanding regarding how structures in society influence day-to-day life. This understanding is often highly emotional and colored by romanticised views of the past like mentioning historical figures and by magical explanations like refering to religion. Furthremore, naïve transitivity is recognized by tweets that fail to grasp the transient nature of causality. What is true today may not be true tomorrow and this speaks to the oversimplification Freire mentions in his initial definition. In short, this study operationalized naïve transitivity as tweets that start to contend with why and how police brutlaity and racism have impacted society from an emotional, historical, or religious standpoint.

Transitivity is identified in this study by tweets that deal critically and intellectually with how structures in society influence day-to-day life. Tweets that state facts about the realities behind police brutality and racism fall into this category. People who speak directly to the causality between social structures and outcomes in day-to-day life regarding police brutality and racism are at the heart of Transitive consciousness in this study. Furthermore, tweets from people who draw from their personal experiences with police brutality and racism are also considered transitive. Taking action plays a central role in the operatinalization of trasntivity in this study as Freire (2005) mentions total

engagement as an element of his initial definition. Therefore, people who were involved in face-to-face social action as individuals, instead of as reporters from an established source, were also included in this category. In summary, this study operationalizes transitivity as tweets that exemplify face-to-face social action and that recognize the true causality between social structures and police brutality and racism.

Table 7 provides the operationalized definitions, coding scheme, and some sample tweets for critical consciousness.

Stage	Description	Value 1	Sample Tweets
Oppressive Language (OL)	Tweets that lack critical qualities in their statements as evidenced by derogatory and dehumanizing language.	Tweets that use derogatory language and communicate racist and classist sentiments	Since #FreddieGray is dead, #Baltimore officials need to make sure his #welfare handouts are stopped. #NAACP #BlackTwitter #BlackLivesMatter
Semi- Intransitive	Tweets that support the dominant narrative by using colonized language that demonizes protestors and activists and supports the dominant narrative due to their inability to apprehend problems outside of their sphere of biological necessity.	Tweets that vilify protesters and categorically dismiss the impact of police brutality and racism in society	Well duh, @deray and @Nettaaaaaaaa do love a good city destroyin' riot. #Ferguson #FreddieGray #BlackLivesMatter http://t.co/yZT4TwwUho
Naïve	Tweets that demonstrate a basic	Tweets that recognize the influence of	91% of blacks are killed by other blacks Not

Table 7. Operationalized Critical Consciousness Coding Scheme and Sample Tweets.

Stage	Description	Value 1	Sample Tweets
Transitive	understanding of how structures influence daily life communicated in an overly emotional fashion via an oversimplification of social phenomenon such as presenting a romantic view of the past or resorting to magical explanations.	police brutality and racism, provide links to information about the #BlackLivesMatter movement, refer to historical figures, or use religious explanations to explain social phenomenon	cops, go protest that. #FreddieGray #BlackLivesMatter https://t.co/uticgM0c1K
Transitive	Tweets that demonstrate an advanced understanding of the causality behind how structures influence daily life from a critical and intellectual standpoint as evidenced by making factual statements based on research or personal experience or engaging in face-to- face social action.	Tweets that discuss the systemic roots of police brutality and racism or provide evidence of first- hand activism	@CNNSitRoom #BlackLivesMatter #FreddieGray Calling him "suspect" by media begins the justification of his death. Bad guys deserves death BS

The operationalized definitions of critical consciousness were used to guide the content analysis. Coding for critical consciousness was completed in binary fashion. If a tweet matched the coding scheme for an item, a '1' was entered in the appropriate row/column. All other columns were filled with a '0' if the tweet did not match the criteria in the coding scheme.

# **Operationalizing Social Action**

The definitions of social action, which include digital activism and nonviolent action, were used to guide the content analysis. The coding scheme for social action is provided in Table 8 along with some sample tweets. Coding for social action was completed in binary fashion. If a tweet matched the coding scheme for an item, a '1' was entered in the appropriate row/column. All other columns were filled with a '0' if the tweet did not match the criteria in the coding scheme.

	Social Action					
Digital Activism (Penney & Dadas, 2014)						
Code	Description	Value 1	Sample Tweets			
Personal Opinions	Sharing personal opinions and views in a "soapbox" fashion	Tweets that contain opinions and use words that communicate sentiment	As long as we allow them to murder us they will keep doing it. #AfricaUnite #fightback #uprise #cometogether #BlackLivesMatter #FreddieGray			
Discussion	Online deliberation in which people debate issues regarding the movement and other associated issues	Tweets that ask questions	What good will body cameras do if police officers can turn them on and off at will? #WalterScott #Ferguson #BlackLivesMatter #FreddieGray			
Connect	Strengthening personal ties with	Tweets that seek to organize activists in	For my LA folks Justice for			

Table 8. Social Action Coding Scheme and Sample Tweets.

Activists	other people who are engaged in activism via informal interactions	formal events and activities	#FreddieGray Emergency #Protest today, Sat., 1 pm @ 5th & amp; Los Angeles Sts downtown. #BlackLivesMatter		
Forward Info	Using retweets and links to share information and media with people who are associated with a given individual in a network	Tweets that contain links to news stories and other types of multimedia	In #FreddieGray's Neighborhood Residents Say Police Harassment Constant http://t.co/ULJzQntKo T #justice4freddie #BlackLivesMatter #Baltimore		
Online Actions	"e-tactics" such as online petitions, lobbying, and other signs of solidarity like #Handsupdontshoot photos	Tweets that encourage others to view livestreams of protests and other events and comment on livestreams	The #racist twitter troll accounts list to be blocked is UPDATED http://t.co/9cl1SftdOT #blacklivesmatter #JusticeForFreddie #freddiegray		
F2F Updates	Citizen journalism that includes people livestreaming or posting photos of face-to-face protests and other activities	Tweets that contain commentary, images, or livestreams of protests and other events sent by the person at the event	MARCH ON MOVE NOW LIVE #Baltimore #FreddieGray #BlackLivesMatter (live at http://t.co/lLnAelPW HR)		
Facilitate F2F	"e-moblization" in which online communications are used to announce time and date information for face-to-face protests	Tweets that invite others to participate in face-to-face protests and provide time and place information for face-to-face protests	443-814-9160 if you are arrested. @NLGnews #Baltimore #FreddieGray #BlackLivesMatter (live at http://t.co/lLnAelPW HR)		
Nonviolent Action (Sharp, 1973)					
Assemblies of	Large coordinated	Tweets that document	At the #freddieGray		

protest or support	gatherings of people in a given location often accompanied by chanting and other symbolic forms of activism	vigils	vigil. #blacklivesmatter #baltimore @city_paper https://t.co/urcZw7Gp gM
Marches	Large coordinated gatherings of people that are focused on disrupting day-to-day life by marching through popular byways	Tweets that document face-to-face marches	Inspiring rally with so many people standing for justice and police accountability #FreddieGray #BlackLivesMatter http://t.co/IH4EPPMX sQ
Protest Meetings	Gatherings of people in which organizers plan larger forms of activism and at times train others how to participate in activism	Tweets that document trainings for protesters and activists	ACLU director Susan Goering serves as legal observer, helps recruit/train others #FreddieGray #BlackLivesMatter http://t.co/QCSnZ9D M2O
Displays of flags or symbolic colors	Displaying banners or wearing any type of object with the symbols or colors the represent a given movement	Tweets that document people wearing symbolic colors and flying flags	#Baltimore City Hall flag replaced with Black and white version by protesters. #FreddieGray #BlackLivesMatter http://t.co/WipH2whY ee

# **Research Design**

Plano Clark and Creswell (2014) define mixed methods research as a design that combines quantitative and qualitative methods in a study. Specifically, this study follows a sequential mixed methods design because quantitative data was collected first and is key to answering the research questions. This study will employ a mixed methods

approach because neither quantitative nor qualitative research alone are sufficient to answer the research questions posed for this study. The qualitative content analysis does not have the capacity to predict future outcomes, only identify data trends. Weber (1985) makes this clear by stating content analysis creates quantitative indicators that assess themes, categories, or issues. The quantitative lexicon analysis is also limited to identifying data trends. On the other hand, the quantitative Naïve Bayes can predict future outcomes but without appropriate context its predictions will be erroneous. Combining content analysis and Naïve Bayes provides Bayes with the needed context to make meaningful predictions. For example, Konstan and Riedl (2012) recommend learning analytics systems use a comprehensive set of data points in algorithms because it improves their performance. If the data that is input into learning analytics is insufficient to capture the myriad of elements that impact a given phenomenon, these elements will be systematically erased (Buckingham Shum & Ferguson, 2012). Ultimately a mixed methods design was selected for this study because without qualitative input, the quantitative methods would be unable to yield meaningful conclusions.

## **Research Procedure**

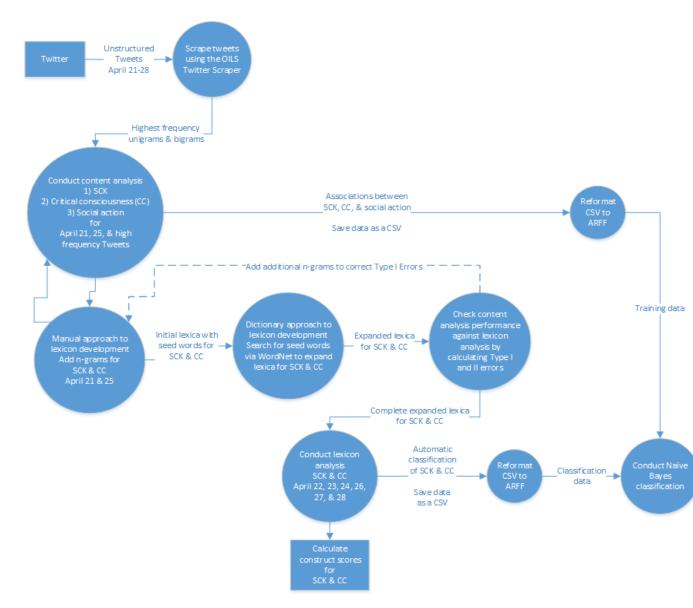


Figure  $\delta$  illustrates the procedure used to conduct this research.

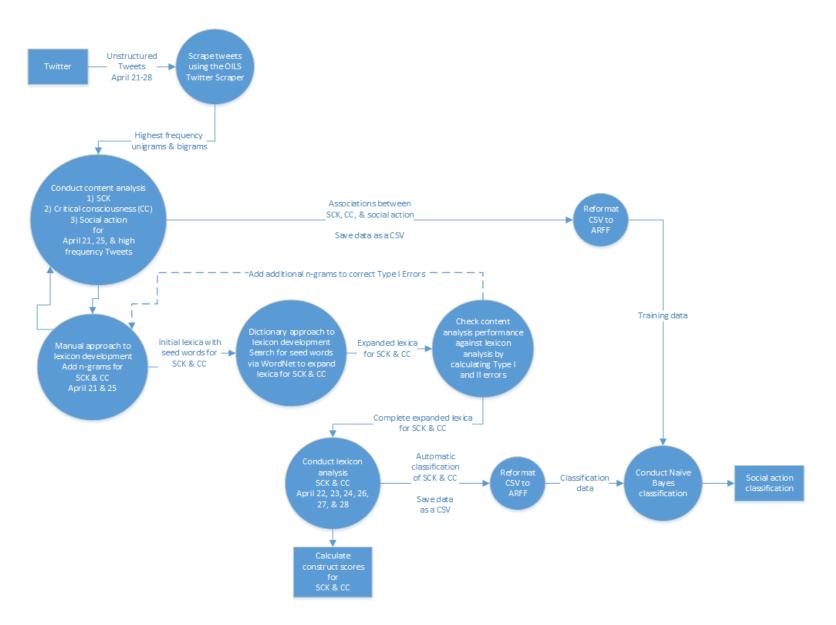


Figure 6. Research Procedure.

Implementation of this study begins with the OILS Twitter Scraper developed by Flor (2014). This tool was used to scrape unstructured tweets from Twitter from April 21-28, 2015. After data scraping was complete, the OILS Twitter Scraper was used to produce counts of the most frequently occurring unigrams and bigrams for each day in the dataset. Note that unigrams are single words and bigrams are word pairs. The most frequently occurring unigrams and bigrams were then included in the content analysis in an effort to include representative language of the main topics of discussion on all days. Three types of content analysis were conducted as part of this study 1) SCK, 2) critical consciousness, and 3) social action. All of the tweets on April 21 and April 25 were included in the content analysis and were coded by hand because they represent unique external influences on the tweets. April 21 did not see any large protests only some ongoing dialogue and a small vigil for Freddie Gray. April 25 included some large protests with small outbreaks of violence like property destruction. The rationale for hand-coding April 21 and April 25 according to SCK, critical consciousness, and social action using a content analysis was to establish a baseline for the various types of activities that occurred during the data collection period. An additional facet to the content analysis was accounting for language conventions like the shorthand for 'shaking my head' as 'SMH' used in tweets.

The primary products of the three types of content analysis are 1) descriptive data used to train the Naïve Bayes classifier and 2) lexica for SCK and critical consciousness. The descriptive data resulting from the hand-coded associations between SCK, critical consciousness, and social action were first exported as a CSV. Next this file was reformatted to adhere to the attribute-relation file format (ARFF) standard used by Weka

(Witten et al., 2011). This modified CSV constitutes the training data used to run Naïve Bayes and calculate probabilities in Weka for SCK and critical consciousness with social action. The second product of the content analysis is produced concurrently with the content analysis. In addition to hand-coding associations between SCK, critical consciousness, and social action, unigrams, bigrams, and n-grams (word phrases) were added to separate lexica for SCK and critical consciousness. This work is referred to as the manual approach to lexicon construction (Liu, 2012) and it involved adding words and phrases to specific columns in an Excel spreadsheet that correspond to each of the IAM phases and critical consciousness stages. Upon the completion of the lexica for SCK and CC, the words and phrases in the lexica were used to expand the lexica using WordNet. Each word and phrase was searched for in WordNet and matching synonyms were added to the lexica. Using WordNet in this fashion is known as the dictionary approach to lexica construction (Liu, 2012). Ultimately the SCK and critical consciousness lexica are used to conduct the lexicon analysis but not before checking the performance of the lexica.

Type I and Type II errors were calculated to assess the performance of the lexica by comparing results from preliminary Lexicon Analyses on April 21<sup>st</sup> and 25<sup>th</sup> with the results of the content analysis from April 21<sup>st</sup> and 25<sup>th</sup>. To perform the initial lexicon analysis, words and phrases from the lexica were input into the OILS Twitter Scraper one phase and stage at a time. The OILS Twitter Scraper then looks for the list of words and phrases to produce counts for each tweet. These counts were then compared manually with the results of the content analysis to identify Type I and Type II errors. Lexica for SCK and critical consciousness were not considered complete until Type I errors were

removed. Type I errors were corrected by returning to the manual method of lexicon construction and adding appropriate n-grams to the given lexicon. These new n-grams were also subject to the dictionary approach to lexicon expansion conducted using WordNet. Subsequent Lexicon Analyses were conducted until all Type I errors, identified by comparing the results with the content analysis, were removed. The complete expanded lexica were then used to conduct lexicon analysis.

The lexicon analysis is comprised of the SCK analysis and the critical consciousness analysis. To conduct these analyses, the OILS Twitter Scraper uses the words in their respective lexica to automatically classify tweets according to SCK and critical consciousness by producing word counts for each construct. A separate SCK analysis and critical consciousness analysis were performed for April 22, 23, 24, 26, 27, and 28. A part of the SCK analysis and critical consciousness analysis is the production of a separate construct score produced by summing the total number of unigrams, bigrams, and ngrams found in tweets using the OILS Twitter Scraper. Construct scores were produced for each day in the dataset. The primary product of the lexicon analysis is the automatic classification of tweets according to SCK and critical consciousness. This descriptive data is exported as a CSV in preparation for classification via Naïve Bayes. The CSV is then reformatted to adhere to the ARFF standard used by Weka. This modified CSV constitutes the classification data used to run Naïve Bayes by providing the data to classify using prior probabilities in Weka for SCK and critical consciousness with social action.

Weka uses the training data, which came from the content analysis, and the classification data, which came from the lexicon analysis, to produce predictions for SCK and critical

consciousness with social action. In Weka prior probabilities needed to conduct Naïve Bayes classification are established according to the associations between social action with SCK and critical consciousness from the training data. These prior probabilities are then used to classify tweets in the classification data by predicting associations between SCK and social action and critical consciousness and social action.

## **Ethical Treatment of Public Data**

All of the data used to complete this study comes directly from public tweets posted on Twitter as is described in Data Collection. All tweets posted on Twitter are part of the public domain. IRB policy stipulates that studies using public domain data are automatically exempt and are therefore not required to submit their studies. Therefore, no IRB approval was obtained for this study. However, this study prioritizes maintaining the privacy of the individuals who are part of the dataset. Individual privacy is protected in this study by reporting aggregate data and omitting identifying information.

### Positionality

Positionality describes a researcher's subjective experience as it relates to his or her research and participants (Deutsch, 2004). The lens that I bring to this research is that of a minority male. My lens is informed by my experiences with structural racism, years working in civic engagement to understand lived experiences of those in urban communities, my academic pursuits, and personal friendships with Blacks. The classifications of statements that I make in this study as part of the content analysis are made through this lens. Reducing communication to words stratified according to various research constructs forces certain language to mean specific things. In this case, context is

an issue and the analyst must be careful what words are assigned to certain constructs because incorrect assignments can create erroneous findings. In this paper I have made an effort to treat findings as data points instead of gospel truth to avoid overstating results. My research adds an additional voice to the chorus of Black and minority scholars who are not simply satisfied with being passively non-racist but who actively call out racism in its many forms.

### **Data Collection**

This study will pursue its research goals using a #BlackLivesMatter dataset collected during the Freddie Gray demonstrations. Data for this study was scraped from Twitter from April 21 – April 28, 2015. Batrinca and Treleaven (2015) define scraping as "collecting online data from social media and other Web sites in the form of unstructured text" (p. 90). The OILS Twitter Scraper was used to preform data scraping. This program is written in Visual Basic and uses the Twitter Application Programming Interface (API) to access Twitter databases and pull relevant tweets into an Excel spreadsheet. A sample search string that was used to scrape the data is provided below:

q=%23blacklivesmatter AND %23freddiegray since%3A2015-04-21

until%3A2015-04-22&src=typd

#### **Participants**

The subjects for this study are people who tweeted to #BlackLivesMatter and #FreddieGray, a public Twitter forum, from April 21 – 28, 2015. A purposive sample of 45,646 tweets were collected during this timeframe. The sample is purposive because the hashtags used to scrape the data were identified based on their association with

potentially high levels of social action. No demographics were specifically collected as part of the data scrape. However, during the content analysis it was evident that there is a wide variety of demographics represented in the sample including many high school aged youth as well as a large number of minorities; especially Blacks.

### **Data Cleaning**

Batrinca and Treleaven (2015) define data cleaning as the "correction or removal of erroneous (dirty) data caused by disparities, keying mistakes, missing bits, outliers, etc." (p. 93). Prior to conducting any analysis, data cleaning was performed to remove redundancies and irrelevant postings. The first step in data cleaning is to remove all non-essential punctuations (periods, commas, colons, etc.) from the tweets because it facilitates the lexicon analysis. In this study, redundancies in the data amount to duplicate content and content that was retweeted by users. The Excel Remove Duplicates function was used to remove duplicate content. Excel filters were used to remove these retweets that all start with "RT". Irrelevant postings were manually removed by identifying non-relevant hashtags such as #Nepalearthquake that also showed up in the dataset. Additionally, tweets made up of only hashtags (e.g. #FreddieGray #BlackLivesMatter http://t.co/zLwvhpwzQw) were excluded from the data.

#### **Research Question 1**

**SCK Content Analysis.** Content analysis is defined by Krippendorff (1980) as "a research technique for making replicable and valid inferences from data to their context" (p. 21). The purpose of conducting the SCK content analysis is to 1) generate associations between SCK and social action and 2) identify keywords that can be used to classify

tweets according to SCK. These associations are important because they allow Naïve Bayes to establish prior probabilities. Identifying keywords is important because they enable the lexicon analysis. All tweets from April 21<sup>st</sup> and April 25<sup>th</sup> were included in the SCK content analysis because these two days include various levels and types of social action that are representative of the rest of the data.

Generally speaking, a content analysis is performed by manually reading text and classifying the text by hand according to a research framework. The unit of analysis for this study is the individual tweet sent by individual users. The reason individual tweets were selected as the unit of analysis was to facilitate the inclusion of the full context of the message in the coding. To accomplish this goal, all of the tweets on April 21<sup>st</sup> and 25<sup>th</sup> were coded using a content analysis that included following links to images, videos, and other multimedia. This additional level of analysis is important because oftentimes the true meaning of a tweet was found in the linked multimedia instead in the text of the tweet itself.

Coding was preformed using an Excel spreadsheet with columns for all of the IAM phases and sub-phases and types of social action. Each tweet is an individual record and they are listed on this spreadsheet in separate rows. Only after reading a tweet and any associated multimedia content was a tweet coded according to the IAM and social action. To code a specific tweet for these frameworks, a '1' was entered in the appropriate column/row after completing the content analysis for each tweet. Tweets were coded for multiple IAM phases if they applied. In most cases, tweets were coded for a single social action category. However, tweets that documented face-to-face activities within digital activism were also coded for the specific nonviolent action they documented. Phases that

did not apply to a given tweet were left blank. All tweets on April 21<sup>st</sup> and April 25<sup>th</sup> were coded according to this convention.

During the coding process, filters were applied to columns in Excel and used to review the analysis at various points in the process to assure tweets were coded consistently. Single columns were filtered for their values to review codes in given categories especially when starting a new coding session. This helped remind the coder of various conventions being used to code tweets. Consistency was also introduced into the qualitative coding process by referring to the types of words and phrases that were being saved in the SCK lexicon. The lists in the SCK lexicon established common language for tweets in those categories that helped to assure others with similar sentiment were included in the given category. If a question was encountered about a particular word or phrase, the existing lexicon was searched to determine how the tweet containing the word or phrase in question should be classified. Using the lexica to guide coding effectively serves the purpose of keeping memos to help standardize the coding process. All of the tweets from April 21 and 25 were coded according to the social action categories during the process of coding for the IAM. The same coding procedures and consistency measures were applied to the coding completed for social action as for the IAM. Note that the tweets on these days were ordered chronologically prior to coding in order to preserve the influence of time on the SCK and critical consciousness processes.

**SCK Lexicon Analysis.** The purpose of conducting an SCK lexicon analysis is to automate the identification of IAM phases. Developing a lexicon for IAM is necessary to enable the automatic classification of tweets according to the IAM phases. A lexicon is simply a list of words. In the case of the SCK lexicon analysis, it contains a list of words

that exemplify each of the phases of the IAM. A similar method to lexicon development was used by Gunawardena et al. (2016) to classify discussion posts according to the construct social presence. Without this list of words there would be no criteria with which to classify data according to IAM phases.

A lexicon for SCK was developed according to two methods described by Liu (2012):

- 1. Manual coding words into categories and assigning their orientation by hand
- 2. Dictionary using online dictionaries and thesauri to generate a comprehensive lexicon based on seed words that are representative of the dataset

Combining a manual and dictionary approach to lexicon generation produces an efficient and precise lexicon (Hu & Liu, 2004, August). The manual approach to lexicon development was completed during the SCK content analysis by selecting words and phrases that exemplified SCK and adding them to columns in an Excel spreadsheet for each IAM phase. These words and phrases are known as seed words because they are used as baseline data to expand the lexica using the dictionary approach. The dictionary approach was implemented using the online dictionary WordNet. WordNet is described by Miller, Beckwith, Fellbaum, Gross, and Miller (1990) as "an online lexical reference system whose design is inspired by current psycholinguistic theories of human lexical memory. English nouns, verbs, and adjectives are organized into synonym sets, each representing one underlying lexical concept. Different relations link the synonym sets" (p. 235). SCK seed words and phrases were searched for in WordNet to expand the lexica. Synonyms that did not fit the original context of the seed word were removed while those that fit the context were added to the lexica. The final product of

this process is a list of words and phrases according to each IAM phase that originate in the Twitter data used for this study.

The complete SCK lexicon is input into the OILS Twitter Scraper by including the words and phrases of varying length, known as n-grams, associated with SCK into specific Excel sheets. These lists then have the spaces in them replaced with dashes using Find & Replace. Next the lists are added to another sheet that uses a routine to count the spaces in each n-gram. Then a routine in the OILS Twitter Scraper is used to replace all instances of n-grams with versions containing dashes. Finally, a separate routine counts the instances of each n-gram in the dataset, which yields automatic classifications according to the IAM. The OILS Twitter Scraper also produces construct scores for IAM by summing all of the instances of n-grams produced during SCK lexicon analysis. The resulting figure indicates the strength of a given IAM phase in the tweet. Note that Gunawardena et al. (2016) used an interpretive method similar to this for the construct social presence. The data produced from the SCK lexicon analysis are then used to perform the Naïve Bayes classification for SCK and social action.

#### **Research Question 2**

SCK and Social Action Naïve Bayes Classification. Naïve Bayes classification is needed to determine whether SCK can predict social action based on the data created as part of the SCK content analysis and SCK lexicon analysis. Naïve Bayes classification is described by Langley and Sage (1994) as a straightforward and widely tested method of probabilistic induction that provides a single probabilistic summary for each new instance of data being assigned to a specific class based on prior probability. Note that class refers

to a dependent variable, which in this case is social action. The Bayesian classification rule is as follows:

$$P(H|X) = \frac{P(X|H)P(H)}{P(X)}$$

Stated another way, the probability of a hypothesis H that an unknown instance of data X belongs to a certain class P(H|X) can be calculated from the proportion of instances in which values of X are observed in all samples in the dataset that H is true P(X|H) times the prior probability of the hypotheses being true in the training data P(H), divided by the observed proportion of instances of X in the dataset regardless of class values P(X) (Manning & Schütze, 1999).

This study uses Weka to conduct Naïve Bayesian classification. Weka is a collection of state-of-the-art machine learning algorithms and data preprocessing tools that provides support for preparing data, evaluating learning schemes, and visualizing data (Witten et al., 2011). In order to conduct the Bayesian classification, two datasets are needed 1) training data and 2) classification data (Witten et al., 2011). Training data includes fully coded data for April 21 and 25 completed during the content analysis that associates study constructs (IAM phases and critical consciousness stages) with class variables (types of social action). Also included in the training data are coded tweets that were retweeted most and tweets that represent the most frequently occurring n-grams on April 22, 23, 24, 26, 27, and 28 produced by the SCK and critical consciousness lexicon analysis performed on each day. The classification data does not include codes for social action.

To create these two datasets, the counts generated by the OILS Twitter Scraper during the lexicon analysis must be converted to an ARFF required by Weka. First training and classification data for SCK is consolidated on separate sheets. Then this data is exported as a CSV. The final step in creating the ARFF is to name the dataset and declare all variables and their types at the beginning of the file. Once this work has been completed, the data can be used in Weka. To perform a Bayesian classification first load the training data. Next select the Naïve Bayes classifier and direct Weka to apply the prior probabilities from the training data to classify the classification data. Class variables (types of social action) are then selected one by one to run the Bayesian classification. Note that this procedure aggregates all of the IAM phases together in predicting face-to-face and digital aspects of social action.

#### **Research Question 3**

**Critical Consciousness Content Analysis.** The purpose of conducting a critical consciousness content analysis is to 1) generate associations between critical consciousness and social action and 2) identify keywords that can be used to classify tweets according to critical consciousness. The previously stated importance of these actions for the SCK content analysis also applies to the critical consciousness content analysis. The unit of analysis for the critical consciousness content analysis is individual tweets. All of the tweets on April 21 and 25 were individually coded using a content analysis that included following links to images, videos, and other multimedia. Only after reading the tweet and any associated content was a tweet coded according to critical consciousness and social action. Coding was preformed using an Excel spreadsheet with columns for all the critical consciousness stages and types of social action. Each tweet is

listed in its own row on this spreadsheet. To code a specific tweet for these frameworks, a '1' was entered in the appropriate column/row after completing the content analysis for each tweet. Stages that did not apply to a given tweet were left blank. Consistency was checked for critical consciousness coding as it was for SCK coding by using Excel filters and checking the appropriate lexicon. All tweets on April 21<sup>st</sup> and April 25<sup>th</sup> were coded in this fashion.

**Critical Consciousness Lexicon Analysis.** The purpose of conducting a critical consciousness lexicon analysis is to automate the identification of critical consciousness stages. Developing a lexicon for critical consciousness is necessary to enable the automatic classification of tweets according to the critical consciousness stages. The critical consciousness lexicon analysis includes words and phrases for each of the four critical consciousness stages. The development of the critical consciousness lexicon followed the same procedures as described for the SCK lexicon analysis.

Conducting the critical consciousness lexicon analysis requires the OILS Twitter Scraper. The list of words that comprise the critical consciousness lexicon are used in the same fashion as described for the SCK lexicon analysis. This process yields a construct score for critical consciousness along with automatic classifications according to the four stages of critical consciousness. These automatic classifications are then used to perform Naïve Bayes classification for critical consciousness and types of social action.

### **Research Question 4**

**Critical Consciousness and Social Action Naïve Bayes Classification.** Naïve Bayes classification is needed to determine whether critical consciousness can predict social action based on the data created as part of the critical consciousness content analysis and

critical consciousness lexicon analysis. Bayesian classification for critical consciousness uses the same procedure in Weka described for the SCK Naïve Bayes classification. The only departure from the procedure described previously is that it uses the critical consciousness training and classification datasets in Weka. The Bayesian classification aggregates all of the critical consciousness stages together in predicting face-to-face and digital aspects of social action.

### Results

#### **Research Question 1**

Answering RQ-1 begins with presenting the results of the SCK content analysis (April 21 and April 25), the purpose of which was to determine whether SCK occurs within the #BlackLivesMatter network of practice and at what levels. Table 9 lists the total counts for each IAM phase and the percentage of the total number of tweets on the given day. The total number of tweets on each day is listed below the dates. Note that IAM phases that are not included in Table 9 were not present in the data and subsequently do not appear in the SCK lexicon analysis.

Answering RQ-1 also includes examining the results of the SCK lexicon analysis, the purpose of which was to create a lexicon and use it along with the OILS Twitter Scraper to automatically code days were not included in the SCK content analysis (April 22, 23, 24, 26, 27, and 28). Table 10 lists the total counts for each IAM phase and the percentage of the total number of tweets on the given day. Data generated automatically by the OILS Twitter Scraper did not classify all of the data. Data without codes are listed in the No Codes column.

Table 9. SCK Content Analysis Coding.

	PhI/A	PhI/B	PhI/C	PhI/D	PhI/E	PhII/ A	PhII/ B	PhII/ C	PhIII/ A	PhIII/ B	PhIII/ C	PhIII/ E	PhIV/ D	PhV/ B
4/21 (n=285)	122 42.8%	47 16.4%	73 25.6%	35 12.2%	56 19.6%	6 2.1%	0	0	1 .35%	1 .35%	2 .7%	0	1 .35%	21 7.3%
4/25 (n=922)	341 36.9%	75 8.1%	275 29.8%	70 7.5%	90 9.7%	32 3.4%	2 .22%	6 .65%	0	8 .87%	4 .43%	1 .11%	1 .11%	258 27.9%

Table 10. SCK Lexicon Analysis Results.

	PhI/ A	PhI/B	PhI/C	PhI/D	PhI/E	PhII/ A	PhII/ B	PhII/ C	PhIII/ A	PhIII/ B	PhIII/ C	PhIII/ E	PhIV/ D	PhV/ B	No Codes
4/22 (n=472)	145 30.7 %	30 6.3%	64 13.5%	34 7.2%	51 10.8%	12 2.5%	0	1 .21%	0	2 .42%	0	0	0	23 4.8%	208 44.1%
4/23 (n=507)	160 31.5 %	40 7.8%	74 14.6%	50 9.8%	50 9.8%	7 1.3%	0	1 .2%	0	1 .2%	0	0	0	31 6.1%	213 42%
4/24 (n=462)	150 32.4 %	30 6.4%	47 10.1%	35 7.5%	47 10.1%	6 1.3%	0	1 .22%	0	2 .43%	1 .22%	0	0	32 6.9%	203 43.9%
4/26 (n=2122)	678 31.9 %	141 6.6%	279 13.1%	209 9.8%	156 7.3%	50 2.3%	1 .05%	3 .14%	0	28 1.3%	2 .09%	0	0	122 5.7%	946 44.6%
4/27 (n=2108)	605 28.7 %	156 7.4%	247 11.7%	176 8.3%	157 7.5%	32 1.5%	0	0	0	18 .85%	1 .05%	0	0	121 5.7%	997 47.3%
4/28 (n=4595)	1186 25.8 %	341 7.4%	415 9%	313 6.8%	422 9.1%	78 1.7%	0	5 .11%	0	48 1.04%	3 .07%	0	0	149 3.2%	2280 62.1%

Most of the data was coded as phase I/A, which covers statements of opinion or observation. This trend holds regardless of whether the data was coded by SCK content analysis or by the SCK lexicon analysis. The same trend can be observed with the data assigned to phase I/C, which encompasses the provision of corroborating examples. However, the percentages of data in these categories drops dramatically when comparing the content analysis days with the ones coded by the lexicon analysis. Also of note is the number of codes that were assigned to phase V/B most of which have to do with people actively engaging in digital or face-to-face social action. April 25<sup>th</sup> saw a large number of demonstrations. Interestingly, on April 27 the largest demonstrations occurred but the codes assigned in the SCK lexicon analysis do not reflect this fact. Further investigation should be conducted to ascertain whether the proportionally low number of phase V/B codes assigned on this day are erroneous or not. That being stated, the large numbers of data that was left without codes by the OILS Twitter Scraper might contain the majority of the codes that fall into phase V/B. In total, 47.2% or 4,847 out of the 10,266 total samples in the classification data that includes April 22, 23, 24, 26, 27, and 28 were left without codes. These samples were removed from the dataset prior to running the SCK and social action Naïve Bayes classification leaving a total of 5,419 samples.

**SCK Lexicon Classification Performance.** This section explains the type of analysis performed to determine the accuracy of the data regarding reliability. The purpose of this analysis was to assure results from the SCK content analysis matched the results produced automatically using the SKC lexicon analysis. Prior to generating the data listed in Table 10 for April 22, 23, 24, 26, 27, and 28, the Type I and Type II error rates were calculated by comparing the SCK content analysis data to the automated data produced

using the SCK lexicon. Any differences in the Type I category were reconciled by adding additional n-grams to the lexicon prior to generating further data to assure automated classification captured all content analysis codes. The Type I and Type II error rates from the first run of the OILS Twitter Scraper are presented in Table 11. Total error rates are presented in Table 12.

	PhI/A	PhI/B	PhI/C	PhI/D	PhI/E	PhII/ A	PhII/ B	PhII/ C	PhIII/ A	PhIII/ B	PhIII/ C	PhIII/ E	PhIV/ D	PhV/ B
4/21 Type I	2.8%	1.4%	2.5%	1.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.7%
4/25 Type I	1.7%	0.2%	4.0%	0.4%	0.5%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
4/21 Type II	11.6%	3.5%	3.2%	2.1%	7.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	3.5%
4/25 Type II	9.3%	2.5%	4.0%	2.2%	5.9%	0.8%	0.2%	0.1%	0.0%	0.0%	0.3%	0.4%	0.0%	5.7%

*Table 11.* Type I and II Error Rates for IAM.

*Table 12.* Total Type I and II Error Rates for IAM.

	Error Counts	Error Percentages
4/21 Type I	30	10.5%
4/25 Type I	76	8.2%
4/21 Type II	91	31.9%
4/25 Type II	290	31.5%

The error rates listed above are quite low with only Type II errors for phase I/A being around 10% at 11.6% for April 21 and 9.3% for April 25. Note that phase I/A includes the largest number of unigrams and bigrams in the IAM lexicon. The larger the number of items in a lexicon, the greater the chance for a Type II error. However, the second most populated phase in the IAM lexicon is phase I/C and both of its error rates were below 5%, which may point to the difficulty in identifying observations or opinions that comprise phase I/A because they are identified using less precise lexical patterns. The low error rates suggest that the data coded according to the IAM lexicon reasonably achieves at least 90% reliability in its overall performance. Note that this reliability rate only applies to the data that is coded into the lexicon and does not account for the entirety of the language is present in the dataset.

**SCK Lexicon Analysis.** The SCK lexicon analysis was conducted using the IAM lexicon. The total number of n-grams in the final lexicon are displayed in Table 13 according to IAM phase.

IAM Phase	Total n- grams	IAM Phase	Total n- grams
PhI/A	1179	PhII/C	16
PhI/B	128	PhIII/A	7
PhI/C	946	PhIII/B	28
PhI/D	135	PhIII/C	12

TT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T A B # T '	<b>A</b> (
Table 13	IAMI Lexicon	n-gram Counts.
10010 15.	II IIII LOAICOII	in grann Counto.

PhI/E	227	PhIII/E	3
PhII/A	146	PhIV/D	6
PhII/B	7	PhV/B	389

The final lexicon included a total of 3229 n-grams across all IAM phases. Samples of the

n-grams included in the IAM lexicon are provided in

Table 14 according to IAM phase.

Table	14.	IAM	Lexicon	n-grams.
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IAM Phase	Sample n-grams	IAM Phase	Sample n-grams
PhI/A	congratulations	PhII/C	paid vacation
	inappropriate		death penalty
	calm		sweet cream
	unacceptable		over sports
	disturbing		execution
PhI/B	shoutout	PhIII/A	can't trust
	Solidarity		can not trust
	Rest in Power		cannot trust
	RIP		cannot rely
	My condolences		cant rely
PhI/C	hundreds protest	PhIII/B	focus on
	police custody		type of coverage
	gandhi		forget about
	so many more		JENNER DAY

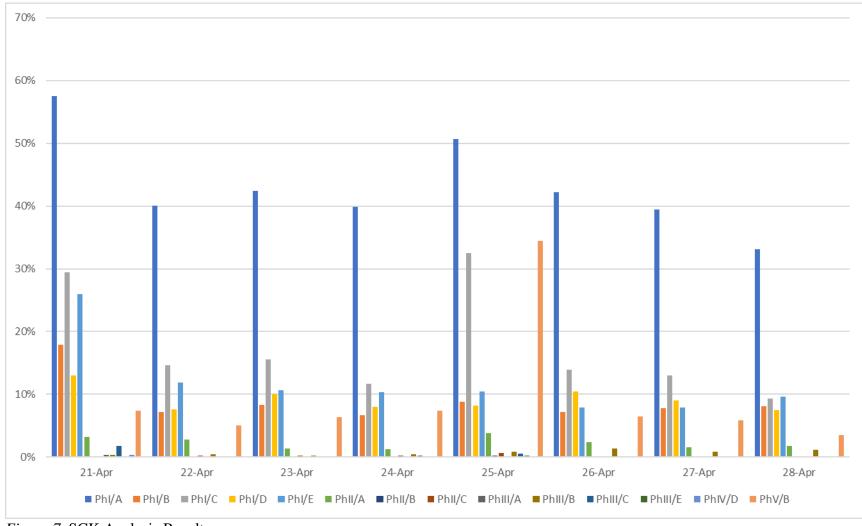
	ICYMI		property damage
PhI/D	why so	PhIII/C	worry about
	Who has		White Americans
	dont they		Insurance will
	did he		concern about
	who directed		occupation about
PhI/E	racist police	PhIII/E	the muscle
	no justice		criminal organization
	Police Impunity		the muscleman
	murder		
	another black man		
PhII/A	transparency	PhIV/D	Pls see @ErinBurnett's tweet
	SMH		@ErinBurnett's tweet
	right to shutdown		please see
	hugging		@ErinBurnetts tweet
	protesters		police equals
	being hijacked		
PhII/B	killed cops first	PhV/B	spread the word
	HOW people		LIVE
	killed bulls first		happening now
	killed coppers		From the streets
	first		1:00 PM
	how citizens		

Note that is some cases (e.g. phase III/A and III/E) the number of tweets that exemplify these phases were minimal. The words provided are a mix of the initial seed word

identified using the manual approach to lexicon development and the dictionary

approach. The complete IAM lexicon can be found in Appendix A.

SCK analysis results are presented in Figure 7 organized by each day in the dataset.



*Figure 7.* SCK Analysis Results.

The SCK analysis counted the number of unigrams and bigrams that were exemplars of the given IAM phase in each sample. Note that each sample tweet can include more than one instance of a given phase or phases. The SCK analysis shows that phase I/A was the most frequent of all the IAM phases. According to percentages, the proportion of phase I/A codes remains fairly consistent over the course of the 8-day dataset. Phase I/C and phase I/E were the most frequent following phase I/A. Excluding the content analysis days (21<sup>st</sup> and 25<sup>th</sup>), levels of phase I/C and phase I/E also illustrated a large degree of consistency ranging between 16% and 9% for phase I/C and 12% and 8% for phase I/E. Such consistency suggests that although the lexicon analysis does not account for all of the data, it consistently identifies SCK in this dataset.

According to the results presented in this section, the answer to RQ-1 is that SCK did occur in the Freddie Gray #BlackLivesMatter network of practice. SCK content analysis, SCK lexicon analysis, and SCK analysis were all able to identify SCK in the dataset at varying levels. Content analysis identified phase I/A and phase I/C at higher rates than lexicon analysis. Overall, the IAM framework identified that SCK occurred mostly in phase I as many examples of sharing opinions and providing examples were found. A few examples of phase I are as follows:

#FreddieGray #BlackLivesMatter Its time for a national call to action Black America. We must demand both justice and systemic change now! CNN: Police: We failed to get #FreddieGray timely medical care after arrest http://t.co/nHcdU14muX #BlackLivesMatter Sad, but it seems to me that #BlackLivesMatter to some ppl only when there's

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money to be made. #Ferguson #Baltimore #FreddieGray

However, data at phase II, phase III, phase IV, and phase V is also present. Most of this data is in phase V which suggests although there is not much dissonance in this network of practice, it might not be necessary to apply one's knowledge in this context.

#### **Research Question 2**

## Naïve Bayes Classification for SCK and Social Action. Before answering RQ-2

regarding the ability of SCK to predict social action an important note about the data used for the Bayesian classification is needed. Classification data indicated missing data to be classified using 0s in the ARFF. Weka treated these missing classifications as the correct outcomes. This resulted in Weka being unable to construct a complete confusion matrix for each element of social action because actual classifications are unknown. For example, the following is a confusion matrix that was created from the training data for IAM and Violence:

The bottom row was constructed based on the actual known classification outcomes represented as 1s in the training data. Classification matrices produced as part of this analysis include only the top row because 0s were provided as the correct outcome. The following is an example confusion matrix for IAM and Violence from the classification dataset:

 $\begin{array}{ccc} a & b & < -- \ classified \ as \\ 5416 & 3 \ | & a = 0 \\ 0 & 0 \ | & b = 1 \end{array}$ 

In the classification confusion matrix, the 3 is actually the predicted number of instances classified as being violent. Therefore, the incorrectly classified instances are correctly classified in light of this study's research questions. Weka reported these possible "hits"

as incorrect because 0s were used to represent missing data in the classification dataset. The classification performance for each social action category is listed in Table 15 with headings that adhere to the goal of this study.

	Correctly Classified	Incorrectly Classified	Correctly Classified
	(1)*	(0)	Percentages
Digital Activism			
Personal opinions	3800	1619	70.12%
Discussion	814	4605	15.20%
Connect activists	10	5409	0.18%
Forward info	1143	4276	21.09%
Online actions	25	5394	0.46%
F2F updates	36	5383	0.66%
Facilitate F2F	4	5415	0.07%
Nonviolent Action			
Assemblies of protest	0	5419	0%
Marches	36	5383	0.66%
Protest meetings	0	5419	0%
Flags	0	5419	0%
Violence	3	5416	0.06%

Table 15. IAM Predictions for Social Action.

\*Weka reports these columns as Correctly Classified, Incorrectly Classified, and Incorrectly Classified Percentages. Column names have been changed to align with the focus of this study.

Nonviolent action was unable to provide sufficient prior probabilities to the Naïve Bayes classifier to successfully predict these categories. Some elements of digital activism were

able to achieve meaningful predictability but nothing that is particularly reliable given that the highest percentage was 70%. The answer to RQ-2 is that SCK has a limited ability to predict social action especially when considering some aspects of digital activism.

### **Research Question 3**

An answer to RQ-3 begins by examining the results of the critical consciousness content analysis (April 21 and April 25), the purpose of which was to determine whether critical consciousness occurs within the #BlackLivesMatter network of practice and at what levels. Table 16 lists the total counts for each phase and percentage of the total number of tweets on the given day. The total number of tweets on each day is listed below the dates.

	OL	Stage 2	Stage 3	Stage 4
1/21 (m_295)	1	8	134	194
4/21 (n=285)	.35%	2.8%	47%	49.4%
4/25 (m. 022)	28	46	363	479
4/25 (n=922)	3%	4.9%	39.3%	51.9%

Table 16. Critical Consciousness Content Analysis Coding.

Answering RQ-3 also includes examining the results of the critical consciousness lexicon analysis, the purpose of which was to create a lexicon and use it along with the OILS Twitter Scraper to automatically code days were not included in the critical consciousness content analysis (April 22, 23, 24, 26, 27, and 28). Table 17 lists the total counts for each critical consciousness stage and the percentage of the total number of tweets on the given day. Samples that were not coded during the critical consciousness lexicon analysis are listed in the No Codes column.

	OL	Stage 2	Stage 3	Stage 4	No Codes
	12	3	133	115	251
4/22 (n=472)	2.5%	.64%	28.1%	24.3%	53.2%
1/23 (m - 507)	17	2	161	119	258
4/23 (n=507)	3.3%	.39%	31.7%	23.4%	50.9%
	12	2	95	104	287
4/24 (n=462)	2.6%	.43%	20.5%	22.5%	62.1%
A/2( ( 0100)	21	19	507	463	1300
4/26 (n=2122)	.99%	.9%	23.8%	21.8%	61.3%
4/27 (n=2108)	31	19	467	440	1310
	1.4%	.9%	22.1%	20.8%	62.14%
4/28 (n=4595)	40	22	758	811	3161
	.8%	.4%	16.5%	17.6%	68.8%

Table 17. Critical Consciousness Lexicon Analysis Results.

Remarkably the coding performed for critical consciousness revealed that the majority of the tweets in this network of practice were at either stage 3 or 4. The critical consciousness content analysis (April 21 and April 25) in Table 16 yielded almost twice the number of codes for stages 3 and 4 compared to coding produced via critical consciousness lexicon analysis in Table 17. Table 16 also shows that although racist and dehumanizing voices are present (stages 1 and 2) they were very much in the minority because they never made up more than 5% of the data for those days. The rates that these opinions were identified by the critical consciousness content analysis are mostly consistent with the critical consciousness lexicon analysis as the highest percentage in oppressive language was 3.3% with stage 2 never even reaching 1%. Much of the data produced by the OILS Twitter Scraper using the critical consciousness lexicon was left without codes. In total, 63.9% or 6,567 of the 10,266 samples were left without codes.

These samples were removed prior to running the critical consciousness and social action Naïve Bayes classification leaving a total of 3,699.

**Critical Consciousness Lexicon Classification Performance.** Reliability of the critical consciousness lexicon analysis was determined by comparing its output to the results of the critical consciousness content analysis. Type I and Type II Error rates calculated from comparing the results of the first run of the critical consciousness lexicon on the critical consciousness content analysis data are displayed in Table 18. Total error rates are presented in Table 19.

	OL	Stage 2	Stage 3	Stage 4
4/21 Type I	0.0%	0.0%	0.7%	2.8%
4/25 Type I	0.0%	0.1%	0.4%	0.9%
4/21 Type II	0.4%	0.0%	13.0%	8.4%
4/25 Type II	0.3%	0.5%	11.8%	8.4%

*Table 18.* Type I and II Error Rates for Critical Consciousness.

Table 19. Total Type I and II Error Rates for Critical Consciousness.

	Error Counts	Error Percentages
4/21 Type I	10	3.5%
4/25 Type I	13	1.4%
4/21 Type II	62	21.8%
4/25 Type II	194	21%

The low error rates for stages 1 and 2 are mostly attributable to the extremely specific language that is used in the critical consciousness lexicon. The generally derogatory language (see Table 21) is easy to find using social learning analytics. The performance

of the critical consciousness lexicon analysis in stages 3 and 4 was also quite strong given the number of words in these stages was much more than in the first two stages (see Table 20). However, the Type II errors were higher than desirable once again illustrating an overfit with the critical consciousness lexicon as was observed with the SCK lexicon. Overfitting is a common issue because the attempt to identify n-grams that identify various phenomenon comes with a measure of imprecision because of changes in context in large datasets. That being said, the overall Type II error rate was consistent across both days at 21.8% for the 21<sup>st</sup> and 21% for the 25<sup>th</sup>.

**Critical Consciousness Lexicon Analysis.** The critical consciousness lexicon analysis was conducted using the critical consciousness lexicon. The total number of n-grams in the final lexicon are displayed in Table 20 according to critical consciousness stage. *Table 20.* Critical Consciousness Lexicon n-gram Counts.

Critical Consciousness	Total n-grams
Stages	
OL	132
Stage 2	329
Stage 3	1036
Stage 4	1339

The final lexicon included a total of 2,836 n-grams across all critical consciousness stages. Samples of the n-grams included in the critical consciousness lexicon are provided in Table 21 according to critical consciousness stages.

Table 21. Critical Consciousness Lexicon n-grams

Critical Consciousness	Sample n-grams	
Stages		
OL	#BlackLivesMatter klan	
	STFU	
	lynch mob	
	Retarded white people	
	simpleton	
Stage 2	conspiracy theorists	
	@deray goes	
	deserved it	
	criminal behavior	
	subversives	
Stage 3	Break his Back	
	opens probe	
	Officers Suspended	
	matter to you	
	Admit failing	
Stage 4	another perspective	
	brute police force	
	WITH PAY	
	Inhumanely treated	

Running While Black

The complete critical consciousness lexicon can be found in a separate file entitled

Appendix A and B.xlsx on the Appendix B sheet.

The results of the critical consciousness analysis, organized according to each of the critical consciousness stages, are presented in Figure 8.

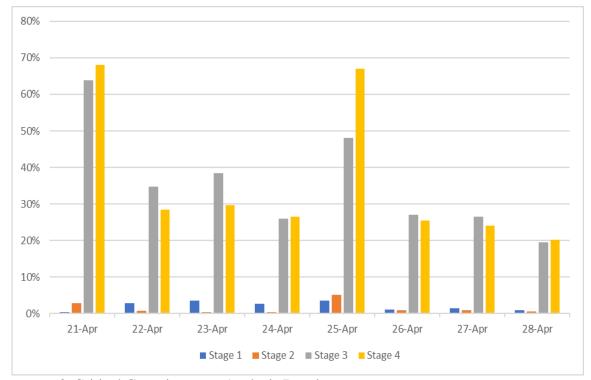


Figure 8. Critical Consciousness Analysis Results.

Much higher levels of stage 3 and stage 4 than oppressive language and stage 2 were found by the critical consciousness analysis. The range of the percentages from days included in the lexicon analysis is from 38% to 19% for stage 3 and 30% to 20% for stage 4. The range is greater for critical consciousness than it is for SCK, which speaks to the higher likelihood that critical consciousness is more context sensitive than SCK. For example, people can talk about vigils, news conferences, protests, outbursts of violence, and marches using a consistent level of consciousness but because the subject changes it is hard for a lexicon analysis to pick up on these nuances. If this is the case, it would account for the discrepancies in the ranges on the days that were coded using the critical consciousness lexicon analysis. The most consistent results are in stages 1 and 2 with both being present at low levels on each day.

According to the results presented in this section, the answer to RQ-3 is that critical consciousness is evident in this network of practice. All four levels of critical consciousness are present in the data with stage 3 and 4 being the most frequent. Some examples of stage 4 are as follows:

Apparently making eye contact with Police is considered a Crime Punishable by Death. #FreddieGray #BlackLivesMatter #StopPoliceBrutality" I predict: Police found negligent, police get reprimands, police keep jobs, more abuse #FreddieGray #BlackLivesMatter <u>http://t.co/bb64ka2wbE</u> Blacks have never experienced "a day" in America free of systemic racism. #BlackLivesMatter #FreddieGray

This likely indicates that those in the #BlackLivesMatter network of practice already possess a high-level understanding of issues like police brutality and racism. This conclusion can be drawn when considering that most of the SCK present in this network of practice focuses on information sharing behaviors. Applications of high levels of knowledge are being recorded on Twitter but this study did not provide evidence that it is developed in this venue. critical consciousness content analysis identified higher percentages of stages 3 and 4 as compared to critical consciousness lexicon analysis. Stages identified by the critical consciousness lexicon analysis show an overall number of

increasing codes in stages 3 and 4 beginning on the 25<sup>th</sup>. However, the increase is also associated with a decreasing total percentage of tweets on each day. It is hard to make any authoritative claims about overall trends because so much data was left without codes from the critical consciousness lexicon analysis. Regardless, RQ-3 was answered as all critical consciousness stages were identified in this network of practice.

# **Research Question 4**

## Critical Consciousness and Social Action Naïve Bayes Classification. Bayesian

classification was conducted to answer RQ-4 about the ability of critical consciousness to predict social action. The results of the classification are presented in Table 22.

	Correctly Classified	Incorrectly Classified	Correctly Classified	
	(1)*	(0)	Percentages	
Digital Activism				
Personal opinions	1177	2522	31.82%	
Discussion	81	3618	2.19%	
Connect activists	0	3699	0%	
Forward info	373	3326	10.08%	
Online actions	0	3699	0%	
F2F updates	0	3699	0%	
Facilitate F2F	0	3699	0%	
Nonviolent Action				
Assemblies of protest	0	3699	0%	
Marches	0	3699	0%	

Table 22. Critical Consciousness Predictions for Social Action.

Protest meetings	0	3699	0%
Flags	0	3699	0%
Violence	0	3699	0%

\*Weka reports these columns as Correctly Classified, Incorrectly Classified, and Incorrectly Classified Percentages. Column names have been changed to align with the focus of this study.

Critical consciousness was unable to predict any of the nonviolent action categories. Its performance with digital activism was a bit better as Personal Opinions, Forward Information, and Discussion at least registered some correct classifications. The highest was Personal Opinions at 31.82% but it still leaves much to be desired as it is far from the 80% accuracy found in Pang, Lee, and Vaithyanathan (2002) in their study that used Naïve Bayes classification of sentiment words related to movie reviews. The context is entirely different but this is still a useful goal to strive for in this research. Classifications for Forward Information at 10.08% and Discussion at 2.19% are also quite low and ultimately do not provide sufficient evidence that they would perform well under different circumstances. Therefore, the answer to RQ-4 is critical consciousness was unable to predict social action as it could not predict nonviolent action and demonstrated a very limited capability to predict certain aspects of digital activism.

### Discussion

This study found that both SCK and critical consciousness can be found in the #BlackLivesMatter network of practice. Interestingly the rates at which data was coded in the SCK lexicon analysis and critical consciousness lexicon analysis was fairly consistent for both SCK and critical consciousness. Specific language and specific topics are likely present on these days and these common threads ran through the rest of the days even being described using similar language. This suggests that the SCK lexicon analysis and critical consciousness lexicon analysis performed well for specific topics that were present on both of the content analysis days. For example, there is a very strong likelihood that people who are not part of the "in" group are using language in their tweets that did not fall into the items included in the lexicon because their context is different from those that were part of the content analysis data. Additional topics were certainly introduced in the noncoded data (e.g. people talking about violence in reference to specific events instead of common emotionality) but the likelihood also exists that the same topics from the existing content analysis data were still present just being described using different language. Indeed, the open nature of Twitter that allows anyone to contribute to any hashtag creates a diversity and general chaos that impacts the robustness of the classifications produced by the lexica developed for this study.

The high rates of critical consciousness at stages 3 and 4 is one of the surprises in this study. The initial expectation was that the most frequent stages would have been 2 and 3. However, the discussion taking place during the Freddie Gray demonstrations built on the shoulders of the #BlackLivesMatter movement that already brought issues of police brutality and racism to the forefront. For example, even the 2014 #BlackLivesMatter uproar over the death of Michael Brown in Ferguson, Missouri "did not spark in a vacuum; they were fueled by accumulated frustrations over previously mediatized moments of injustice and guided by previous digital campaigns" (Bonilla & Rosa, 2015, p. 10). The high levels of stages 3 and 4 suggest that the people who coalesce to online networks of practice like #BlackLivesMatter have a highly developed critical consciousness prior to engaging in activities online. The fact that many long-time

activists and critical scholars engage in #BlackLivesMatter and other social movements (Tufekci, 2017) supports this notion.

Perhaps the involvement of long-time activists and critical scholars explains the similar levels of critical consciousness stage 3 and 4 in this dataset because it is contrary to how Freire (2005) describes the development of critical consciousness. "The new stimuli characteristic of an "opening" society generate a complex of activist mental attitudes. However, the somewhat abrupt emergence of the people from their previous stage of submersion leaves them more or less perplexed by the new experience of participation; and their activism takes the naive and highly emotional form of rebellion" (p. 32). The main takeaway from this statement is that as people start to discover their voice and use it in the real world that they are not able to engage in activism in a critical fashion because they are awash with emotion. The opening society is exemplified by the use of social media like Twitter to engage in discussions about topics like police brutality and racism. The highly emotional form of rebellion Freire writes about is akin to stage 3 but many tweets moved beyond the constraint of highly emotional engagement to the cogent critical analysis akin to stage 4. The existing highly developed critical consciousness of long-time activists and critical scholars is the likely explanation for such high levels of stage 4 in the data. Further examination is warranted because there is a potential that there are many everyday people at stage 4. social network analysis would prove invaluable in ascertaining the formal background of people on #BlackLivesMatter because much can be gleaned from those with whom one associates.

The existing critical consciousness of the people posting to this network of practice might also be associated with the low levels of tweets having to do with violence like smashing

windows and throwing rubbish at police. The levels of violence are remarkably low considering the looting and rioting that happened on April 25 and 27. Neither SCK or critical consciousness were able to meaningfully predict violence in tweets with SCK being able to predict .06% of instances and critical consciousness being unable to predict any. Here it must be pointed out that there are many people who engage in #BlackLivesMatter face-to-face protests that are not accounted for by social media activity. The great majority of the people who are tweeting online are not the ones who are engaging in violence as evidenced by the high number of critical consciousness stage 3 and 4 codes. If people are not overly emotional, the likelihood of them becoming violent is miniscule. As this study shows, even when violence was identified it constituted a bystander documenting violence not someone livestreaming their enraged destruction of public property firsthand. Here are a few examples:

COPS W BIGASS BATS JOIN FIGHT #Baltimore #FreddieGray

#BlackLivesMatter (live at <a href="http://t.co/OcS1PyYnBZ">http://t.co/OcS1PyYnBZ</a>)

Protesters smashing cars in #Baltimore #FreddieGray #BlackLivesMatter http://t.co/gTe6WBXnwN

Tufekci (2017) makes the important point that many social movements do not seek out violence or conflict because in the end the state has overwhelming power and numbers to quell any such activities. The highly developed critical consciousness of most of the individuals in this network of practice, exemplified by the levels of stages 3 and 4, means that the core group of people engaging in face-to-face social action are not likely to engage in violent or destructive behaviors.

With such high levels of stages 3 and 4 it should follow that the nonviolent action elements of social action (e.g. meetings, protests, and marches) would be associated with SKC and critical consciousness. However, these two constructs were unable to predict nonviolent action suggesting that a heightened level of SCK and critical consciousness may not lead to nonviolent action. One possibility is that critical consciousness was unable to predict nonviolent action because of the high number of phase 3 and phase 4 codes present in the dataset. The prior probabilities established as part of the Naïve Bayes classification might be ambiguous because of these high levels thus causing the Bayesian classifier to fail to classify new instances in the nonviolent action categories. Alternatively, SCK and critical consciousness might have failed to predict nonviolent action because nonviolent action simply is not exemplified online. For instance, a study by this author, Sánchez (2016), found that even within digital activism there was no correlation between categories associated with face-to-face action (e.g. Facilitate Face-toface Action and Face-to-face Updates) and totally online activities (Forward Information and Online Actions). Nonviolent action is exclusively a face-to-face activity and although plenty of face-to-face activities are documented online, none take place on Twitter. The current findings regarding nonviolent action extend what was found in Sánchez (2016) because they confirm that there is little connection between the totally online activism and face-to-face actions that includes the violence that took place alongside formal #BlackLivesMatter organizing.

This study also found that digital activism categories were the only elements of social action that SCK and critical consciousness were able to meaningfully predict. Both constructs were strongest in predicting (1) Personal Opinions, (2) Discussion, and (3)

Forward Information. These three categories were all parts of strictly online behaviors and on the whole reflect the statement made by Bill Heil as cited by Hands (2011) that Twitter is a broadcast medium rather than an intimate conversation. One feature of a broadcast medium is one-way communication and the categories that were most successfully predicted have this feature. Note that discussions were coded in this study as people who were asking questions but no responses were tracked as part of this study. Thus, the dialogic nature of discussion was not ascertained in this study. There is a strong connection between IAM and the three one-way communication categories of digital activism it predicts as follows: Personal Opinions → phase I/A – Statement of observation or opinion, Discussion → phase I/D – Asking and answering questions, and Forward Information → phase I/C – Corroborating examples provided. These connections confirm previous research regarding the IAM's ample ability to work with and identify phase I data.

One caveat to this extension is phase II that deals with dissonance. Little dissonance was discovered in this dataset. The role of dissonance as a required element of SCK has been both supported and challenged. This study did not find many instances of constructive conflict needed to initiate dissonance and further understanding. That being stated, the very nature of the overall discussion being held on #BlackLivesMatter on police brutality and racism is wrought with conflict. It is possible that many of the people engaged in #BlackLivesMatter came to it because they were experiencing dissonance already. For instance, the online movement that sparked the Arab Spring was organized around the Egyptian police beating Khaled Said to death in the streets reportedly because he was in possession of videotaped evidence incriminating police in sharing the spoils from a drug

bust (Lim, 2012). Previously Egyptians were weary of police brutality but "We are all Khaled Said" provided Egyptians the opportunity to negotiate their identities and coalesce around a shared sense of victimization. Similarly, minorities have been subject to police brutality and racism for countless years but the rise of #BlackLivesMatter provided them with a venue to start resolving their dissonance by creating change digitally instead of simply ignoring these injustices.

Many of the previous studies conducted using the IAM have failed to identify higher phases of knowledge construction (Paulus, 2007). For the most part, this study is no exception because the majority of the samples were either in phase 1/A or phase 1/Cindicating that higher phases of knowledge construction did not happen in this network of practice. One potential explanation for this is provided by (Gunawardena, Lowe, & Anderson, 1998, August) who write that dissonance is not always needed to build knowledge because the people coming into a given discussion realize they are on the same page conceptually speaking and therefore accept statements made by others. This is certainly consistent with the previous argument about the activists and critical scholars that are often involved in movements like #BlackLivesMatter. However, this does not account for the overwhelming lack of phase III co-construction or phase IV testing new knowledge. The lack of phase III and phase IV could be explained by the nature of Twitter as a broadcast medium. Its main focus is on information sharing and this in and of itself does not fully support SCK. An additional explanation is that this study did not examine interactions between people because building on the ideas of others is a key aspect of assessing SCK.

One way that this study deviates from previous research using IAM is that a fraction of the codes were at phase V/B. The causality and association between phase I and phase V in this study was not determined. Further research is needed to establish this connections between these phases. It is most likely that people already came into the Freddie Gray #BlackLivesMatter movement in a place of praxis. Their actions as part of that praxis happened to be participating in social action. Since the data used for this study includes days when face-to-face protests occurred, finding some phase V application of knowledge was almost a guarantee. Nonetheless, the instances of applied learning present in this data are important because many individuals at phase V exemplify higher levels of critical consciousness and are thus valuable resources for people who are coming to terms with how to take constructive action regarding their experiences with police brutality and racism.

## Limitations

The first limitation is that this study did not include any external measures to assure the reliability of the coding performed as part of the SCK content analysis and critical consciousness content analysis. Coding consistency was assured by filtering coded data and referring to language in the SCK and critical consciousness lexica. However, it would have been ideal to have an additional researcher code a sample of coded tweets. Intercoder reliability measures could then be calculated by comparing the performance of the coders according to how well their IAM, critical consciousness, and social action coding matched. At a minimum, 80% of the coding should match to be considered reliable. Typical intercoder reliability measures should be extended beyond the typical assessment of codes in a framework to include language picked to identify a given

research construct when manually building lexica. Differences in lexica should be addressed by discussing them and deciding what words or phrases to use in the final lexica. Performing intercoder reliability for coding and lexica development would strengthen the findings of in this study.

An additional limitation is that there were only a few postings at higher levels of SCK specially IAM phase III and IV. The findings from this study would be more robust if there were greater instances, specifically of phase III and above, because IAM phase III is where knowledge co-construction begins. Future studies should seek to identify more samples of phase III, IV, and V to include in the analysis. It is likely that studies with more high-level data would yield a greater ability to predict social action. Given the limited ability of Twitter to support interaction discussed in the Theoretical Framework, such high-level data needs to come from replies to tweets that are not included in the current dataset. This is a limitation of the OILS Twitter Scraper because it is not capable of pulling replies to specific tweets from the Twitter API. An alternative is to employ social network analysis to map @replies to identify the interaction patterns within the Network. This would facilitate the process of identifying high-level SCK.

The final limitation is that this study took all the IAM phases present in the data to predict social action. The same approach was applied in working with critical consciousness as all four of its stages were taken as a whole to predict social action. Ascertaining that IAM and critical consciousness predict some elements of digital activism is important but it should be just the first step in the investigation of these frameworks. Future studies should break each of these frameworks down one-by-one to determine the individual ability of each IAM phase and critical consciousness stage to predict social action.

Completing a study such as this would require the creation of separate training and classification datasets for each of the IAM phases and critical consciousness stages. An examination at this level of granularity would certainly yield important information about what the elements of each framework can predict and the element of each framework that is most responsible for predicting a given social action.

### **Future Research**

The findings of this study suggest important considerations for future research. The biggest consideration is how to build robust lexica that can more comprehensively identify both SCK and critical consciousness. 47.2% of the data for IAM and 63.9% of the data for critical consciousness were not classified according to the lexica developed for this study. There are specific facets of each of these constructs that contributed to this performance. Critical consciousness is particularly challenging because words that are indicators of people dealing with structural issues can be either spoken of in positive or negative ways. The mere mention of racism is not sufficient to determine the stage of critical consciousness a given post should occupy. The rest of the statement can illustrate understanding of the concept and how it works or launch into an outright denial of its influence on society. As such, using n-grams is the most effective method at determining the necessary context. This study employed the n-gram method but still found great difficulties in building lexica that classified the majority of tweets. This suggests that critical consciousness is highly subjective and is sensitive to specific discussions and how they are carried out. In short, identifying critical consciousness is not so much about what is being said but about how it is being said. On the other hand, SCK is much easier to deal with from a lexical standpoint because certain language is representative of various

phases of the knowledge construction process. For example, if someone mentions the word "define," or any derivation thereof, there is a pretty high likelihood that their statement is in phase I/A. This being stated, the rate of classification is not as high as desired for SCK.

In order to correct these low classification rates in future studies, modifications must be made to the manual method of lexicon development. This study fully coded two entire days in the dataset as representative samples for the rest of the days. The performance of the SCK and critical consciousness lexicon analysis suggests that a more effective strategy would have been to code a proportional sample of all days in the dataset to assure the trends in language are being captured as both SCK and critical consciousness proved to be highly sensitive to context. Making this modification would help assure that as different events unfold and the subjects of discussion subsequently change, the lexica will more accurately move with the tide using representative language from each day. A further consideration is to incrementally filter the data after the initial classification is complete to quickly identify if any trends in that data that is excluded from the initial classification should be incorporated into the lexica. For example, after the initial classification is complete, the non-classified items can be identified using filters in Excel. This list can then be parsed to produce the most frequently occurring unigrams and bigrams, which would identify any big trends that might exist. If trends are identified, these unigrams and bigrams can be added to the lexica thus improving the overall performance of the SCK lexicon analysis and critical consciousness lexicon analysis. Engaging in the process of building lexica according to research constructs must be a mindful exercise because analytics fundamentally group information and create

categories. Buckingham Shum and Ferguson (2012) mention "learning analytics and recommendation engines are always designed with a particular conception of "success," thus defining the patterns deemed to be evidence of progress, and hence, the data that should be captured. A marker of the health of the learning analytics field will be the quality of debate around what the technology renders visible and leaves invisible" (p. 19). The process of boiling language down into the most useful n-grams is by its very nature reductionist and can oversimplify the messages being communicated by people on Twitter. Extra care must be taken when working with data that comes from a network like #BlackLivesMatter because this population has historically been oppressed by research. The history of research being used against people of color is voluminous ranging from forced sterilizations of Native American Women (Lawrence, 2000), infecting the Tuskegee airmen with syphilis (National Center for HIV/AIDS, 2015), and dehumanizing people by classifying them into various racial and ethnic categories (Gómez & López, 2013). The final example provided is an instance where classification was used to devalue people, their histories, and their lived experiences. Analytics can perpetuate similar devaluation and then some if researchers do not take care as they are building their classification systems and keep in mind that their work can be used to point the finger at people of color by those in power. In addition, language, via literacy, has often been used to oppress people of color (Freire & Macedo, 1987) and of course language is key to working with lexica and analytics. As such, it is important to allow people of color to reclaim their voices and to define their words in terms of research that is meaningful to them. The best way that this goal can be accomplished is by engaging scholars who are people of color in the process of determining what specific language means in various

domains especially when considering the work of social justice. Bakhtin (1981) writes that people attempting to liberate themselves from forms of oppression delivered via discourse happens when they struggle with the dominant narrative and compare it against what they know to be true. This struggle will not happen for many people unless there is an alternative to the dominant narrative. The methods presented in this study provide people of color with the unique opportunity craft an alternative narrative by decolonizing language. Speaking quantitatively provides people of color with a way to speak the language of those who often revel in oppression and can be a useful tool in the mission of furthering humanity and solidarity in society. As people of color, we need to own our own narrative and the research that is being conducted in our communities by embracing methods like social learning analytics and lexicon analysis before researchers outside of our communities use them to coopt our experiences.

#### Significance

The findings of this study highlight the potential for the identification of SCK using the IAM to be automated. The automation of IAM is important because it will significantly reduce the time it takes to analyze data using the framework. The biggest contribution this study makes to automating IAM is the SCK lexicon. Although some of the n-grams in the SCK lexicon are specific to social action, many n-grams in phase I/A and phase I/C can be carried over to a general lexicon that can be applied to many types of online research. To automate the identification of SCK using the IAM, further contributions to this lexicon should be made from different disciplines so that it can be applied in many areas. This work should be mindful of the context that the contributions come so the accuracy of

the lexicon will not be threatened. The SCK lexicon can be used as the foundation for future studies that use IAM and social learning analytics.

The mixed methods research design is also of significance to other researchers because it combines qualitative analysis with increasingly complex analytic methods. Other researchers who wish to tell a quantitative story that begins with a large volume of qualitative data would benefit from following the process used in this study because the creation of a lexicon for any number of research frameworks can enable analytics. So long as the sampling of qualitative data to code is appropriate, the method used in this study can save large amounts of time that would otherwise be dedicated to qualitative analysis. The key step is quantifying the qualitative coding according to a specific research framework by using the OILS Twitter Scraper to automatically code data according to the criteria established in the lexicon. These quantifications can then be used in Weka to conduct further analysis using any number of advanced machine learning techniques.

#### Conclusion

This study is one of the first to use the IAM to understand the gestalt of the messages on a Twitter hashtag. The lexica developed for SCK and critical consciousness as part of this study can be used as cornerstones for the automation of qualitative coding for both. The findings of this study revealed that SCK and critical consciousness occur in the #BlackLivesMatter network of practice conducted on Twitter. SCK was mostly evident at the lower levels of knowledge construction although some instances of higher phases of knowledge construction are present. All phases of critical consciousness are present in the

data. SCK and critical consciousness have a limited ability to predict social action mostly relegated to only a few categories within digital activism.

The predictability of Personal Opinions, Discussions, and Forwarding Information as well as the presence of SCK and critical consciousness in this dataset show that a network of practice on Twitter can be a fertile environment for initiating social change. Boyd, Golder, and Lotan (2010, January) write that "Retweeting can be a political act, especially amongst those who wish to get their voices heard" (p. 9). Retweeting was not mentioned for most of this study but it must be mentioned here because this Twitter feature embodies the ability for users to Forward Information. Twitter's function as a broadcast medium is greatly enabled by the ability to retweet. Similarly, the ability to tweet along with the network structure of Twitter provide the technological affordances that serve as vehicles for social action. In this network of practice, the call to social action is constructed by making statements of opinion, asking questions to spark discussion, and forwarding information to others.

#### Afterword

Freire (1970) notes that "to speak a true word is to transform the world" (p. 87). The true words Freire speaks of in this study are about police brutality and racism present in this dataset at phase I of SCK and stages 3 and 4 of critical consciousness. These words are catalysts for potential social change. For example, Figure 9 documents the collaboration between the violently rival street gangs Bloods (red clothing) and Crips (blue clothing) as well as the Nation of Islam (suits) during the Freddie Gray #BlackLivesMatter protests to fight against police brutality and racism.



Figure 9. Bloods, Crips, and Nation of Islam at Freddie Gray Protest.

The power of this collaboration is that these groups were able to overcome their animus for one another by organizing around the common struggle for an end to police brutality and racism. Puschmann, Bruns, Mahrt, Weller, and Burgess (2014), note that "Twitter opened up a world of impossible discourses through the restriction to 140 characters: discourses that could never have come to pass had the creators of the service not chosen to constrain users' ability to compose messages in this way" (p. 428). The delivery of succinct messages in a generally safe online space can create a sense of belonging for people who have otherwise been disenfranchised in our society. Although the collaboration between the Bloods, Crips, and Nation of Islam did not originate online, it serves as an example of what is possible when a space is created to work with societal issues like police brutality and racism. The #BlackLivesMatter network of practice on

Twitter is such a space and its accessibility will allow others to join the movement on a continual basis. This study's examination of SCK and critical consciousness finds that knowledge is being built in this network of practice and it also paints a picture of the activists on #BlackLivesMatter contrary to the demonized protestor that is so common today. This study is an empirical investigation of how #BlackLivesMatter builds knowledge and the data about what types of knowledge is being built via critical consciousness can be used to understand the struggle of Blacks and other people of color to begin breaking down the boundaries between "them" and "us". The findings of this study are encouraging but it is just one small piece of the work that needs to be done at the intersection of social learning analytics and social justice in networks of practice to discover more about how social movements work for change in a digital age.

## **Chapter 5 Conclusion**

## **Dissertation Theme Development and Findings Summary**

As part of this dissertation, I completed three research papers that investigate #BlackLivesMatter in an effort to determine how people learn about and engage in various types of social action. The papers are as follows:

- Paper 1 Methodological Foundations
- Paper 2 Initial Empirical Research
- Paper 3 Advanced Empirical Research

Paper 1 established the methodological foundations for my work by describing how to conduct social network analysis (SNA) and social learning analytics to assess the social construction of knowledge (SCK).

Paper 2 uses a typology of digital activism by Penney and Dadas (2014) to examine how people tweeting to #BlackLivesMatter engaged in digital activism. This study, includes a content analysis and basic analytics including a sentiment analysis and correlations based on descriptive data produced using custom arrays. Paper 2 identified that some people on #BlackLivesMatter were Facilitating Face-to-Face Actions but the specific actions were not identified. Paper 2 also broke down the people tweeting to #BlackLivesMatter according to whether they supported or were critical of the overall movement. One of the most important findings in Paper 2 were the negative correlations between Online Action and Forwarding Information and all other forms of digital activism. The negative correlations suggest that Online Activists are their own separate group who engage in unique digital activities that impact social movements while those who pass information along take a much more passive approach to their activism.

Paper 3 used a Freddie Gray #BlackLivesMatter dataset to identify SCK and critical consciousness as well as to establish whether either of these two constructs can predict social action. The primary social themes in this paper were police brutality and racism. This study found that marches were the most frequent face-to-face social action being facilitated on Twitter. Most of the people in Paper 3 were either at critical consciousness stage 3 or 4 meaning they generally have a critical understanding of the movement and its main message that would lead them to support its actions. Paper 3 examined dissonance and its role in knowledge creation finding that there was very little dissonance in the overall dataset. The absence of dissonance is notable but it does not provide conclusive evidence that dissonance does not play a key role in knowledge construction regarding issues of police brutality and racism. SCK and critical consciousness both have limited capabilities when it comes to predicting social action. In fact, both SCK and critical consciousness had little to no ability to predict the nonviolent action categories. Both could predict the Personal Opinions, Discussion, and Forward Information categories to some extent. SCK performed the best at predicting Personal Opinions at 70.12% while critical consciousness was at 31.82%. The ability of SCK and critical consciousness to predict Discussion and Forward Information was much lower. Ultimately Paper 3 concluded that both SCK and critical consciousness are present on the #BlackLivesMatter network of practice. Furthermore, the building blocks for online knowledge construction (Personal Opinions, Discussion, and Forward Information) are supported by the Twitter features of Tweeting and Retweeting.

The findings from Paper 3 extend the findings from Paper 2 because the inability of SCK and critical consciousness to predict many elements of social action, especially nonviolent action, confirm the finding from Paper 2 regarding the nonexistent relationship between Online Action and Forwarding Information. Paper 2 found that Online Actions are their own phenomenon demonstrating no links to even face-to-face activities supported online such as Facilitate Face-to-face Action or even Face-to-face Updates. Paper 3's finding further supports Paper 2's assertion that there is activism (face-to-face actions), slacktivism (forwarding information), and Online Activism (digital solidarity) present in online movements like #BlackLivesMatter. Paper 3 also tells the story about why a person would be supportive or critical of the movement that was part of Paper 2 using critical consciousness. The study of critical consciousness revealed that people in Paper 2 likely were in either a supportive or critical group based on their understanding of social justice and the harsh realities that face black communities on an ongoing basis.

#### Implications

The findings of this study have implications in both the areas of learning and social justice. As far as learning is concerned, this study indicates that knowledge is being built in networks of practice like #BlackLivesMatter. However, the knowledge construction is not so comprehensive that it accounts for all the stages of the IAM. This study did identify phase V knowledge construction but this knowledge can be attributed to the previous work being done by the people who are posting to #BlackLivesMatter such that they had previously been applying their knowledge in other contexts. The data analysis conducted for this study tells an interesting story about the people who posted to a particular hashtag in a particular window of time. This snapshot can ultimately reveal

interests, sentiment, and positionality. What it does not provide is a comprehensive view of the individualized learning process. One reason that people do not use Twitter to host all their cognitions is because the platform ultimately is very strong when it comes to disseminating information. "Thanks to digital technologies (like Twitter), ordinary people have new means of broadcasting-the potential to reach millions of people at once" (Tufekci, 2017, p. 6). Indeed, Twitter is a good place to learn about a wide range of topics that people otherwise would not be able to access. Twitter also excels when it comes to allowing people to find information via its use of hashtags (Barash & Golder, 2011). The large number of phase I codes in this dataset support this assertion because they deal with asserting personal opinions and definitions that can easily be categorized into hashtags. Interactions within this network of practice ultimately capture just one important perspective of the learning universe that surrounds the social justice work being done via #BlackLivesMatter. People likely use Twitter as a vehicle to support specific elements of their cognition not as a platform to chronicle all their individual growth as evidenced by the number of phase I and V codes in the data. The possibility exists that much more is present in hashtag research but authoritative assertions about this need to be linked to longitudinal data analysis of specific people who consistently post to a given hashtag. Only then will research be able to reveal the extent to which people embody their learning in tweets.

The findings of this study also highlight the importance of engaging in robust informal learning especially when it comes to building knowledge of social movements. Informal learning refers to learning that comes from everyday experiences and often takes place outside of the traditional classroom (Merriam & Caffarella, 1999). Part of what makes

Twitter a strong informal learning resource is its ability to help users organize knowledge. "Twitter hashtags help us to find discussions, snippets of knowledge, and hyperlinks to further resources from which we may learn" (Dron & Anderson, 2014, p. 181). In this study, people on #BlackLivesMatter shared a diverse number of opinions and resources. The information shared on social media like Twitter "exposes students to new communities and lived experiences, which often bring into focus an issue they may have initially struggled with, disagreed with, or found unfamiliar" (Hentges, 2016, p. 234). For a person who is trying to understand social justice anew, their posts can be seen as how they are framing their understanding. For an experienced social justice practitioner, the posts can be seen as exemplars of their expert knowledge. Twitter provides agency to those who employ it to learn about new topics and stay abreast of the latest developments on any number of topics. For example, Blair (2013) writes that Twitter can transform student's identifies from receivers of knowledge to knowledge creators and breaks down the barriers between novice and expert. This study is an exemplar of the agency afforded by Twitter as it was used in a variety of different ways ranging from simple sharing of resources to documenting the application of new knowledge as people engaged in face-toface and digital protests. It is precisely this richness that allows Twitter to be a valuable learning resource and serve the individualized informational needs of a given individual. It is liberating to use such a powerful tool in the service of furthering individual understanding regarding social justice because doing so can help increase the accountability of police and other authoritarian structures to the citizenry. Accountability is needed because even when clear evidence of excessive force exists, police, internal investigations, and the US Justice Department interpret the laws as they see fit to protect

people in law enforcement. Police officers who use excessive force are almost never accountable for their actions even in the case of Freddie Gray as all of the officers involved were eventually acquitted (Rector, 2016). Accountability is specifically introduced because everyday citizens can use their phones to record and share media that documents police brutality along with a host of other nefarious activities (Cullum, 2010). These actions, as documented on #BlackLivesMatter and other hashtags, ultimately create an easily accessible body of knowledge regarding these subjects for all the world to see that provides an undeniable history of police brutality and racism that can serve as a social conscious.

The fact that movements like #BlackLivesMatter exist and garner a large amount of ongoing activity creates social accountability that assures more people are at the very least knowledgeable about these issues and how they play out. Recognizing and naming social phenomenon are the key first steps in making social change (Freire & Macedo, 1987). In light of the digital activism that is present in this dataset, the mere action of becoming knowledgeable via the forwarding of resources and stating of personal opinions is a meaningful form of resistance. A space to dialogue about issues like racism is needed but is often silenced via societal norms (Sue, 2015). The ability for people to have an open dialogue about police brutality and racism on #BlackLivesMatter goes a long way in ending this silence (Bonilla & Rosa, 2015) and providing the space needed for people of color to contend with police brutality and racism. Therefore, an implication of this study is the recognition that the long-term documentation of instances of police brutality and racism provides an invaluable historical resource for people of color and anyone else who is interested in learning about the realities of how structural racism functions in our

society. Such a historical resource is vital because it can help unseat any denial within communities of color that would cause some people to not realize the impacts of police brutality or racism on their lives until it happens directly to them. Indeed, these people would rather deny the information around them rather than engaging in dissonance and modifying their internally held beliefs. The denial present in minority communities regarding these issues is magnified tenfold when examining white communities due to their denial of prejudice, the existence of racism, that their ancestors were oppressors, and of white privilege (Sue, 2015). Ongoing discussion is vital in helping people come to terms with police brutality and racism because as more and more examples are documented the more likely it is for people to recognize the reality of the situation and subsequently move to change these injurious social conditions.

It is further liberating to engage in social media networks of practice because everyday people can create content. This means that people are who closest to the front lines of any face-to-face type of social action can document their activities live and share them with the world. Evidence for this is present in this study's dataset as many live streamed their experiences at protests and posted images and videos as they made their way through the various types of social action in which they engaged. These types of posts allow people outside the movement to form their own opinions and decide for themselves whether to believe the categorical demonization that often plagues social movements. The ability for users to create content can also function as a double-edged sword because the power to generate messages and document phenomenon can be used equally well to inform as well as to mislead. The intent of the user behind the content is paramount in this regard. Freire (2005) comments "man is maneuvered by the mass media to the point where he believes

nothing he has not heard on the radio, seen on television, or read in the newspapers" (p. 31). Of course, he was writing before the advent of Web 2.0 technologies, social media, and fake news but the point is that the media has a strong influence over what people will actually believe. As everyday users generate content, they become part of the media and their messages can influence others in ways that are not entirely under their control. The source of the information used in this study regarding police brutality and racism comes from #BlackLivesMatter, which presents a particular slant on these issues that is decidedly anti-establishment. Anyone who is learning about these issues would be wise to be aware of the source and its overall mission when considering the messages they produce. For example, one of the organizations documenting the #BlackLivesMatter protests was Ruptly. This tweet is an example of their coverage

Watch live #Baltimore Saturday protest #FreddieGray #BlackLivesMatter via

@Ruptly <u>http://t.co/PdzLH1RMps</u>

This organization is an arm of the Russian State Media and they obviously bear ill intent towards people in America. However, if a given individual does not look this up, he or she will take the information at face value that can lead to misguided conclusions. This maxim is even more important when considering the individual messages generated by users rather than an organization. Indeed, this task is much more difficult when considering individuals because they often do not state their mission outright or will misstate their mission because their objective is generating misinformation and subterfuge. An examination of the veracity of content flows from this investigation and should be conducted with a critical eye and compared against other sources of information to determine credibility. In the past people could count on the information

provided via the mass media, but that simply is not the case anymore. This calls for individuals to conduct their own individual investigations and question the sources and content before jumping to conclusions.

## **Final Thoughts**

Twitter is a powerful tool that is being used to facilitate social action. Speaking generally Batrinca and Treleaven (2015) write, "Social media data is clearly the largest, richest and most dynamic evidence base of human behavior, bringing new opportunities to understand individuals, groups and society" (p. 90). The richness of the data that is available for anyone to consume online via Twitter is immense. The hopeful aspect of this treasure trove of information are the new opportunities it affords people from very different backgrounds to understand one another. "As men entered a larger sphere of relationships and received a greater number of suggestions and challenges to their circumstances, their consciousness automatically became more transitive" (Freire, 2005, p. 15). Being exposed to differing viewpoints via Twitter can at the very least help most people to expand their horizons and become a bit more transitive. At the very best, the information available on #BlackLivesMatter and other networks of practice like it is the best hope we have as a society to heal the racial divisions that have plagued it for so long. This potential exists because the user generated knowledge can be used to begin to understand the interests of the given group by outsiders. The basic features of the knowledge being built on #BlackLivesMatter include Personal Opinions, Discussions, and Forwarded Information. Coupled with the large number of critical consciousness stage 3 and 4 codes, it is safe to say that the information on #BlackLivesMatter presents an authentic picture of how people of color view and experience police brutality and

racism. Such a rich resource can provide a venue for outsiders to understand the #BlackLivesMatter movement on their own terms by making connections to their own interests in a safe space.

Interest convergence, first introduced by Bell (1980), explains why people of color have been able to advance their position in society in the critical literature. He writes "the interest of blacks in achieving racial equality will be accommodated only when it converges with the interests of whites" (p. 523). He uses this concept to explain the Brown VS Board of Education decision that desegregated schools as the result of aligning interests between the black and white communities instead of any altruistic sentiment from whites. The concept of interest convergence applies in this context because for outsiders, including whites, to come to a basic understanding of what it means to be a person of color it is necessary to see firsthand what our experiences are like. Dialogue on #BlackLivesMatter provides the venue for this understanding to be built. In order to apply interest convergence directly to issues of police brutality and racism would require the indiscriminate vilification of blackness to somehow stop serving the interests of the dominant white class. There must be something in it for whites for police brutality and racism to come to an end. A new Imagined Community (Anderson, 2006) will need to be formed from among the existing communities in our society in order to make positive and lasting changes in the areas of police brutality and racism. As the definition of an Imagined Community goes, the members of this community do not need to see one another simply share a common practice and beliefs. Anderson (2006) notes that racism traces its roots to ideologies of class because racism shows itself within national boundaries and was used by colonial regimes to establish their superiority over the people

they conquered and places they occupied. The oppressive roots of racism presented by Anderson certainly speak to the idea that interest convergence will be required to overcome police brutality and racism. What common interest has the power to bring together whites and people of color?

The common interest in question must be our common humanity. It is one of the only things that can supersede class. Common humanity is established on #BlackLivesMatter by putting a face to police brutality and racism. For those who have inquiring minds and refuse to swallow the dominant narrative about activists as subversives who are terrorists, anti-establishment, or even un-American, #BlackLivesMatter is a true voice in the wilderness generated by those who are experiencing the bitter yoke of these social ills. This information allows people to see for themselves who gets hurt by police brutality and racism. Furthermore, the information available on #BlackLivesMatter clearly illustrates how badly those affected by police brutality and racism are injured physically, mentally, and emotionally. Putting a face on police brutality and racism serves the end of humanizing its victims that creates a more level playing field with white people so they can see just how much they have in common with society's outcasts. The availability of this information is critical because recognizing people of color as equals allows potential allies within the white community to move towards establishing solidarity with people of color. White allies are needed in the struggle for social justice if lasting changes are to be made in society. As Freire (1970) puts it, a white ally comes of age "when he stops regarding the oppressed as an abstract category and sees them as persons who have been unjustly dealt with, deprived of their voice, cheated in the sale of their labor—when he stops making pious, sentimental, and individualistic gestures and risks an act of love" (p.

50). Putting a face on police brutality and racism is critical because it illustrates the depth of human suffering that has the potential to stir the hearts of people who historically choose to ignore reality. With their humanity invoked, new allies can then engage in an act of love by joining their Imagined Community and working alongside the oppressed as they strive for social justice. The continued existence of #BlackLivesMatter is critical in allowing potential allies to join the movement and assuring people of color are not oppressed through silence. The fact that people frequently share information and opinions on #BlackLivesMatter is a heartening aspect of this study because creating basic awareness that can trigger dissonance is the first step in taking action that can spark enduring social change.

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PhI/A	Ph/B	Ph/C	Ph/D
right-thing	#shoutout	hundreds-protest	?
hell	shoutout	Baltimore-police-probe	Why
brutally-beat	another-cop	comes-together	How-the
demand	one-thing-that-is-clear	witness-says	When-was
congratulations	Solidarity	he-heard	Since-when
needs	#Solidarity	officers-suspended	Why-did
Maryland-needs	release-video	police-custody	Why-is
are-right	Rest-in-Power	"	What-good
right	Another-Black-life	"	Is-there
inappropriate	not-illegal	marchers-chanting	What-kind
Inspiring	run-too	rise-up	how-much
angry	thoughts-&-prayers	#freddiegray-protest-in	How-much
calm	thoughts-and-prayers	shut-down	ask-twitter
its-noting	prayers	yep	for-what
its-nothing	clearly-hear	gandhi	eh
unacceptable/frightening	hear-his	this-month	how-many
frightening	Justice-for	family-on-the-way	how-does
unacceptable	Rest-in-power	were-tired	where-are
on-point	RIP	means-necessary	WHO-CONDUCTED
feels	#rip	not-guilty	when-is
means	stand-with-you	live-pastor	Who-will
our-duty	yes	disturbing-image	Whats-the
must-cease	my-thoughts-&-prayers	prompts-protest	Did-Baltimore
BS	a-story	he-fell	You-sure
stop-calling	my-thoughts	thousands-march-in	Was-#FreddieGray
should-be	Rest-Easy	so-many-more	Do-you

# Appendix A – IAM SCK Lexicon

its-hard its-hard nothing-wrong wants-us apologist-down sick must-be U-guilty disturbing infuriating should-investigate purple **I**-believe shit SHIT I-say terror-victims paranoid conspiracy-theorists stop-trying send-those No-wonder sad enough-is exactly Devastated nothing-will I-dont

No-problem Rest-peacefully My-condolences Justice-For shout-out NOT-Remain solidarity **Rest-In-Power** My-heart Good-thoughts Speak-truth DOWN-BALTIMORE All-day my-baltimore Praying Hold-the Go-hard must-say Rise-for in-spirit Much-respect Raise-your Say-it-again with-you my-love united-with brothers-&-sisters props

is-why indict-them 1997 the-storm narrative sinister-version filed-by-the will-investigate cop-case 1000s-march-in #freddiegray-protest-cont **Opens-Probe** #runningwhileblack rally-with felony-running @marclamonthill-is in-the-eye Protest-Cont ICYMI **DuBois** Cival-Rights-Probe Civil-Rights-Probe opens-probe vigil photojournalists-manhandled "investigate" fractured-vertebrae podcast-interview

Wouldnt-it Who-polices What-type Who-watches Wouldnt-that What-if dont-draw when-will Wonder-why How-did On-whos think-so So-no So-now wonder-how And-were What-is What-hope doncha-think drone-is Are-you are-your Is-he Or-is Yall-wanna Yall-wanna still-going Where-is

love-seeing Should-provide **UNACCEPTABLE** evil-reigning not-matter NOT-MATTER under-way must-stop to-feel has-to dont-have severed-itself fuck FUCK DAMMIT good Good hopefully I-wish wont-change not-bv thats-that Pained Exactly If-youre excuse-Ive broke-my I-cant

my-spirit long-live pure-strength Support-all Sending-love Thinking-about-you stand-with we-blkwmn-bck we-blks-bck send-love love-and-support another-bull another-copper another-fuzz another-pig free-video another-African-American-life another-African-American-life another-Afro-American-life another-Black-American-life scat-too scarper-too turn-tail-too lam-too run-away-too hightail-it-too bunk-too head-for-the-hills-too

looking-into get-well-soon Footage-from criminal-probe Keep-witnessing FAMILY-ATTY truth-stop cops-suspended **Opens-Investigation** without-force Feds-to an-investigation rights-investigation streets-today open-investigation Civilian-POC been-added the-many Exactly-#tonimorrison searches-for emotions-high unanswered-questions Demands-Answers **Baltimore-Suspends** van-ride Another-one draws-hundreds mighty-FOI

so-you why-so Who Tell-me Will-other I-thought Right-@deray ?? condoning-#Baltimore Is-this is-ok Who-has sound-familiar did-the dont-they dont-they how-about wheres-the wheres-the do-we did-he protesters-eh how-is can-you wherefore what-sort what-form what-variety

This-needs horrible disgusting Sickening Im-appalled Another-#BlackMartyrOfPoliceBrutality we-allow #BlackMartyrOfPoliceBrutality my-imagined Lives-Dont-Matter horror if-your died-bc was-scared offended Example-why very-important Protesters-Pledge Inhumanely-treated fucking-w apparently POWER-IS What-Im You-can mood indict-them destruction-is does-not

take-to-the-woods-too escape-too fly-the-coop-too break-away-too thoughts-&-supplications thoughts-and-supplications petitions orisons distinctly-hear rest-in-peace a-narrative a-tale a-report a-news-report a-account a-write-up rest-softly eternal-rest-softly sleep-softly eternal-sleep-softly quietus-softly rest-gently eternal-rest-gently sleep-gently eternal-sleep-gently quietus-gently no-trouble rest-peacefully

Kay-Granger One-protester strong-message BMore-Now face-off

Baltimore-protests car-covered are-out #FreddieGray-protester phone-power picture-speaks Thousands-march Rally-growing flag-replaced Protesters-clash Protesters-occupy **GROWS-N** Admit-failing Stopping-traffic Susan-Goering Sara-Benjamin Billboard My-sign watch-the rally-for stand-up **DOJ**-investigates smashing-cars

how-often inquire-twitter enquire-twitter who-lead who-directed Whats-the what-is-the you-certain Wouldnt-it who-patrols who-observes who-follows who-watches-over who-keeps-an-eye-on Wouldnt-that dont-draw do-not-draw inquire-why enquire-why question-why On-whos opine-so suppose-so imagine-so reckon-so guess-so so-nowadays so-today

ugly have-a but-peaceful at-least **APPEARS-TO** hell-breaks is-seen we-are All-I we-do surprise-surprise Our-government own-necks Thank-you I-love I-hope i-hope wins-the Agitation Power Voice WOW Thanks Another-Coverup People-sick I-would obviously Think-yall

eternal-rest-peacefully sleep-peacefully eternal-sleep-peacefully quietus-peacefully not-stay begging imploring keep-the must-state must-tell much-esteem much-regard my-passion brothers-and-sisters giving-love blacks-back black-women-back love-&-support

Car-activism the-kids Cars-join pictures-of Why/How shutting-down Your-Whistle Contempt-of STILL-HERE Call-jake Protesters-throwing already-squaring providing-security reads-statement police-backtrack march-in hundreds-attended Thousands-gathered drones-out Protesters-running rapidly-expanded Protesters-outside Larry union-will History-keeps protesters-threw Mao-Zedong orwellian

so-at-present inquire-how enquire-how question-how did-baltimore and-serve And-were what-the wonder-how-much how-the-hell did-#baltimore future-gang where-are-you when-is-this why-did-the and-we-are what-trust since-when-was what-desire dont-you-think Yall-want-to you-all-want-to correct-@deray excusing-#Baltimore demonstrators-eh

despicable yep interesting duh crazy can-tell condones better please Please is-not u-get we-must idiots has-got ashamed go-protest significance-of necessary we-win have-to dont-put forgot Consider-coming liar myth mirrors dont-make

protesters-occupy-camden custody-death Downtown-#Baltimore flies-30 with-truth expansion-leads prompted-protests-in the-killings growing-here **Telling-stories** Protesters-gather Marcus-Aurelius Residents-Say Contempt-of-Cop two-cities Filed-Bysh\*t-over Start-disrupting **Broken-Relationship** timely-medical Police-Culture Michael-Jackson **Redemption-Songs** our-family a-pretzel apparently-snapped want-answers the-terrorists

is-WHY
Hes-a
only-ones
I-predict
bcuz
religion-under
bashing
probably
have-never
Youll
You-will
intentional
powerful
love-you
must-unite
all-over
Couldve
only-sin
Too-many
couldnt-give
I-pray
need-an
Pray-for
NO-LOVING
Now-Put
Fuckouttahere
Cops-think
YOU-SUCK

shutting-it-down All-lives these-cases Mistakes-were Why-we Tampa-police many-more today's-action compared-peaceful with-love police-simmers Yesterday-in years-beaten Another-sign #BlackLivesMatter-chant **GET-RESULTS** Drones-in Move-together to-gather banner-reads street-medics lessons-learned Saturday-protest names-and-faces So-MANY Stingray-Tracking what-happens Small-crowd

dont-call Seems-2 overly-dramatic only-when people-suck Pfft **GET-ATTENTION** Its-funny Great new-gangs Weve-got Jesus-hasnt We-have dont-see Protestors-are vocal fast glad overflowing mostly-nobody thats-a Or-else Sounds-like Impunity stop-mass WTF change-EVERYTHING people-vs

last-year Read-THIS flies-over #racist-at live-tweeting Protests-in Crowd-Swells Pennsylvania-Avenue Dixon-White identify-themselves SHUT-IT Protests-continue Together Demonstrations-in Luke-41621 Luke-4:16 #freddiegray-protest-rolls Ridin'-for protest-rolls Words-from stand-against black-is March-descends DRONE-OVERHEAD Shut-City Without-Racism **Baltimore-Streets** reaches-back

beautiful town-near **#WAKEUPAMERICA** enough Wish-I dicey Stop-police Hoping I-want #dope Retarded seems-that proud make-it Need-caption You-cant Dont-profile no-surprise is-needed empowering moving cant-say cant-wait Encouraging I-genuinely got-to They-wonder its-time

rewind-exhibition Image-from marches-coalesced 2-death post-from protest-in protecting-city whole-convoy draws-thousands occupy-Camden standoff-with meant-to march-through comparing-environment special-coverage **CITIZEN-LIVE** Photos-from clashes-with 8-places started-chasing gettin-slapped #United-for destroying-cars been-arrested Thousands-protest Wear-a coming-together Sutton-sez

End-the Tell-them should-join obsessed-with looks-peaceful needs-2 need-to No-time if-you lynch-mob #PrettyInappropriate outta-control awesome suspicion-death Wishing-I look-like dont-get agitated chaos no-way hope-they fucking-animals Demand-justice Way-to-go stay-safe favorite-thing savages gas-them

Now-Trying #SystemicRacism ended-up protesters-at police-presence Father-and aim-anger federal-courthouse People-rallying many-others officer-who said-#FuckYourBreath Aristotle they-beating state-troopers spotted-over domestic-violence statements LAWYERS-ADMIT not-the-first ANOTHER-MAN several-hurt #MalcolmX today-in according-to **Protesters-Protesting** wake-of erupts-into

careful Ah-yes WE-DONT going-down bullshit stay-cool tears Time-to which-is r-smashing white-RaCists we-need be-safe shit-DAILY may-not They-arent not-this Startling-juxtaposition disturbed lookin-like looks-like wont-bring clown-show odd Hope-nothing I-wont Unabashedly tired

crips-team vine-by at-protesters cut-the-part cops-were check-it state-of the-language as-compliance enlists-national-guard national-guard-called National-Guard-arrives National-Guard-as National-Guard-is armed-National White-People-Rioting Malcolm-X 1968-vs.-2015 1968-vs-2015 gang-members lead-the-world Another-perspective @TSoulMusic media-loop #Baltimore-resists Deploying-thousands Michael-Jacksons Michael-Jackson's

and-stop peaceful-protest off-the-hook to-disguise grateful havent-forgotten havent-forgotten Lying-bastard FULL-OF-CRAP leads-to no-doubt did-not clearly convenient clear-he police-know need declare-our to-undermine might-have exposed hysteria this-has good-job suck sucks need-to thugs

board-now protest-outside Vigil-continues Protesting-outside prompted-protests #FreddieGray-protest at-the-protest hundreds-dissent Baltimore-police-force-probe Baltimore-constabulary-probe Baltimore-law-probe Baltimore-police-force-investigation Baltimore-constabulary-investigation Baltimore-law-investigation gets-together witnesser-says informant-tells witness-tells policemen-suspended police-officers-suspended policemen-debared police-officers-debared rebel arise rise close-up close fold

outrage shame figured-out #copcarsmatter animals brave darkness bitching scum ignorant violent awakened arent-right arent-right aint-right aint-right love-this tarnish solve-anything welcome-2 aggression at-war wanton-violence furious nuisance disappointed ridiculous couldnt

close-down family-heading-to distressing-image distressful-image perturbing-image troubling-image worrisome-image worrying-image distressing-photo distressful-photo perturbing-photo troubling-photo worrisome-photo worrying-photo distressing-picture distressful-picture perturbing-picture troubling-picture worrisome-picture worrying-picture mass-meeting-with demonstration-cont demonstration-continued demonstration-continues protest-continued protest-continues in-case-you-missed-it Cival-Rights-Investigation couldnt correct-thing hell-on-earth hellhole snakepit the-pits inferno perdition Inferno infernal-region nether-region pit cruely-beat-up cruely-worked-over need require praise kudos extolment Maryland-wants Maryland-demands are-correct correct incompatible out-or-keeping unfitting inspire furious

Civil-Rights-Investigation **Opens-Investigation** look-into inquire enquire broken-vertebrae check check-up-on look-into check-out suss-out check-over go-over check-into bounce-back-soon get-over criminal-investigation continue-witnessing keep-on-witnessing continue-finding keep-on-finding continue-seeing keep-on-seeing family-attorney truth-end truth-halt bulls-suspended cops-suspended

raging tempestuous wild unagitated serene tranquil its-noting its-nothing impossible insufferable unacceptable unsufferable awful dire direful dread dreaded dreadful fearful fearsome frightening horrendous horrific terrible impossible insufferable unacceptable unsufferable

coppers-suspended fuzzes-suspended pigs-suspended bulls-debared cops-debared coppers-debared fuzzes-debared pigs-debared opens-up-probe opens-up-investigation a-probe rights-probe streets-now Civilian-person-of-color Civilian-people-of-color the-countless precisely-#tonimorrison seeks looks-for seek unrequited-questions asks-for-answers needs-answers calls-for-answers Baltimore-ends some-other-one pulls-hundreds powerful-FOI

senses intend signify stand-for our-responsibility our-obligation must-end must-stop must-finish must-terminate bull Irish-bull horseshit shit crap dogshit stop-saying its-difficult its-difficult nothing-incorrect nothing-improper needs-us requires-us vindicator-down justifier-down disgusted fed-up sick

fruit-of-islam one-dissenter strong-content strong-subject-matter **Bmore-at-present** confrontation encounter showdown face-off Baltimore-demonstrations auto-covered automobile-covered machine-covered motorcar-covered come-out #FreddieGray-demonstrator telephone-power image-speaks photo-speaks picture-speaks one-thousand-marches 1000s-march M-march K-march chiliad-march G-march grand-march thou-march

sick-of tired-of brainsick crazy demented distracted disturbed mad sick unbalanced unhinged you-guilty distressing distressful disturbing perturbing troubling worrisome worrying exasperating infuriating maddening vexing should-inquire should-enquire should-look-into violet I-think

yard-march demonstration-growing flag-substituted flag-supplanted flag-replaced flag-superseded flag-supervened-upon flag-superceded demonstrators-brush demonstrators-clash demonstrators-encounter demonstrators-skirmish demonstrators-invade acknowledge-neglecting accept-neglecting acknowledge-failing accept-failing halting-traffic hoarding my-signboard observe-the follow-the watch-over-the keep-an-eye-on-the mass-meeting-for demonstration-for arise rise

I-believe I-consider I-conceive crap dirt shit shite poop turd I-say I-tell stop-seeking stop-attempting direct-those deplorable distressing lamentable pitiful sad sorry precisely exactly on-the-nose on-the-dot on-the-button lay-waste-to waste devastate

uprise getup stand-up Department-of-Justice-investigates Justice-Department-investigates DOJ-looks-into Department-of-Justice-looks-into Justice-Department-looks-into shattering-cars smashing-autos smashing-automobiles smashing-machines smashing-motorcars shattering-autos shattering-automobiles shattering-machines shattering-motorcars auto-activism automobile-activism machine-activism motorcar-activism the-children the-kids the-youngsters the-minors the-shavers the-nippers the-smallfries

desolate ravage scourge I-dont enjoy-seeing should-supply should-provide should-render should-furnish impossible insufferable unacceptable unsufferable immorality-predominating wickedness-dominating iniquity-ruling immorality-reigning wickedness-prevailing not-count afoot underway must-end must-stop must-finish must-terminate must-cease to-sense to-experience

the-tiddlers the-tikes the-tykes the-fries the-nestlings autos-join automobiles-join machines-join motorcars-join cars-connect autos-link automobiles-link-up machines-join motorcars-unite images-of photos-of WhyHow Why-How closing-up closing folding closing-down demonstrators-throwing protesters-hurling demonstrators-hurling supplying-security police-double-back police-force-double-back

dont-have discerped-itself lopped-itself goddamn goddamn-it damnit I-want wont-change wont-shift wont-switch wont-shift wont-switch afflicted troubled ailed If-youre excuse-Ive if-you-are separate-my I-cant atrocious frightful horrifying horrible ugly disgustful distasteful foul

constabulary-double-back law-double-back police-turn-back police-force-turn-back constabulary-turn-back law-turn-back police-backtrack police-force-backtrack constabulary-backtrack law-backtrack marching-in hundreds-went-to 100s-went-to 100s-attended drones-come-out demonstrators-running demonstrators-scarpering demonstrators-turning-tail demonstrators-lam demonstrators-running-away demonstrators-hightailing-it demonstrators-bunking demonstrators-heading-for-the-hills demonstrators-taking-to-the-woods demonstrators-escaping demonstrators-fling-the-coop demonstrators-breaking-away protesters-scarpering

loathly loathsome repellent repellant repelling revolting skanky wicked yucky nauseating nauseous noisome queasy loathsome offensive sickening vile Im-dismayed Im-shocked Im-dismayed Im-shocked we-let we-permit my-conceived-of repugnance repulsion revulsion died-because

protesters-turning-tail protesters-lam protesters-running-away protesters-hightailing-it protesters-bunking protesters-heading-for-the-hills protesters-taking-to-the-woods protesters-escaping protesters-fling-the-coop protesters-breaking-away quickly-inflated rapidly-blew-up speedily-expanded quickly-amplified quickly-inflated quickly-expanded demonstrators-outside demonstrators-outdoors demonstrators-out-of-doors demonstrators-alfresco protesters-outdoors protesters-out-of-doors protesters-alfresco chairman-mao business-district-#Baltimore with-accuracy true-statement developing-here

was-frightened shocked offended scandalized scandalise appaled appalled outraged illustration-why instance-why representative-why really-significant real-significant rattling-significant really-crucial real-crucial rattling-crucial demonstrators-pledge inhumanely-handled fucking-with obviously evidently manifestly patently apparently plainly plain force-is

narrating-stories recounting-stories reciting-stories narrating-tales recounting-tales reciting-tales telling-tales narrating-narratives recounting-narratives reciting-narratives telling-narratives demonstrators-assemble demonstrators-get-together demonstrators-meet protestors-assemble protestors-get-together protestors-meet **Residents-state** Residents-tell registered-by shit-over sht-over things-over bullshit-over bull-over Irish-bull-over horseshit-over shit-over

temper mood humor humour devastation-is demolition-is wipeout-is despicable ugly vile slimy unworthy worthless wretched atrocious frightful horrifying horrible leastways leastwise at-any-rate seems-to our-authorities our-regime thankyou I-enjoy I-hope I-promise

crap-over dogshit-over begin-disrupting begin-interrupting start-disrupting start-interrupting seasonable-medical well-timed-medical welltimed-medical timely-checkup timely-medical-checkup timely-medical-examination timely-medical-exam timely-medical timely-health-check seasonable-medical-checkup well-timed-medical-examination welltimed-medical-exam police-force-culture constabulary-culture law-culture our-kin our-kinsperson obviously-cracked evidently-cracked manifestly-cracked patently-cracked apparently-cracked

I-trust I-desire gains-the advances-the force ability cover-up cover-up people-disgusted people-fed-up people-sick people-sick-of people-tired-of evidently manifestly patently apparently plainly plain Think-yall ugly vile slimy unworthy worthless wretched concerning yes

plainly-cracked plain-cracked desire-solutions desire-answers desire-results desire-resolutions want-solutions want-answers want-results want-resolutions closing-it-down these-events errors-were faults-were todays-action likened-peaceful equated-peaceful police-force-simmers constabulary-simmers law-simmers years-beat-up years-worked-over another-signboard acquire-results get-solutions get-answers get-results get-resolutions

brainsick crazy demented distracted disturbed mad sick unbalanced unhinged can-state can-say excuses improve amend ameliorate meliorate you-get u-receive imbecile cretin moron changeling half-wit retard go-resist import-of implication-of meaning-of

acquire-solutions acquire-answers acquire-results acquire-resolutions travel-together travel-jointly travel-collectively travel-conjointly move-jointly move-collectively move-conjointly to-meet to-gather to-assemble to-forgather to-foregather banner-says street-medical Saturday-demonstration Stingray-trailing what-befalls what-bechances little-crowd flight-over protestations-in crew-swells gang-swells bunch-swells

necessity essential requirement requisite we-succeed block blank-out draw-a-blank Think-about-coming prevaricator dont-make Hes-a I-foretell I-prognosticate I-call I-forebode I-anticipate I-promise faith-under religious-belief-under sock bop whop whap bonk probably likely in-all-likelihood

name-themselves close-it protestations-continue demonstrations-continue protests-go-on protests-proceed protests-keep-going protests-go-forward demonstrations-go-on demonstrations-proceed demonstrations-keep-going demonstrations-go-forward jointly collectively conjointly put-together protests-in Ridin-for **Riding-for** demonstration-rolls protestation-rolls protest-wanders protest-swans protest-strays protest-tramps protest-roams protest-casts protest-rambles

in-all-probability belike Youll deliberate knowing must-connect must-link must-link-up must-join must-unify everywhere everyplace Couldve Could-have only-transgression only-trespass couldnt-give I-beg I-implore demand-an want-an require-an take-an involve-an no-enjoyment immediately-put instantly-put straightaway-put

demonstration-wanders demonstration-swans demonstration-strays demonstration-tramps demonstration-roams demonstration-casts demonstration-rambles protestation-wanders protestation-swans protestation-strays protestation-tramps protestation-roams protestation-casts protestation-rambles lyrics-from stand-up-against remain-firm-against blackness-is march-falls march-goes-down march-comes-down shut-city shut-metropolis without-racialism without-racial-discrimination returns-to makes-it picture-from

straight-off-put directly-put now-put right-away-put at-once-put forthwith-put in-real-time-put like-a-shot-put Fuck-outta-here Fuck-out-of-here bulls-believe cops-believe coppers-believe fuzzes-believe pigs-believe bulls-consider cops-consider coppers-consider fuzzes-consider pigs-consider bulls-conceive cops-conceive coppers-conceive fuzzes-conceive pigs-conceive dont-call dont-say dont-say

icon-from ikon-from protests-amalgamate protests-amalgamated protests-coalesced protests-consolidated protests-fused demonstrations-amalgamate demonstrations-amalgamated demonstrations-coalesced demonstrations-consolidated demonstrations-fused marches-amalgamate marches-amalgamated marches-consolidated marches-fused to-death demonstration-in march-in protecting-metropolis protecting-Baltimore entire-convoy attracts-thousands pulls-thousands pulls-in-thousands draws-thousands draws-in-thousands invade-Camden

looks-to appears-to excessively-dramatic just-when receive-attention get-care get-attention receive-aid get-aid Its-funny its-curious its-funny its-odd its-peculiar its-queer its-rum its-rummy its-singular it-is-curious it-is-funny it-is-odd it-is-peculiar it-is-queer it-is-rum it-is-rummy it-is-singular outstanding new-pack

intended-to comparing-surroundings extra-coverage special-reporting extra-reporting pictures-from images-from scenes-from collides-with eight-places 8-locations eight-locations begin-chasing get-chasing start-out-chasing start-chasing set-about-chasing set-out-chasing commence-chasing getting-slapped desctucting-cars destorying-autos destorying-automobiles destorying-machines destorying-motorcars destructing-autos destructing-automobiles destructing-machines

new-ring new-mob Weve-got we-have-got Jesus-hasnt Jesus-has-not dont-see do-not-see demonstrators-are outspoken flying quick happy beaming overrun well-over run-over brim-over overrunning welling-over running-over brimming-over largely-nobody for-the-most-part-nobody thats-a that-is-a alternatively as-an-alternative

destructing-motorcars been-collared been-nailed been-apprehended been-arrested been-picked-up been-nabbed been-copped Thousands-demonstrate 1000s-demonstrate 1000s-protest put-on-a get-into-a don-a assume-a merging meeting Sutton-says at-present-trying now-seeking now-attempting at-present-seeking at-present-attempting landed-up fetched-up ended-up wound-up finished

instead sounds-equal sounds-equivalent sounds-similar end-mass stop-mass finish-mass terminate-mass cease-mass what-the-fuck alter-everything modify-everything town-close chancy chanceful dodgy end-police stop-police finish-police terminate-police cease-police end-police-force stop-constabulary finish-law terminate-law cease-law trusting desiring

demonstrators-at police-force-presence constabulary-presence law-presence direct-wrath direct-anger direct-ire direct-ira aim-anger aim-wrath aim-ire aim-ira citizenry-rallying people-mobilizing people-mobilising citizenry-mobilizing policeman-who stated-#FuckYourBreath they-whipping they-beat-up they-worked-over seen-over arguments attorneys-admit attorneys-acknowledge lawyers-acknowledge another-human several-wounded

I-need I-require cool mentally-retarded looks-that appears-that force-it You-cant Dont-profile you-can-not you-cannot do-not-profile is-needed is-wanted is-required cant-say cant-wait can-not-say can-not-wait cannot-say cannot-wait I-truly I-really needs-to they-question its-time it-is-time end-the

several-injured several-harmed now-in Demonstrators-Protesting Protesters-Demonstrating Demonstrators-demonstrating aftermath-of backwash-of broke-out-into at-demonstrators edit-the-part edit-out-the-part remove-the-part edit-the-portion edit-out-the-portion remove-the-portion edit-the-section edit-out-the-section remove-the-section bulls-were cops-were coppers-were fuzzes-were pigs-were check-up-on-it look-into-it check-it-out suss-it-out

stop-the finish-the terminate-the cease-the order-them enjoin-them should-connect should-link should-link-up should-join should-unite haunted-with obsessed-with preoccupied-with taken-up-with possessed-with appears-peaceful seems-peaceful out-of-control amazing awe-inspiring awesome awful awing suspicious-death fishy-death funny-death shady-death

check-it-over go-over-it check-into-it the-terminology the-nomenclature as-conformity as-conformation as-compliance as-abidance engages-national-guard national-guard-sent-for National-Guard-gets National-Guard-comes whites-rioting pack-members ring--members mob--members guide-the-world some-other-perspective another-position another-view some-otherposition some-other-view some-other-perspective #Baltimore-holds-out #Baltimore-withstands #Baltimore-stands-firm #Baltimore-protests

suspect-death looks-like dont-get rouse turn-on charge commove excite charge-up pandemonium bedlam topsy-turvydom topsy-turvyness fucking-beast fucking-brute need-justice require-justice favourite-thing barbarian beast wolf savage brute wildcat WE-DONT bull Irish-bull horseshit

#Baltimore-dissents deploying-1000s display-board-now display-panel-now demonstration-outside watch-continues vigil-goes-on vigil-proceeds vigil-goes-along vigil-keeps watch-goes-on watch-proceeds watch-goes-along watch-keeps demonstrating-outside inspired-protests motivated-protests incited-protests inspired-demonstrations motivated-demonstrations incited-demonstrations prompted-demonstrations #FreddieGray-demonstration at-the-demonstration

shit crap dogshit crying weeping are-smashing are-shattering white-RaCists white-racialist we-demand we-call-for we-require we-ask we-want bull-every-day Irish-bull-every-day horseshit-every-day shit-every-day crap-every-day dogshit-every-day bull-day-after-day Irish-bull-day-after-day horseshit-day-after-day shit-day-after-day crap-day-after-day dogshit-day-after-day bull-day-to-day Irish-bull-day-to-day

horseshit-day-to-day shit-day-to-day crap-day-to-day dogshit-day-to-day They-arent They-are-not upset troubled looking-like seems-like wont-bring buffoon-show curious funny odd peculiar queer rum rummy singular I-wont wear-upon tireout wear weary jade wear-out outwear

wear-down fagout fag fatigue and-discontinue and-stop and-cease and-give-up and-quit and-lay-off to-camouflage thankful have-not-forgotten lying-asshole lying-bastard lying-cocksucker lying-dickhead lying-shit lying-mother-fucker lying-motherfucker lying-prick lying-whoreson lying-son-of-a-bitch lying-SOB full-of-shit to-be-sure without-doubt distinctly

clear obvious-he necessitate ask postulate need require take involve callfor demand announce-our to-sabotage to-undermine to-countermine to-counteract to-subvert to-weaken unwrap disclose let-on bring-out reveal discover expose divulge impart break

give-away let-out craze delirium frenzy fury well-done want-to require-to hood hoodlum goon punk thug tough toughie strong-armer shock offend scandalize scandalise appal appall indignation solved worked-out figured-out puzzled-out

licked worked animate-being beast brute creature courageous dauntless fearless intrepid unfearing dark iniquity wickedness complaining trash nescient unenlightened unlearned unlettered fierce tearing vehement violent trigger-happy are-not-right enjoy-this stain

maculate sully defile work-out-anything figure-out-anything puzzle-out-anything lick-anything work-anything welcome-to hostility aggressiveness state-of-war wanton-ferocity wanton-fierceness wanton-furiousness wanton-fury wanton-vehemence wanton-violence wanton-wildness angered enraged furious infuriated maddened pain pain-in-the-neck defeated disappointed

discomfited foiled frustrated thwarted absurd cockeyed derisory idiotic laughable ludicrous nonsensical preposterous could-not this-has-to dont-have-a does-not-matter pretty you-lie no-value made-up we-have-to killing-us this-has-got-to am-thinkin hurts and-stop-the weve-got-to baseball-i-want

peaceful i-wish-i which-is-not you-can-tell one-side

Ph/E	PhII/A	PhII/B	PhII/C
racist-police	perfunctory	killed-cops-first	paid-vacation
no-justice	transparency	HOW-people	death-penalty
victims-grows	opacity	killed-bulls-first	deserved-it
Police-Impunity	DOJ-trusts	killed-coppers-first	sweet-cream
can't-trust-officers	payroll-of-BPD	killed-fuzzs-first	The-killings
cant-trust-officers	Smh	killed-pigs-first	over-sports
cruel-&-inhumane	SMH	how-citizens	paid-holiday
police-brutality	Really?		execution
murder	cop-cars		executing
allowed-to-kill	can-replace		capital-punishment
walk-free	white-man		merited-it
racist	Deray-goes		cream-of
racism	right-to-shutdown		crème-de
troll	right-problem		the-violent-death
troll-accounts	Stay-classy		over-athletics
being-black	obviously-white		sweet-cream-of
justification	hugging-protesters		
murdered	there's-money		
on-and-off	than-violence		
MORE-AFRAM-OFFICERS	dangerous-situation		
no-value	People-die		
They-kill	other-blacks		

another-black-man	#criminal-who
#PoliceBrutality	a-liar
same-outcome	racist-criminal
they-run	deaths-occurs
unarmed	the-protectors
keep-their-jobs	profile-#cops
excuse-after	is-different
worry-for	some-WP
been-conditioned	being-hijacked
culturally-conditioned	more-whites
mil-like	people-who
violent-blk	erupts-into
violent-black	as-compliance
defending-what	Another-perspective
murder-us	casual
the-problem	cursory
not-grounds	passing
corrupt-KKKops	transparence
State-violence	transparentness
racist-adding	opaqueness
KILLING-BLACK	Department-of-Justice-trusts
few-cops	Justice-Department-trusts
being-prey	Department-of-Justice-swears
raping-black	Justice-Department-relies
Harassment-is-Constant	Department-of-Justice-relies
Contempt-of-Cop	Justice-Department-swears
routine-traffic	paysheet-of-BPD
keep-jobs	really

open-season hadn't-run call-the-cops mass-incarceration right-to don't-trust militarism hunt-&-kill marginalization racist-television being-valued 1.5-million 15-million continue-to-occur racist-police-force racist-constabulary racist-law racialist-police racialist-police-force racialist-constabulary racialist-law police-force-impunity constabulary-impunity law-impunity cant-rely-on-officers cant-trust-police-officers cant-rely-on-police-officers cant-rely-on-policemen

can-substitute Deray-travels Deray-moves Deray-proceeds right-to-closedown right-to-close correct-problem stay-posh stay-swish remain-posh remain-swish remain-classy evidently-white manifestly-white patently-white apparently-white plainly-white plain-white embracing-protesters squeezing-protesters embracing-demonstrators squeezing-demonstrators hugging-demonstrators theres-money there-is-money unsafe-situation citizenry-decease citizenry-perish

cant-trust-police-policemen cruel-and-inhumane barbarous-and-inhumane brutal-and-inhumane fell-and-inhumane roughshod-and-inhumane savage-and-inhumane vicious-and-inhumane police-ferociousness police-force-brutality constabulary-viciousness law-savagery slaying execution let-kill permitted-to-kill get-away antiblack anti-Semite racialist racialism racial-discrimination slay hit dispatch bump-off off polish-off

citizenry-go citizenry-exit citizenry-pass-away citizenry-expire citizenry-pass citizenry-kick-the-bucket citizenry-cash-in-one's-chips citizenry-buy-the-farm citizenry-conk citizenry-give-up-the-ghost citizenry-drop-dead citizenry-pop-off citizenry-choke citizenry-croak citizenry-snuff-it people-decease people-perish people-go people-exit people-pass-away people-expire people-pass people-kick-the-bucket people-cash-in-one's-chips people-buy-the-farm people-conk people-give-up-the-ghost people-drop-dead

## remove

MORE-african-american-OFFICERS MORE-black-OFFICERS MORE-african-american-police MORE-african-american-police-force MORE-african-american-constabulary MORE-african-american-law MORE-black-police MORE-black-police-force MORE-black-constabulary MORE-black-law they-put-to-death some-other-black-man some-other-african-american-man equal-equivalent equal-outcome equivalent-outcome same-result same-resultant same-final-result same-termination equal-result equal-resultant equal-final-result equal-termination equivalent-result equivalent-resultant equivalent-final-result

people-pop-off people-choke people-croak people-snuff-it other-african a-prevaricator racist-felon racist-crook racist-outlaw racist-malefactor antiblack-felon anti-Semite-crook antiblack-outlaw anti-Semite-malefactor the-defenders the-guardians the-protectors the-shielders profile-bulls profile-cops profile-coppers profile-fuzzs profile-pigs is-unlike is-dissimilar some-white some-anglos more-anglos

equivalent-termination they-scat they-run they-scarper they-turn-tail they-lam they-run-away they-hightail-it they-bunk they-head-for-the-hills they-take-to-the-woods they-escape they-fly-the-coop they-break-away maintain-their-jobs hold-their-jobs trouble-for been-learned culturally-learned wild-black wild-blk supporting-what fending-for-what slay-us hit-us dispatch-us bump-us-off off-us

citizenry-who breaks-out-into as-conformity as-conformation as-abidance some-other-perspective another-position another-view some-other-position some-other-view needs-2-put @deray-goes polish-us-off remove-us the-trouble not-cause not-reason crooked-KKKops racialist-adding killing-african few-bulls few-coppers few-fuzzes few-pigs being-quarry being-target being-fair-game ravishing-black violating-black assaulting-black dishonoring-black dishonouring-black torment-is-Constant torment-is-ceaseless torment-is-constant torment-is-incessant torment-is-never-ending torment-is-perpetual torment-is-unceasing torment-is-unremitting

harassment-is-ceaseless harassment-is-constant harassment-is-incessant harassment-is-never-ending harassment-is-perpetual harassment-is-unceasing harassment-is-unremitting everyday-traffic mundane-traffic quotidian-traffic unremarkable-traffic workaday-traffic maintain-jobs hold-jobs hadnt-run had-not-run mass-imprisonment dont-trust do-not-trust do-not-rely dont-rely hunt-and-kill marginalisation antiblack-television anti-Semite-television continue-to-happen continue-to-hap continue-to-go-on

continue-to-pass-off continue-to-pass continue-to-fall-out continue-to-come-about continue-to-take-place stop-calling-him harassment-constant dixon will-not-stop

PhIII/A	PhIII/B	PhIII/C	PhIII/E
can't-trust	focus-on	worry-about	the-muscle
cant-trust	type-of-coverage	White-Americans	criminal-organization
can-not-trust	forget-about	Black-Americans	the-muscleman
cannot-trust	JENNER-DAY	Insurance-will	
can-not-rely	your-focus	Insurance-won't	
cannot-rely	#takebackebony	concern-about	
cant-rely	more-important	interest-about	
	Don't-send	occupation-about	
	more-than	anglos	
	property-damage	indemnity-will	
	the-disenfranchisement	indemnity-wont	
	more-concerned	Insurance-wont	
	concentrate-on		
	center-on		
	centre-on		
	pore-on		
	rivet-on		

	type-of-reporting
	bury
	your-focal-point
	your-direction
	more-significant
	more-important
	Dont-send
	do-not-send
	more-interested
	more-occupied
	more-worried
PhIV/D	PhV/B
Pls-see-@ErinBurnett's-	
tweet	We-gonna-fight
@ErinBurnett's-tweet	die-in
please-see	die-in

spread-the-word

officer-twist

blocked-is-up

approximately-1700 Inspiring-rally happening-now Marching-for ghost-of Live-streams

live

LIVE periscope

Pls-see-@ErinBurnetts-

@ErinBurnetts-tweet

police-equals

tweet

222	
223	

Live-stream fight-for are-follow for-updates From-the-streets LIVE-broadcast Watch-live We-REFUSE Come-out Spent-the-day Spread-this Flickr-for 1-pm See-you Getting-ready JOIN-FIGHT live-protesters our-conversation small-group 12:00-noon White-ally Please-read Tune-in Reppin-homeland ustream at-3pm Livestream Watch-here

Follow Preparing-Sign Pennsylvania-Avenue Watching-#FreddieGray current-situation Watching-now Live-Streaming Pennsylvania-Ave Camden-Yards starting-in to-see-you **30-MINUTES** In-Front 4-feeds ad-plane **Be-There** the-move flag-flies Lombard-st LIVE-NOW riot-gas Traffic-blocked they-want-to Bottles-now breaching-barricades incoming-bottles right-now TAKING-FIRE

**BY-CHAIRS ON-WAY BUSINESSES-ATTACKED** PEOPLE-ATTACKED **CARS-SMASHED EMPTY-TRASH** HIS-GUN Howard-Street 83-and-395 smashing-windows SNATCH-PEOPLE gassing-protesters ARREST-IN **KICKING-CARS** POLICEMANS-HAT tipping-point HAT-RETALIATES make-arrests making-arrests Pratt-St be-heading STAND-OFF streams orders-patrol Protesting-outside western-district police-arrest film-it

virtual-boycott 443-814-9160 4438149160 flickr-updates National-Guard-holds union-square Eliot-Chapel completely-shut-down Retweet tunein tune-in just-joined we-are-going-to-fight we-gonna-press we-gonna-campaign we-gonna-push we-gonna-agitate we-gonna-crusade we-are-going-to-press we-are-going-to-campaign we-are-going-to-push we-are-going-to-agitate we-are-going-to-crusade circulate-the-word circularize-the-word circularise-the-word distribute-the-word disseminate-the-word

propagate-the-word broadcast-the-word diffuse-the-word disperse-the-word pass-around-the-word policeman-twist police-officer-twist officer-flex officer-bend officer-deform officer-turn policeman-flex policeman-bend policeman-deform policeman-twist policeman-turn police-officer-flex police-officer-bend police-officer-deform police-officer-turn about-1700 close-to-1700 just-about-1700 some-1700 roughly-1700 more-or-less-1700 around-1700 inspring-protest

inspring-demonstration happening-at-present shade-of spook-of wraith-of specter-of spectre-of crusade-for press-for campaign-for push-for agitate-for are-following live-program live-programme view-live see-live catch-live take-in-live we-resist we-reject come-to-the-fore step-forward come-forward step-up step-to-the-fore passed-the-day circulate-this

circularize-this circularise-this distribute-this disseminate-this propagate-this broadcast-this spread-this diffuse-this disperse-this pass-around-this fix prepare setup ready gear-up set join-fighting join-combat join-scrap join-struggle join-battle join-conflict join-engagement live-demonstrators little-group 1200-noon white-friend representing-homeland representing-fatherland representing-motherland reppin-fatherland reppin-motherland view-here see-here catch-here take-in-here fixing-sign setting-up-sign readying-sign gearing-up-sign setting-sign fixing-signboard setting-up-signboard readying-signboard gearing-up-signboard setting-signboard preparing-signboard viewing-#FreddieGray seeing-#FreddieGray catching-#FreddieGray taking-in-#FreddieGray current-state-of-affairs viewing-now seeing-now catching-now taking-in-now

beginning-in leading-off-in commencing-in thirty-minutes for-feeds ad-aeroplane advertisement-aeroplane advertizement-aeroplane advertising-aeroplane advertizing-aeroplane advert-aeroplane advertisement-airplane advertizement-airplane advertising-airplane advertizing-airplane advert-airplane advertisement-plane advertizement-plane advertising-plane advertizing-plane advert-plane be-at-that-place be-in-that-location the-go Lombard-street public-violence-gas traffic-barricaded traffic-blockaded

traffic-stopped traffic-blocked-off traffic-blocked-up traffic-bared they-need-to gapping-barricades breaching-roadblocks gapping-roadblocks business-organizationsattacked business-organisationsattacked business-organizationsassailed business-organisationsassailed businesses-assailed businesses-assulted people-assailed people-assulted citizenry-assailed citizenry-assulted citizenry-attacked autos-smashed automobiles-smashed machines-smashed motorcars-smashed cars-banged-up autos-banged-up

automobiles-banged-up machines-banged-up motorcars-banged-up empty-rubbish empty-scraps empty-garbage Howard-St shattering-windows catch-people grab-people gassing-demonstrators collar-in nail-in apprehend-in pick-up-in nab-in kicking-autos kicking-automobiles kicking-machines kicking-motorcars police-officers-hat officers-hat hat-strikes-back Pratt-Street be-going tells-patrol enjoins-patrol tells-police

enjoins-police orders-police demonstrating-outside police-force-arrest constabulary-arrest law-arrest police-force-apprehend police-force-catch police-force-collar police-force-pinch police-force-take-into-custody constabulary-apprehend constabulary-catch constabulary-collar constabulary-pinch constabulary-take-intocustody law-apprehend law-catch law-collar law-pinch law-take-into-custody shoot-it take-it home-reserve-holds wholly-shut-down entirely-shut-down completely-shut-down totally-shut-down

all-shut-down altogether-shut-down wholly-shut-down wholly-shut-down entirely-shut-down completely-shut-down totally-shut-down all-shut-down altogether-shut-down wholly-shut-down wholly-closedown entirely-closedown completely-closedown totally-closedown all-closedown altogether-closedown wholly-closedown wholly-closed entirely-closed completely-closed totally-closed all-closed altogether-closed just-now-joined just-linked just-linked-up just-joined just-united

just-now-linked-upp just-now-joined just-now-united diein we-gonna-fight-for april-25 blocked-is-updated marching-in crowds-overflowing preparing-signs enough-baltimore watch-live-protesters

ST 1	ST 2	ST 3	ST 4
almost-pissed	doesnt-died	hundreds-protest	no-racist-police
BS-#BlackLivesMatter	doesnt-died	Baltimore-police-probe	no-justice
rats-ass	that-man	another-cop	We-gonna-fight
#BlackLivesMatter-klan	should-investigate	over-the-death	unarmed-Black-victims
tards	conspiracy-theorists	preventable-tragedy	stopped
retards	those-cities	hell	die-in
these-tards	BEHEADING	shutting-shit-down	die-in
STFU	evil-reigning	brutally-beat	diein
people-suck	affecting-an-arrest	rot-in-jail	another-black-man-dies
town-near	Baltimore-protests	break-itself	hands-of-police
#WAKEUPAMERICA	get-pass	officers-suspended	#institutionalizedracism
the-protectors	let-me	police-custody	spread-the-word
Retarded-white-people	black-teens	get-the-truth	witness-says
Need-caption	@deray-goes	ended-up	he-heard
#Obamacare	few-cops	right-thing	Police-Impunity
own-mirrors	surprise-surprise	protest-now	live
handouts-are	Call-jake	shut-down	black-man-killed-by
lynch-mob	guy-tonight	people-rallying	cant-trust-officers
future-gang	yep	not-sever	cant-trust-officers
some-WP	city-destroyin	needs	dont-and-cant
#BlueLivesMatter	being-looted	Maryland-needs	dont-and-cant
fucking-animals	criminal-behavior	no-problem	marchers-chanting
BS-movement	course-idiots	family-on-the-way	stop-the-lies
savages	pointless-discussion	watch-video	lies
Arrest-them	subversives	pocket-knife-outlawed	lie
gas-them	People-die	cruel-&-inhumane	rise-up

## Appendix B – Critical Consciousness Lexicon

#RaceWar-started beat-black about-urinate just-about-piddle almost-puddle allbut-piss nearly-pee about-pee-pee just-about-urinate just-about-piss just-about-pee-pee idiot imbecile cretin moron changeling half-wit

simpleton simple these-idiots these-imbeciles these-cretins these-cretins these-morons these-morons these-changelings these-changelings these-simpletons shut-the-fuck-up town-close

protest-that #criminal-who criminal-who marshmallows not-anti not-antipolice deserved-it racist-criminal religion-under Bashing-#Christianity Root-Cause mom-more Helluva-movement #WhiteCopsKillem Islamist-Black nobody-cares Or-else

#thugtivists other-blacks ass-criminals robbing-ppl white-RaCists white-Racists insidious-agendas but-looting hershey-bars doesnt-decease doesnt-perish **Opens-Probe** death on-point got-to Protest-Cont Break-his-Back dies **DuBois** opens-probe vigil prior-to sick-of BS Officers-Suspended thoughts-&-prayers thoughts-and-prayers prayers MORE-AFRAM-**OFFICERS** Justice-for **Rights-Probe** "ruff-ride" ruff-ride beat-his-ass cop-apologist under-attack no-wonder Seens-like fractured-vertebrae

black-man-killed White-Americans **Black-Americans** #policebrutality police-brutality murder Call-it-what-it-is perfunctory transparency opacity payroll if-not-racist Solidarity #runningwhileblack Since-when rally-with chance-in-hell approximately-1700 allowed-to-kill walk-free felony-running gun-down get-away-with-it hunting N\*\*\*\*rHunting nrhunting officer-twist in-the-eye

town-nigh town-adjacent town-nearby town-nighboring the-defender the-guardian

the-shielder retarded-whites want-subtitle

require-subtitle need-subtitle want-caption require-caption have-mirrors possess-mirrors handout-is charity-are gang pack ring mob bally-animals

bloody-animals blooming-animals doesnt-go doesnt-exit doesnt-pass-away doesnt-expire doesnt-pass doesnt-kick-the-bucket doesnt-cash-in-oneschips doesnt-buy-the-farm doesnt-conk doesnt-give-up-theghost doesnt-drop-dead doesnt-pop-off doesnt-choke doesnt-croak doesnt-snuff-it doesnt-decease doesnt-perish doesnt-go doesnt-exit doesnt-pass-away doesnt-expire doesnt-pass doesnt-kick-the-bucket doesnt-cash-in-oneschips

doesnt-buy-the-farm

RIP rip Footage-from criminal-probe Keep-witnessing enough-is matter-to-you love-seeing Stress-at

**UNACCEPTABLE** under-way 4-every suspects-death My-thoughts severed-itself card-posted streets-today open-investigation **Rest-Easy Cops-Suspended** column-today photojournalistsmanhandled by-itself added-to

troll-accounts Another-Black-life devaluing being-black-in-America calling-him "suspect" justification racist-cops defending-what on-and-off run-too 2-believe to-believe The-Truth RACIST-COPS stop-killing U-guilty we-become no-value They-kill another-black-man #CivilRights-violation representing-in same-outcome

investigate

crashing-animals

flaming-animals bally-beasts blinking-beasts bloody-beasts blooming-beasts crashing-beasts flaming-beasts bally-brutes blinking-brutes bloody-brutes blooming-brutes

crashing-brutes flaming-brutes bull-social-movement fake-social-movement bull-front

fake-front barbarian beast wolf savage brute wildcat barbarians beasts

doesnt-conk doesnt-give-up-theghost doesnt-drop-dead doesnt-pop-off doesnt-choke doesnt-croak doesnt-snuff-it should-inquire should-enquire those-metropolises those-urban-centers decapitation immoralitypredominate immorality-dominate immorality-rule immorality-reign immorality-prevail wickednesspredominate wickedness-dominate wickedness-rule wickedness-reign wickedness-prevail iniquity-predominate iniquity-dominate iniquity-rule iniquity-reign

## WHO-CONDUCTED

this-shit release-video hear-bystanders Mayham-going unanswered-questions my-imagined man-suffered **Demands-Answers** US-AG beat-him Rest-in Rest-peacefully My-condolences arrestees-death Another-one draws-hundreds

mighty-FOI Kay-Granger One-protester strong-message BMore-Now face-off are-out #FreddieGray-protester picture-speaks Smh SMH Really? be-peaceful that-killed KILLA-COPS they-run we-break unarmed keep-their-jobs face-of-diversity excuse-after justify-killing safety-of

killing-of brutality-that been-conditioned DOES-NOT-MATTER does-not-matter culturally-conditioned Conditioned like-game narrative-going

we-gonna-fight-for

podcast-interview

terror-victims

nail-them
apprehend-them
pickup-them
nab-them
cop-them
nigger
nigga
spade
coon
jigaboo
nigra
beat-up-nigger
beat-up-nigga
beat-up-spade
beat-up-coon
beat-up-jigaboo
beat-up-nigra
work-over-nigger
work-over-nigga
work-over-spade
work-over-coon
work-over-jigaboo
work-over-nigra

wolves

brutes

wildcats

collar-them

iniquity-prevail impact-anapprehension bear-upon-an-arrest Baltimore-dissent Baltimore-objection receive-pass get-a-pass find-pass obtain-pass incur-pass allow-me permit-me black-adolescent black-stripling black-teenager @deray-go @deray-proceed @deray-move few-bulls few-cops few-coppers few-fuzzs few-pigs guy-tonight cat-this-evening hombre-this-night bozo-tonight metropolis-demolish fucking-w Thousands-march Rally-growing flag-replaced Protesters-clash Protesters-occupy **GROWS-N** Admit-failing Stopping-traffic Billboard watch-the rally-for stand-up smashing-cars getting-ugly Car-activism 10-Years hell-breaks Cars-join Mahatma-Gandhi crucified-in Why/How WhyHow shutting-down DOWN-BALTIMORE Contempt-of STILL-HERE Protesters-throwing

without-force Streamers media-does-not real-terror not-repaired human-beings completely-shut malicious-intentions another-perspective the-problem cops-first 4438149160 militarized glorifying-guns brute-police-force need-justice protesting-outside joined-the-muslims tunein acknowledge-history others-killed-by Civilian-POC 5th-&-los-angeles wcops-like-these Wapos-muted institutionalizedracism WITH-PAY

happening-now

urban-center-destroy being-pillaged being-plundered being-ransacked

course-idiot course-imbecile course-cretin course-moron course-changeling course-half-wit course-retard otiose-discussion pointless-treatment superfluous-discourse wasted-discussion revolutionist revolutionary subversive subverter multitude-decease masses-perish mass-go hoi-polloi-exit people-pass-away the-great-unwashedexpire pepole-pass pepole-kick-the-bucket own-necks sign-wins providing-security Agitation Power Voice hundreds-attended Thousands-gathered wrong-city drones-out Flickr-for hugging-protesters Larry All-day History-keeps Mao-Zedong crazy-right than-violence

playing-games

prompts-protest

Protesters-gather

Marcus-Aurelius

worst-enemies

flies-30

with-truth

watchmen

Downtown-#Baltimore

Exactly #nrhunting excuse-Ive fell-really Another-#BlackMartyrOfPoliceBrutality #BlackMartyrOfPoliceBrutality stand-together Authoritative-white kill-you Lives-Dont-Matter killed-by corrupt-KKKops a-threat only-ones State-violence Marching-for those-killed #BlackLivesMatter-Action phone-power Inhumanely-treated white-police ghost-of side-by-side racist-adding Running-While-Black Live-streams Live-stream

pepole-cash-in-oneschips pepole-buy-the-farm pepole-conk pepole-give-up-theghost pepole-drop-dead pepole-pop-off pepole-choke pepole-croak pepole-snuff-it dissent-that resist-that felon-who crook-who outlaw-who malefactor-who not-antipolice-force not-anticonstabulary not-antilaw merited-it antiblack-felon anti-Semite-crook anti-outlaw anti-malefactor faith-under religious-belief-under sock-Christian-religion bop-Christian-religion

two-cities my-baltimore so-necessary we-win Praying sh\*t-over Start-disrupting be-enough timely-medical Michael-Jackson **Redemption-Songs** Hold-the in-office has-to-pay Go-hard a-pretzel apparently-snapped want-answers crucify-me All-lives only-sin I-pray Pray-for before-i-tweet my-heart police-simmers Yesterday-in

POWER-IS NOT-Remain **KILLING-BLACK** Were-tired Were-tired Sara-Benjamin My-sign can-replace fight-for indict-them are-follow for-updates From-the-streets justice-death Indifference-Kill #StopPoliceBrutality eye-contact all-victims They-paid but-peaceful LIVE-broadcast joined-the-rally THOUSANDS-MARCHING death-of Watch-live Orwellian-state

Livestream

whop-Christian-	
religion	frat-boys
whap-Christian-	5
religion	OUR-PAIN
bonk-Christian-religion	arrests-divided
beginning-induce	years-beaten
origin-stimulate	Sinister-Version
root-cause	Jesus-is
	#BlackLivesMatter-
rootage-have	chant
source-get	GET-ATTENTION
ma-more-than	Drones-in
mama-more-than	drone-is
mamma-more-than	Saturday-protest
mom-more-than	Jesus-hasnt
momma-more-than	names-and-faces
mommy-more-than	great-powers
mammy-more-than	violently-shaken
mum-more-than	Chief-says
mummy-more-than	Stingray-Tracking
Helluva-campaign	Small-crowd
Helluva-cause	last-year
Helluva-crusade	in-spirit
Helluva-drive	Read-THIS
Helluva-movement	Confederate-flag-flies
Helluva-effort	Protests-in
white-bull-shoot-down-	
em	morbid-outlook
Caucasian-cop-defeat-	
em	over-death

do-nothing Speak-truth We-REFUSE Come-out Shackled-Black deem-unworthy wont-tell USE-our ONLY-spend police-violence Billboard-in Thanks-Baltimore Nazi-flag Another-Coverup solidarity-in Spent-the-day obviously-white MSM-coverage not-be-ignored Spread-this 1-pm See-you Getting-ready theres-money theres-money

copper-vote-down-em fuzz-vote-out-em pig-em Islamism-blacken Mohammedanismmelanize Muhammadanismmelanise Muslimism-nigrify cipher-give-care cypher-give-care nobody-give-care nonentity-give-care other-blacken other-melanize other-melanise other-nigrify buttocks-felon nates-crook arse-outlaw butt-malefactor backside-crook bum-crook buns-crook can-crook fundament-crook hindquarters-crook hindend-crook keister-crook

Much-respect	Nothing-coded
Raise-your	instead-of
shutting-it-down	Who-polices
#alllivesmatter	JOIN-FIGHT
SHUT-IT	being-prey
change-EVERYTHING	paid-vacation
people-vs	death-penalty
is-beautiful	live-protesters
Together	kill-again
fighting-for	Come-on-out
dicey	untold-violence
#dope	raping-black
Demonstrations-in	11a-ET
Luke-4:16	Harassment-is-Constant
Luke-41621	Harassment-Constant
Ridin-for	Injured-Prisoners
Ridin-for	Contempt-of-Cop
protest-rolls	Filed-By
proud	small-group
Police-Shooting	these-lies
March-rn	Consider-coming
is-not	racist-tweets
March-descends	systemic
Baltimore-Streets	Renaissance-myth
and-moving	mirrors
cant-wait	his-ignorance
cant-wait	killings

posterior-crook prat-crook rear-crook rearend-crook rump-crook stern-crook seat-crook tail-crook tailend-crook tooshie-crook tush-crook bottom-crook behind-crook derriere-crook fanny-crook buttocks-outlaw nates-outlaw arse-outlaw butt-outlaw backside-outlaw bum-outlaw buns-outlaw can-outlaw fundament-outlaw hindquarters-outlaw hindend-outlaw keister-outlaw posterior-outlaw

reaches-back rewindexhibition 2-march Image-from baseball-players looks-peaceful post-from something-March my-spirit long-live whole-convoy draws-thousands occupy-Camden out-there pure-strength than-baseball standoff-with stay-safe favorite-thing #AllLivesMatter meant-to march-through careful the-1960s special-coverage sounds-and condoning-#Baltimore **CITIZEN-LIVE** 

supremacist-terror killing-us **Broken-Relationship** 12:00-noon get-reprimands 25-bcuz Come-2 Police-Culture type-of-coverage racist-cops unarmed-blacks never-experienced systemic-racism never-pry Blackness executions White-ally Please-read come-out must-unite Tune-in LOVE-not-FEAR forget-about our-brothers wait-by police-overhaul Reppin-homeland murdered

prat-outlaw rear-outlaw rearend-outlaw rump-outlaw stern-outlaw seat-outlaw tail-outlaw tailend-outlaw tooshie-outlaw tush-outlaw bottom-outlaw behind-outlaw derriere-outlaw buttocks-malefactor nates-malefactor arse-malefactor butt-malefactor backside-malefactor bum-malefactor buns-malefactor can-malefactor fundament-malefactor hindquartersmalefactor hindend-malefactor keister-malefactor posterior-malefactor prat-malefactor rear-malefactor

Photos-from 8-places going-down gettin-slapped stay-cool Always-tears Ppl-power Sending-love Thinking-about-you God-please be-safe destroying-cars been-arrested God-bless Startling-juxtaposition theyre-doing theyre-doing not-trending juxtaposition their-hands Now-Trying justice-first sick-& sick-and shut-down-baltimore the-storm the-kids legal-observer

many-more trying-to-imply 1pm-ET compared-peaceful with-love Gray-killing open-season #takebackebony your-focus hadnt-run hadnt-run ustream at-3pm to-gather jail-killer cops-like-these structural-relationship Watch-here live-at killed-him MANY-MURDERS an-emergency 4-running Blocked-his Crowds-overflowing call-the-cops cave-do

#racist-at

rearend-malefactor rump-malefactor stern-malefactor seat-malefactor tail-malefactor tailend-malefactor tooshie-malefactor tush-malefactor

bottom-malefactor behind-malefactor derriere-malefactor overcharge-multitude soak-masses surcharge-mass gazump-hoi-polloi fleece-masses plume-masses pluck-masses rob-masses hook-masses white-person-racialist Caucasian-racialist pernicious-docket subtle-schedule merely-plunder simply-despoil just-loot only-reave

protests-continue peaceful-protest peaceful-protests armed-insurrection time-2-march time-to-march policemen-protecting Protesters-threw protesters-occupycamden-yards citizen-live-stream hundreds-resist hundreds-dissent some-otherbull some-other-cop some-other-copper some-other-fuzz some-other-pig over-the-dying over-the-demise preventable-calamity preventable-catastrophe preventable-disaster preventable-tragedy preventable-cataclysm hell-on-earth hellhole snake-pit the-pits

live-tweeting FOLLOW-HER Preparing-Signs Pennsylvania-Avenue Dixon-White identify-themselves Watching-#FreddieGray mass-incarceration current-situation Say-it-again Watching-now enough. with-you Live-Streaming Pennsylvania-Ave Camden-Yards #NonViolent-March brutalist-free still-going brutality-cops starting-in right-to to-see-you Words-from #stopkillercops Live-protest In-Front

stand-against

merely-strip simply-rifle just-ransack only-pillage loot-foray white-people-suck inferno crap-knock-down dirt-cut-down shit-push-down shite-pull-down viciously-beat-out brutally-crushed savagely-shelled viciously-trounced viciously-vanquished fracture-itself policeman-set-aside police-officer-set-aside policeman-detention police-officerdetainment police-officer-hold acquire-the-truestatement proper-matter right-affair suitable suited close-down wants require Old-Line-State-want Free-State-need MD-require

DRONE-OVERHEAD Without-Racism Dont-profile Dont-profile My-#FreddieGray-statement No-ignorance 4-feeds The-killings no-trial dont-trust dont-trust getting-heard the-trauma cell-reception Tell-them marches-coalesced **EVERY-DAY** 2-death Stingray-Devices **Expansion-leads 30-MINUTES** ad-plane **Be-There** @BaltimorePolice-using the-move black-flag-flies

white-supremacists

no-problem	Lombard-st
family-line-on-the-way	LIVE-NOW
folk-on-the-way	riot-gas
kinfolk-on-the-way	hunt-&-kill
kinsfolk-on-the-way	police-state
sept-on-the-way	Traffic-blocked
phratry-on-the-way	they-want-to
view-video-recording	Things-wont
see-video-recording	Things-wont
catch-video-recording	Bottles-now
take-in-video-recording	breaching-barricades
pocket-knife-	
illegitimate	incoming-bottles
switch-blade-illicit	Police-repression
pocket-knife-outlawed	TAKING-FIRE
switch-blade-outlawed	BY-CHAIRS
pocket-knife-unlawful	ON-WAY
barbarous-inhumane	BUSINESSES-ATTACKED
brutal-inhumane	PEOPLE-ATTACKED
cruel-inhumane	others-killed
fell-inhumane	CARS-SMASHED
roughshod-inhumane	EMPTY-TRASH
savage-inhumane	HIS-GUN
vicious	Howard-Street
open-investgation	83-and-395
decease	smashing-windows
expiry	SNATCH-PEOPLE
on-degree	gassing-protesters
on-level	HIT-BY

on-stage	ARREST-IN
travel-to	KICKING-CARS
go-to	Protests-Trending
move-to	Get-the-Whole
locomote-to	POLICEMANS-HAT
objection-proceed	tipping-point
dissent-go-forward	HAT-RETALIATES
separate-spinal-column	the-muscle
split-up-vertebral-	
column	criminal-organization
fall-apart-spine	make-arrests
come-apart-backbone	making-arrests
sepearate-back	Pratt-St
sepearate-rachis	oppression-here
separate-his-spinal-	
column	#censorship-Twitter
separate-his-vertebral-	
column	be-heading
separate-his-spine	#United-for
separate-his-backbone	justice-now
separate-his-back	shit-DAILY
separate-his-rachis	leading-the-march
decease	Follow-@deray
perish	badge-today
go	STAND-OFF
exit	racist-police
passaway	coming-together
expire	democracy-looks
pass	Insurance-will

kick-the-bucket	Insurance-wont
cash-in-ones-chips	streams
buy-the-farm	Get-to
conk	a-reaction
give-up-the-ghost	orders-patrol
drop-dead	real-matter
pop-off	over-sports
choke	racist-television
croak	valued-at-less
snuff-it	#SystemicRacism
watch	Before-judging
anterior-to	case-in
disgusted-of	call-the-victim
fed-up-of	marching-in
sick-of	watch-live-protesters
sick-of-of	those-killed-by
tired-of	reform-is-needed
bull	oppressive-tactics
Irish-bull	covered-#baltimore
horseshit	citizen-livestream
shit	tyrannical-behavior
crap	tyrannous-behavior
dogshit	oppresive-behaviour
policeman-debared	oppresive-conduct
police-officer-debared	oppresive-doings
thought-supplication	tyrannical-conduct
thought-process-	
supplication	tyrannous-doings
cerebration-	tyrannical-tactics

supplication	
intellection-	
supplication	tyrannous-tactics
mentation-supplication	reform-is-wanted
to-a-greater-extent-	
Black-person-and-	
policeman	reform-is-required
to-a-greater-extent-	
blackamoor-and-police- officer	observe-live-protesters
	observe-nive-protesters
to-a-greater-extent- Negro-and-policeman	follow-live-protesters
to-a-greater-extent-	ionow-nve-protesters
Negroid-and-police-	
officer	watch-over-live-protesters
justness-for	keep-an-eye-on-live-protesters
thumping-drive	observe-live-demonstrators
correct-investiagtion	follow-live-demonstrators
rectify-investiagtion	watch-over-live-demonstrators
	keep-an-eye-on-live-
beatup-his-buttocks	demonstrators
workover-his-nates	watch-live-demonstrators
beatup-his-arse	demonstrating-in
workover-his-butt	name-the-victim
beatup-his-backside	instance-in
workover-his-bum	example-in
beatup-his-buns	before-judgment
workover-his-can	before-judgement
beatup-his-fundament	prized-at-less
workover-his-	valued-at-less

hindquarters beatup-his-hind-end workover-his-keister beatup-his-posterior workover-his-prat beatup-his-rear workover-his-rear-end beatup-his-rump workover-his-stern beatup-his-seat workover-his-tail beatup-his-tail-end workover-his-tooshie beatup-his-tush workover-his-bottom beatup-his-behind workover-his-derriere beatup-his-fanny bull-vindicator cop-justifier copper-vindicator fuzz-justifier pig-vindicator under-assail under-assault under-set-on no-wonder look-alike

treasured-at-less appreciated-at-less racialist-television racialist-telecasting racialist-TV racialist-video racist-telecasting racist-TV racist-video over-athletics true-matter real-thing real-affair real-topic real-subject real-issue prescribes-patrol dictates-patrol a-response reach make progress-to annoy rag bother get-at irritate

appear-similar	rile
Rest-in-Peace	nark
video-recoding-from	nettle
tape-from	gravel
felon-probe	vex
crook-probe	chafe
outlaw-probe	devil
malefactor-probe	Insurance-will-not
enough	indemnity-will-not
count-to-you	Insurance-wont
matter-to-you	majority-rule
weigh-to-you	arriving-together
watch-love	getting-together
view-love	racist-police-force
see-love	racist-constabulary
catch-love	racist-law
take-in-love	antiblack-police
tension-at	anti-Semite-police
tensness-at	antiblack-constabulary
hap-once-again	anti-Semite-law
go-on-once-more	repulsion
pass-off-over-again	badge-nowadays
occur-once-again	badge-now
pass-once-more	leading-the-protest
fall-out-over-again	leading-the-demonstration
come-about-once-again	heading-the-protest
take-place-once-more	heading-the-demonstration
impossible	heading-the-march

insufferable unacceptable unsufferable afoot for-every defendants-decease defendants-expiry my-opinion my-sentiment my-persuasion my-view cut-off-itself poster-posted posting-posted placard-posted notice-posted bill-posted streets-nowadays streets-now open-up-probe bull-abeyant cop-abeyant copper-abeyant fuzz-abeyant pig-abeyant editorial-nowadays newspaper-columnnow who-lead

bullshit-daily bull-daily Irish-bull-daily horseshit-daily shit-daily crap-daily dogshit-daily shit-day-to-day shit-day-after-day shit-every-day bullshit-day-to-day bull-day-after-day Irish-bull-every-day horseshit-day-to-day shit-day-after-day crap-every-day dogshit-every-day justness-now justice-immediately justice-instantly justice-straightaway justice-straight-off justice-directly justice-now justice-right-away justice-at-once

justice-forthwith justice-in-real-time

who-take	justice-like-a-shot
who-direct	subjugation-here
who-conduct	Pratt-Street
who-guide	collaring
this-crap	nailing
this-dirt	apprehending
this-shit	picking-up
this-shite	nabbing
this-poop	coping
this-turd	the-muscleman
video-recording-	
publish	get-the-entire
video-recording-bring-	
out	acquire-the-whole
video-recording-put-out	demonstrations-tre
video-recording-issue	kicking-autos
listen-bystanders	kicking-automobile
hear-bystanders	kicking-machines
take-heed-bystanders	kicking-motorcars
havoc-going	apprehension-in
unreciprocated-inquiry	arrest-in
unrequited-enquiry	catch-in
nreciprocated-query	collar-in
unrequited-	
interrogation	pinch-in
my-fanciful	taking-into-custody
my-imaginary	struck-by
my-imagined	impinged-on-by
my-notional	ran-into-by
	-

ring ng ehending ng-up ing ıg nuscleman he-entire ire-the-whole onstrations-trending ng-autos ng-automobiles ng-machines ng-motorcars ehension-in t-in i-in r-in 1-in g-into-custody-in k-by nged-on-by

man-endured	collided-with-by
adult-male-endred	gassing-demonstrators
need-reply	kidnapping-people
need-response	kidnap-people
American-Attorney-	
General	shattering-windows
U.SAttorney-General	Howard-St
USA-Attorney-General	83-&-395
U.S.A-Attorney-	
General	discharge-trash
pound-him	empty-rubbish
thump-him	empty-scraps
eternal-rest-in	discharge-rubbish
sleep-in	discharge-scraps
eternal-sleep-in	cars-banged-up
quietus-in	cars-smashed-up
peacfully-eternal-rest	autos-banged-up
peacfully-sleep	automobiles-smashed-up
peacfully-eternal-sleep	machines-banged-up
peacfully-quietus	motorcars-smashed-up
my-commiseration	citizenry-attacked
arrestees-decease	people-assailed
arrestees-expiry	citizenry-assailed
my-commiseration	businesses-assailed
some-otherone	concerns-attacked
attract-hundreds	business-concerns-attacked
	business-organizations-
pull-hundreds	attacked
pull-in-hundreds	business-organisations-attacked

draw-hundreds draw-in-hundreds one-dissenter one-dissident one-protester one-objector one-contestant confrontation encounter showdown Freddie-Gray-dissenter Freddie-Gray-dissident Freddie-Gray-protester Freddie-Gray-objector Freddie-Graycontestant image-talks icon-speaks ikon-utters image-mouths icon-verbalizes ikon-verbalises M-demonstrate K-demonstrate chiliad-demonstrate Gs-demonstrate a-grand-demonstrate thou-demonstrate yard-demonstrate

concerns-assailed business-concerns-assailed business-organizations-assailed business-organisations-assailed on-the-way en-route erupting igniting catching-fire combusting conflagrating police-force-repression constabulary-repression law-repression gapping-barricades breaching-roadblocks gapping-roadblocks things-will-not traffic-barricaded traffic-blocked traffic-blockaded traffic-stopped traffic-blocked-off traffic-blocked-up traffic-barred

hunt-and-kill

hound-and-kill trace-and-kill

mass-meetingflourishing mass-meeting-growing mass-meeting-thriving flag-supplanted flag-replaced flag-superseded flag-supervene-upon flag-superceded dissenters-brush dissidents-clash protesters-encounter objectors-skirmish contestants-clash dissenter-occupy dissident-occupy protester-occupy objector-occupy contestant-occupy Mahatma Gahndi arise daily rise develop uprise spring-up acknowledge-neglect barricade-traffic block-traffic

riot-gasmasks riot-respirators Lombard-street @BaltimorePolice-utilizing @BaltimorePolice-utilising @BaltimorePolice-applying @BaltimorePolice-employing be-at-that-place be-in-that-location advertisement-plane advertizement-plane advertising-plane advertizing-plane advert-plane ad-airplane ad-aeroplane thirty-MINUTES Expansion-results Expansion-leaves to-death day-to-day day-after-day protests-coalesced demonstrations-coalesced protests-blend protests-flux protests-mix

blockade-traffic stop-traffic block-off-traffic block-up-traffic observe-the follow-the watch-over-the keep-an-eye-on-the arise rise uprise get-up bang-upcars smash-up-cars getting-atrocious getting-frightful getting-horrifying getting-horrible auto-activism automobile-activism machine-activism motorcar-activism 10-twelvemonth X-twelvemonth tenner-twelvemonth decade-twelvemonth hell-on-earth-burst hellhole-erupt

protests-conflate protests-commingle protests-immix protests-fuse protests-coalesce protests-meld protests-combine protests-merge demonstrations-blend demonstrations-flux demonstrations-mix demonstrations-conflate demonstrations-commingle demonstrations-immix demonstrations-fuse demonstrations-coalesce demonstrations-meld demonstrations-combine demonstrations-merge marches-blend marches-flux marches-mix marches-conflate marches-commingle marches-immix marches-fuse marches-coalesce marches-meld

snake-pit-burst	marches-combine
the-pits-erupt	marches-merge
inferno-burst	order-them
autofall-in	enjoin-them
automobile-get-	
together	cellular-reception
machine-fall-in	phone-reception
motorcar-get-together	the-injury
wherefor	the-hurt
how	the-harm
close-down	being-heard
down-Baltimore	do-not-trust
disdain-of	for-feeds
scorn-of	Dont-profile
despite-of	My-#FreddieGray-argument
dissenter-project	do-not-profile
dissident-cast	without-racialism
protester-contrive	without-racial-discrimination
objector-project	pilotless-aircraft-overhead
	radio-controlled-aircraft-
contestant-cast	overhead
have-cervix	stand-up-against
possess-cervix	remain-firm-against
signboard-succeed	live-demonstration
signboard-win	live-march
signboard-come-	
through	getting-down-in
signboard-bring-home-	hasing in
the-bacon	beginning-in

signboard-deliver-thegoods supply-protection provide-protection render-protection furnish-protection C-attended century-attended one-C-attended centred-attended 1000-meet M-gather K-assemble chiliad-forgather G-foregather grand-meet thou-gather yard-assemble incorrect-metropolis incorrect-urban-center embrace-demonstators hug-demonstators bosom-demonstators squeeze-demonstators Mao Chairman-Mao than-ferocity than-fierceness than-furiousness

getting-in starting-out-in starting-out-in setting-about-in setting-out-in commencing-in ferociousness-cops viciousness-cops savagery-cops brutality-bulls brutality-coppers brutality-fuzzes brutality-pigs ferociousness-bulls viciousness-coppers savagery-fuzzes savagery-pigs still-happening still-proceeding #NonViolent-protest #NonViolent-demonstration Pennsylvania-Avenue fixing-signs setting-up-signs readying-signs gearing-up-signs setting-signs fixing-signboards

than-fury than-vehemence than-violence than-wildness Blatimore-businessdistrict flies-XXX flies-thirty dissenters-garner dissidents-collect protesters-pull-together objectors-garner contestants-collect Marcus-Aurelius watcher sescurity-guard worst-foe so-necessity so-essential so-requirement so-requisite we-succeed we-win we-come-through we-bring-home-thebacon we-deliver-the-goods crap-complete dirt-concluded

setting-signboards telephone-the-cops call-up-the-cops phone-the-cops ring-the-cops call-the-bulls call-the-coppers call-the-fuzzes call-the-pigs telephone-the-bulls call-up-the-coppers phone-the-fuzzes ring-the-pigs crowds-overrunning crowds-welling-over crowds-running-over crowds-brimming-over for-running for-scatting for-scarpering for-turning-tail for-laming for-running-away

for-hightailing-it

setting-up-signboards

gearing-up-signboards

readying-signboards

shit-ended	for-bunking
shite-over	for-heading-for-the-hills
poop-all-over	for-taking-to-the-woods
turd-terminated	for-escaping
disrupting-disrupting	for-flying-the-coop
begin-disrupting	for-breaking-away
lead-off-disrupting	an-exigency
start-disrupting	a-pinch
commence-disrupting	many-slayings
be-adaquate	many-executions
Michael-Jacksons	view-here
salvation-vocal	see-here
defend-the	catch-here
the-board	take-in-here
1968	bulls-like-these
guard-the	coppers-like-these
lead-the-world	imprison-killer
fetus	incarcerate-killer
media-loop	lag-killer
in-agency	immure-killer
president-is-black	put-behind-bars-killer
in-federal-agency	jug-killer
#baltimore-resists	gaol-killer
in-government-agency	put-away-killer
in-bureau	remand-killer
in-office	to-meet
in-authority	to-assemble
proceed-hard	to-forgather

obviously-tear evidently-rupture manifestly-snap patently-bust apparently-tear plainly-rupture plain-snap desire-solution desire-answer desire-result desire-resolution desire-solvent only-transgress only-trespass I-beg I-implore beg-for implore-for my-pump my-ticker police-force-evildoers constabulary-evildoers law-evildoers fraternity-boys our-anguish our-hurt apprehension-divided arrest-divided

to-foregather at-3-pm at-3-oclock had-not-run hadnt-scatted hadnt-run hadnt-scarpered hadnt-turned-tail hadnt-lamed hadnt-run-away hadnt-hightailed-it hadnt-bunked hadnt-headed-for-the-hills hadnt-took-to-the-woods hadnt-escaped hadnt-flew-the-coop hadnt-broke-away Gray-violent-death compared-law-abiding 1-pm-ET 1-pm-EST seeking-to-imply attempting-to-imply essaying-to-imply assaying-to-imply seeking-to-connote attempting-to-connote essaying-to-connote

catch-divided collar-divided pinch-divided taking-into-custodydivided twelvemonth-beat-up yrs-worked-over pilotless-aircraft-is radio-controlledaircraft-is Sat-resist Sabbatum-dissent Jesus-of-Nazarethhasnt the-Nazarene-hasnt Jesus-Christ-hasnt Christ-hasnt Savior-hasnt Saviour-hasnt Good-Shepherd-hasnt Redeemer-hasnt Deliverer-hasnt great discover-faces key-faces key-out-faces distinguish-faces describe-faces outstanding-might

assaying-to-connote slain hit dispatched bumped-off offed polished-off Representing-homeland stand-for-homeland reppin-fatherland reppin-homeland reppin-motherland reppin-mother-country reppin-country-of-origin reppin-native-land representing-fatherland representing-homeland representing-motherland representing-mother-country representing-country-of-origin representing-native-land police-force-overhaul constabulary-overhaul law-overhaul police-force-renovation constabulary-renovation

outstanding-mightiness violently-jolted top-dog enjoin head-orders chief-tells top-dog-enjoins stingray-trailing little-crowd last-twelvemonth understand-this read-this interpret-this ghoulish-outlook ghoulish-prospect demonstations-in Sat-demonstration alter-everrything modify-everrything multitude-versus masses-versus mass-versus hoi-polloi-versus people-versus the-great-unwashedversus oppose-for fight-back-for fight-down-for

law-renovation police-renovation our-blood love-not-fearfulness love-not-fright must-unify come-on turn-up surface show-up white-friend anglo-ally murders slayings never-prise never-prize never-lever never-jimmy never-take never-undergone never-seen never-gone-through unarmed-Black-person unarmed-blackamoor unarmed-Negro

unarmed-Negroid unarmedafrican-american racialist-bulls defend-for chancy chanceful dicey dodgy manifestations-in objection-rolls dissent-rolls police-force-shooting constabulary-shooting law-shooting parade-in exhibit-in parade-decends exhibit-decends and-travel and-go and-move and-locomote cant-delay cant-hold cant-time-lag cant-postpone to-parade to-exhibit picture-from image-from icon-from

racialist-coppers racialist-fuzzes racialist-pigs racist-bulls racist-coppers racist-fuzzes racist-pigs kind-of-coverage type-of-reporting kind-of-reporting come-to get-to get-2 25-because receive-reprimands find-reprimands obtain-reprimands incur-reprimands 1200-noon **Busted-Relationship** supremacist-scourge supremacist-threat racialist-tweets these-prevarications little-group registered-by wounded-captives injured-captives

ikon-from looks-lawabiding my-liveliness my-life long-survive long-last long-live long-live-on long-go long-endure long-hold-up long-hold-out overall-convoy total-convoy pull-in-M draw-K draw-in-chiliad pull-G pull-in-grand draw-thou draw-in-yard inhabit-Camdon remain-safe favored-matter favorite-affair favourite-matter best-loved-affair pet-matter

torment-Constant torment-is-Constant 11am-ET 11-am-ET 11-am-EST ravishing-black violating-black assaulting-black dishonoring-black dishonouring-black outraging-black ravishing-african violating-african assaulting-african dishonoring-african dishonouring-african outraging-african come-out turn-up surface show-up kill-once-again kill-once-more kill-over-again unrecorded-protesters live-demonstrators execution executing

preferred-affair preference-matter favored-thing favorite-thing favourite-thing best-loved-thing pet-thing preferred-thing preference-thing mean-to intend-to signify-to standfor-to especial-reporting exceptional-reportage particular-reporting audio-and excuse-#Baltimore overlook-#Baltimore photograph-from photo-from exposure-from pic-from **8**-positions **VIII-positions** eighter-positions eighter-from-Decaturpositions octad-positions

capital-punishment being-quarry being-target being-fair-game join-battle join-conflict join-engagement alternatively as-an-alternative or-else nothing-encoded nothing-enciphered nothing-ciphered nothing-cyphered nothing-encrypted nothing-inscribed nothing-written-in-code there-is-money 1pm distribute-this not-be-dismissed not-be-disregarded not-be-brushed-aside not-be-brushed-off not-be-discounted not-be-pushed-aside media-coverage MSM-reporting

ogdoad-positions MSM-reportage octonary-positions evidently-white octet-positions remain-chill rest-cool-down forever-treadrop multitude-powerfulness masses-powerfulness mass-powerfulness hoi-polloipowerfulness Jesus-of-Nazarethexistance the-Nazarene-existance Jesus-Christ-existance Christ-existance Savior-existance Saviour-existance Good-Shepherdexistance Redeemer-existance Deliverer-existance draw-attention sign-in pilotless-aircraft-in radio-controlledaircraft-in Supreme-Being-please demolish-auto exclusively-spend demolish-automobile

manifestly-white patently-white apparently-white plainly-white plain-white evidently-anglo manifestly-anglo patently-anglo apparently-anglo plainly-anglo plain-anglo obviously-anglo passed-the-day some-other-coverup some-other-cover-up another-cover-up hoarding-in police-force-violence constabulary-violence law-violence entirely-spend

demolish-machine demolish-motorcar been-collared been-nailed been-apprehended been-arrested been-picked-up been-nabed Supreme-Beingconsecrate Supreme-Being-bless Supreme-Being-hallow Supreme-Beingsanctify their-performing their-executing theyre-performing theyre-executing startling-apposition startling-collocation apposition collacation their-manus their-mitt their-paw now-seeking now-attempting now-essaying now-assaying

solely-spend alone-spend utilize-our utilise-our apply-our employ-our wont-report will-not-tell will-not-report hold-unworthy view-as-unworthy take-for-unworthy deem-despicable deem-ugly deem-vile deem-slimy deem-unworthy deem-worthless deem-wretched hold-despicable view-as-ugly take-for-vile hold-slimy view-as-unworthy take-for-worthless view-as-wretched we-resist

judicature-first	we-reject
disgusted-and	talk-truth
fed-up-and	speak-truth
sick-and	utter-truth
sick-of-and	mouth-truth
tired-of-and	verbalize-truth
close-down-Baltimore	verbalise-truth
the-rampage	view-live
the-rage	see-live
the-child	catch-live
the-kid	take-in-live
the-youngster	view-unrecorded
the-minor	see-unrecorded
the-shaver	catch-unrecorded
the-nipper	take-in-unrecorded
the-small-fry	THOUSANDS-processing
the-tiddler	THOUSANDS-demonstrating
the-tike	THOUSANDS-protesting
purple-representing	joined-the-mass-meeting
before-succumbing	but-law-abiding
energized-but	are-following
pd-chief	struggle-for
the-tyke	my-signboard
the-fry	we-are-tired
the-nestling	were-pall
legal-perceiver	were-weary
legal-percipient	were-fatigued
legal-observer	were-jaded

legal-beholder resistance-went-on dissent-carried-on resistnce-proceeded law-abiding-resistance law-abiding-dissent time-to-demonstrate police-officerprotecting officer-protecting demonstrators-throw demonstrators-inhabit-Camden-Yards

not-stay not-rest scatting-while-black running-while-black scarpering-while-black turning-tail-while-black laming-while-black running-away-while-black hightailing-it-while-black bunking-while-black heading-for-the-hills-whileblack taking-to-the-woods-whileblack escaping-while-black flying-the-coop-while-black breaking-away-while-black racialist-adding shade-of spook-of wraith-of specter-of spectre-of anglo-police-force anglo-constabulary anglo-law

killing-african

white-police-force white-constabulary white-law Inhumanely-handled telephone-power cell-power demonstrating-for protesting-for lone-ones lonesome-ones only-ones sole-ones solitary-ones a-menace pervert-KKKops subvert-KKKops demoralize-KKKops demoralise-KKKops debauch-KKKops debase-KKKops profane-KKKops vitiate-KKKops deprave-KKKops misdirect-KKKops Lives-Dont-Matter Lives-Do-not-Matter Lives-Do-not-count Lives-Dont-count

Authoritative-anglo some-other-#BlackMartyrOfPoliceBrutality excuse-Ive excuse-I-have alibi-Ive exculpation-Ive self-justification-Ive alibi-I-have exculpation-I-have self-justification-I-have precisely institutionalized-racism Wapos-muted admit-history malicious-purpose malicious-intent malicious-aim malicious-design humans not-mended not-fixed not-restored true-terror real-scourge real-threat media-dont without-violence

happening-at-present narration-going story-going tale-going dont-matter ferociousness-that viciousness-that savagery-that barbarity-that barbarism-that savagery-that refuge-of warrant-killing apology-after keep-their-occupation keep-their-business keep-their-job keep-their-line-of-work keep-their-line maintain-their-occupation maintain-their-business maintain-their-job maintain-their-line-of-work maintain-their-line hold-their-occupation hold-their-business hold-their-job hold-their-line-of-work

hold-their-line we-burst we-erupt they-scat they-run they-scarper they-turn-tail they-lam they-run-away they-hightail-it they-bunk they-head-for-the-hills they-take-to-the-woods they-escape they-fly-the-coop they-break-away killa-bulls killa-cops killa-coppers killa-fuzzes killa-pigs be-law-abiding equal-outcome equivalent-outcome same-consequence same-effect same-outcome same-result

same-event same-issue same-upshot equal-consequence equivalent-effect equal-outcome equivalent-result equal-event equivalent-issue equal-upshot #CivilRights-infringement some-other-black-man Traffic-blocked they-want-to Things-wont Things-wont Bottles-now breaching-barricades incoming-bottles Police-repression **TAKING-FIRE BY-CHAIRS ON-WAY BUSINESSES-ATTACKED** PEOPLE-ATTACKED others-killed CARS-SMASHED **EMPTY-TRASH** 

HIS-GUN Howard-Street 83-and-395 smashing-windows **SNATCH-PEOPLE** gassing-protesters HIT-BY ARREST-IN KICKING-CARS **Protests-Trending** Get-the-Whole POLICEMANS-HAT tipping-point HAT-RETALIATES the-muscle criminal-organization make-arrests making-arrests Pratt-St oppression-here #censorship-Twitter be-heading #United-for justice-now shit-DAILY leading-the-march Follow-@deray badge-today

STAND-OFF racist-police coming-together democracy-looks Insurance-will Insurance-wont streams Get-to a-reaction orders-patrol real-matter over-sports racist-television valued-at-less #SystemicRacism Before-judging case-in call-the-victim marching-in watch-live-protesters those-killed-by reform-is-needed oppressive-tactics covered-#baltimore citizen-livestream no-racist-police-force no-constabulary no-racist-law

we-gonna-fight-back we-gonna-fight-down we-gonna-defend no-racist-police-force no-constabulary-constabulary no-racist-law disarm-African-Americanvictims disarm-African-Americanvictims disarm-Afro-American-victims disarm-Black-Americanvictims discontinue stop cease give-up quit lay-off some-other-African-Americanadult-male-died some-other-African-Americanadult-male-perishes some-other-Afro-Americanadult-male-goes some-other-Black-Americanadult-male-exits some-other-African-Americanadult-male-passes-away

some-other-African-Americanadult-male-expires

some-other-Afro-Americanadult-male-passes-away

some-other-Black-Americanadult-male-kicks-the-bucket

some-other-African-Americanadult-male-cashs-in-his-chips

some-other-African-American-adult-male-buys-the-farm

some-other-Afro-Americanadult-male-conks

some-other-Black-Americanadult-male-gives-up-the-ghost

some-other-African-Americanadult-male-drops-dead

some-other-African-Americanadult-male-pops-off

some-other-Afro-Americanadult-male-chokes

some-other-Black-Americanadult-male-croaks

some-other-African-Americanadult-male-snuffs-it custody-of-police-force custody-of-constabulary custody-of-law circularize-the-intelligence

circularise-the-tidings distribute-the-news disseminate-the-intelligence propagate-the-tidings broadcast-the-news spread-the-intelligence diffuse-the-tidings disperse-the-news pass-around-the-intelligence viewer-states watcher-says looker-tells police-force-impunity constabulary-impunity law-impunity unrecorded cant-entrust-police-force cant-intrust-constabulary cant-trust-law cant-confide-in-police-force cant-commit-constabulary marchers-tone marchers-chant marchers-intone halt-the-lies rebel arise rise

African-American-male African-American-killed Afro-American-male Black-American-killed African-American African-American Afro-American Black-American police-force-ferociousness constabulary-brutality law-viciousness police-force-savagery slaying execution casual cursory passing opaqueness paysheet if-not-antiblack if-not-anti-Semite mass-meeting-with permit-to-kill walking-free shoot-down search hunt-and-kill nigga-hunting

spade-hunting coon-hunting jigaboo-hunting nigra-hunting some-other-African-life some-other-African-life some-other-African-life some-other-African-life some-other-African-life undervalue policeman police-officer flex bend deform twist turn being-African-American-in-**United-States** being-African-American-in-United-States-of-America being-African-American-in-America being-African-American-inthe-States being-African-American-in-US being-African-American-in-U.S. being-African-American-in-

USA being-African-American-in-U.S.A distrust misturst antiblack-bull antiblack-cop antiblack-copper antiblack-fuzz antiblack-pig fighting-what opposing-what fightimg-back-what fighting-down-what move-too also-think likewise-believe consider-as-well also-conceive the-true-statement discontinue-killing stop-killing cease-killing give-up-killing quit-killing lay-off-killing no-respect no-esteem no-value

no-prize no-prise they-obliterate they-wipe-out