Visualizing the Intersection of the Personal and the Social Context - The Use of Multi-layered Chronological Charts in Biographical Studies

Patrick T. Hiller
Portland State University, philler@pdx.edu

Recommended APA Citation

Visualizing the Intersection of the Personal and the Social Context - The Use of Multi-layered Chronological Charts in Biographical Studies

Abstract

This paper outlines the theoretical reasoning and technical implementation of a particular approach to creating multi-layered chronological charts in qualitative biographical studies. The discussed method elucidates the interpretation of traditional life chronologies where the individual's "objective" life facts are reconstructed free from analysis. The novelty of multi-layered chronological charts lies in their ability to enrich the visualization of a temporal connection between personal and social contextual factors based on categories determined by the researcher. In doing so, such charts make existing interview data more accessible and processable. In-depth, thematic data analysis can be supported through the visualization of prominent life aspects or the presentation of integrative perspectives of individuals' lives. Case examples are presented to demonstrate how methodological and theoretical objectives are fulfilled through the customized use of genealogy software. Based on the underlying research problem, multi-layered biographical charts can be customized for different research purposes and connected to an array of complex linkage systems.

Keywords

Biography, Biographical Chart, Chronology, Genealogy Software, Life History, and Visualization

Creative Commons License

Visualizing the Intersection of the Personal and the Social Context–The Use of Multi-Layered Chronological Charts in Biographical Studies

Patrick T. Hiller
Portland State University, Portland, Oregon, USA

This paper outlines the theoretical reasoning and technical implementation of a particular approach to creating multi-layered chronological charts in qualitative biographical studies. The discussed method elucidates the interpretation of traditional life chronologies where the individual's "objective" life facts are reconstructed free from analysis. The novelty of multi-layered chronological charts lies in their ability to enrich the visualization of a temporal connection between personal and social contextual factors based on categories determined by the researcher. In doing so, such charts make existing interview data more accessible and processable. In-depth, thematic data analysis can be supported through the visualization of prominent life aspects or the presentation of integrative perspectives of individuals' lives. Case examples are presented to demonstrate how methodological and theoretical objectives are fulfilled through the customized use of genealogy software. Based on the underlying research problem, multi-layered biographical charts can be customized for different research purposes and connected to an array of complex linkage systems. Key Words: Biography, Biographical Chart, Chronology, Genealogy Software, Life History, and Visualization

Biographies have a central role within the qualitative research tradition. We distinguish between (a) biographical studies, where an individual's life story is studied through research of archival documents and records, (b) autobiographies, where persons write their own life stories, (c) oral histories, which focus on personal recollections of events, their causes and their effects from the perspective of one or more individuals, and (d) life histories, which reflect socio-cultural, personal and institutional themes in an individual's life (Creswell, 2007). Regardless of the biographical approach, qualitative researchers are faced with the crucial task of differentiating the life history, or lived life, from the life story, examining the meanings attached to the lived life (Chaitin, 2002).

Chronologies are visualization tools used by researchers to reconstruct the life history (cf. Chaitin, 2002; Creswell, 2007; Marshall & Rossman, 2010; Rosenthal, 1993, 2004; Taylor & Bogdan, 1984; Wengraf, 2001). My own doctoral research, a life history study, called for the creation of life chronologies of a group of selected, nonviolent peace activists in the United States (Hiller, 2010). Having employed the rather traditional method of creating chronologies in previous research studies, my doctoral dissertation gave me the incentive to experiment with more advanced, useful forms of visualization.

In this article, I will discuss how I envisioned and developed multi-layered chronological charts customizing contemporary genealogy software. In doing so, I hope

to provide fellow qualitative researchers with some insight into state-of-the-art research methodological, theoretical and technical approaches. I argue that in addition to commonly used forms of thematic analysis this approach is a useful analytical tool. First, I will briefly discuss the need for and application of chronologies in biographical research. Then I will describe how I developed my approach using multi-layered chronological charts in my own research study. In order to situate the philosophies and theories of my approach, I wish to describe its development and, using illustrated examples from my dissertation, discuss its applications. I conclude by encouraging qualitative researchers to add customizable multi-layered chronologies to their methodological tool box as a means of strengthening biographical research by disseminating data through a unique visualization angle and even adding additional layers of data.

The Role of Chronologies in Biographical Studies

Denzin and Lincoln (2005) fittingly describe qualitative research as "a set of interpretative, material practices that make the world visible" (p. 4). Furthermore, they argue that "qualitative researchers deploy a wide range of interconnected interpretive practices, hoping to get a better understanding of the subject matter at hand" (Denzin & Lincoln, p. 5). For the study of lives in context, Cole and Knowles (2001) recommend organizing material in a way to maximize access and ongoing visitations. When we are dealing with data dissemination, Miles and Huberman (1994) rightfully argue that extended text is disadvantageous for "resolving problems of multidimensionality, inter-event influence, and differential salience of events" (p. 111). The creation of chronologies in biographical studies is one of several steps of data analysis.

The main objective of a chronological sketch is to look for life-course stages or experiences such as childhood, marriage, employment, place of residence, siblings, etc. (Creswell, 2007). Marshall and Rossman (2010) note that "the abundance of data collected in a life history should be managed and reduced so that analytic headway can be made" (p. 152). The authors suggest considering alternatives to the classical chronological order, such as highlighting critical dimensions of the person's life, turning points or the person's means of adaptation. Wengraf (2001) calls his approach Biographical Data Chronology (BDC) made up of chronological data points—"hard facts" (uncontroversial objective events)—in interviews. The author suggests collecting such data from the interviews and other sources such as historical research, letters, diaries, official files, written autobiographical texts, and oral sources within the social network of the interviewee.

For Miles and Huberman (1994), data display is a fundamental component of data analysis during and after the data collection period. The authors call for a variety of systematic displays as a means to organize data and make it more accessible and compact. This perspective is particularly relevant for life story studies. The interviews in my own study lasted between 2.5 and nine hours, leading to verbatim transcripts of 30,000 or more words. Time-ordered displays are Miles and Huberman's suggested sequences for chronological data. More specifically the authors introduce so-called "event listings" as matrices arranged by chronological time periods which are sorted into several categories.

Chaitin (2002) proposes eight basic steps for analyzing data in biographical studies. Relevant for this article is the fourth step, namely the creation of a chronology of the individual's life. The author suggests either creating a list of life experiences or a written summary. Importantly this part of the analysis is free from any interpretation of the experiences and highlights only facts about the interviewee's life. Those, according to Chaitin, can be juxtaposed next to a historical timeline in order to combine the personal story with the historical/social context. The latter approach has worked well for me and my fellow researchers in providing important insights into the lives of interviewees in several biographical research studies. These included comparing the life-stories of Cuban immigrants to certain waves of immigration (Cooper, Edsall, Riviera, Chaitin, & Linstroth, 2009), Haitian immigrants and regime changes in their native country (Linstroth, Hall, Douge-Prosper, & Hiller, 2009), Guatemalan immigrants and the genocidal civil war in their country of origin (Hiller, Linstroth, & Ayala Vela, 2009) and Israeli and Palestinian immigrants and their respective collective histories (Chaitin, Awwad, & Andriani, 2009).

For my own dissertation it was self-evident that I apply the techniques that had been so pivotal in our previous studies. After I created the first chronologies I was satisfied with the content, yet I was lacking visual affirmation of thematic connections emerging in global and thematic analyses. Consequently, I started conceptualizing my own ideas of chronological charts, hoping to see more than the chronological life reconstruction.

Moving Toward Multi-Layered Charts

Before explaining my approach in more detail, I wish to contextualize it by giving a brief outline of the research study to which it was applied. The biographical study explored the psychological and social meanings given to the life experiences of long-time nonviolent peace and social justice activists in the United States. The research question was: How do nonviolent peace activists construct and negotiate their identities? The sample consisted of six women and ten men.

I gathered data by analyzing information gathered from the life-stories of these individuals. I was also able to obtain information from documentary sources pertinent either to the participants' lives, the social contexts, or the specific social movements and actions in which they were involved. Participants in this study shared experiences related to the Civil Rights Movement, the Anti-Vietnam War Movement, conscientious objection, the opposition to nuclear power and weapons, the Latin/Central America Solidarity Movement, the ongoing movements opposing the wars in Iraq and Afghanistan and the Middle East conflict in general, to name just a few.

Given the participants' stories, it seemed even more important to juxtapose their respective life histories and the concurrent social histories. In my study the previously discussed approach of creating life histories and examining them together with historical timelines was modified. Considering the research questions, it seemed appropriate to literally visualize the intersection of the personal and the social aspects. In other words, I created a complex biographical chart for each participant where personal and social events in the participants' lives where categorized and presented in one single, multi-layered chart following a life timeline. The direct juxtaposition not only gives insight

into the intersection of the personal and social realm, it also alludes to those aspects that were prominent in the participants' narratives. Moreover, the chart provides a chronology of U.S. history emphasizing events, periods and social movements that were significant for social activism.

Even though chronological charts are free of interpretation, the interviewees' "objective" life facts can be categorized. Categorization will not lead to any additional data but make the existing data more accessible and processable. If the objective of a biographical life history study is to examine socio-cultural, personal and institutional themes in an individual's life (Creswell, 2007), then why not start out by creating thematic categories for the "objective" chronological facts?

Following a timeline from the participants' date of birth to the interview date, the multi-layered charts show selected, objective life categories. The timeline is bordered by the year on top and the interviewee's respective age at the bottom. Aligned to the left, the categories are listed vertically so that the content can be filled in according to the year and participants' age (see Figure 1).

Figure 1. *Sample Biographical Chart with Empty, Customizable Categories*
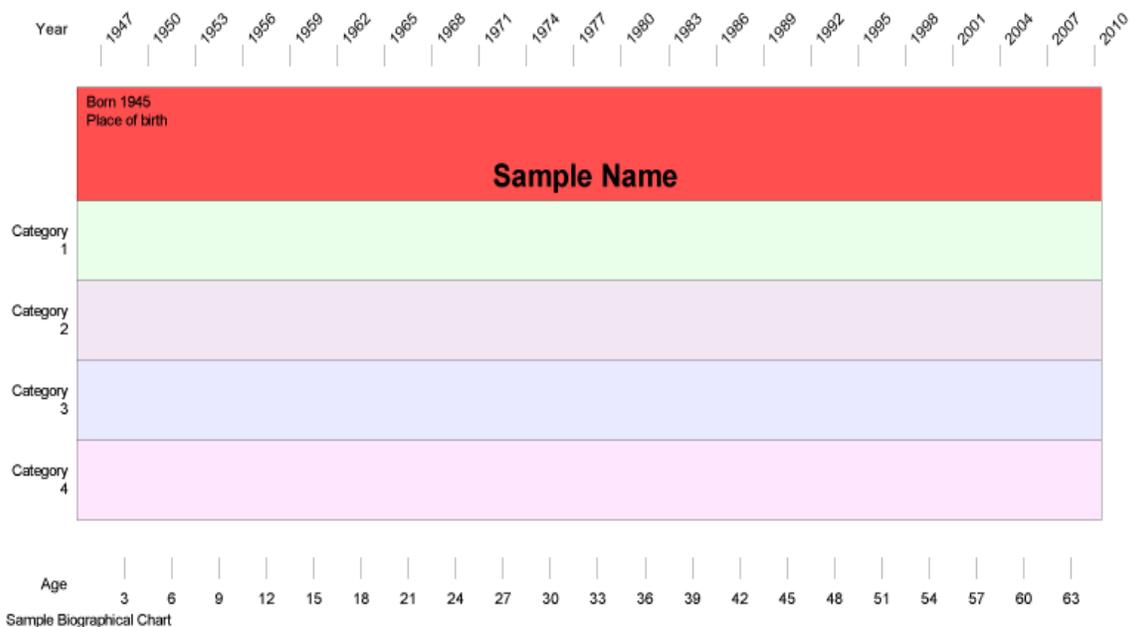
In my research study, objective life facts were categorized into *personal* factors such as marriage, birth and death of family members, places of residence, or other mentionable personal life events such as illness or meeting a significant person. A further category I created was *education*, which includes formal education ranging from elementary school to graduate studies or other forms of continuing education. The category *occupation* contains the interviewee's professional life path. The next category, particularly important for my study on nonviolent activists, was the interviewee's *activist engagement*. The final category for my purpose was that of *history*. This category, external to the studied life, indeed provided additional data. Relevant for my study, I chose historical facts that pertained to nonviolent activism in the U.S. such as World War

II, the Civil Rights Movement, the Vietnam War, the Cuban Missile Crisis or the Vatican II Council. In addition, I entered more specific historical events such as the times frames of movements that were pertinent to the participants' lives and appeared in their narratives.

Including background historical data in biographical studies has also been suggested by Chaitin (2002) and Scheff (1997). In studies on identity development this approach is important, assuming that the individuals' processes of identity construction are tied to the social context in which they are unfolding. In my specific studies, the activists' life stories were intimately interconnected to the developments and changes occurring within their societies.

Sometimes the boundaries between the categories were rather blurry. In other words, I was not sure, for example, whether the interviewee's work or education was not actually part of his/her activist engagement. However, this "problematic" feature turned into an asset for the multilayered visualization, since it allowed me to demonstrate the interconnectedness of factors in the person's life story. Before I dwell more on theoretical considerations, I want to provide some technical explanations about how the charts were developed.

Creating Multi-Layered Chronological Charts with Genealogy Software

The good news is that there is software that allows you to create multi-layered chronological charts based on your data entries with custom categories. The bad news is that the software is not designed to do just that in a qualitative research context. Creating results such as the ones exemplified in Figures 2-6 requires significant tweaking and sometimes seemingly illogical use of genealogy software. Let us go back one step back, however.

Envisioning a more complex, multilayered form of chronological data presentation, I spent a considerable amount of time venturing into the realm of genealogy software vendors' websites to get an idea about how such timelines might actually look. Numerous screenshots brought me closer to what I was looking for. Ultimately I resorted to Genelines™ (Progeny Genealogy Inc, 2007), the self-proclaimed leader in timeline software. The program offers fully customizable timeline charts where personal data can be combined with any other chronological data relevant to one's research.

The sample biographical charts were intriguing; the software seemed to be an easy way to implement my vision. Unfortunately, as I mentioned, creating the charts requires some tweaking and the use of genealogy software (e.g., Legacy Family Tree) as the fundament for Genelines™ (Progeny Genealogy Inc, 2007). For someone not familiar with genealogy, I was now challenged with figuring out the basics of creating a family tree. Essentially for the purpose of creating a multilayered biographical chart as illustrated in Figures 2-6, I only needed to create one entry for the person with his/her date of birth. Imported into Genelines™ (Progeny Genealogy Inc) I was able to create so-called "Event Categories". Those categories could be filled out with the name of the event, the start date and the end date, which ultimately was the basis for the automatically created biographical chart. At this point, one mouse click led to the automatic creation of an individual biographical chart.

        The charts' color spectrum emerged out of the software's default color scheme. As such, the purpose for the use of those colors lies purely in their readability. The software allows users to change the colors of all categories and fonts within the charts. I recommend using a color spectrum that ensures black and white printing without the loss of information. We can, however, take the use of colors further from a research methodological perspective. Many researchers use so-called color coding to manage data. Color coding is considered a useful took in assisting the researcher to handle dates, names, titles, events, chronologies and other data relevant to the study (Marshall & Rossman, 2010). I suggest that color codes in interview transcripts or other documentary sources can be matched to colors used in the biographical charts, thus facilitating the researcher's data management.

        Applying Genelines™ (Progeny Genealogy Inc, 2007) to the needs of my biographical charts certainly was an asset, yet it had its limitations. Not all life facts can be clearly categorized and estimated dates will not be visualized adequately in the chart. Only fully customizable timeline software or even pure graphic illustration software would allow the creator of the charts to fine tune the entries accordingly to include such information. At the same time, in having to do this, we would lose the advantage of being able to easily enter the data into a mask as the basis for automatically created charts. Admittedly, achieving visual results requires a little practice and tweaking with the software. Patience and creativity can go a long way and I suggest that every researcher needs to make an informed methodological choice as to whether certain limitations are acceptable for his/her research or not.

        By now the reader—most likely someone interested in qualitative research— might think "well, this is all nice and good, but how can I benefit from these forms of visualization?" In the following section I will provide selected examples from the biographical charts used in my research and explain how they proved to be useful analytical tools in addition to enhancing visualization.

Case Examples with Illustrations

        Nonviolent peace activists interviewed for my dissertation readily talked about their lives and how they intersected with the socio-political history of the United States. This aspect, in fact, was among the central questions I tried to answer in my research study: What is the influence of the social context on the development of a nonviolent orientation?

        I begin with Michael's chronology (Figure 2), which is complex and full of change, especially in the educational and occupational categories.[1] Certainly one might argue that the length of the interview (approx. 3.5 hours) or Michael's detailed account allows the inclusion of many factors. Thematic analysis, however, revealed that one of the major themes in Michael's life was that of exploring options. For most of his adult life Michael followed a path of making life choices based on options he considered viable. These options usually appeared as new challenges in Michael's life which he needed to take on rather than "growing old" with one profession or life-project.

---

[1] All names used are pseudonyms

Figure 2. *Biographical Chart Michael*
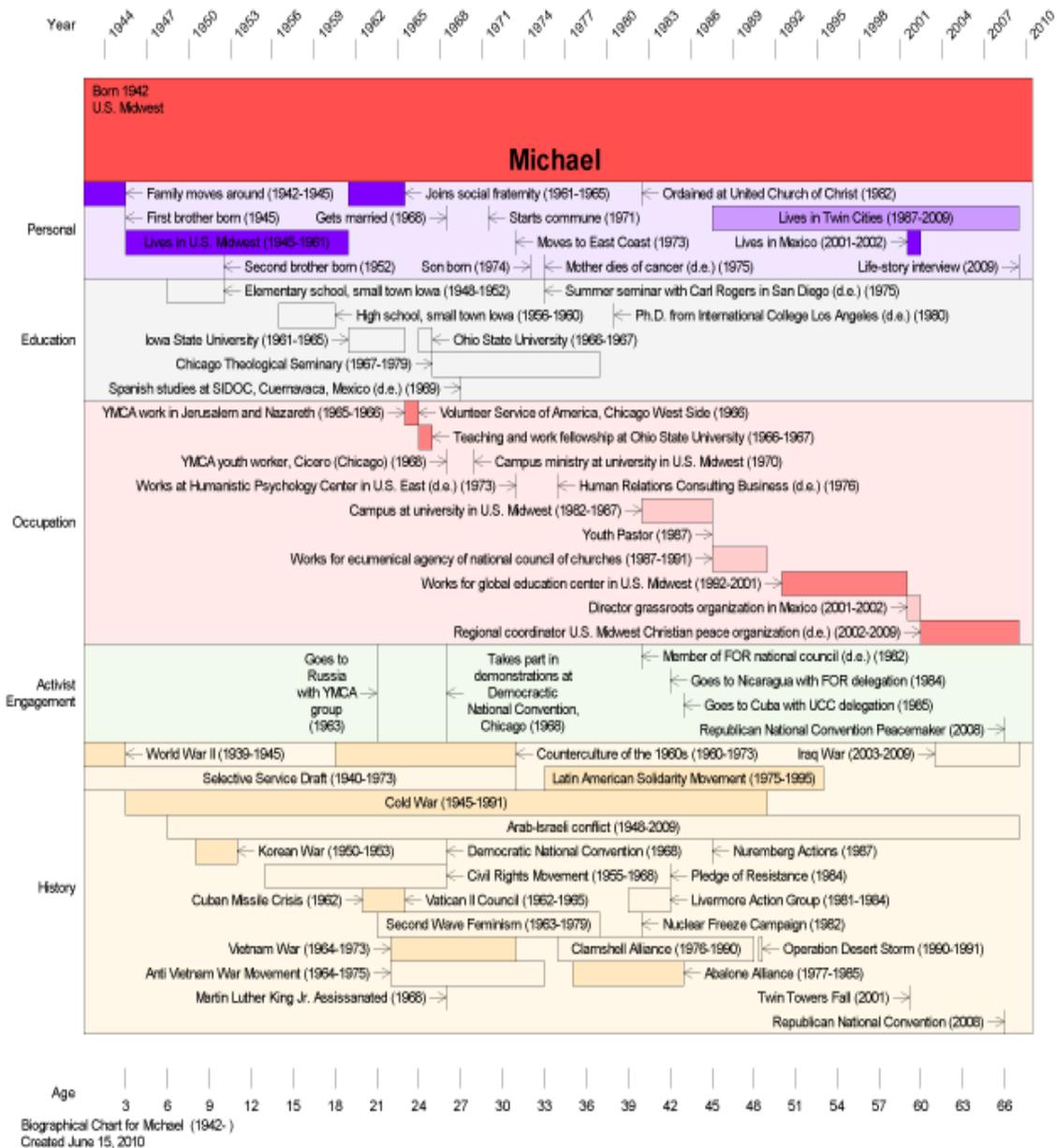
The time chart reveals the multiple and different social environments to which Michal has been exposed. In fact, Michael's life-story is threaded with new experiences, illustrated by his use of the word "experience" 47 times during the narrative. This helps us understand Michael's self-understanding as an activist in that it implies having explored and experienced social realities outside of his familiar context. Moving into the chart's history category, we discover connections between Michael's growing commitment to social activism and concurrent historical events. In his narrative, Michael talked about a trip to Russia in 1963 with the YMCA as being transformative in his life. If we look at the historical context in Michael's biographical chart, we notice several ongoing historical courses and events. Michael's trip took place during the Cold War shortly after the Cuban Missile Crisis, concurrently with the Selective Service Draft, the

Civil Rights Movement, and the Vatican Two Council. During this period, by self-definition, Michael was not yet a social activist. In fact we can also read in the biographical chart that he was member of a social fraternity at his university. His trip, however, resembles an alternative way of experiencing the social realities surrounding him in his familiar context and consequently turned out to be significant for his growing commitment to social activism.

Finally, Michael's age should be taken into consideration when reading the chart. In my study I found that the processes toward identity formation are created, negotiated and maintained in a journey-like process that passes through specific stages, not necessarily resembling those life courses discussed in classical and contemporary literature on identity formation. However, some of the respondents' narratives, including Michael's, suggested a connection between the stages of adolescence and young adulthood and identity development as presented by Erikson (1959). During this period, as pointed out later on as well by McAdams (1988, 2001), available ideological and occupational options are explored and people experiment with social roles which eventually consolidate beliefs and values into a personal ideology. Michael's trip to Russia took place when he was 21 years old. Whereas his identity as a peace and social justice activist had not yet manifested itself openly, one certainly can view this period as a transformative, identity forming time in his life. All of the respondents in my study faced the challenges of trying to discover their respective identities and roles in the world. This occurred for some during adolescence, especially while experiencing unfamiliar contexts through schools or colleges. However, for others I was not able to determine a clear role of adolescence and young adulthood in their identity construction.

I now move on to Anna's biographical chart (Figure 3). At first glance we notice the depth of the category "activist engagement." The thematic analysis confirmed the category's predominance in the biographical chart, since Anna's narrative revolves around her dynamic, non-exclusive involvement in activist groups. For Anna activism means aligning herself with activist groups; in fact she associates herself with 19 different groups in her narrative. Because these groups are all part of one greater movement for peace, her alignment with these groups changes depending on the salience of the issues with which they are dealing.

We also notice that Anna's activist engagement started later in her life but then seemed to be very intensive. One significant event in Anna's narrative occurred when she joined a so-called "cursillo" Catholic retreat, where she met a woman who turned out to be very influential in Anna's dedication toward activism. We can see that the cursillo trip came at a similar time when she engaged in self-education. Both entries in the biographical chart seem to be the starting point for her heavy activist engagement. Anna's activism is strongly connected to the Latin American Solidarity Movement and the Anti Nuclear Movement. Comparing the historical timeline to her activist engagement we see an overlap of the personal and the social history.

We notice that Anna's activist engagement decreases toward the time of the interview. A closer look at the biographical chart alludes to two interesting points. First, we notice two deaths in the chart's personal category. Even though being a social activist remains a strong aspect of Anna's social identity and she remains active, she feels a sense of exhaustion in her activist life and experiences great sadness due to the loss of her husband and two other inspirational male activist friends. At the time of the interview

Anna was at a point in her life when she felt that she was lacking the energy to maintain her commitment to activism. It does not appear to be an ideological challenge where she is questioning social activism as such, but one where she is lacking the inspiration and support of those who have accompanied her over the years. Losing her husband has left a huge gap with regard to maintaining her activist commitment. In fact, Anna ended her main narrative on a painful note referring to her husband's rather recent death and the friends who died during the last years.

Figure 3. *Biographical chart Anna*
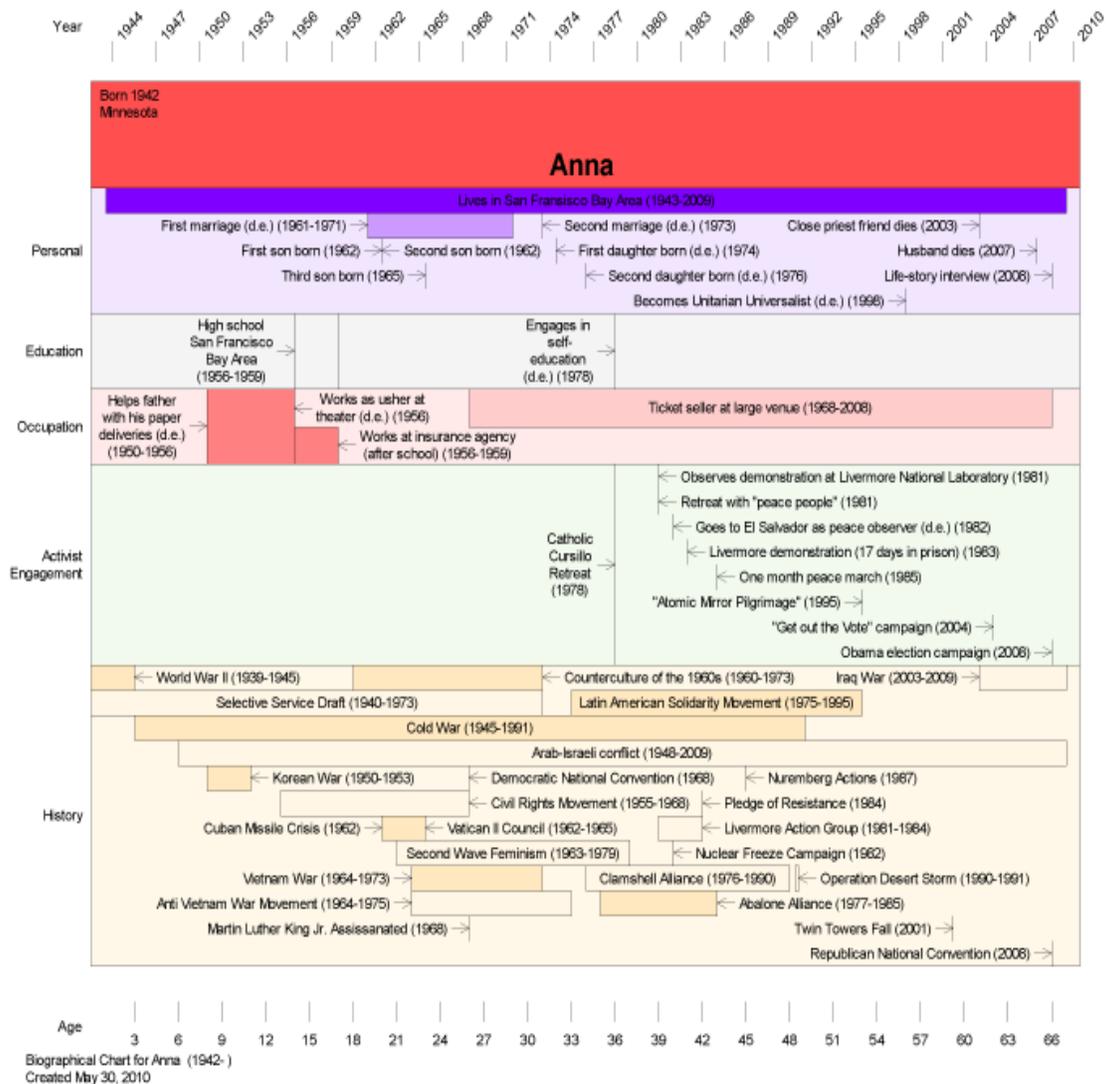
A decrease of activist engagement after the Latin American Solidarity Movement is worth noting. Due to her strong connection and ongoing participation in numerous movements, Anna felt a letdown when the war in El Salvador ended. Anna emphasized her desire to end the war while at the same point stressing her connection for "years and years in being part of a movement." Finally the chart also shows us a connection

between Anna's age and her activism. In addition to the previously discussed factors, Anna pointed out that one of the reasons for her slowing down was simply age and the desire to spend more time with her grandchildren. The dates of birth of their grandchildren were not available in my research, but they certainly would have supported the visual interpretation of the biographical chart.

I now move on to Gwen's biographical chart (Figure 4). A somewhat shorter interview did not allow for the creation of a chart as complex as the ones previously discussed. Nevertheless the visualization of Gwen's chronology also allows interpretation of some important aspects of her life-story. An examination of Gwen's life up into her mid-forties reveals a very traditional path of basic education, marriage and raising four children. Her husband was the family's caretaker while she raised their children in a small town environment. Essentially she was living the "American Way," which, in my study is understood as an Anglo-Saxon notion based on individuals' hopes, roles and expectations with regard to family, community, faith, traditions, work, education, leisure, politics, etc. in society (Safire, 2008).

 In the late 1960s, however, we notice an entry in the occupational category in that she begins to work running a college bookstore. We know from the historical category, that this was a time of a growing counterculture in the U.S. largely driven by student groups and the time of the Anti Vietnam War Movement. Through her work at a college bookstore, Gwen became somewhat engaged in the Anti-Vietnam War Movement without actively seeking actual participation. One pivotal event was her contribution toward helping a young draft resister to avoid prison by providing him with direct, financial support to flee the country to Canada. This event and other factors made this time meaningful for her later complete commitment as a social activist, fundamentally opposing any kind of war.

Another life fact that stands out in Gwen's personal history is the death of her 24 year old second daughter in 1972 due to a drug overdose. Similar to the previously discussed point we recognize the social context of the previously discussed point as the time of the youth counterculture in the United States. Consequently, we can connect Gwen's narrative to the socio-cultural current of that time. According to Gwen, her daughter was part of the hippie movement. The narrative suggests that Gwen blames the Vietnam War and the ills of the society for the death of her daughter. Gwen explained that "she [her daughter] was a Victim of the Vietnam War" and that "she saw the world as it really was and she couldn't stand it." In sum, it is through the interpretation of the narrative and the interpretive reading of the biographical chart that I was able to recognize two formative events in Gwen's time that planted seeds for her later commitment to nonviolent peace activism.

I now will discuss two biographical charts which illustrate how interrelated categories are supported by thematic analysis. If we look at Charles's biographical chart (Figure 5) we see aspects of spirituality in the educational, occupational and activist engagement categories. They are different yet connected to a dominant theme in Charles's narrative, namely spirituality. More specifically, we see a Catholic influenced education leading to Charles's ordination as a Dominican priest. After having left the priesthood due to struggles with the institutional church, Charles's spiritual commitment prevailed which we see by the interfaith pilgrimages he joined. Moreover, professionally he became engaged with Creation Spirituality.

Figure 4. *Biographical Chart Gwen*

Figure 5. *Biographical Chart Charles*

In Judith's biographical chart (Figure 6) we see how the categories of occupation and activist engagement are strongly interconnected starting in the early 1980s. Beginning with her involvement in the Catholic peace advocacy organization Pax Christie, Judith's personal commitment to nonviolence made her take on official roles and responsibilities in various committees and organizations working for nonviolent social change and led her to seek a professional path along those lines. In that regard we see that she worked at a Catholic emergency shelter, moved to Palestine to work at the Bethlehem University and did an internship at a dispute resolution center.

Figure 6. *Biographical Chart Judith*
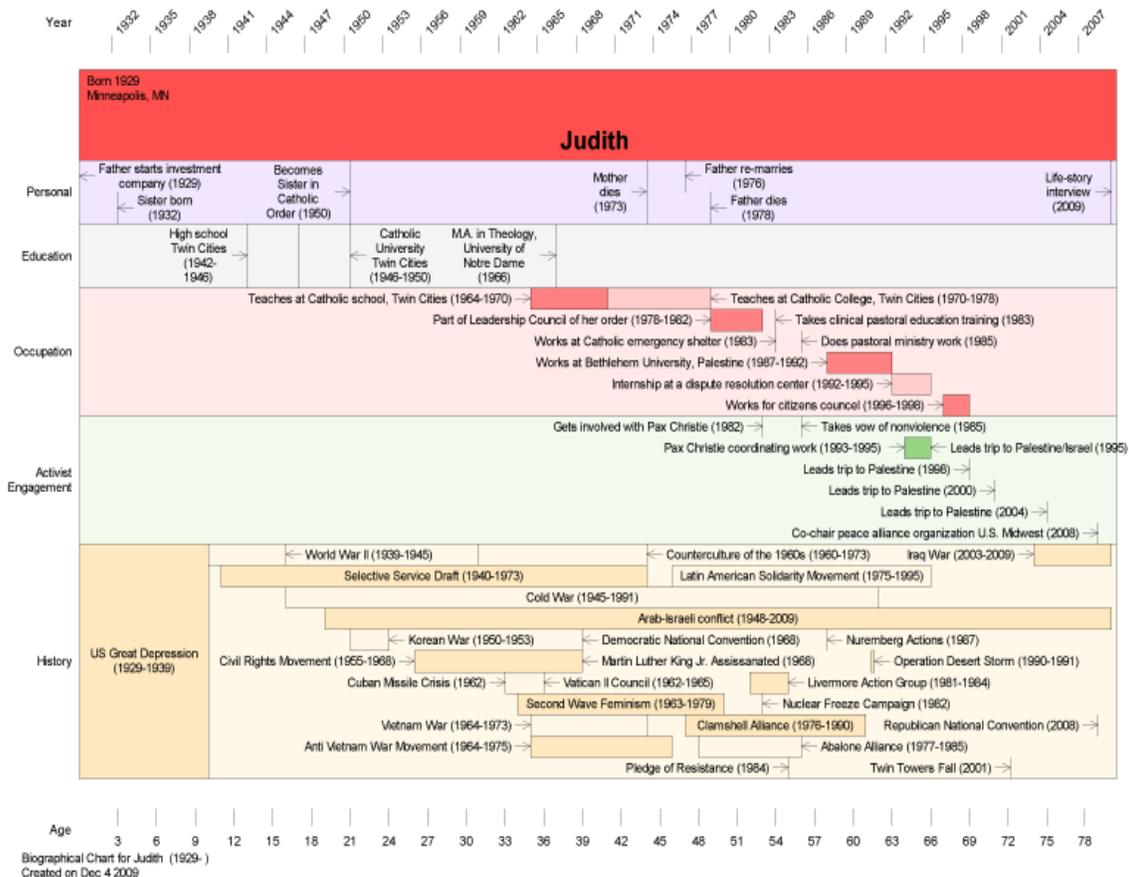
Biographical charts also allow understanding as to how individuals connect the personal, professional, educational and social aspects of their lives in general. In my thesis, the major themes derived from the analyses suggest that the participants generally have developed integrative worldviews over their life course though they might spend more time and energy with regard to specific issues. Integrative worldviews can be understood as dynamic and emergent cognitive processes that lead to all-encompassing, conscious human interpretations of their lives and constructions of scripts of how to live meaningfully. Integrative worldviews help us understand our experiences on the personal, family, social, political, moral and sometimes, spiritual level. Obviously biographical charts portraying the "objective" life facts do not allow for interpretations of individuals' integrative worldviews. We can, however, look at biographical charts and see just how strong individuals connect different aspects of their lives. In other words,

biographical charts remind us that despite complexities, individuals' life narratives create coherence of being – the stories we live by (see also McAdams, 2006).

Now that we have discussed the theory and the application of multi-layered biographical charts, I would like to point out how fellow qualitative researchers can apply and improve this implement for their respective studies.

Discussion and Conclusion

Multi-layered chronological charts are useful tools for visualization and analysis of biographical studies. The presentation of an individual's objective life-facts in the form of a biographical chart facilitates the researchers' thematic in-depth interpretation. The chart visualizes complexities, continuities and changes in an individual's life. Multiple layers allow the researcher to juxtapose "objective" life facts to the social context.

The use of multi-layered chronological charts in biographical studies benefits qualitative researchers in multiple ways. Biographical charts can be custom-designed depending on the researchers' topical areas and research problems. In my case, the lives of nonviolent peace activists in the U.S. were examined, leading me to add the categories "Activist engagement" and "History" to emphasize those historical events relevant to social activism. Researchers have the option to choose those categories that allow them to examine how they interact over a person's life course.

Biographical charts assist us in strengthening our inductive data analysis from a different angle. By adding additional external data in a historical category or another category of the researchers' choice, one might even consider this unique visualization as data triangulation in that several layers of data are added "to build a confirmatory edifice" (Denzin & Lincoln, 2005, p. 187). However, the charts should not be substitutes for analytical approaches for drawing conclusions with regard to the meaning individuals attribute to their life facts.

Biographical charts help us identify which aspects of an individual's life were important and emphasized. The visualization also gives us a glance at those aspects of the participant's life that were considered important to the individual or which were addressed in the narrative. For example, we might see a large section dedicated to the category "Personal," suggesting that family life played an important role in the narrative. In this regard the biographical chart can be seen as an additional, facilitative tool for in-depth thematic analysis.

Biographical charts help us visualize and examine people's lives from an integrative perspective. As much as we tend to categorize and create themes for individuals' lives, we must not forget that a person's life is an organic whole. Yet, according to Miles and Huberman (1994), "our cognitive tendency is to reduce complex information into selective and simplified gestalts or easily understood configurations" (p. 11). The multiple layers of categorical separation allow us to visualize the connection between the personal, educational, professional, social or any other category pertinent to a research study in a convincing better display.

From a technical/programming perspective, multilayered biographical charts can be elaborated to complex database systems. For example, the entries in the charts can be combined with existing qualitative research software, computer-based documents,

internet sites, etc. through an array of hyperlinks. The researcher then can maneuver through the datasets using the charts as an entry mask. Whereas the software used in my research study does not yet allow for such connections, it is certainly possible to imagine and implement this technological path.

The creation of multi-layered chronological charts as described in this article comes with some limitations. Whereas visualization through genealogy software is the main asset, the programs simply were not designed as tools for qualitative research. Some forms and limitations in the graphical output were not conducive. Estimated dates or time periods, for example, cannot adequately be visualized with a dotted line or a semi-transparent block. At this point, I believe a researcher can consciously ignore those setbacks. In the long run, however, I hope that qualitative research software or other applications will allow more customization to address human biographies as complex as they are.

If we can overcome the additional costs, accept the occasional imperfect visualization, and have the muse and patience for some tweaking, I believe the multilayered chronological charts are an asset to any form of biographical research. Hopefully I have opened a door for qualitative researchers to build on this approach with their ideas and imagination.

References

Chaitin, J. (2002, February). *How do I ask them about the war? Collecting and understanding the stories of soldiers and victims of war*. Paper presented at the Fifteen International Association for Conflict Management Conference, Salt Lake City, UT. Abstract retrieved from http://ssrn.com/abstract=304580

Chaitin, J., Awwad, E., & Andriani, C. (2009). Belonging to the conflict: Collective identities among Israeli and Palestinian emigres to the United States. *Social Identities: Journal for the Study of Race, Nation and Culture, 15*(2), 207-225. doi: 10.1080/13504630902778644

Cole, A. L., & Knowles, J. G. (2001). *Lives in context: the art of life history research*. Walnut Creek, CA: AltaMira Press.

Cooper, R., Edsall, D., Riviera, D., Chaitin, J., & Linstroth, J. P. (2009). "My country"/"This country": Ambivalent belongings of Cuban Americans in South Florida. [Art. 13]. *Forum: Qualitative Social Research, 10*(3). Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1364/2859

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Denzin, N. K., & Lincoln, Y. S. (2005). *The SAGE handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Erikson, E. H. (1959). *Identity and the life cycle: Selected papers*. New York, NY: International Universities Press.

Hiller, P. T. (2010). *Trajectories toward nonviolent identities: Development, negotiation and maintenance of integrative worldviews of a selected group of peace and social justice activists in the United States.* (Unpublished Dissertation). Nova Southeastern University, Fort Lauderdale, FL.

Hiller, P. T., Linstroth, J. P., & Ayala Vela, P. (2009). "I am Maya, not Guatemalan, nor Hispanic"— The belongingness of Mayas in Southern Florida. [Art. 10]. *Forum: Qualitative Social Research, 10*(3). Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1361/2853

Linstroth, J. P., Hall, A., Douge-Prosper, M. A., & Hiller, P. T. (2009). Conflicting ambivalence of Haitian identity-making in South Florida. [Art. 11]. *Forum: Qualitative Social Research, 10*(3). Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1362/2855

Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research* (5th ed.). Thousand Oaks, CA: Sage Publications.

McAdams, D. P. (1988). *Power, intimacy, and the life story: Personological inquiries into identity*. New York, NY: Guilford Press.

McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology, 5*(2), 100-122.

McAdams, D. P. (2006). *The redemptive self: Stories Americans live by*. New York, NY: Oxford University Press.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Progeny Genealogy Inc. (2007). *Genelines Universal Edition* (Version 2.1) [Computer Software]. New Minas, Canada: Progeny Genealogy Inc.

Rosenthal, G. (1993). Reconstruction of life stories. Principles of selection in generating stories for narrative biographical interviews. In R. Josselson & A. Lieblich (Eds.), *The Narrative Study of Lives* (Vol. 1*,* pp. 59-91). Newbury Park, CA: Sage Publications.

Rosenthal, G. (2004). Biographical research. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 48-65). London, Great Britain: Sage Publications.

Safire, W.. (2008). *Safire's political dictionary*. (Rev. Ed.) New York, NY: Oxford University Press.

Scheff, T. J. (1997). *Emotions, the social bond, and human reality: Part/whole analysis*. Cambridge, United Kingdom: Cambridge University Press.

Taylor, S. J., & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meaning* (2nd ed.). New York, NY: Wiley-Interscience.

Wengraf, T. (2001). *Qualitative research interviewing: Biographic narrative and semi-structured methods*. London, Great Britain: Sage Publications.

Author's Note

Patrick T. Hiller currently is scholar-in-residence and adjunct instructor at the Conflict Resolution Department at Portland State University. He holds a Ph.D. in Conflict Analysis and Resolution from Nova Southeastern University and a M.A. in Human Geography from the Ludwig-Maximilians-University in Munich, Germany. Following an interdisciplinary approach, his work and research interests encompass conflict resolution, peace studies, environmental issues, ethnicity, human rights, nationalism, social justice, Mexico, Latin America, social/peace movements, identity

formation, culture and conflict and migration. Patrick is editor of the open-access, peer-reviewed journal Resistance Studies Magazine and member of the Advisory Council of the organizations International Cities of Peace and PeaceVoice and member of the board of directors of the Oregon Peace Institute. Correspondence regarding this article can be addressed to: Dr. Patrick Hiller; Phone: 001 954 805 4923; Email: philler@pdx.edu or p.hiller@gmx.de

Article Citation

Hiller, P. T. (2011). Visualizing the intersection of the personal and the social context–The use of multi-layered chronological charts in biographical studies. *The Qualitative Report*, *16*(4), 1018-1033. Retrieved from http://www.nova.edu/ssss/QR/QR16-4/hiller.pdf