Social Networking: Product or Process
And What Shade of Grey?

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Abstract
Social networking debuted in 1997 and is now an established and common method of communication and is increasingly related to and supportive of academic publishing, scholarship and generating new information. Some of the most mature and popular sites are Facebook, Bebo, Twitter, Linked-In and Plaxo plus many more specialized examples. As many professional societies and individuals choose to develop a presence on social networking sites (SNSs), the utility of them has become more valuable and ubiquitous. With emerging forms of technology to provide personal space and networking opportunities, the sites gain a new presence blending information products with new means to be discovered and searched. This paper explores how academic
libraries are implementing a range of social networking activities to augment their online presence through traditional websites and launch new ways for their users to find, discover, access, navigate, evaluate, create and apply content. Libraries are also extending access with greater mobile optimized sites for Smartphones (iPhone, Droid, and Blackberry) and other emerging technologies that enhance information in utilizing and managing data, images, audio and streaming media. Today, library collections and services are being transformed due to electronic publishing, data curation, preservation and archiving efforts in order to allow users dependable 24/7 access to resources with potential for interactive communication. In an increasingly global and mobile society, the new social communication mediums reduce boundaries, transcend the digital divide and invite more transparency and participation by shadowing the grey parameters in the scholarly community and redefining publishing outputs and opportunities. This evolution did not happen without cautious regard to intellectual property, privacy and confidentiality. The new by-products are not always tangible but remain instructive and promote innovation within communication as a new adopted and accepted form of authorship and creative expression. By adding the social communication features of this kind of networking that promotes introduction, networking, commentary, critique, discourse, sharing, and the building of new communities, grey content is enhanced and the sources of access multiply with an open and entrepreneurial future for SNSs.

Let's begin with a story, not a fairytale but a true fact-based memory.

A not quite long time ago in a far away land, there existed a feudal system of Publishers who sought to control the largest number of Users as their loyal subjects (archeologists would later refer to this prehistoric era as Web 1.0). Users were happy for a while until one day they discovered that they too, could become Publishers, quite easily in fact, and form their own kingdoms and communities.

They created a new land were content is democratized and where each User could become their own king. New social websites and services soon enabled them to publish royal decrees (called Blogs and Podcasts), vote for content they Digg, discover old friends on Social Networks, Poke (and even SuperPoke) each other, become Internet Famous, gain Followers, and in a few cases become even larger and more powerful than the great Publisher kingdoms of yore. They named this new utopia Web 2.0 and immediately started to blog about how cliché the name was. Welcome to the Social Web.¹
Background
The relationship between Grey Literature and Social Media is not at all unusual. Grey Literature has been known to include the previously challenging documentation, records, and communications in all formats including oral histories, news and broadcasts, correspondence, diaries, journals, reviews, other primary source content and more recently websites, blogs, examples of photojournalism, videos, images, and other forms of commentary. The enhanced technologies which are now more ubiquitous in everyday life make for an intensive lifestyle.
change that allows individuals a way to present themselves, build and conduct independent relationships and offers personal empowerment that has never been so intensely realized prior to the development of the Internet. It often provides same or real time experiences and broadcasts across all geographical barriers as long as one has connectivity and anyone of many devices required to participate. Here we are at the end of 2011,

- Nearly 20 years after the birth of the World Wide Web
- 13 years after the launch of Google Search
- 8 years after the start of the first social networking site
- 6 years after the first YouTube video
- 4 years after the introduction of the first touch screen smartphone
- 3 years after the opening of the first “app” store
- And a little over a year after the first iPad sale

Social media has been defined by Gartner as:

“a set of technologies targeted at forming and enabling a community of participants to productively collaborate. The ability of social-media technology to enable mass collaboration differentiates it from other collaboration technology and practices. IT tools to support collaboration have existed for decades. But social-media technologies, such as social networking, wikis and blogs, enable collaboration on a much grander scale. They enable
potentially hundreds of thousands, even millions of people to simultaneously create content, share experiences and build relationships."

These contemporary methods of social media are indeed different from other forms of exchange in that they can be saved, traced, shared, easily accessed and have unspecified properties challenging authorship, rights, permissions, and intellectual property. As much as they are technologies, they are tools. Suffice it to say, social media has redefined the information landscape. Print advertising revenue streams are drying up quickly due to readership preferences and patterns. The upswing of e-publishing and digital formats offers the added power of interactivity, commentary and opportunities for readers’ feedback. Anyone can be an author or contributor and share their opinion with whatever bias with the entire world if they choose. The Global Web Index reported three clear trends in the consumer adoption of the Internet (not a medium):

1. Social Media has reached mass maturity – shift from massive growth and active social consumers to ‘real-time’ technologies – moving from creating content and publishing to sharing or from creator to distributor models for both ‘traditional’ media and professional content- utilizes tweets, status updates, etc
2. Open browser-based web is losing out to packaged internet platforms such as mobile apps, internet connected televisions, tablets, eReaders, gaming and video platforms
3. Continued aggressive growth of packaged platforms as traditional style content become a core part of the consumer online experience

It is no surprise that as we witness the changes in how media is delivered, cable television, satellite, radio and newspapers as we currently know them are in danger of becoming obsolete. A more “packaged” Internet may transform the way we get online, the content we consume, and the ways we can create, share and communicate. We also see a convergence taking place...
within new social media as Twitter becomes increasingly visible and important and the academic community abandons or relies less upon RSS feeds for updates than on twitter feeds, choosing to find twitterers who keep current, participate in timely conversations/debates and provide links to sources relevant to personal interests, both individuals and relevant organizations. These methods of keeping up with technology will be personally challenging as well as a goal for the workplace to handle.6

Social Media as Grey Literature

Grey literature has always encompassed new ideas and captured information outputs regardless of formats and as technologies have emerged, embraced them to the extent that they can be saved, preserved and archived. In the last twenty years of the digital revolution, we have been immersed in the knowledge generation era followed by one in knowledge management, tapping into the vast potential that hypermedia and the Internet allows. Higher education and research benefited from this in a very transformational way as the structure of social construction expanded to include new communication methods. Previously, a world of standard grammar peppered with occasional colloquialisms and nuances, new lingo, and expressions would be common. Today, new languages to accommodate social media have been birthed, text messaging, for one has its own dictionaries and a lingua franca of the handheld device has determined ways to create its own ethnography. In one of the first books that chronicled this movement of Social Media the compiled conference papers allowed the editor, Edward Barrett to coin the term, 'sociomedia,' “to signify when we design computer media we are hardwiring a mechanism for the social construction of knowledge.”7 The papers in this early collection (1989) explore the role of the computer and what is information and he writes, “Information about a text becomes as important as the primary text itself.”8 An aspect of daily life that has really assumed added visibility due to social media is the expansion of religious identity via the new communities established through these online venues. (Church of Facebook) As the Church of Facebook describes itself, the hyperconnected are a redefining community and encouraging the pursuit of authentic relationships with spiritual beings outside of the secular domain.9

No subject, discipline, activity, workflow is left untouched by social media and its potential. The business community’s thread to survival is keenly dependent on its mastery, creative and appropriate applications. It is considered by many current writers and historians of the day, that the omission of social media will delete you and your enterprise from the public radar. Still considered in its infancy, social media remains to be all about potential and users will have to be flexible and able to cope with frequent change, and a certain amount of ambiguity.

While we were finishing this paper, the news of the passing of two extraordinary and highly influential people who contributed to this topic of information sharing communities and networks cannot be overlooked. Steve Jobs, founder of Apple and John McCarthy, known as the father of artificial intelligence. Without their innovative spirits, our today would be a lot different.
As librarians, our generation is focused on knowledge creation and we commend David Lankes for including a “thread” on this in his much acclaimed, *Atlas of Librarianship*. He quotes Melvil Dewey, “The time was when a library was very much like a museum, and a librarian was a mouser in musty books...The time is when a library is a school, and the librarian is the highest sense a teacher.” The Atlas is intended to have a worldview of librarianship not founded on materials but outcomes and learning with concentration on the librarian rather than the
The Mission Statement, “The Mission of Librarians is to Improve Society through Facilitation Knowledge Creation in their Communities,” is a figurative illustration about how that can be done with different focus points and the one selected for this paper, emphasizes conversation and should be viewed vertically or top to bottom.\textsuperscript{12}

**How we perceive social media networking**

Increasingly, people are using social media for a variety of different things. According to the Pew Internet Research Foundation, more and more users are using social media as a daily part of their lives\textsuperscript{13}. As can be seen from the chart below, social networking site use by adults starts from a low 8\% in 2005 to nearly 65\% in 2011.\textsuperscript{14}

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**Social networking site use by online adults, 2005-2011**

The percentage of all adult internet users who use social networking sites since 2005

![Graph showing social networking site use by online adults from 2005 to 2011](image_url)


**Harnessing Social Capital**

Most importantly, the age of social networking users tends to be in the 18-29 age category compared with older adults, although that is changing.\textsuperscript{15}
As the number of people who use social networking and social media proliferates, libraries and librarians will find themselves in positions as curators of information to harness the power of social media for academic and scholarly research and reflect the demographic analysis. In Charnigo and Barnett-Ellis’ 2007 survey of 126 academic librarians, they estimated 54 percent of the librarians surveyed thought there was little academic use for Facebook. On the other hand, in a study done approximately at the same time by the Pennsylvania State University Libraries 126 of the 441 reference questions in a sampled Fall Semester study were asked through Facebook. Compared to the other methods of reference questions such as email, phone, IM, and In-person reference, the Facebook transactions were the most highly asked for reference questions.
Since social media is still a relatively new concept, some libraries and librarians are resistant to the idea that social networking can have academic purpose (Dickson and Holley, 2010). It is assumed that the usage of this method of communication is still evolving and will continue to evolve many years to come. This paper and our research examine how libraries use social media as a product or process to achieve the goal of improving academic scholarship in different ways. In terms of academic usage, some universities, such as how George Washington University concluded in a study in 2007 that only four percent of the students that they interviewed used Facebook for academic purposes and we can speculate that this figure has probably increased over the last four years, but by how much remains unclear. As more campuses adopt distance education to reach out to more students, course management systems may be used to facilitate information sharing and online participation.

Since Facebook has let users design programs, attach them to their own pages and publish them for other users, examples ranging from sports to entertainment, science, medicine and the arts allow users to satisfy many of their online needs without leaving their profile pages.

**Library Applications – Passive/Active social media content**

One of the goals of libraries branching into social media sites such as Facebook, Twitter, and Google+ is the ability for the library to conduct outreach to more users while they are not inside the library. The type of information that exists on the library social media site can be divided into two main categories: static information and active social media content. Static information is a one-way information exchange that tells the user a piece of information such as the library hours, location, and website information. Static information can exist on Facebook as a complement to the library’s traditional website. An example of static content follows:  

![Facebook image](http://www.facebook.com/libraryofcongress/)

Source: Library of Congress Facebook Page
Active content is a two way dialog between the library and its users. This means anything that the library does through the library social media site such as online reference services to include chat reference through Facebook or, posting a Twitter feed of a library event. Other types of active content could also include the Facebook “wall” with dialogs, postings and comments from library patrons, users, and also other Facebook members containing reviews of content, exhibitions, streaming meetings such as our gathering today among other examples.

Example of Active Content:23


Today’s news that The Library of Congress is also engaged in creating and maintaining a Twitter Archive of all tweets sent suggests new social and historical value of this unique communication medium.24
The Educause Center for Applied Research noted that the Library tops social networking in a tally of students’ computer and internet activities in 2010. The list ranked 19 entries:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Share of Students Using</th>
<th>Median use frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using College Library’s website</td>
<td>94%</td>
<td>Weekly</td>
</tr>
<tr>
<td>Presentation software</td>
<td>93%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Text messages</td>
<td>90%</td>
<td>Daily</td>
</tr>
<tr>
<td>Social networking websites</td>
<td>90%</td>
<td>Daily</td>
</tr>
<tr>
<td>Course or learning management systems</td>
<td>90%</td>
<td>Several times per week</td>
</tr>
<tr>
<td>Spreadsheets</td>
<td>86%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Instant Messaging</td>
<td>71%</td>
<td>Several times per week</td>
</tr>
<tr>
<td>Graphics Software</td>
<td>67%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Using Internet from handheld device</td>
<td>50%</td>
<td>Daily</td>
</tr>
<tr>
<td>Voice over Internet (VOIP) from computer</td>
<td>47%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Following or updating microblogs</td>
<td>43%</td>
<td>Several times per week</td>
</tr>
<tr>
<td>Contributing content to video websites</td>
<td>42%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Contributing content to wikis</td>
<td>40%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Video creation software</td>
<td>40%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Contributing content to blogs</td>
<td>36%</td>
<td>Once per quarter/semester</td>
</tr>
<tr>
<td>Audio creation software</td>
<td>34%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Online multiuser computer games</td>
<td>27%</td>
<td>Once per quarter/semester</td>
</tr>
<tr>
<td>Social bookmarking/tagging</td>
<td>25%</td>
<td>Weekly</td>
</tr>
<tr>
<td>Online virtual worlds</td>
<td>9%</td>
<td>Once per quarter/semester</td>
</tr>
</tbody>
</table>

Somewhat related, the same source reported that text messaging is the communication form of choice for most students compared to social networking sites, instant messaging and VOIP. Ease of use via mobile phones, usually readily at hand suggests the probable reasons.

Organizing information appears to be central to the construct of social media and to the agenda of most libraries. One interesting sidebar may be the contributions of another computer scientist, David Gelernter, also known as a victim of the Unibomber among other notorieties. He and his students, in this context, are the chief architects of Lifestreams, defined as:

“a time-ordered stream of documents that functions as a diary of your electronic life; every document you create and every document other people send you is stored in your lifestream. The tail of your stream contains documents from the past (starting with your electronic birth certificate). Moving away from the tail and toward the present, your stream contains more recent documents --- papers in progress or new electronic mail; other documents (pictures, correspondence, bills, movies, voice mail, software) are...”
stored in between. Moving beyond the present and into the future, the stream contains documents you will need: reminders, calendar items, to-do lists.”

This is one of the first visible chronicles of everyday communication, exchanges and activities. Analogous to the capstone of autobiographical journal experiences, this record of sharing put document management or organization to a test for indexing, labeling or tagging.

With the subtheme of this conference, “From Social Networking to Wealth Creation,” one has to consider what the different intelligence communities are. Today, the corporate sector has been described as “Data Rich, Insight Poor.” This oneliner from Casper Craven, founder of the British research firm, Trovis, states,

“the research warns that companies ignoring social media channels do so at their peril.”

This is clearly a demonstration of the new competitive intelligence the corporate sector is relying upon – who can utilize channeling to follow leads, connect to new customers and establish new markets. As higher education continues to emulate the business world, instruction follows business trends.

In a different domain, but one that is equally conducive to fast changes refers to the youngest population and one that the public, school and academic library community is monitoring. Children growing up today are unaware that telephones ever had cords or had to be used in a static environment. Additional studies by the Pew Foundation, Outsell, the Horizon Reports, and countless other releases from global marketing and research firms are plentiful but the report, “Zero to Eight: Children’s Media Use in America” released last month by Common Sense Media is the first examination of how “even very young children are frequent digital media users, experiencing mobile media, using computers and playing video games” in early childhood defined as ages 2-4 and 5-8. In addition, “there continues to be a substantial digital divide, including both computers and mobile devices” referring to family income and the ability to invest in home computers, smart phones and promise connectivity. Other findings note:

- Children under 2 spend twice as much time watching TV and videos as they do reading books
- TV continues to dominate children’s media use
- Broadcast television is the most accessible and widely used platform for educational content among lower-income children
- Media use varies significantly by race and socio-economic status, but not much by gender
- Even some young children are media multi-taskers

Evidence of media multitasking is observed as young as among 5-8 year olds with such examples as doing homework while watching television, speaking on the telephone and monitoring Facebook, but increasingly common among 12-18 year olds. Media as babysitter is also common, while out running errands, or by parents who use media to occupy themselves when they are considered to be playing with or engaging with their children. Think of the last
time you visited a park or supermarket and observed parents holding a phone, wearing Bluetooth, while disciplining a child! The major conclusions confirmed:

- that increasing dosages of baby videos on TV and DVDs on a regular basis with children under 2 are concerning
- bedroom television contributes to obesity, declining school grades and other negative effects
- educational media via television remains the most popular platform
- there is an enduring and substantial digital divide among lower income families, even when targets are for health and social promotion
- quality entertainment is challenged with negative impact of content and advertising of violence or inappropriate gender roles
- perceptions of a decline in reading and literacy may not be as great as earlier studies
- there is still much to learn about neuroscience effects of multitasking by very young children

Perceptions of social media characterize information products that one used to consider perpetual ways of life that were deemed safe and were part of legacies as well as future generations. As reading habits changed, information became far more abundant, accessible, yet fragmented traditions of scholarship and lifestyle have been challenged. Some academic examples include the book review. When one published a scholarly monograph or even a trade book, novel, or released a film, had an exhibition, the anticipation of the reviews clouded the authors or artists’ horizons for months as that could dictate the professional opportunities of one’s future, the commercial viability of the project, compensation packages, new merchandising potential and any host of other related by-products.

Today, reviews are immediate, distributed worldwide and can commend the work hailing its success at the cash register or box office, or pan it with a few tepid or carefully selected words. In a recent op-ed piece, a historian shared his observations of why one should read book reviews by concluding that they are “enduring value of the form,” and going on to state, “Reviews do influence my book buying – just in a roundabout way. I’m sometimes inspired to buy books by authors whose review impress me.” He concludes by saying that as a reviewer and reader of reviews, he can now see how a “pretty nifty Twitter-friendly version could have been built around the best lines from the [full review].” New social reading experiences are abundant and content ideas can be shared with people one may never encounter outside this virtual world such as in BookGlutton.com

Signs of addiction to social networking are apparent as one’s identity is defined by where one is found. Earlier explorations into virtual worlds termed such visitors as geeks and techies, today, one is expected to be a joiner, self-promoter, au current with microblogging options that allow followers the 140 character tweets. Relationship building today often has its beginnings in the throes of social networking. Immediacy and constancy are what defines it as we think of the quality of the friends we acquire on these journeys.
New Communication Strategies

Forrester Researcher and Gartner are pioneers in tracking consumer behavior and indicating trends in media usage. Public opinion polling, voting patterns and behavior, campaigning, newscasts, GIS activity have each been a hallmark of grey literature. The political landscape offers a wealth of examples of grey literature that comes out of social media and could include the spectrum of that and other related matter. President Obama’s 2008 campaign ignited the populace via methods of social media like nothing in the past and redefined the potential for this medium. Today’s “Occupy Wall Street” again demonstrates how social media can mobilize populations with a common cause and agenda and predictably, have some staying power.

The following is an example of a Gartner Hype Cycle for Social Media in Business Technologies done in August 2011 demonstrating the adoption rate of business use of different social media:

A SWOT for this analysis of social media may include the quadrants: Challengers and Leaders on the top with Niche Players and Visionaries below.

And yet another very academic example is the most interesting corpus of work by the political scientist, George R. Boynton at the University of Iowa who studies and teaches about new media in political discourse. He tracks the spread of political sentiments and social issues by different forms of new media, tracing how fast news travels. His research “focuses on dissemination of information of “real time” events, such as Iran’s nuclear production activity and President Obama’s Nobel Peace Prize. By undertaking a systematic analysis of Twitter feeds and other social media, he sheds light on the shifting information landscape and explores emerging areas of research on the intersection between these new media and politics. Boynton publishes reports about his new media research with supporting data on his Web site, and, of course, posts updates on Twitter (@bobbyonton).” For this, he was recognized as the recipient of the the 2010 Primary Source Award for Research for a project that deploys eight computers to continually harvest from the Web data on new media trends. An example of the Twitter Streamgraphs used to track such activity is found below:

![Twitter StreamGraphs](source)

Returning to a theme of Grey Literature and data sets, the Discover Research Group has culled some usage statistics from a variety of well-known social media platforms and shared in recent months and if anything this data has increased:

Social Network Data

Source: Neoformix.com:
- Average Facebook user has 130 Friends
- Over 25 Billion pieces of content are shared on Facebook each month
- Over 200 Million active users of Facebook via mobile phones; overall there are 500 Million users
- In late 2010, one year ago, Twitter had over 100 Million registered users with 300,000 signing up each day
- Twitter received 180 Million unique visitors to its site monthly and over 600 Million searches daily
- Twitter users are averaging 55 Million tweets daily; 637 tweets a second
- YouTube receives 2 Billion views a day and the 3rd most visited website
- On average, visitors spend 15 minutes daily viewing and adding content to site
- 24 hours of video being uploaded to YouTube each minute

As a new form of grey literature, these data sets will add to the timely corpus of information about these trends and continue to inform us about how we function in this increasingly web, semantic and multimedia age. Detecting new influences, seeking behavioral indicators, and tracking the patterns and timing of these functions and how they contribute to new innovations, stimulate the economy, generate new knowledge is all for the greater good. Higher education is testing and trying many of the features of this medium by adopting social bookmarking practices in the classroom (Brainify.com) and utilizing social media to submit college admission essays.
The Global Divergence of Social Networking depicts the growth in social media worldwide but especially in China, the US, India and Brazil, across all demographic segments. In the United States what we know is that:

- Social networking and photo sharing are the leading social channels
- Social networking and video sharing are the fastest growing platforms
- Product reviews, Q&A services and forums have the smallest differences between young and old consumers
- Despite the rise of Twitter still 50% more bloggers in the US
- Fragmentation by demographic components suggest that the target audiences and customers that use social media are not fully developed and requires special insights
- Meanwhile, the number of U.S. unique users was 50.8% December 2010, a sharp drop from 62.1% the previous June. This suggests that the use of Twitter outside the U.S. has experienced significant growth over the past six months.

**Conclusions**

Libraries, like business are trying to stay relevant and increase market shares of their constituencies. The competitive intelligence indicators suggest that engagement, branding, overcoming the digital divide and utilizing the available technologies in smart efficient ways leads to greater participation and collaboration, key goals in the promotion of learning and exchange. Some disconnects or challenges exist for the academic community, as we are warned about the risks of creating poor content.

“If your library has been making the common mistake of primarily using social media as a marketing platform for its collections and programs, then its content probably lacks interest or relevance to the majority of its followers. One of the things that makes content successful is making sure there is a “hook” to capture readers’ attention. Interesting content will generally be humorous, useful or newsworthy. Take care to ensure that whatever is being posted is not only useful but also entertaining.”

Entertaining is often perceived as inappropriate for the academic marketplace, but being relevant may require that to appeal to the target age cohort and compete with other more entertaining content. It is clear that the latest World map of social networks popularity suggests use of social media by all ages. We think it is possible, and that social networking will continue to be both product and process and dim in its hues of grey. Social Networks we speculate will continue to evolve both in the personal and external professional settings. Communication security will experience challenges but the typical features of having groups, fan pages, widgets, applications, games, profiles, communication abilities with degrees of privacy to allow for collaboration, recruitment, branding, engagement, retention, mentoring, leadership development, relationship building, promoting of diversity. With more than 90% of people in the workplace using eMail compared with fewer than 40% of workers who use social media tools, as found by a recent study commissioned by Skype, we predict a steady decline in eMail and a surge in use among a growing range of social media tools. Users will become increasingly savvy and the unforgiving economy will lead by changes in business communication and thus education will follow.
That is our scenario and grey literature will not be referred to that way because its ubiquity and increasing ease of use will continue to transform how life is conducted. When asked back in 2007 in Friends: the Social Networking Sites for Engaged Library Services whether social networking applications are a long term phenomenon, Stuart Weibel, Research Director at OCLC, emphatically stated, “they already ARE.”

Let’s end by asking all those in this room who over the last week (due to travel) have contributed to, consulted or read a blog, to please rise; who collaborated on or contributed to a wiki to rise; who watched a podcast to rise; who updated personal information in fb to rise; who sent a tweet to rise; who sent an eMail message to please rise. Need we say more?

References


5 Ibid.

6 Threads on LITA-L listserv, December 1, 2011. Keeping up with technology.


8 Ibid, 8.


11 Ibid, 15

12 Ibid, 30


14 Ibid.

15 Ibid.


21 *Dickson and Holley.*


Additional Selective References:


