



Vocational Bildung in action

A case study of the vocational education biography
of master craftsman Wolfgang B.

Ruhi Tyson



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ISBN 978-91-7649-073-0

Printed in Sweden by Universitetsservice US-AB, Stockholm 2015
Distributor: Department of Education, Stockholm University

To Wolfgang

List of articles

Article 1

Tyson, R. (2014). Aesthetic Bildung in vocational education: The biographical case of bookbinding master Wolfgang B. and his apprenticeship, *Vocations and learning* 7(3) 345-364.

Article 2

Tyson, R. (under review). Education for vocational excellence: the auto/biographical exploration of enacted craft pedagogy. Manuscript submitted to *Vocations and learning*. Major revisions requested and undertaken, currently re-submitted.

Abstract

This study looks at issues of Bildung and vocational education from a biographical perspective. These issues are conceptualized in terms of Bildung in action, developed in relation to Schön's concept reflection in action; Bildung through making as a way of thinking about processes of Bildung connected to crafts; and Bildung in vocational contexts, ie. contexts of vocational education and work. The concepts are enriched through an extensive auto/biographical case study of master craftsman Wolfgang B.'s educational biography focusing on stories of Bildung where processes and actions are described as well as the curricular structure of his training. Some of these stories and aspects of the case have then been analyzed in two articles, one dealing with questions of aesthetic Bildung in vocational education using Schiller as conceptual lens and one dealing with educating for vocational excellence using Aristotle's concepts *techne* and *phronesis* to understand the narratives analyzed. The results are an increased and differentiated understanding of Bildung in vocational contexts, especially as related to the coexistence of skill training with education for Bildung and the unique perspectives that auto/biographical studies of retired or semi-retired craftspeople bring to the field of research connecting biography, Bildung in action and vocational education.

Key words

Bildung, vocational education, auto/biography, craft, reflective practice, narrative inquiry, curriculum, skill, technique

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Preface

I have become convinced that universities are not devoted to the production and distribution of fundamental knowledge in general. They are institutions committed, for the most part, to a *particular* epistemology, a view of knowledge that fosters selective inattention to practical competence and professional artistry.

Donald Schön (1983:vii, italics in original)

The education and practice of professionals has been an ongoing controversy over the past 30 years if not more, often leading to calls for more regulation and evaluation. As both a cause and a consequence of this there has been a retrenchment among many professionals where, as Schön writes (1983:vii-viii): “when people use terms such as ‘art’ and ‘intuition’ they usually intend to terminate discussion rather than to open up inquiry.” This is echoed 21 years later by Rauner & Bremer (2004:150) who write that Polanyi’s introduction of the concept of tacit knowledge ended up having a conservative effect on the educational discussion in vocational education and training (VET) by allowing practitioners and researchers alike to step back and claim that vocational/practical skills or competences could not be articulated. Of course, this is not at all what Polanyi intended as far as I can surmise.

Rauner & Bremer go on to consider the, by now, fairly well established fact that the particular knowledge and skill needed to handle a vocational task cannot be divorced from those more general or key competences that, in many ways, are most important to develop.¹ Thus the idea that was in vogue a few decades ago that one could dispense with a lot of particular vocational training and focus instead on the immediate general development of key-qualifications has been, at least to a large degree, judged illusory. They advocate a focus on paradigmatic educational tasks where skills and general competences can be seen to develop most efficiently in tandem.

¹ There are different takes on what this includes or denotes, UNESCO (2005:20) lists the capacity for independent learning, working in teams, entrepreneurship and civic responsibility. Brater et al. (1988:72) have a longer list that includes reliability, endurance, patience, exactness, capacity for problem solving, capacity for improvisation, etc.

I have been interested in this discussion for the past 15 years or so having begun my academic studies after upper secondary school at the same time as I began an apprenticeship in bookbinding. The points made by Schön together with Rauner & Bremer have resonated with me, as an experience, throughout my apprenticeship and beyond. It echoed in the papers I wrote, in my Bachelor's thesis and in my Master's thesis (Tyson 2011) that all in one way or other expressed an interest with what we actually participate in when we engage in making-activities, as novices and as experts. Another important influence, particularly in the present text, is an article by Mark Freeman (1997) on Tolstoy's *The death of Ivan Ilych*. In it he argues that Tolstoy's novel makes a powerful case for the narrative integrity of a life lived well by describing a life lived without any sense of meaning or coherence other than that demanded externally by convention; Ivan Ilych takes a wife and has a child because this is "what you do" etc. This question of a life lived well, with a sense of meaning or narrative integrity, is fundamentally what has driven my interest in Bildung as part of a vocational education and of work. From this point of view the concern that has echoed in various ways throughout my early academic papers up until this point, is with how we can create educational settings that afford narrative integrity for those participating in them. With this I mean that the core purpose of education is to support a sense of meaning understood in the long term as the unfolding of a life lived well.

In the following documentation and analysis of the vocational education biography of my bookbinding teacher, Mr. Wolfgang B., I have tried not only to get beyond the "tacitness" of a making-profession but also to remain attentive to (Schön 1983:vii): "practical competence and professional artistry." Furthermore the sense of narrative integrity, which I have subsumed into the perspective of Bildung developed in this thesis, that sometimes comes with age has led me to the early consideration that the evaluation of Bildung-related aspects of vocational knowledge is strengthened as one grows old and is able to look back. This then, is the personal context in which the thesis has grown.

Stated briefly, the problem is a combination of the selective inattention Schön refers to and the tacitness of much professionalism. I have attended to this as it surfaces in discussions and research on Bildung and vocational education. Rather than deal with the problem on a strictly philosophical basis I will use an educational biography to give empirical content to what I will be developing as the concept of vocational Bildung in action through crafts or making.

1 Introduction

This is an inquiry into craft vocational Bildung in action set in the context of issues relating to skill training, general and practical competencies and professional artistry. It has been pursued as an explorative auto/biographical case study concerned with the vocational education of master bookbinder, gilder and engraver, Mr. Wolfgang B. It is through this case that I will be discussing the various perspectives on vocational education and Bildung that the study is focused on. First of all, I will clear the space somewhat by introducing the question of vocational education and Bildung as some scholars have considered it over the course of the 20th century. This, in turn, leads me to the aim of the study after which I will be concluding the introduction with a look at the overall structure of the thesis.

1.1 Vocational education and Bildung, a brief outlook

The field of research related to vocational education is not commonly associated with questions of Bildung, especially outside of the German-speaking nations. Although this is the case on a general level there are a number of articles and books that in recent years have dealt with such issues and related them to Bildung (explicitly or implicitly), crafts, vocational education and work (eg. Lange et al. eds. 2001, Sennett 2008, Volanen 2012 and Winch 2012, for a more comprehensive survey, see chapter 2). This is even more so if we include the entire 20th century and such prominent figures in German reform pedagogy as Kerschensteiner, Blankertz and Fintelmann; going further back would take us to figures such as Pestalozzi. Before I continue this discussion, here is a very brief initial presentation of the concept of Bildung.

Bildung is a German word with no precise equivalent in English. Liberal education comes close in many ways and it does make some sense to call the same non-technical aspects of VET vocational liberal education. However, as discussed in chapter 2, Bildung has a wider range of meaning especially in the sense of formation of character. Not because liberal education lacks the historical roots, the Greek concept of paideia included education of both the mind and the body, but Bildung has other roots as well, in medieval thought and among some German scholars of the late 18th century. Furthermore, in Germany, Bildung is sometimes used in the same way as education without the “liberal” is used in English, which

means knowing the context is necessary in order to be sure if *Bildung* is taken in a more comprehensive way or as a synonym to education. I will be using the term in the former manner unless otherwise noted.

In what follows, I will be writing of *Bildung* in vocational contexts to indicate that we are dealing with VET and not “general education” whatever currency this expression carries today. Added to this I will also use the expression *Bildung* through making in order to specify that what we are considering here are processes, subject matters, curricula, etc. that afford² *Bildung* by being about creating or repairing things with one’s hands. Finally, I will be developing the conceptual construct of *Bildung* in action by expanding upon some of Donald Schön’s work (Schön 1983, 1987, Schön ed. 1991). All of this is discussed extensively, both conceptually and related to relevant research and writing in the next chapter.

Returning now to the first paragraph, the educational initiatives focusing on bringing together *Bildung* and VET have also produced some empirical research on the matter. Most prominent is the *Bildungsgangdidaktik* research (see Trautmann ed. 2004 and Meyer 2009b for an overview) that sprang from the work of Blankertz but more important for the present study has been the work by Gessler (1988) in relation to Fintelmann and the Hibernia school. Both have taken a biographical view of *Bildung*, understanding it as a process that becomes visible in hindsight through biographical studies. Thus, the *Bildungsgangdidaktik* researchers have focused on conversations with students in order to surface how different educational environments and styles of teaching afford processes of *Bildung*. Gessler’s study is largely in the same vein with one part being the exception. In it he presents a small sample of conversations that were had with former students of the school about 20 years after they had left it, considering their continued vocational trajectories as well as their reflections on the *Bildung* processes they experienced. Emerging from this was an example of how biographical research can surface the kind of *Bildung* processes that a vocational context affords. Furthermore it was done in the context of *Bildung* through making or crafts, something that otherwise is mostly argued philosophically going back to Pestalozzi and Kerschensteiner.

A different, but equally important, context comes from the research initiated by Donald Schön’s work on reflective practice. Briefly put, Schön argued that professionals reflect in practice (reflection in action), and also on practice (reflection on action). Furthermore he argued that a number of professions, teaching, architecture, psychoanalysis, etc. follow an educational path that is design-like (1987). This means that the process of learning these vocations is not so much a

² Afford in the sense that *Bildung* is not immediately teachable and needs to be understood more as a stronger or weaker potential of curricula, contents, contexts, activities, etc. to provide experiences of *Bildung* together with whatever else they provide. This does not imply that *Bildung* is a random phenomenon but only that as an outcome of education it cannot be fully planned for. There are differences between educational contexts in the degree to which they afford experiences of *Bildung*, see chapter 2 for a more thorough discussion.

matter of applying theory to problem-solving but of coming to understand the vocational practice, “to get it,” something that in turn connects to the development of a way of seeing things that is not apparent to a novice. Schön himself states (1987) that he has not set out to explore aspects of developing professional knowledge that reach into what in this context would be Bildung-related issues such as the development of wisdom. But his approach leaves the door wide-open to this, which is why it makes sense to build on it in developing the concept of Bildung in action. This facilitates descriptions of Bildung-related reflection in action as well as Bildung-related processes that emerge during the course of action, in this case making action. Furthermore, Schön provides a template for research into Bildung in action in the way he constructs the empirical foundations for his discussion of reflection in action and educating for reflective practices by analyzing case studies of such practices. In these, educational episodes and stories figure prominently which they also do in biographical accounts of Bildung.

Both of these contexts are concerned with how we construct vocational subject teaching and VET more generally today (and in the past) and both are, fundamentally, rooted in practice oriented philosophical traditions (cf. ch. 3). My argument is that combining these contexts with a biographical case study of craft vocational education and the concept of Bildung in action opens up two important lines of inquiry:

1. Bildung in action explored through biographical case studies has the potential to uncover and represent practical knowledge that benefits other practitioners.
2. Bildung in action explored through biographical case studies also allows analyses of patterns in Bildung-affordances within vocational contexts as well as systematic, comparative, approaches to research in this field; especially systematic and comparative approaches to practical knowledge that is otherwise classified as tacit or experiential and thus opaque to research efforts.

This leads me to the aim of the study.

1.2 Aim

The aim of the study is to increase our understanding of Bildung in action in a craft vocational context. As outlined above, this is part of a research context that on the one hand brings together Bildung and vocational education and on the other hand tries to differentiate our understanding of the actual practice of teaching vocational subjects, techniques and skills, ie. didactics or the “in-action.” As a whole, these are issues that need to be researched because if Bildung has any edu-

cational relevance today, and this entire text is an argument for that, then there is a whole field of empirical research into Bildung in action and VET that needs to be further explored. Thus, the explorative approach to a vocational education biography from a Bildung perspective with special emphasis on narratives that concern themselves with Bildung in action, ie. descriptions of judgment or deliberation, contents or tasks that connect to processes of Bildung as well as curricula or other more structural issues.

The extensive exploration of a single vocational education biography is a way of bringing the concept, processes and contents of Bildung in action together and working through them in order to get at deeper levels of reflexivity than a larger number of brief case studies allow. I have judged this to be especially important in a study where the aim is set in a comparatively unknown context and focuses on elaborating on a conceptual construction that is uncommon (cf. 4.6 on methodological limitations).

Given the wide scope of Bildung as well as the explorative character of the case study, there are many ways in which the aim could lead into more exact research questions. I will deal here with issues of aesthetic Bildung in a vocational context and the development of vocational excellence (excellence here understood as what might be termed vocational virtue and judgment). These issues correspond to the two articles I have written and are as follows:

1. What constitutes aesthetic Bildung in action in a craft vocational context, especially in the field of vocational subjects, ie. in the teaching of a subject or a technique.
2. How is vocational excellence part of Bildung in action throughout the case, in the double sense of considering the act of teaching itself and the extent to which such considerations of teaching episodes themselves in turn contribute to the development of excellence.

Having established the aim of the study, I will conclude the introduction with a brief presentation of the biography of Mr. B. since I will be referring to it in the chapters preceding the case chapter, 6.

Mr. Wolfgang B. was born in Stuttgart 1935. Some years after the war he graduated upper secondary school and became a bookbinder's apprentice in a medium sized workshop. He completed his apprenticeship around 1956 and went to Stockholm to go through part of his further education in preparation for becoming a master bookbinder. However, he wound up staying there and worked for several years as head of the finishing department in a large industrial bookbindery. In the early 60s, he began moving towards hand binding and between approximately 1963 and 1969 continued his education at the Ecole Estienne becoming a master in bookbinding, gilding and engraving. Following this he spent another seven years working out of his studio workshop before taking a part time job as teacher of bookbinding at a Waldorf (Steiner) school. This evolved into full time

work and, until his recent retirement and return to the studio workshop he kept over the years, he spent the next 35 years as a teacher of bookbinding to students at the upper secondary level which is where I met him and stayed on as an apprentice after graduating.

1.3 Overview of thesis

The first chapter on Bildung and VET provides the main context for the case and the questions discussed in the articles. This includes definitions when appropriate, conceptual distinctions as well as the major part of my review of previous research since this is, to a large degree, an issue of reviewing research related to Bildung and vocational education from various perspectives. Following that I will go on to discuss the research context that the thesis stands in, positioning it in relation to the practice turn in philosophy and to the auto/biography research tradition.

Chapter 4 on method discusses how the case was built and analyzed after which a chapter on ethics and axiology follow thereby rounding out the chapters that together constitute the context for the case. I have placed the chapter (6) containing the whole case before the chapter (7) dealing with the research questions and the article summaries because both the article summaries and the discussion before and after them benefit from knowing the case. If for no other reason, then because the summaries and the discussions refer back to the case and would otherwise have to include substantial parts of it. The thesis concludes with a discussion, chapter 8, and two appendices that reproduce the articles in full.

2 Bildung and vocational education

In this chapter, I will first provide a brief introduction to the concept of Bildung with a focus on Bildung and biography. I will then go on to discuss Bildung in action and its relation to Schön's reflection in action and the Bildungsgangdidaktik tradition. Thereafter I will go on to consider Bildung in vocational contexts (vocational Bildung) and three of the most prominent German reformers of the 20th century who have concerned themselves with it. Following this, I will go on to consider the related concept of Bildung through making (crafts) focusing on a biographical perspective. Finally, I will also discuss aesthetic Bildung through the philosophy of Schiller together with some relevant empirical studies. I will be dealing with most of the previous research, discussing it as I go along and including, at the end, a part on the process of systematically locating other scholarship.

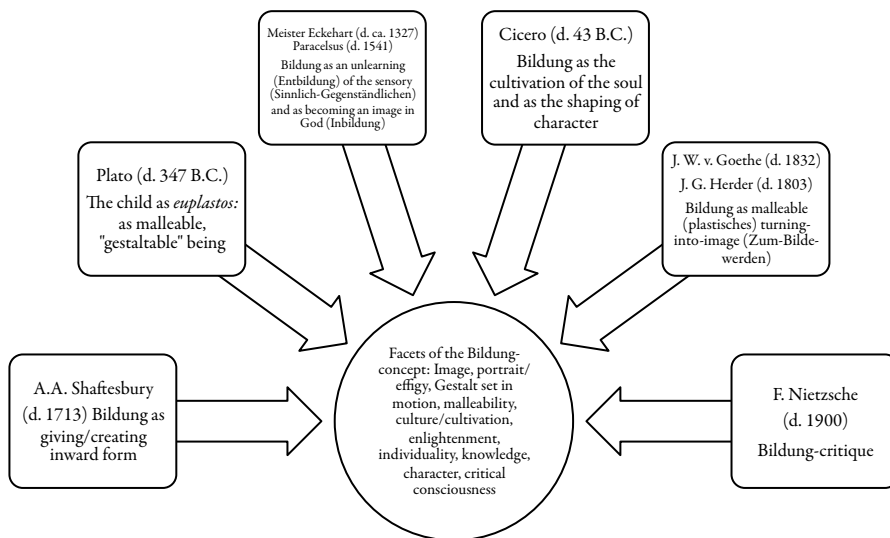
2.1 A brief review of the concept of Bildung

Bildung is a concept with a long history and wide range of application. In providing this general outline I am, gratefully, referencing a number of thoughts and observations from Christian Rittelmeyer's recent (2012a) *Bildung, ein pädagogischer Grundbegriff* (Bildung, a foundational concept in pedagogy or education). Generally speaking it is close to impossible to give a definition of Bildung that encompasses what has been said and written over the years. As Rittelmeyer argues, it makes more sense to speak of a conceptual cluster or a Bildung-landscape rather than to attempt a distinct definition. Especially if one moves beyond the superficial listings of those knowledge-contents that one needs to be familiar with in order to be considered in possession of "general Bildung." For the purposes of this study, the elucidation of the concept falls into two, sometimes overlapping, categories: a philosophical-historical and a biographical.

2.1.1 Bildung from a philosophical-historical viewpoint

In his overview of the history of the concept Rittelmeyer provides the following schematic in order to illustrate the variations contained in it and at the same time, incidentally, showing the difficulty in rendering many of the core concepts from German into English. Since I have translated it from the original German I have allowed myself to also reconstruct the schematic which looks slightly different graphically in the original (2012a:18).

Sketch of the different facets that can be found through a historical reconstruction of the concept of Bildung:



What this graphic brings to expression is the wide range of philosophical thought that is contained in the concept. Part of it hearkens back to Greek and Roman philosophy and ideas of cultivation and the formation or shaping of character (which is where the second article connects). Part of it is rooted in medieval thought about becoming alike to God's image. Finally, an important part of it is connected to German enlightenment and early romantic philosophy.

One field in which these views are employed is concerned with the contents and the various modes of knowledge that need to be included in educational curricula in order for them to support the full development of the human being. This is also where the largest overlap exists between the classical German tradition, the Anglo-Saxon tradition of liberal education and the use of the concept in Scandinavian writing. Characteristic of these approaches is a predominantly philosophical, or philosophical-anthropological, perspective emanating in more or less distinct suggestions for curricula (cf. Hirst 1974, 1993, Klafki 1995, Eisner 1996, Volanen 2012) in the case of educational writings and otherwise in more general ideas and overviews of what the contents and processes of Bildung are thought to consist of (Gustavsson 1996). Another way of dealing with the concept is by discussing what might be termed core elements or aspects of Bildung. Aesthetic Bildung is a central aspect of the concept, together with emancipation and autonomy, which were all developed during German classicism. Bildung in antiquity had more of a focus on character formation and the development of virtue. In the following discussions I will first say something about Bildung in relation to biog-

raphy and then go on to consider Bildung in action, Bildung and vocational education as well as further aspects of Bildung.

2.1.2 Bildung and biography

Apart from the historical perspective another way of approaching the concept of Bildung is through biographical studies and/or through the reading of what is often called Bildungsromanen (Bildungsromans) of which Goethe's *Wilhelm Meister* and Rousseau's *Emile* are commonly referenced as important sources for the tradition.

Regarding the approach to Bildung through biographical studies, it is in the narration of key experiences that give meaning to the life of the person in question or that provide an individual richness and furthering or transformation to the biography that these studies prove their value. And also, one might add, through negative examples of life experiences that have been strikingly devoid of meaning and abundance. Rittelmeyer (2012a:59f) also calls attention to the Bildung-related question of when and how individuals arrive at so called "aha-experiences" where something is cast in a wholly new light or becomes especially meaningful. In this sense Bildung is something that resists planning, that is unexpectedly experienced perhaps by one person in a crowd owing to that individual's circumstances.

That does not rule out a planned education rich in Bildung-affordances and it is this line of questioning that can be profitably pursued through biographical research because Bildung, in many ways, is an element of learning that is not easy to observe the way one might observe the more or less successful binding of a book. Furthermore, if we leave aside Bildung-experiences that are clearly tied to an individual's peculiar biography, which may be of interest from other research perspectives, then individual lives can convey a lot of information about aspects of education for Bildung. Such a line of inquiry, as mentioned in the introduction, is related to what in Germany is called Bildungsgangforschung and Bildungsgangdidaktik respectively. Bildung and gang there translated as (Meyer 2009a): "learner development and educational experience within the teacher learner interactional process."

Having clarified that Bildung is closely related to biography and thereby presented a core argument for why this is a biographical study I will make a case for the concept of Bildung in action considering it against the background of Donald Schön's reflection in action and in relation to the German research in Bildungsgangdidaktik.

2.2 Bildung in action

The thesis contains four core conceptualizations of Bildung: Bildung in action, Bildung in vocational contexts, Bildung through making and aesthetic Bildung. If Bildung in vocational contexts, Bildung through making and aesthetic Bildung,

are fairly straightforward, Bildung in action is less intuitive. Does it mean processes of Bildung as they are taking place? How does it relate to a biographical view in which Bildung is understood as an ongoing enrichment of life with meaning? I will begin by briefly describing Schön's concept of reflection in action and then the Bildungsgangdidaktik perspective will follow after which I will conclude with how I understand Bildung in action.

2.2.1 Reflection in action

Donald Schön in his work on reflective practice (Schön 1983, 1987, Schön ed. 1991) introduced the concept of reflection in action in order to describe the practitioner's capacity to engage in reflection during the process of action rather than before or after it. Important to Schön's argument is that reflection in action is mostly called forth on account of a surprise in the course of doing something (Schön 1987:26ff). This is what leads over from what he calls knowing in action to reflection in action. The point, he argues, is a matter of understanding what professional practice is about and that technical rationality, which consists of applying rules to a problem, does not adequately describe what most professionals actually do (I have a more elaborated argument in 3.1.3 on the relationship between *techné* and *phronesis* as well as in the discussion, 8.2.2).

In *Educating the reflective practitioner* (Schön 1987) the case is made for reflection in action being a core component of professional education and that this is a major part of how apprenticeships, *practica* and similar educational arrangements work. His main example is the architectural studio as an educational model for reflection in action. In this example he reasons extensively based on a case centered on conversations between architects and students about some task the student is performing. I will return to these matters shortly after introducing Bildungsgangdidaktik.

2.2.2 Bildungsgangdidaktik

If we are to think about Bildung as part of vocational education we need to look at how this has been enacted and experienced; enacted and experienced in educational settings as a process of judgment or deliberation, as various contents and courses and as the curricula shaping a full vocational education. This is precisely the argument of the Bildungsgangdidaktik research in Germany but there mostly in relation to interviews with students in school or just after school rather than later in life (Terhart 2009:147-151). In describing the contribution that the Bildungsgangdidaktik tradition in Germany has made to educational research Terhart writes (2009:202, my translation):

The fundamental idea that this group [researchers on biographical processes of Bildung] has brought into the didactics of Bildung-theory is the "biographization" [Ger. Biografisierung] of the Bildung-problem. The idea of Bildung is

thereby once more taken out of the sphere of the speculative-normative and brought into the processes of development and *Bildung* of youth – without thereby losing itself in developmental and biographical research.

Or, in other words, because *Bildung* is largely biographical these didactical elements tend not to emerge easily through ethnographic or phenomenological studies but lend themselves well to being explored in biographical research. An issue here is that whereas processes of general *Bildung* have found both literary and scholarly attention on the empirical level through biographical writing and research (cf. Rittelmeyer 2012a), this is not the case to the same extent with *Bildung* in vocational contexts (exceptions being Blankertz described in Terhart (2009) and Gessler (1988), to be discussed shortly under 2.4). There are, to be sure, any number of biographical texts that speak of the author's work, similarly there are texts in which the author's vocational education is the focus rather than her working life. However, on the scholarly side there has been little systematic inquiry into what *Bildung* in vocational contexts might be like for different people, in different times and across different occupations.³

2.2.3 Conceptualizing *Bildung* in action

Against the background of the above descriptions, *Bildung* in action can be considered from three angles: as parallel to reflection and knowing in action, as part of an educational practice that supports the unfolding of *Bildung* in action and in relation to, as well as articulated by, a biographical narrative.

Bildung in action is similar to reflection in action in that it is often caused by surprise or, in retrospect, a reevaluation of experience (the *aha*-moments of Rittelmeyer). *Bildung* in action understood thusly, cannot be confined to the immediate process of action the way reflection in action can, but rather needs to be understood as that part of the immediate action that also reaches out beyond the action itself, ie. becomes biographical. Perhaps, although I would not press the argument too far, there can be no parallel to reflection *on* action when it comes to *Bildung* since what is formed is not an external object but one's own character and biography. What I mean is that actions directed towards making can be reflected on in ways that do not necessarily influence our identity, which is not the same as excluding the possibility that some such actions do, the case study is basically about such actions. Self-reflection or contemplation, which would perhaps be the equivalent to reflection on action, cannot so easily be separated from itself. All *Bildung* as it relates to the becoming *bildet* of the subject would then be *Bildung* in action, reflection on action thus potentially being an instance also of *Bildung* in action.

³ Stephen Billett (2011) makes a useful distinction between vocations and occupations by having the former deal with what could also be termed a calling, an identity in relation to work and occupations rather dealing with social facts such as what constitutes paid employment, regulations and certifications, etc. I will follow this distinction for the most part noting when it does not apply.

Bildung in action, it should be emphasized, is not the same as a heightened state of reflection although instances of reflection in action or reflection on action may well be practically indistinguishable from a process of Bildung in action. But the kind of surprises or interruptions that warrant reflection in action may also be quite different, in kind or degree, from those that provoke a process of Bildung. I have a good example of the latter from my own apprenticeship involving the learning of edge gilding, the process of putting gold-leaf onto the edges of a book's paper. When I was first trying to learn this, I failed repeatedly for various reasons leading to both reflection on action (talking with Mr. B. after a failed attempt trying to figure out what went wrong) and reflection in action (adjusting my action in the middle of the process on account of some observation and more or less quick deliberation). However, as the failures mounted the issue became more an issue also of perseverance until, after about a month of tries, most of our reflective efforts had come to naught, no enthusiasm for the work remained and the experience of (and need for) perseverance took over entirely. To my surprise one day, perhaps two weeks later, it worked! This experience of endurance took a while to "digest" but has remained one of the defining moments in my life. My point is that the reflection in action and on action initiated by the (unpleasant) surprise of continuously failing in a complex process was not initially tied to any Bildung in action. If the reflections had solved the problem quickly, the Bildung aspect would have receded into the background.

Because Bildung is not limited to reflection but rather connotes processes of character formation, moral development, aesthetic development or sensibility and becoming autonomous or self-directed, Bildung in action cannot be assumed to be something we can study by participatory inquiry the way Schön's case of the architecture practicum is constructed. Rather, perhaps counterintuitively, Bildung in action is easier to identify after the fact through biographical case studies, following the same argument as the Bildungsgangdidaktik research makes. The example above of the edge-gilding "disaster," which is what it felt like during the process, makes a good case for this. The narrative needs to complete itself first, before Bildung in action can be surfaced and even an observer of the event would have to wait for the process to play itself out. One might hope that such an experience becomes a source of Bildung because one recognizes the potential of the situation but there is no way to know really until after the fact, in retrospect.

Schön makes an argument for professional education that develops a capacity in the student for reflection in action through apprenticeships, practica and similar educational environments or constructs. Most of this is concerned with first correcting assumptions about professionalism and then clarifying the various hurdles and issues professional education faces when it is design-like. Schön makes it clear that he is saying little about "wisdom in response to the ethical dilemmas of practice" (1987:xiii) and the following text supports that what he is aiming for is the craft-knowledge (*techné*) of design-like occupations. By dealing with it in the way he does, mostly through case study examples, he avoids excluding the potential inclusion of Bildung-related aspects. This is where the empirical inquiry

into Bildung in action joins Schön's. The study of Bildung in action through biographical cases mirrors that of reflection in action through participatory cases. In the latter, matters of craft-like knowledge are explored both with regard to the educational structures in which they are enacted, apprenticeships, practica, studios, workshops, etc., and with regard to the teacher-student interaction. In the former, Bildung in action, the same questions are asked of educational structures and teacher-student interaction. If Schön calls his main work on the issue: *Educating the reflective practitioner* then this might be called *Educating the bilded practitioner*.

2.2.4 Clarifications: didactics and similar concepts in relation to Bildung in action

I will, for the most part, write about Bildung in action rather than the didactics of Bildung because although the "in action" covers much the same conceptual ground as didactics, it adds a distinctiveness that didactics as a general concept lacks. However, the conceptual relationships need to be clear. I understand didactics to mean basically the relationship between subject, student and teacher and those issues that bear upon this, structural, content-wise and as they relate to agency (Uljen 1997). Similar to this understanding of didactics, Stephen Billett (2011) has called for research not only into what he calls the intended curriculum (that which is planned and laid out in texts) but also of the enacted and the experienced curricula, ie. what teachers actually do and students experience. When I write of Bildung in action this is part of what I mean: education aimed at Bildung (explicitly or implicitly) as it has been enacted and experienced. In order not to make the text unnecessarily cluttered with concepts I have, to the degree this has been possible, refrained from using the terms didactics and curriculum. On a similar note, I will refrain from making any distinction between enacted and experienced, calling Mr. B.'s stories narratives of enacted vocational education for Bildung. This is because the distinction has not been of any central relevance to the analysis, most of his descriptions are of his teachers and what they did, asked for, etc. and how he experienced that, which I would call a mixture of teaching and learning narratives. For the same reason I have avoided using the terms teaching and learning when not explicitly called for, writing instead of education or pedagogy understanding them to include both. In part, this reflects the current discussion about the "learnification" (Biesta 2010) of educational discourse. As Biesta writes (2013:693):

The language of curriculum [in this context Bildung in action] is in this sense a much more educational language than the language of instruction or the language of learning, because it highlights questions of content, purpose and relationships – aspects that often disappear from the radar when education is entirely discussed in terms of learning.

This is the reason I have called the present case study an educational biography rather than a learning biography. Learning can happen in all contexts whereas education highlights that the focus here is on pedagogical interventions and Biesta's "content, purpose and relationships."

Further conceptual definitions follow under 3.1.1 regarding making, craft-like, practical and practice, skill, technique and capability as well as under 3.2 regarding narrative, story and episode.

2.3 Bildung in vocational contexts

To begin with, the question of Bildung has been one in which there is a long history of placing it at the opposite end from VET. Thus, Plato already wrote of it in his *Laws* as (Plato 2008, #644, book 1):

At present, when we speak in terms of praise or blame about the bringing-up of each person, we call one man educated and another uneducated, although the uneducated man may be sometimes very well educated for the calling of a retail trader, or of a captain of a ship, and the like. For we are not speaking of education in this narrower sense, but of that other education in virtue from youth upwards, which makes a man eagerly pursue the ideal perfection of citizenship, and teaches him how rightly to rule and how to obey. This is the only education which, upon our view, deserves the name; that other sort of training, which aims at the acquisition of wealth or bodily strength, or mere cleverness apart from intelligence and justice, is mean and illiberal [the Swedish translation (2008) has *slavelike* here and the German (quoted in Lange et al. eds. 2001:195) *craftsmanlike*], and is not worthy to be called education [the German translation has *Bildung* here] at all.

Humboldt created a similar polarity in advocating an understanding of Bildung as the broadening of one's horizons rather than specialization and equated this with a classical, humanist, education (Gonon 2002). Such views have been repeatedly countered philosophically (Blankertz & Gruschka 1974, Edding et al. eds. 1985, Fucke 1976, 1977, Gonon 2002, Lange et al. eds. 2001, Volanen 2012). In the review below I have aimed at differentiating the ways in which this has been discussed.

Bildung in vocational contexts has been researched and discussed, although not always with explicit reference to Bildung, from several perspectives. This includes moral development (Corsten & Lempert 1997) and the development of various general capacities, especially in conjunction with aesthetically oriented education (Hetland et al. 2007, Rittelmeyer 2012b, Brater et al. 1985, 2011, Brater & Wagner 2011, Schmalenbach 2011). It also encompasses the development of various emotional and will-dependent capacities through manual skills (Fucke 1996, 1981, Brater et al. 1988) and the furthering as well as integration of work, education and biography (Brater et al. 1985, 1986, 1987, Brater & Büchele 1985, Fintelmann 1990). In all of these, and often with an emphasis on aesthetically

oriented manual skills, which might be the result more of tradition than of any fundamental necessity, one might say that the tacit Bildung-value of vocational skill or capability is at the center of attention. There is also some research into unpacking the vocational subject knowledge inherent in a skill so that the historical, social and natural scientific affordances indwelling in it become explicit (cf. Fücke 1976, 1977, With 1994). There are, on a more philosophical level, next to general presentations of the concept of Bildung, overviews of the historical discussion specifically related to vocational education and Bildung (Lange et al. eds. 2001, Winch 2006b). Research into the biographies of skilled craftspeople is less developed especially when concerned with their educational Bildung-experiences. Gessler (1988) is an exception.

Throughout the study I have been using the construct Bildung in vocational contexts as a way of talking about processes of Bildung that occur in vocational education or through work (sometimes writing vocational Bildung in action, as in the title, when combining both viewpoints). This can be understood in two ways. One is that one comes to experience processes of Bildung by learning a vocation, this is how we can understand the Hibernia school described below where vocational competence is reached by completing an apprenticeship that is, to a large degree, done within a school setting rather than at regular firms. This might be called Bildung through the contents of a full vocation (leaving open the differences between what is considered a full vocation in time and across space), no matter if the context is work-related or not (cf. 8.2.1). The second way is through an emphasis not on *what* is being done but rather on the context in which it is done. Thus, one might learn about history and science in a workshop, as part of a vocational training rather than in school and this would then also fit into the construct Bildung in vocational contexts. In relation to the case study, the major part of it intersects with this and also demonstrates that both ways of understanding the concept can coexist. There are, however, aspects of it, for example experiences during Mr. B.'s childhood and youth, which do not and there are also aspects of it that are more specific to crafts which has led me to introduce a further variant of Bildung: Bildung through making. However before I move on to discuss this, the concept of Bildung in vocational contexts or Bildung through vocational education is not without precedent, rather it emanates from a tradition that reaches back at least to Kerschensteiner at the beginning of the 20th century. I will consider three of these precedents from the German context where it has received more attention than elsewhere especially as it relates to craft. Of the three, the Hibernia school is the one where these views have been most extensively developed which is the reason for dwelling on it in more detail.

2.3.1 Georg Kerschensteiner

Georg Kerschensteiner was an educational reformer in Bavaria at the beginning of the 20th century. Much of his reform work was aimed at introducing work as a form of Bildung in the public schools of Munich. He was their director between

1895 and 1919 and it was in this period, 1911, that he published *Begriff der Arbeitsschule* (Gonon 2005) in which he lays out the concept of a curriculum that includes manual work. This is done in relative detail listing various tasks that students in different grades were to complete. Kerschensteiner's argument for a school that includes manual work was threefold and in ascending order (Gonon 2005:16f):

1. That the public school system prepares its students for working life.
2. Since they are part of a community, to awaken a sense for how their work can serve this greater whole.
3. If possible, also to develop faculties through which the students can participate in the further development of this community (state).

He writes (Gonon 2005:17, my translation):

The ideal of a moral collective citizenship [sittlichen Gemeinwesen] is first realized in a harmonious community of morally free personalities that in their many differences complement and support each other.

This focus on citizenship and community as the goal of *Bildung* through work and making was not conceived as a political education, citizenship as Kerschensteiner understood it was far more than that. However, other reform pedagogues such as Gaudig and Fischer criticized it, Gaudig demanding that the *Bildung* of the personality (*Persönlichkeitsbildung*) be considered the aim of manual work in schools (Gonon 2005:142-153). In doing this Gaudig also went further than Kerschensteiner in working out the methodology of manual work as a contribution to *Bildung*, Gonon summarizes (2005:145, my translation):

Bildung encompasses the whole human being including his embodiedness [Körperlichkeit]; he has the capacity to realize and make the intentions of his spirit or mind [Geist] through creation and action. The development of motor-skills also speak for the inclusion of manual activities in school. Technical work as a process of visualized knowledge [anschauendes Erkennen] also supports the development of thinking in images. A school through work [Arbeitsschule] is, however, not achieved solely through a stronger emphasis on manual activity, this is a necessary step, but not enough. For a school through work to be fully realized the self-directed work of the students must become the defining character of the school as a whole.

In effect, Gaudig's critique is that Kerschensteiner confuses the material aspect of work, ie. the making part, with the formal aspect, work as a form of self-directed activity. This conceptual issue has remained relevant, craft-related work, in the sense of making things, perhaps too often being taken as the paradigm for work in general (cf. 3.1.1). I have tried to be attentive to this by introducing *Bildung* through making as a specific aspect of *Bildung* concerned with craft-related or

hand-related work processes. Although Bildung in vocational contexts is not exactly identical with Bildung through work, I think that this is to its benefit because it is less abstract. Vocational contexts, although in the present thesis concerned with a craft vocational context, allows for any context to be discussed, musician, scholar, preacher, architect, psychologist, etc. all of which imply some kind of work (or rather practice, cf. 3.1.1). Bildung through work is difficult to pin down without qualifiers and if self-directed activities is what one takes this to mean I find it difficult to see what the necessary, as opposed to potential, vocational part in it is.

2.3.2 Herwig Blankertz

Herwig Blankertz was active as an educational reformer in the decades after WWII. His principal issue was with the division of students into academic and vocational tracks, or into general and special Bildung, with the accompanying social stratification and subsequent democratic issues of inequality. As part of this he initiated, and was responsible for the scientific research accompanying, the Kollegschole in Nordrhein-Westfalen (cf. Keim 1985, Obermann 2013). The Kollegschole was the establishment of a comprehensive school where what had previously been separated, vocational schools and the Gymnasium (in which one studied for Abitur, the certification needed for further studies at a university), was integrated into one school. As previously mentioned, it was as part of this that the research on Bildungsgangdidaktik developed and since I have already dealt with that I will say little else about the work of Blankertz here. In the context of this biographical case study, it is worth noting that Blankertz in his day was one of few professors who had begun his education with a degree as textile engineer, ie. a vocational training and then gone on to get an academic degree later on (Obermann 2013:46 footnote).

2.3.3 Klaus Fintelman and the Hibernia school

The Hibernia school is a Waldorf (Steiner)-school in Wanne-Eickel close to Essen and Bochum in the Ruhr-area of Germany and the institution that I know of where a concept of Bildung through vocational education at the secondary educational level has most thoroughly been put into practice. It has existed since the 50s, to begin with as an apprentice training at the Hibernia chemistry factories and then later expanded to a comprehensive Waldorf-school. It was founded by Klaus Fintelman who was initially put in charge of the general education of the apprentices at the Hibernia factories. By introducing elements of the Waldorf upper-school curriculum such as the Parzival-saga (a medieval tale of the knight Parzival's search for the holy Grail), drama and art, he was able to drastically reduce the time his students needed for the completion of their vocational education. This, in turn, allowed for the expansion of the program to a full Waldorf upper-school since the reduction in training-hours could be given over to general

subjects instead, leading to a point where vocational subjects, aesthetic subjects and theoretical/cognitive subjects occupied roughly equal thirds of the upper secondary school curriculum (Rist & Schneider 1979, Fintelman 1985).

Fintelman's fundamental idea was that vocational education contains a potential for *Bildung*. In this he included several levels of perspective (Fintelman 1990, Rist & Schneider 1979):

1. That training of manual skills is a general education of the will (where arts, humanities and sciences tend to involve a general cognitive and emotional education).
2. That manual or crafts vocational education for all students is a path of overcoming the social division of labor.
3. That vocational education is a way to introduce a biographical relationship towards work and of supporting both the transition to work after school and the capacity for self-directed lifelong learning.

These premises led to the development of a curriculum in which students in 7th – 10th grade (ca. 13 – 16 years old) experienced approximately the first year of training in all the vocations the Hibernia school taught where one could achieve a certification at the end of 12th grade, ie. in the areas of carpentry, tool-making, electrics, childcare and tailoring (for a more detailed look at the curriculum read Rist & Schneider 1979). These vocational studies are done together with a humanist/natural sciences curriculum. In the middle of 10th grade the students, having experienced the fundamentals of all available vocations, then go on to choose the one in which they wish to specialize for the rest of their time in high-school and at the end of the 12th grade they go through the state mandated test in order to receive their journeyman's certificate. The school then offers the possibility to stay on for another one or two years in their Kolleg in order to further broaden their education as well as to complete the state Abitur-test to gain access to the universities. In contrast to the national average (at least the averages 30 years ago) where approximately 30% of German students complete the Abitur, approximately 60% of Hibernia students stay on to do the same (Rist & Schneider 1979, Edding et al. eds. 1985). This appears to have had no strong relation to the socio-economic background of the students given that the Ruhr-area, especially in the 60s and 70s, was predominantly working-class and the student-body at the school reflected this (Rist & Schneider 1979). The Hibernia school was also, mostly in the 70s and 80s, connected to a number of studies including several biographical studies of former students, one of which has been published to date: Luzius Gessler's (1988) already mentioned *Bildungserfolg im Spiegel von Bildungsbiographien*. I will return to this below, in my discussion of *Bildung* through making. But before that, it is worthwhile considering what kind of vocational education that the Hibernia school envisions (Fintelman 1985:124f, my translation):

[T]he technical world of work is, as never before, functionally [zweckbestimmt] planned and ordered. But this is also the reason why the execution of work-tasks is so dispersed that a comprehensive functional context of the various activities at a workplace is no longer possible to experience. The worker must have learnt to act out of insight and knowledge [Erkenntnis]; he must have developed a basic need to justify his work through his own understanding. This means that even where the sense of a work-task is no longer possible to experience immediately, but only out of insight into the general context, the person doing the work will be motivated to take an active part in the aim and purpose of the work. However, this requires that the education received prepares for this. It belongs in the general competencies of work to have the capacity to solve a given work-task independently. Once again this needs to be taught before the entrance into a technically planned production since by then planning, execution and control have already been differentiated with regards to who carries responsibility for what. But no one can carry out a socially qualified planning if he isn't – in principle – able to carry out the tasks he is planning for. And no one should be forced to carry out what he – in principle – wouldn't be able to plan and imagine, ie. the ability to cognitively understand the context of one's work. Thus on the practical *Bildungspath* of the Hibernia school the work-tasks are from the start created in such a way as to allow a shared participation in the experience of their solutions. The learners are asked to develop their own drafts and to independently carry them out with the responsible co-thought of the workshop teacher. [italics in original]

This is important to be clear about because the focus on craft vocational education at the Hibernia school might otherwise come across as quaint and romantic which is decidedly not the case.

2.4 Bildung through making

Bildung through making is a way of conceptualizing Bildung as it occurs in the process of working with one's hands. This is often called practical learning rather than making as in Keim when he lists the various goals that have been associated with practical learning (1985:236 my translation):

- As a didactical principle in conveying theoretical-general knowledge and insights (Workschool concept [Arbeitschulkonzept] of the Leipzig teacher association, Otto Seinig's school the "speaking hand");
- as a way to achieve character and citizenship education in primary school (Kerschensteiner);

- as part of a holistic education of youth in the sense of the Landerziehungsheimbewegung;
- as part of holistic human Bildung [Menschenbildung] in the sense of Rudolf Steiner's Waldorf education and finally
- as part of a complete socialist education.

Some of the research mentioned in the previous part on Bildung in vocational contexts, especially the volumes by Fucke and Fintelmann, is also concerned with the Bildung-potentials inherent in learning a craft. Among other works are the previously mentioned Richard Sennett's *The Craftsman* (2008) as well as Pye (1995), Dormer (1994, 2010), Adamson (2007) and Gatz (1949). These generally concern themselves with subject matter encompassing the Bildung-potentials inherent in the crafts, often in the sense of Bildung in vocational contexts. If one ventures into the grey-zone between systematic research and literature there is an even greater wealth of material to engage with, both apologetic (Crawford 2009, Anderson 2013) and biographical (Krenov 2006), there are also a number of autobiographies especially in connection with journeymen's travels, relating to bookbinding eg. Engström (1995), Leutz (2010), Middleton (2000) and Wilcox (1999). In many ways this literature and research has the strongest connection to my own inquiry. At the same time, one can discern a number of ways in which these works (from the present perspective I might add) are somewhat one-sided:

1. The work is mainly conceptual/philosophical or at least not immediately biographical (eg. Sennett, Fintelmann, Fucke).
2. The work is mainly auto/biographical and more or less lacks any systematic philosophical/conceptual perspectives or analysis.
3. The work is more or less polemical in advocating a return to, or emphasis on, the manual crafts or trades in some way.

The combination of biographical study, interest in vocational education and interest in Bildung from a more scholarly perspective seems rare.

2.4.1 Bildung through making in biographical research

As mentioned above, the study by Luzius Gessler (1988) includes a few biographical studies of students from the Hibernia school in their mid 30s to early 40s (at the time these were the oldest former students available owing to when the school started). I will discuss one of these because it provides a valuable contrast and comparison to the case of Mr. B. To begin with, and on a general level, Gessler

writes that his biographical study indicates that the educational affordances at the Hibernia school strengthen the student's self-awareness and confidence. Furthermore that they provide them with a wide range of skills and capacities that manifest in the way their vocational development and continuing studies after school exhibit a flexibility and curiosity in the face of new challenges and also contain strong elements of personal autonomy. They also indicate that the education at the Hibernia school provides a capacity to think and act in an interdisciplinary way and to contextualize (Gessler 1988:84ff). This amounts to characterizing ways in which a craft/manually oriented vocational education supports *Bildung* through making. Here is the biography of *Pflegeleiter* (the designation of someone who is manager of the care-taking at a hospital) Martin M. The introductory text reads (Gessler 1988:49, this and the following translations are mine):

Martin M. was born in 1947. He went to the Hibernia school from 1962-67 while it still was organized as a four-year vocational school [*Berufsgrundschule*] that then emancipated itself from the Hiberniawerk. He graduated as a chemistry-technician [*Chemiefacharbeiter*] and with a technical school diploma [*Fachschulreife*]. For two years, he worked in the laboratory of the Hiberniawerk as a chemistry-technician after which he trained to become a care-taker [*Krankenpfleger*]. He then worked for two and a half years in surgery-care [*Operationspfleger*] and later added an education as trainer in care-taking [*Unterrichtspfleger*]. He worked for another four and a half years as trainer after which he came to work as the manager or leader [*Pflegeleiter*] of the care at a hospital.

At the time of our conversation M. was 33 years old, married, father of a five-year old son and working as manager since two years.

We chose him for our interview because [he, in a questionnaire] [...] exhibited a biographical pattern that was typical of the data in the questionnaires: changes of vocational fields, a movement between phases of learning and work, a vocational profile in the pedagogical and social field.

In the interview Martin recalls that the memory of the contents of his four year education at the Hibernia school pales in comparison to that of his main teacher and class sponsor, himself not originally a teacher but a bricklayer (the English term denoting something far less complex than the German: *Maurer*). He became something of a father figure for the mixed group of boys and girls in the class.

Martin claims that at the time he counted as one of the less talented students especially in mathematics and that his teacher worked extra with him and other students in order to alleviate the problems and that he also tried hard to find ways of strengthening individual student's self-esteem and social standing. In Martin's case by finding out that Martin before he had begun his study at the school had taken a first aid class, which then turned him into the person responsible for the first aid kit in class. This meant caring for fellow students, having official first aid responsibility on the yearly ski trips, sitting next to a class-mate with epilepsy and

even receiving a special mention in his final, written grade (Bildung through caring or doing (praxis) in the Aristotelian sense might be terms that describe this). Martin is quoted as saying (Gessler 1988:51): “so my present vocation was in many ways strongly furthered by my class sponsor.”

Martin also speaks highly of the value in having a multitude of aesthetic and craft subjects. He notes that the practice of initially, before taking up a specific vocational training, going through a basic course in all the workshops, carpentry, smithy, mechanical engineering (Schlosser), electrical engineering and laboratory work, allowed him to discover and learn a richness of skills and interests. It provided him with fields of knowing and know-how (Wissen und Können) that was immediately applicable in his social life outside school. Another inheritance from the Hibernia school that manifested in Martin’s biographical narrative is his having experienced the colors and architecture, somewhat peculiar to Waldorf-environments to which the Hibernia school belongs, in a way that led him to take an active part in the renovation of the hospital where he worked as Pflegedienstdirektor (care-taking manager). Thus both outside and inside his hospital lacked the, at the time, common sterile white colors with different stations and functions instead receiving different colors together with an emphasis on including works of art in the environment. Gessler recounts from their conversation (1988:56f):

Hospitals are constantly in danger of letting the medically necessary sterility of hospital-work pass over into the human relationships in the institution. In such [...] climates hierarchical structures have a tendency to develop especially well and beyond necessity. Both dangers are best countered by being conscious of them and to make a habit of cultivating conversations about them that bridge the boundaries of established hierarchies. To institutionalize such conversations there are regular weekly and monthly meetings with the different groups of co-workers. [...] And the more people are made part of decision-processes that affect them the more they feel responsible for “their” house.
[...]

The positive working environment has had its effects. The Theresien-hospital has a unusually low fluctuation in staff, seldom experiences problems with hiring instead having so many people desiring to work there that the care-director [Pflegeleiter] can consider who would fit best in the current staff.

Having experienced the various safety measures taken in, among other places, the smithy during his school days, Martin also instituted a rigorous regiment at the hospital lowering the number of work-related accidents far below the average. He also recounted that having had such a wide experience of different fields of work in his education unexpectedly proved valuable in providing venues for conversations with many patients thereby allowing their illness to recede into the background.

When a mechanical engineer arrived who had had an accident at his lathe one knew exactly how such things happen and by being able to speak personally about his work one thing led to another. From the lathe one came to speak about his family and his children and his difficulties with this or that and found oneself in a position perhaps to help somewhat (Gessler 1988:57f).

There are a further couple of examples of how Martin's wide basic vocational education has contributed to ways in which he has been able to find unusual perspectives in his work and he was convinced that without those four years he'd be somewhere in a laboratory or electrical firm "extinguished in the undifferentiated masses" (Irgendwie in der Masse untergegangen). He did point to his younger sister who didn't go to the Hibernia school and who trained as a nurse and who was leader of a large intensive-care station and Gessler concludes, writing (1988:60):

But when M. then speaks about how his sister, locked in the hierarchy of her hospital, is hardly able to influence the sterile clinical atmosphere even in her own care-station, he reinforces me in my assumption that the research on Bildung [Bildungsforschung] through the statement of the *vocational aims* [Berufszielen] that someone has reached, has not yet grasped the deciding issue. This reveals itself first when one explores *how* a person practices her vocation and what kind of vocational competence [Berufskompetenz] is manifest in her work and to what degree she succeeds to realize herself in this work. [italics in original]

There are many similarities between this condensed biographical description and that of Mr. B. But whereas the above study was made as part of a project aimed at understanding the impact of the Hibernia educational model on the student's lives the present study is more concerned with a vocational path from apprenticeship through the French Ecole-system. It also has a more direct focus on extended narratives recounting Bildung in action.

2.5 Aesthetic Bildung

I have treated the subject of aesthetic Bildung extensively from a philosophical standpoint in my article on aesthetic Bildung in vocational education (Tyson 2014). However, several aspects in the present study go beyond what was said there. After discussing aesthetic Bildung as it was formulated in Schiller's philosophy I will move on to discuss two research related aspects that add to the overall picture.

2.5.1 Schiller's philosophy of aesthetic Bildung

As a point of departure, the definition of aesthetic Bildung follows Dietrich et al. (2013:9) and states: "Bildung is the formation of character or personality in and through aesthetic experiences." What constitutes aesthetic experience, including aesthetic activity, and why such experiences are of particular importance in Bildung philosophy is a matter that the philosopher and writer Friedrich Schiller discussed extensively, especially in his *Letters on the aesthetic education of man* (2010 [1795]).

In his *Letters* Schiller develops a philosophical anthropology in which the human being is placed between two poles, which he calls drives: sense and form. The former would probably be called the embodied drive today, the latter perhaps the cognitive or mental. Schiller tries to show that we are essentially determined by sense and form and that the freedom of the human personality has to be searched for elsewhere. In my Master's thesis (2011) I discussed this in relation to descriptions of experiences in the autism spectrum, making the case that it is through outliers of perception and cognition rather than through averages that we most clearly can discuss these issues. Donna Williams, in an autobiographical passage, offers a paradigmatic description of what happens when we are given over entirely to the sense drive (1995:222f):

We arrived in a town full of bright, colored lights. I felt part of the rainbows dancing upon a shiny, black, shimmering surface. I got lost in becoming part of bright, red, squiggly patterns. I 'disappeared' into a haunting, blue square high up above us, beyond black, curling patterns that went on and on.

My senses went on red alert. I had fallen into meaning-blindness, and my visual hypersensitivity was absolutely sky-high without any interpretation at all but I had been too hypnotized by beauty to notice it coming on.

Ian was scared for me, although scared was no longer a concept to me. I mirrored his facial expression. It seemed purposeless and meant nothing. I was like a person on drugs looking at this incomprehensible paradise around me, racing from one form of heaven to the next. I looked at Ian. He was form without meaning, yet still familiar.

I began to become afraid. I tried to name the things around me. I could not. The shapes and patterns and colors could not be interpreted. I began to get more frightened. Would this person with me understand? Was I safe? Should I run? Thoughts drifted by me and I couldn't touch them.

Darkness. I turned down a long stretch of darkness away from the colors. I had flown too high. Each height had topped the last one until I was almost flying.

I hit the hard surface under my hand. *Splat*, said the surface. 'Bricks,' I said in reply. I hit another surface, commanding my mind to bring interpretation back. *Thud*, said the surface. 'Wood,' I said in reply. 'Yes, wood,' said Ian. 'Stone,' I said, stomping upon *clack-clack* cobblestones. 'A laneway,' I said, looking around and finally getting a whole picture of where I was. [italics in original]

Schiller describes this more philosophically as (2010:47 this and the following quotes from Schiller are my translations):

The human being in this state is nothing more than a quantitative unit, a fulfilled moment in time – or rather: *she* doesn't exist, because her personality is nullified as long as sensation holds sway and time carries her away. [italics in original]

Likewise, but perhaps more subtly, Gunilla Gerland offers a description relating to the form drive in which she suddenly comprehends a conceptual relationship (2008:98f, my translation):

I discovered behind and inside.

It was an enormous insight with equal parts joy and pain and it completely took my breath away. I was seven, maybe eight, years old and it was spring or early summer and rather warm outside. I sat outside in the garden and tickled the neighbors' cat with a straw. I had my striped dress on. The cat, whose name was Higgins, was lying almost inside the bushes that overlooked the neighbors' place, I had to stretch in amongst the leaves and branches to reach him. I sat there thinking of nothing in particular. Then I looked up and saw the hedge itself that divided our yard from the neighbors', then I looked out over the whole area. Since our house was on top of a hill I could see far away, I saw a large, beautiful house, like a castle, far in the distance. It was the retirement home, I'd heard someone say. I saw the houses and the trees and suddenly the insight struck me.

Behind everything is something!

And I immediately knew how it was with inside as well, that this meant everything.

Everything has an inside!

The joy of understanding was great. It almost sang inside of me but it hurt also to understand what I hadn't understood before, and that this was something that naturally was self-evident to others. I wanted to tell someone but I didn't have any words with which to explain, I knew that no one would understand if I tried to tell of my important insight. It was also painfully obvious that I could think with much greater clarity than I could express myself and I felt very alone with my special moment.

Schiller expresses this abstractly as (2010:48):

When the first [sense] drive only creates single *cases* the second gives *laws* – laws for every judgment [Urteil] when it comes to knowing and laws for every will when it comes to doing. [italics in original]

Together these two drives permeate each other and create the ordered experience that we are accustomed to. This is where he introduces his main argument, that between these two there is a third drive, the play drive, which he equates with aesthetic activity. He describes the character of play as follows (Schiller 2010:60): "the word play designates all that is neither subjectively or objectively coincidental and yet at the same time neither inwardly or outwardly exerts coercion." With this he implies that a process of play, ie. an aesthetic activity, including an experience, is meaningful rather than coincidental and that it cannot be forced or coerced. In effect Schiller's perspective leads to an understanding of art as a matter of our capacity to interact playfully with an object, "great art" might facilitate this for many people but someone may just as well play, ie. be aesthetically active, with a piece of driftwood. Furthermore, in Schiller's view the human being really comes into being through play, ie. Schiller takes a position, or at least I interpret him thusly, in the debate about human identity and individuality, which is that individuality is identical with a potential for aesthetic activity and actualizes this in a process of *Bildung*, including identity formation. In this sense, Schiller's philosophy is the wellspring from which *Bildung* is understood throughout this study so that aesthetic *Bildung* includes two different perspectives. On the one hand aesthetic *Bildung* is a kind of *Bildung* that can stand on its own or intersect with other kinds of *Bildung*, as will be discussed below in the two examples presented from research. On the other hand, aesthetic *Bildung* is what makes a process of education into a process of *Bildung*. *Bildung* occurs to the extent that we find ways of interacting playfully or aesthetically with our educational experiences and an education for *Bildung* is one that successfully affords such interaction. This echoes my point about "great art" in the sense that any educational affordance can be a source of *Bildung* in the life of a person given the right circumstance and there are no guarantees that even the most elaborate educational initiative will be a source of *Bildung* to everyone. But descriptions of educational institutions and processes that surface what could be described as intense aesthetic acts on the part of those responsible for them are valuable for the same reason that the craft behind great art is worth exploring. How do we know when we are dealing with such descriptions then? By the degree that they afford us our own aesthetic activity, be it through art or, in the case of research perhaps more in the sense of conceptual breakthroughs, inspirations for new ideas, eliciting new ways of seeing things or as Schiller describes it (2010:70):

Through beauty, the sensory [embodied] human being is led to form and to thinking; through beauty the spiritual human being is brought back to matter and given back to the world of sense.

What does he mean by beauty? That which has resulted from a process of play or the process itself. Thus a group of children playing hide and seek could well lead us to form and thinking as well as back to matter, so could a sculpture by Michel-

angelo, depending on the circumstances. In this context beauty means a biography that contains much in the way of Bildung narratives, in other words what Freeman (1997, 2007) refers to as narrative integrity (this is taken further in 3.2.2 and 5.2).

2.5.2 Aesthetic Bildung in relation to Bildung through making

The study by Gessler (1988) mentioned above also includes a participatory part in which he stages a play together with the students at the Kolleg, ie. those students that had graduated with their journeyman's certificates and were now earning a dual qualification through preparing for the Abitur. In it he gives a vivid description of the difference encountered by him, an experienced teacher at a humanist Gymnasium in Switzerland, with these students (Gessler 1988:243f, my translation):

[D]uring the first of my hospitations at the Hibernia school in the spring of 1981 with the first grade of the Kolleg [I] had the opportunity to study and stage Sartre's *The Flies* [...] [it proved to be so much] easier than it was with the Gymnasium students at my school in Basel where we often performed theatre, to solve the many different technical problems that arise in any staging of a play given that for the costumes, the back drops and the technical aspects involved [lighting etc.] there were always experts among the actors. Our Jupiter was also a machine builder, Orest was an electrician, Aegist a carpenter, Klytaimnestra was childcare assistant, Elektra a dressmaker and taking care of lights and sounds was a very imaginative integrator of science, technology and art who listened with interest to my staging ideas and then for a long time seemed to do nothing. Finally and with obvious joy after some probing, he built an astonishing projection device that was easily serviced from his post as lighting technician. With this apparatus he then conjured the plague of flies alluded to in the title [...] and, depending on the ambience in the respective scene, they would range from being ubiquitous, almost imperceptible shadows or frightening fluttering bats or a raging whirl of mind-shattering shadows. He created all this by using a dose of black tobacco crumbles that floated weightlessly in a glass-container of alcohol (balance of specific weights!), and their shadows, with the help of an old dia-projector could then be projected onto the stage. A magnet was used for the controllable dynamics mounted as it was underneath the fish tank and thereby controlling the movement of a steel bolt thus causing whirlstreams.

I have included it here to illustrate the potential in bringing aesthetic Bildung activities and a background in the crafts together. The point being that the recurrence of aesthetic Bildung descriptions in the case study (as analyzed in Tyson 2014) is not a singular phenomenon and it can occur in different contexts in dif-

ferent ways and from different perspectives. The description given by Gessler is interesting in a more abstract sense too because it suggests a further perspective on Bildung in action as it relates to Bildung in vocational contexts, Bildung through making and aesthetic Bildung. This is the comparative perspective in which he as a teacher familiar with a more traditional context of aesthetic Bildung can relate his experiences there to one in which the students he teaches come from a vocational Bildung context.

2.5.3 Aesthetic Bildung as habits of mind

In much of the research on aesthetic skills, the concern is with the measure of transfer effects such as the impact of learning to play an instrument or listening to music on math skills or language. This research is still in its infancy, often poorly designed and, more importantly not immediately connected to the issue of Bildung, if anything the opposite (for a review see Rittelmeyer 2012b). Other research such as that by Hetland et al. (2007) is directly related to this kind of Bildung perspective and thus deserves to be presented in somewhat greater detail given that one might expect narratives of vocational education to at least indicate experiences corresponding with what they have identified as habits of mind in aesthetic activities.

In analyzing the how's and what's of five prominent teachers at high schools in the US with specializations in arts programs Hetland et al. (2007) describe various studio habits of mind (what the arts teach). They are divided into eight main categories each with subcategories:

1. Learning to develop craft: Using art tools, materials and concepts.
2. Learning to engage and persist: Committing and following through.
3. Learning to envision: Planning beyond seeing.
4. Learning to express: Finding personal visions.
5. Learning to observe: Seeing beyond the ordinary.
6. Learning to reflect: Thinking metacognitively.
7. Learning to stretch and explore: Beyond the familiar.
8. Learning to understand the artist's worlds: Navigating domain and field.

Taken together and in combination with the other parts of Hetland et al.'s study these constitute a powerful argument specifically for the integration of studio arts in most forms of education. Even though these findings are most easily corroborated through observation, and thus share more common ground with Schön, I could offer any number from my own workshops in bookbinding. It is also possible to occasionally come across statements in biographical research where an in-

tense Bildung-experience is reflected on that also corresponds with one or more of these categories. The exception is learning to use tools and materials which is such a dominant category that not having had any important experiences relevant to it is difficult. If I were to construct an argument for the value of crafts education based on my own biography it would to a large degree coincide with the above educational experiences, as the example chosen to develop the argument about Bildung in action illustrates. I have not pursued any systematic analysis of the case as it relates to the studio habits of mind in what follows but their approach is a further complement to any biographical one.

If Schön is primarily after the craft-like aspects of a professional education, the perspectives of Gessler and Hetland et al. demonstrate that at least aesthetic Bildung in action can also be researched through various participative and observational case studies. My point is that by viewing these different approaches together we can come to better appreciate what each has to offer and also develop a more thorough understanding of educational contexts in which Bildung in vocational contexts, Bildung through making and aesthetic Bildung intersect.

2.6 Scholarship from a Swedish context in relation to Bildung and VET

Bildung (Sw. bildning) is a common educational concept in Sweden, but the German combination of Bildung and vocation (Berufsbildung, Sw. yrkesbildning) is very rare and does not carry the contextual connotations it does in Germany (cf. Lange et al. eds. 2001 for the German context).⁴ Thus, the above discussion about Bildung and vocational education lacks an explicit equivalent in Swedish scholarship. This is not to say that there is no research touching on the subject matter, but it is considered in other terms or not as extensively. For instance, Gustafsson (2002) in her dissertation on crafts and knowledge development, from the perspective of a hairdresser, discusses issues of Bildung and education (Sw. bildning and utbildning) as part of her work. There are also biographical studies of craftspeople, for example Engström's (1995) dissertation about bookbinder journeyman Karl Stellan Söderström's journeys 1843-1858. Descriptions of making-processes and what they entail also exist, perhaps the most well known in Sweden being that of the carpenter Thomas Tempte (1991, 1995). But the discussion that has been going on in this field has far more to do with the character of practical

⁴ A search on Google and in Diva find the term Yrkesbildning (vocational Bildung) no later than the 1920s in Swedish writings with the one exception discussing Bildung in academic nurse training (Segesten 2011) but this almost underscores the point since a major part of it considers Bildung as something aside from learning "the craft" of nursing. There are Finnish scholars who write about Yrkesbildning similar to my use in a contemporary context (Nummela et al. 2008, Salo 2004, Volanen 2012) so the Swedish situation is not necessarily generally applicable outside the German-speaking countries.

knowledge, or the practical intellect as Tempte calls it, and I will return to it in the next chapter when discussing the practice turn in philosophy. There is also writing that parallels Bildung through making in the context of Swedish sloyd pedagogy (Hartman ed. 2014). The result is that although writing and research occasionally touches on vocational Bildung in action through making this is incidental. Given the context in which the current thesis has been written: the research school in vocational subject didactics this is not hard to understand. If I had been writing more under the general umbrella of educational studies the questions asked of Mr. B. as well as the structuring and analysis of the case might well have turned out more similar to the works mentioned. Writing in the context of the research school called my attention to didactics, the “in action” of Bildung in action and to the relationship between Bildung and vocational subject teaching, ie. what happens when we are learning a vocational subject or training for a skill that is related to matters of Bildung.

2.7 Finding related scholarship: deliberations, databases and search terms

In conducting the study, I have pursued several different avenues of inquiry in order to make myself aware of previous research in the field. One is the search for scholarly articles using the databases ERIC and EBSCO together with key-words such as Bildung, liberal education (given that Bildung often isn't a term in English-language writing), vocational education, biography, Schiller, apprenticeship, narrative, phronesis, didactics, pedagogical content knowledge and curriculum. I have conducted a similar search in DiVA for the equivalent Swedish terms, bildning, yrkesutbildning, didaktik. I have also made the same searches on Google since some results show up there that are not found through the academic search engines, especially book titles (where Amazon's internal algorithm for suggesting further reading has also helped me find some unexpected gems) and non-scholarly works. I have also used Google in addition to the Fachportal Pädagogik in order to search for research in the German language. Another is the snowball-like effect of following up on references in relevant literature that has proven successful as well as closer looks at journals in which important articles have been found or which it stands to reason might be relevant (for instance the journal *Reflective practice*). A third is the presentation of the research to other scholars and receiving their suggestions for further study. The results of these searches are found in the previous chapter, the following one, as well as in the articles (Tyson 2014, Tyson under review).

In order to delineate what to consider more closely I have tried to concentrate on research that is simultaneously concerned with Bildung or liberal education and vocational education. I have included classical texts on Bildung such as Schiller's and an overview such as Rittelmeyer's (2012a) but otherwise steered clear of

the more general discussion given that my main interest isn't in how the concept *Bildung* can enrich vocational education but rather to describe *Bildung* in vocational contexts. I have made an effort to consider research and writing that deals with much the same matters as the *Bildung* tradition but without using the concept as such, for instance the work of Corsten & Lempert (1997) on ethical development among apprentices.

I have also been restrictive in the perusal of research regarding vocational identity formation on the one hand and research concerned with learning theories such as the socio-cultural perspective on the other. In discussions of vocational identity there is, generally, some kind of psychological theory of identity involved and branching out into psychology was not the intention of the present research. I am not asking how Mr. B. came to view himself as a craftsman or what this means for his self-perception or when he first started to think of himself as a bookbinder. Not because I find these questions less interesting but because they have not featured strongly as a theme in the conversations. The closest we have come to discussing such questions has been in talking about the moral development or sense of responsibility that one or the other task engendered. This, however, need not immediately be cause for involving questions of identity. I have, to be on the safe side, conducted some quick searches combining the key-words craft and identity to see if perhaps some important work emerged.

A further focus has been on research and writing in German for two reasons: first because it is also the context for the case and as such relates more to German works than to English or Swedish, second because German research and writing is often comparatively unknown outside of the German speaking countries and therefore of special interest.

2.8 Summary

In discussing *Bildung* and vocational education, I have aimed at both a philosophical and scholarly review of those aspects that are of central relevance to the inquiry. I have broken these down into *Bildung* in action, *Bildung* in vocational contexts, *Bildung* through making and aesthetic *Bildung*. Of these, the first three are actually interconnected through the case in what could be described as vocational *Bildung* in action through making. It functions as the context in which the case is set as well as the wider analytical framework and I will be returning to it in connection with the article summaries and in the final chapter, 8. Intersecting with this is Schiller's aesthetic *Bildung*, which, in the first article has a more distinct analytical role but that also functions as a philosophical foundation for the *Bildung* concept.

3 The research context

In this chapter, I will be discussing the research context within which the thesis has been written. In other words, I will present the philosophical context as well as the research traditions that underpin the study. Philosophically this is a matter of discussing the practice turn. Regarding research traditions I will position the thesis in relation to auto/biography and the narrative inquiry tradition.

3.1 The practice turn in philosophy

The basis for my understanding of knowing and knowledge is founded in Peter Reason's and John Heron's participatory inquiry perspective (1997). There they argue that the process of coming to know something has several steps. Initially knowing is based in experience. This experience then has to be interpreted, an aesthetic process that leads to what they call presentational knowing. That experience needs interpretation has several reasons, one being that experience itself does not tell us what is important and what is irrelevant, this is given through the context or perspective we take which in turn is an act of judgment that has aesthetic qualities, thus connecting it to the perspective of Schiller. Another reason is that there is no single and fully unambiguous way to present experience and experience needs to be presented, ie. communicated somehow, in order to be shared (outside of having it together and even then that does not account for our inward experience).

Having thus interpreted or presented experience we can also proceed to develop the form of knowing commonly referred to as propositional. As a final development, Heron & Reason posit a practical form of knowing in which we not only have (or suffer) experiences but can also interact with what we encounter in a skillful or capable manner. Practical thus comes to mean something different than it does in the dichotomy of practical and theoretical knowing. Here practical can just as well be the ability to work skillfully with mathematical concepts as with clay or navigation. It does not matter if we are talking about the given natural world or something more or less man made such as computer-programming since every world, every perception, is initially given to us as an experience and only through this together with practice do we develop the ability to interact with it in an ordered or skillful manner.

As an aside, theoretical here would be the opposite of sense-experience perhaps closer to the Greek word *theoria*: contemplation or viewing with the mind's eye.

There would then be two sources for our experiencing: our senses and our mind and neither would immediately reveal its full meaning, ie. both require interpretation. This way of understanding theory means that when we would normally speak of something as being theoretical I would call it “propositional without the accompanying experiences” or something similar.

This also means that the underpinning of the study is squarely in line with at least the Aristotelian parts of the practice turn in philosophy (Janik 1996, Molander 1996, Shulman 2004, Toulmin 1990). This is most immediately relevant in how I interpret teacher knowledge, understanding it first and foremost as a matter of practical knowing in both Aristotelian senses, ie. partly as a *techne* or craft/art and partly as *phronesis* or practical wisdom (to be discussed shortly). Thus, my interest is in situational descriptions of actions and judgments and not in generalized declarative statements. Such generalizations serve little purpose in many practical fields of knowledge other than as useful shorthand for already proficient practitioners in the same way handbooks of craft professions are more useful to the already trained than they are to beginners. This is much the same point as Schön makes in *Educating the reflective practitioner* (1987) when writing that design-like educational processes require the person learning to “get” the inherent gestalt or language of the subject. This, in turn, necessitates a suspension of previously held beliefs and a willingness to immerse oneself in a way of doing that is initially opaque and, most importantly, cannot really be made transparent without some practice which, hopefully, leads to a breakthrough in which one “gets it.” Dormer (1994:65-69) writes similarly of “going native” in a body of knowledge. Teaching involves much the same questions; I presume we all know of teachers who just don’t seem to get how they need to go about working with a subject so that it becomes accessible. Schön (1987) has some very good examples of exactly how much the practice of teachers varies.

3.1.1 The practice turn in Sweden

The practice turn in philosophy has an extensive Swedish context that includes works by Gustavsson (1996, 2000), Janik (1996) and Molander (1996). At Södertörn University College there has been, since 2001, a *Centre for studies in practical knowledge*, with publications such as *Vad är praktisk kunskap?* (What is practical knowledge? Bornemark & Svenaeus, eds. 2009) and *Konst och lärande. Essäer om estetiska läroprocesser* (Art and learning. Essays on aesthetic learning processes. Burman ed. 2014). Perhaps most extensive and accessible to an audience outside Sweden, are the dialogue seminars held by Bo Göransson resulting in such publications as: *Dialogue and technology, art and knowledge* (Göransson & Florin eds. 1991), *Skill, technology and Enlightenment, on practical philosophy* (Göransson ed. 1995) and *Dialogue, skill & tacit knowledge* (Göransson et al. eds. 2006).

In the present context it is Molander’s insightful critique of Schön that has been immediately relevant. In his book *Kunskap i handling* (Knowledge in action,

1996) he includes an extensive discussion of Schön where he writes (Molander 1996:159f, my translation):

There is, in Schön's writing, a general lack of clarity when it comes to differentiating between on the one hand sustainable or valid knowledge and on the other unsustainable or invalid, sometimes it even seems as if the demarcation between better and worse is erased. [...] Another sign of the same lack of clarity is when Schön speaks of how something is taught in practice (or practicum). He then talks of learning through role models, conventions, value systems, knowledge and language. He doesn't speak of prejudice, outdated ideas, views that are not sustainable and straightforward foolishness – that presumably are *also* learned in most cases. [italics in original]

This is a valid critique that has immediate bearings on the philosophical underpinnings of the present case study. I have made the issue of learning virtues vs. vices a centerpiece of the problematic discussed in the second article (Tyson under review) where I agree with Molander's assessment of the matter, although without explicit reference to Schön since this is a problem facing all apprenticeship style educational designs. My main argument for how to deal with this can be found in the article summary (7.3.1). The first issue brought up, how to differentiate between sustainable and unsustainable knowledge is another matter. I have had many such discussions with Mr. B. regarding craft knowledge since there are a number of different techniques with which a book can be bound. Unfortunately, some of them are clearly inferior but still taught in places and it is not uncommon to encounter bookbinders that insist that their technique is perfectly adequate or even excellent. At one point, in the 60s I believe, Mr. B. got so exasperated with the incessant arguments he would get into with colleagues that he had books bound in various techniques sent to a lab for comparative testing. There, a machine opened and closed each book a few thousand times to see which one broke first and which one stayed together the longest. I would call this systematically applied practical knowledge and it goes a long way toward answering Molander's question. However, there are aspects of a practice that are not so easily tested systematically because cases are rare or the number of factors to consider are too many. This is where a practitioner needs to be clear that some uncertainty exists in the practice that perhaps will never be resolved. It may well be that some of what counts as valid knowledge turns out to be invalid with time, either because it was faulty or because circumstance changed, introduction of new tools or materials for instance. This by extension holds true also for scholarly studies of practical knowledge traditions, which includes the present one. In other words, what Molander calls attention to is the (frequent or infrequent) unwillingness among practitioners to engage in systematic analysis of their practice together with a sustained input from academic scholarship. With the latter, I mean on the one hand the input from lab analyses and on the other input from the social and human scienc-

es. My point in the second article is that this is a matter of judgment and virtue (perhaps the virtue of truthfulness?) for practitioners in all vocational fields, including research.

3.1.2 Making and craft-like, practical and practice, skill, technique and capability

At this juncture I need to make some distinctions. When I write about *Bildung* through making I mean, as previously mentioned, experiences of *Bildung* through making or creating/repairing something with one's hands. In other words, *Bildung* through crafts and similar vocational activities, not making in a more general sense of making music or making a movie. I am not excluding a wider understanding on principle here but in this context it seems prudent to be restrictive. However, the practice turn in philosophy hinges on understanding knowledge as in many ways practical or craft-like in the sense that it is particularistic, experiential, and so on. This easily creates some confusion because crafts as making activities are sometimes also contrasted with, or understood as, technical activities where a planned rational course of action is applied to a problem resulting in some intervention that solves it. As if these two ways of making represent two distinct vocational paths. This is Gadamer's issue as discussed below (3.1.2). Thus, I will sometimes be referring to craft and then this is synonymous with making. I will also write of craft-like or practical in which case I take the perspective of practical philosophy. Unfortunately some of the authors quoted use the term practical in the sense of craft or making rather than in the more metaphorical sense of practical philosophy, I have drawn attention to it at times but it is also worth bearing in mind. I will not use the term making-like. Finally, the term practice appears in the practice turn in philosophy where I take it, in the context of the thesis, to be synonymous with practical, although this is not the whole story of course. Schön too, writes of reflective practice and I have used the term as in professional practice or educational practice. In these contexts practice denotes an activity and its setting, its culture and habits in the same sense as the practice of bookbinding denotes activities of bookbinding together with a certain culture and habits developed in the course of becoming familiar with it. One might, on closer inspection, argue for multiple practices of bookbinding or education but this is hardly essential to the study at hand. What Schön means is that any such practice can be a reflective one. Since English uses the same term when indicating that something requires practice in the sense of repeated performance in order to become proficient this usage also occurs throughout the text.

When it comes to skill, technique and capability, these terms are often used indiscriminately as Winch (2012) discusses thoroughly, not least because skill is a term in English that does not have direct equivalents in many other languages. I will be using skill interchangeably with capability, in this context as learning par-

particulars of how to make things. This means that learning to be a bookbinder among other things consists of learning a number of skills, such as binding a particular kind of book, say, cloth-binding or leather-binding to simplify a bit. It is not a skill to bind books generally but a collection of interrelated ones. I take technique to be an intersecting concept where some skills are more or less techniques and some techniques can be used across similar skills such as the technique of using brushes to glue and paste in various bookbinding contexts. However, as the following discussion regarding Aristotle and the concept *techne* shows, the use of these terms can differ widely, especially when qualifying terms such as technical are attached as in “technical skill.” To be clear, I find technical knowledge straightforward if we by this mean knowledge of technical devices and processes. I find technical skill equally straightforward if it is taken to mean capabilities to work with technical devices. It is a technical skill in this sense to be able to operate a machine. But, and this is where the discussion below becomes so important in conjunction with the case, this is only the case if it qualifies as a skill which in turn I take to include elements of practice, the importance of experience and a capability that goes beyond mechanical repetition. In other words, it is hardly a skill to be able to use a coffee-machine.

3.1.3 *Techne* and *phronesis*, the Aristotelian perspective

This discussion of Aristotle’s concepts, *techne* (the art of making) and *phronesis* (practical wisdom or prudence), initially summarizes the presentation in my second article (Tyson under review). It then goes on to some wider aspects concerning the tandem mentioned in the preface where general competence and skill are said to develop together. Although Rauner & Bremer (2004:154) state that there is widespread consensus that the development of general vocational competences is domain-specific and bound to skill-training this is not always clear in practical philosophy. It might seem then that involving such deliberations is taking a philosophical detour away from already established empirical research. However, recent scholarship concerned with practical wisdom in the education of professionals (eg. Bondi et al. eds. 2011, Kinsella & Pitman eds. 2012, Sockett 2012) belies this, showing that *phronesis* can be a powerful lens through which to analyze VET. Furthermore, analyses of case narratives need a solid conceptual foundation to help prevent slippages into anecdotal reasoning (cf. 4.1).

Aristotle, in the *Nicomachean Ethics* (2009), distinguishes between three kinds of knowledge: *episteme* (knowledge of eternal principles), *phronesis* (practical wisdom or prudence) and *techne* (the art of making). In recent years, the distinction he made between the two forms of practical knowledge, *phronesis* and *techne* has found renewed interest among scholars. Much of the argument centers on the right understanding of competence and capability (eg. Winch 2012, Winch 2006a) and issues surrounding the education of professionals, particularly

teachers (eg. Dunne 1993). In short, is professional competence the rational application of rules derived from scientific study or is it rather the slow buildup of experience through participation containing extensive tacit components? The former is often made to correspond to *techne* whereas the latter tends to be equated with *phronesis*. That this is problematical philosophically and in relation to Aristotle will be discussed here.

Phronesis can be understood as the capacity to deliberate wisely on right or virtuous action. As such Aristotle calls it one of the intellectual virtues. A teacher, for example, might be virtuous in that she is very tactful (echoing van Manen's pedagogical tact, 1991). However, this virtue does not, on its own, make her capable of judging or deliberating on in what way tactfulness is to be realized in a situation. Because most situations do not suggest one single course of action exclusively but rather remain vague on what would be a virtuous act, *phronesis* is needed. Aristotle, furthermore, is careful to point out that *phronesis* is based on experience, ie. wise deliberation increases with time because it's about dealing with particulars as well as universals, practical *and* wisdom or reason.

Techne in Aristotle's sense is usually translated as art or craft although one needs to be clear that navigation and medicine are also examples of *technai* that Aristotle uses. These might be regarded as crafts in a very metaphorical sense but hardly in the literal sense of the term today. Complicating the matter is the issue that Aristotle writes at times of *techne* in such a way that one might interpret it to mean someone in possession of the knowledge of how to make something irrespective of if that person also had the capacity to actually do so. At other times he reasons in a way that supports an interpretation of *techne* more in terms of having the necessary skills (cf. Dunne 1993, for a detailed discussion). This ambiguity has also led to discussions about *techne* as a form of knowledge concerned with applying rules to practical problems, technical rationality, rather than a complex nexus of skill, knowledge and character traits. A prominent interpreter in the former sense is Gadamer who has presented us with a concise description of how technique and skill come to be understood in mechanical or technical terms (quoted in Bernstein 1988:39):

When Aristotle, in the sixth book of the *Nicomachean Ethics*, distinguishes the manner of "practical" [*phronesis*] knowledge [...] from theoretical [*episteme*] and technical [*techne*] knowledge, he expresses, in my opinion, one of the greatest truths by which the Greeks throw light upon "scientific" mystification of modern society of specialization.

[...]

In my own eyes, the great merit of Aristotle was that he anticipated the impasse of our scientific culture by his description of the structure of practical reason [*phronesis*] as distinct from theoretical knowledge [*episteme*] and technical skill [*techne*]. By philosophical arguments he refuted the claim of the professional lawmakers whose function at that time corresponded to the role of the expert in the modern scientific society. Of course, I do not mean to equate the

modern expert with the professional sophist. In his own field he is a faithful and reliable investigator, and in general he is well aware of the particularity of his methodical assumptions and realizes that the results of his investigation have a limited relevance. Nevertheless, the problem of our society is that the longing of the citizenry for orientation and normative patterns invests the expert with an exaggerated authority. Modern society expects him to provide a substitute for past moral and political orientations. Consequently, the concept of 'praxis' which was developed in the last two centuries is an awful deformation of what practice really is. In all the debates of the last century practice was understood as application of science to technical tasks [...] *It degrades practical reason to technical control.* [my italics]

Practical reason (phronesis) is contrasted here with technical control (techne) in such a way that technical skill appears to be a machine-like capability to produce an intended result. But why does it make sense to contrast a technical expert well versed in the scientific (presumably positivist) background of his or her expertise with someone with a great deal of practical reason? Perhaps there are experts without phronesis but there are surely just as well experts that also have phronesis? There is no given reason why becoming expertly capable cannot also include becoming practically wise. This contrasting of techne and phronesis seems to me be an especially pernicious line of reasoning having some basis already in the way Aristotle himself sometimes separated those who are able to make from those having the practical and theoretical insight to decide what to make and how, when, and where to make it (Sennett, 2008:22ff). Dunne, in particular, has tried to show ways in which such an instrumentalist view of techne is not the only reading of Aristotle and that there is also a more experientially oriented philosopher to be found (Dunne, 1993, p. 285, 326, 333f). The issue of what learning a skill entails tends to mirror the different ways one might read Aristotle, instrumental or experiential, and as Squires (2003:4) points out Aristotle uses techne more as in occupation and occupational knowledge than as in skill. I will return to these matters in the concluding discussion since the case explores them from an empirical viewpoint.

3.2 The auto/biographical case study tradition

When considering the case study tradition I have not aimed at covering the more general discussion about doing case studies as a form of research (cf. Flyvbjerg 2006, Larsson 2009, Thomas 2010). Among the various kinds of case studies one might undertake this one stands in the auto/biographical case study tradition in the context of educational studies (cf. Bron & West 2000 for a discussion). In the following I will be considering two aspects of this in more detail: auto/biography and narrative inquiry. I will return to case studies again from a methodological perspective in chapter 4.

Before proceeding, here is a brief definition of the key-terms. Throughout the text I am using narrative and story synonymously, with episode referring to a shorter narrative within the context of a longer one in the case study. Thus, the biography as a whole is a narrative or story here and when Mr. B. remembers more detailed, self-contained sequences of events I have called these episodes for clarity's sake. They are, however, not episodes in the sense that the whole event always occurs without a break in time. The definition of biographical narrative here is: a *connected* sequence of events in the life of a person. By being connected, they go beyond a chronology that lists a series of events without going into a deeper reflection on their connection. This holds both for the biography as a whole and for the episodes.

3.2.1 Auto/biography

One way of clarifying what auto/biographical research is concerned with is that the slash signifies the mutual dependence of individual and society in such a way that autobiographical work is also biographical work (Roth 2005:3). Such a perspective finds the 'other' also in autobiography and counsels against supposing that writing of oneself can or should be viewed as something apart from all other social and biographical research. It might seem less relevant to apply this toward a research project that although very much entangled with my own life still is predominantly concerned with the life of someone else. However, I would argue that it is precisely this that affords it importance in that it might help to uncover otherwise tacit or dismissed issues. I will get back to this momentarily.

Another way of understanding the slash between auto and biography is perhaps more intuitive where it is taken to mean some combination of autobiographical and biographical study or the way one's own autobiography influences work with other people's biographies (West 2001:33ff, and more generally Elbaz-Luwisch 2014). It is predominantly in this sense that I have understood this inquiry with an emphasis on the biography part. Thus, the main thrust of the inquiry has been the vocational education biography of Mr. Wolfgang B. and the autobiographical aspects of it, our relating of it to my own vocational learning biography, have served to assist in a more complex understanding of this. At a couple of places this relationship of my own vocational education biography with Mr. B.'s has led us to discuss matters directly from my own educational experiences, this is discussed in the case study under the heading: *conversations about my apprenticeship*.

Going back to the initial consideration of the interdependence between individual and society, such a view can help the researcher remain sensitive to how a biographical story is told. Is the narrative characterized by a focus on the experiences of the speaker to the exclusion of other people and the institutional environment in which it is placed? In such cases, one might pay more attention to how this shapes the whole story and what it leaves out. In the present case for instance, the stories that Mr. B. tells about his vocational education contain a whole array of

more or less important characters and role models. Given the focus of our conversations it is perhaps not surprising that his home environment, which included siblings and his mother, receives close to no attention although one might well argue that this is a typical (often male) omission and so this is one tacit part of the biography that might have yielded important additions to that which we discussed. An issue that is only lightly touched upon in many ways is the larger societal context in which the apprenticeship and the further education in Paris take place.

At one point Mr. B. mentions that it wasn't exactly easy to get an apprenticeship at the time. But we speak very little, for instance, about Stuttgart as it was right after WWII (their house had been completely destroyed in the bombings and half his school class from before the war had perished) or Paris in -68 during the student protests. Both of these larger historical and societal upheavals are things I have talked with him about at other times and so I am particularly aware of what we have left out.

A more critical reader might interpret the whole story as a good example of how those who are fortunate and talented take advantage of the opportunities given to them in a societal context that has just left a strongly authoritarian leadership and that still has a system of repression and hierarchy built into its way of educating. To some degree, these are issues that I would feel uncomfortable raising as a kind of suspicion in our conversations and in part it is belied by instances such as Mr. B.'s story of fighting for equal hourly wages for the men and women that he worked with later in Sweden. Even more so it does not fit well with Mr. B. spending the better part 35 years working at a school for far less than he earned as a craftsman teaching adolescents. Discussing the degree to which a certain educational formation is inclusive or exclusive at a point in time necessitates other types of data. Here it is really only possible to acknowledge these issues and the need they bring to any educational study of at least considering them. There is always the risk that we become complicit in supporting practices that do more harm than good through research that does not reflect on this. I will continue these reflections further on when discussing the ethics of this inquiry (ch. 5). The research tradition of auto/biography is located in a wider tradition, that of narrative inquiry to which I now turn to discuss some further matters in biographical research: narrative integrity and narratives as a form of knowledge.

3.2.2 Narrative inquiry: narrative integrity and narratives as a form of knowledge

Forming more of a background to these reflections on narrative inquiry are some works by Jerome Bruner (2007, 2004, 1991), Mark Freeman (2007, 2003, 1999, 1997) and Marsha Rositter (1999) that I first read many years ago during work on my Bachelor's thesis. Together these have offered insights into the potentials of narrative biographical research, ideas for how to do analysis, ways of writing about

it, possible questions to ask and most importantly, a certain ethics and approach to the matter that I have aimed for here and elsewhere. In the following I will be taking a closer look at those aspects of the narrative research tradition that are of specific importance in relation to the present inquiry. This has two sides. One connects to the biographical aspect and one to the philosophical aspect, where it expands upon some of the issues considered in the part on the practice turn. The latter of these two has been more extensively covered in my second article (Tyson under review) and I will keep that discussion brief.

As I mentioned in the preface, Mark Freeman is one of the scholars who has written extensively on matters of biography and narrative integrity. In the aforementioned article about Tolstoy's *Death of Ivan Ilych* he writes (1997:388):

Other than the condition of its being consonant with social convention and expectation – Ilych is the ‘socially constructed self’ par excellence – his life was aimless, devoid of significant purpose and devoid of any organizing principle or principles that might give it meaning. It was devoid, in short, of narrative integrity.

Lest the present argument be construed as some kind of aestheticism, let me hasten to add that *what is meant by narrative integrity is not merely harmony of proportion or beauty of form but the soundness and depth of one's ethical [...] commitments.* [my italics]

Freeman also writes that even though there are perhaps many lives that are fragmented this is not the inevitable nature of human life, biographical narratives are the result of our creative capacity, maybe not as coherent as a novel, but therefore “no less poetic in their connectedness and in the possible beauty of their form (1997:382).” In other words, it is a practical, educational matter to support developmental processes that can result in biographies exhibiting narrative integrity. This is one intersection between the narrative inquiry perspective, Schiller's aesthetic philosophy (giving the aesthetic aspects of the argument further depth) and Aristotle's ethics (“depth of one's ethical commitments” or in Aristotle's terms: the depth of one's practical wisdom).

Freeman's perspective might seem somewhat idealist but there are also studies that lend support to his reflections in the field of narrative medicine (Charon 2006) and health studies (Antonovsky 1991). Frank (1995) in *The wounded storyteller*, presents a case for variations in illness narratives as they form part of larger biographical narratives. He identifies three distinct narrative types: the restitution, chaos and quest narratives of illness. Restitution narratives are those in which the illness is not fitted with any narrative meaning but is instead an interruption in the narrative thread of life that needs to be fixed. Chaos narratives are most prevalent among people with chronic illness and pain where the narrative structure of life breaks down, finally becoming intelligible, losing temporal structures, tapering out in discontinued sentences, etc. Quest narratives are those in

which the illness receives biographical importance becoming part of what, in the present context, would be called a person's *Bildung*-journey, irrespective of the "end" ie. return to health or not, health becoming a very tricky concept at this point. These are biographical aspects of narrative integrity that I have discussed more extensively in my Master's thesis (Tyson 2011).

The philosophical perspectives that are rooted in narrative inquiry have already been introduced in the discussion of Heron & Reason's work on participatory inquiry (1997). It is their argument about presentational knowledge as a distinct form of knowledge that this section builds on.

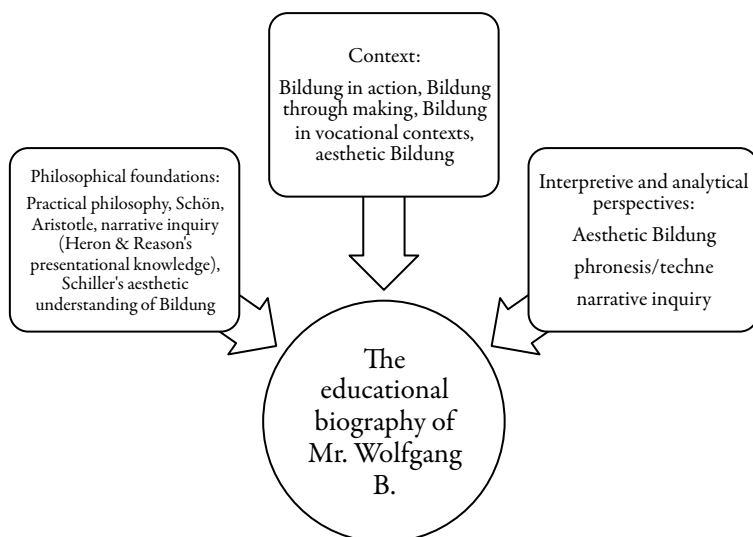
To recap the discussion in the second article briefly, because both craft-like knowledge and practical wisdom deal with particulars far more than with general principles, narratives do not just constitute a rung on the ladder towards propositional knowledge but rather are, in themselves, the articulation of this kind of knowing. There is no point in decontextualizing these narratives in analysis since it is precisely the context that gives them their meaning. As narratives they function as sources of knowledge through verisimilitude, ie. their likeness to reality or similar situations, and because they provide content to one's narrative imagination. It is this imaginative capacity that allows us to know a story about someone who acted wisely, according to our judgment, and in a different situation make use of that story as a source for our own deliberation. This is another point where Aristotle's ethics, narrative inquiry and Schiller's aesthetic philosophy intersect.

There is also the matter of oral and written narratives. Ong (1982) has written an extended reflection on the cultural consequences of going from a largely oral society to a literary one. The vocational education tradition associated with apprenticeships has until recently been largely oral, its knowledge and wisdom enshrined in numerous verses, expressions and stories passed on from teacher to student. A question one might ask here is if the many complaints by older practitioners in various vocations that newer and more text based forms of training have lost something valuable from "the good old days" (that weren't always so good) might have some merit. What perhaps gets lost in the transition from opaque, oral and tacit practices to transparent, literate and articulate practices is the storytelling part, and the knowledge that was transmitted through this.

3.3 Summary

The participatory inquiry paradigm of Heron & Reason, Schön's thoughts on reflective practice and Aristotle's concepts of *techne* and *phronesis* together make up the main context of practical philosophy in which the case study is situated. Together with the narrative inquiry perspective, they represent the study's epistemological foundation. The tradition of auto/biography has provided the framework in which the case has been researched. Going forward, Aristotle and narrative inquiry also play an important role in the interpretation and analysis of the case, especially in the second article.

The various relationships between the perspectives on Bildung developed and those of practical philosophy can be illustrated as follows:



Until now I have not made any clear distinction between processes of Bildung, contexts in which Bildung is afforded, contents of Bildung and faculties or capabilities that are developed through and for processes of Bildung. Bildung in action is a process-oriented concept as is Bildung through making. Both are open to any number of different contents and results. Bildung in vocational contexts likewise says very little about the actual contents but rather considers the context in which a process of Bildung occurs. Aesthetic Bildung complicates matters because it is at once a content of Bildung, a process of Bildung and a faculty for Bildung. This last aspect is related to Bildung being a biographical process that is, in part, a matter of narrative capacity, ie. the capacity to interpret an experience in narrative form (give meaning to it) ie. narrative integrity. Likewise, phronesis or practical wisdom is both a content of Bildung and a faculty for Bildung. I will return to these matters in chapter 7 where I deal with the research questions and the articles.

4 Method

4.1 Single case studies

In this first part on method I will be considering the ways in which this biographical case can be understood as research, ie. in what ways it can be used to conduct analysis. Thereafter I will move on to consider the process of building the case. The reasons for making it a biographical case depend on it being one aimed at *Bildung* and *Bildung* in action. The connection between *Bildung* and biography has already been discussed in chapters 2 and 3. This leaves the case study as such to discuss methodologically.

I will begin with two critiques of narrative case study research that have been dealt with also in my second article (Tyson under review) but need to be mentioned here. The first is that since narratives are so embedded in contexts and situations they tend to be inherently conservative something Ong echoes in his comparative study of oral and literary cultures (1982). However, at least in literary cultures, stories can also serve the opposite purpose and become vehicles for resistance or reinterpretation (Gallagher 2013:7f).

The other critique is that stories are merely anecdotal and not really a form of knowing. As Griffiths and Macleod write (2008:124): “anecdotes are short biographical [...] accounts of incidents, told because they are thought to be interesting or amusing or to make a debating point.” It is not easy to navigate this critique because on a fundamental level it has to do with the confusion of general and particular statements. Among practitioners, there is a way of expressing practical knowledge that has been gained through experience as if it were generally valid although further query will often turn up any number of caveats and exceptions. Furthermore, to illustrate such general statements recourse is often taken in a paradigmatic story. This amounts to shorthand for long explanations that in any case are often so riddled with tacit elements that they are exceedingly difficult to express in words (as discussed at length by Polanyi 2009 [1966]). The point is that stories, including this biographical case narrative, can always be reduced to anecdotes. What makes them vehicles for analysis and new knowledge apart from comparative generalizing analyses? To answer this I move now to discuss some writing on case study research.

To begin with there are a number of different uses that can be made of single case studies. Staffan Larsson (2009) has proposed a pluralist view of generalization in qualitative research. In his article, he first describes ideographic and negative case studies as ones in which generalization is not the aim. For ideographic studies,

such as many biographical and historical ones, because the logic of the study is rather like a puzzle where each piece fits together with others but does not say much about the character of the other pieces. For negative case studies, what might be termed “black swan studies” because their aim is to disprove a generalization by presenting a deviation from it. A good example, at least for me, of a story working like this comes from an interview with Marshall Rosenberg (2004:74) where he speaks about a study by Walter Wink of an aboriginal people, the Negrito, who held radically different views on crime and punishment than what I am accustomed to. If someone stole a hen or set someone’s hut on fire, they reasoned that this must be because the person had forgotten who she or he was. The “obvious” course of action was for the whole community to gather around that person and remind her or him of all the important and good things that they contributed, not to punish which, in that context, seemed counterproductive. What had appeared self-evident, that crime requires penance in some way suddenly appeared far less given. The stories told in the present case are hardly of the same caliber but they still call into question beliefs about what apprenticeship-like vocational education is as well as what craft-like knowledge and *Bildung* can be understood as.

A way of generalizing from cases is through context similarity where a sufficiently thick description of a case allows especially other scholars to generalize or transfer understanding to their own field. Finally, Larsson also describes the possibility of generalization through recognition of patterns. He uses as example the study and description of a hidden curriculum at a North American university that by laying bare a pattern allows one to observe the same or similar patterns elsewhere.

Bent Flyvbjerg (2006) tackles the question somewhat differently by stating that common misunderstandings about case-studies are: that theoretical knowledge is more valuable than practical knowledge, that we are not able to generalize from single cases and that cases are more suitable for generating hypotheses rather than testing them. Flyvbjerg makes the first point by arguing that all knowledge of human affairs is context dependent and that therefore theoretical rule-based knowledge is, in fact, less valuable than practical, context dependent knowledge. He writes (2006:222) that:

Concrete experiences can be achieved via continued proximity to the studied reality and via feedback from those under study. Great distance to the object of study and lack of feedback easily lead to a stultified learning process, which in research can lead to ritual academic blind alleys, where the effect and usefulness of research becomes unclear and untested. As a research method, the case study can be an effective remedy against this tendency.

With regards to biographical vocational education studies aimed at *Bildung* in action this implies that even single cases, well chosen, can contribute important contextual knowledge that can serve to correct or question more theoretically

founded ideas. This works, if not as a black swan case, then perhaps more as a grey swan in that it may not categorically falsify an assumption but rather suggest another, more rewarding one. I will ignore the fact that Larsson views falsification as a form of non-generalization whereas Flyvbjerg claims the opposite given that I think the issue is more a semantic one than one of radically different points of view.

Furthermore, Flyvbjerg makes the argument that case studies are actually more suited to test hypotheses than to generate them if one selects atypical cases or strategic samples (Flyvbjerg 2006:225f), that are rich in information, ie. their information richness is an effect of their deviation from common cases. This has been one of the guidelines in determining case-criteria (see below, 4.2.1). One might also, simultaneously or separately, work with an extreme case, one that brings a point home especially dramatically as well as critical cases, black swans in a stricter sense, and paradigmatic cases. He describes paradigmatic cases as cases that develop a metaphor or establish a school of thought for the domain that the case concerns. I would, for instance, at least think it is possible to argue that apprenticeship and crafts constitute paradigms for the European view of non-academic vocations and initial vocational education, and that case studies in this field are more likely to produce paradigmatic cases than in many other areas even though highly skilled craftwork is a marginal part of contemporary society.

I have used the case in several of the above ways. I have argued that it reveals patterns in relation to aesthetic Bildung in vocational education (Tyson 2014). I have argued that it deals with practical knowledge rather than propositional (Tyson under review) and the extent to which it can be viewed as a black or “grey” swan has been mentioned above. Depending on one’s point of view the case, considering the criteria listed below, may very well qualify as extreme in the sense that Mr. B. is unusually well educated. In the concluding discussion, I will be arguing that the case as a whole through its information richness allows us to consider the topic of Bildung and vocational education from surprising vantage points (8.2). My hope is that it will prove generalizable through context similarity although this remains to be seen since it depends on how other scholars receive it.

4.2 Selecting the case

4.2.1 Criteria for selection

I have used a set of criteria in order to ensure that the case selected was relevant in relation to the inquiry. Since Bildung is an ongoing biographical process one criterion has been age, that Mr. B. has reached “retirement” age (I place retirement in brackets since he has not exactly ceased working and learning). The second criterion has been a high degree of proficiency in the chosen field of work. For Mr. B. this has been formalized as him having three master certificates, as bookbinder,

gilder and engraver. This criterion might be considered from a different standpoint by aiming, not at high proficiency in one vocational field (crafts), but aiming instead at hybrid proficiencies. For instance, one might search for biographies of master craftspeople that also possess an academic doctorate. The point with this proficiency criterion is twofold: one is the assumption that we are more likely to find rich educational paths among people with high degrees of skill than elsewhere (although this is clearly not a certainty), the other is the combination of *Bildung* and skill (*Bildung* through making in this context) that I am after.

A third criterion has been teaching, that Mr. B. has been active for a large part of his life in teaching his vocation, both professionally by training apprentices and in a school setting giving lessons to students. This is a way of ensuring that the conversations have a good chance of containing educational reflections. To have these criteria together is especially important in an explorative study where it is initially unclear, beyond very general aims, what an empirical study on *Bildung* in action might include. Having established this it is then easier to drop one or two of the above criteria in further, more specific, studies.

4.2.2 Issues and potentials when the case has personal ties

My research data consists of conversations with Wolfgang B. and being a former apprentice as well as coworker, collaborator and close friend I have had the opportunity to engage in conversation in a way that carries several benefits as well as risks.

On the one hand, my previous knowledge and our relationship enable *us* to engage in a long and complex conversation about his education that seems hard to imagine otherwise. One aspect is the professional, that we both share the experience of learning a craft, something that, given the nature of my interest, seems necessary. Returning to Polanyi's (2009 [1966]) reasoning for a moment I can be said to have an extensive proximal world from which I attend to the narrative. This can also be formulated as a kind of participatory observation that has gone on before this research process began and that can inform it. Another aspect is the personal, where I believe someone with no previous history with Wolfgang B. could still establish a rapport as time passed. However, our long and shared experience allows me to compare what he says and how he speaks of his past today with things said, one, five or ten years ago, to the extent that my own memory serves me, thereby providing another level of understanding and questioning to his narrative. So, for example, I've found that the continuity in his narrative is fairly strong even though the sequence and exact dates of events sometimes varies and in some instances there might be some confluence of what has occurred so that separate instances are merged or one instance is split into several ones. None of this is of any central importance to what I am considering, not even in the sense of there being a more or less accurate biographical rendering since I am more concerned

with how things appear late in life in retrospect than with how they occurred, as long as there is reasonable convergence of fact and memory.

On the other hand, there are risks connected to a possible lack of critical inquiry and analysis. I would argue that the close relationship in this case works to the advantage of my research since we have long cultivated a conversational space that allows for dissent and mutual critique. This is also a matter of what kind of questions my research is informed by. Given that issues of biography and education are at the forefront, it seems to me to be mostly advantageous that we share such a wide field of experience even as the events of which he speaks to a large degree occurred before we ever met. What we *don't* share is perhaps just as important. There is almost no overlap between our educational trajectories apart from the shared vocation. He did his apprenticeship in Germany, in a mid-size firm, switching back and forth between work at the firm and work/learning at the vocational school. I did mine in Sweden, at the school where he worked and "switched" back and forth between binding books and teaching bookbinding to the students at the school as a sort of teacher-apprentice. His education was in a context where bookbinding was still part of the publishing industry whereas no such economic context remained at the time I was learning the craft. And, finally, his is a story that takes place right after WWII in a country just starting to rebuild, my background is growing up in Sweden during the 80s and 90s in a country more or less untouched by war for the past century and more.

The strongest objection I can think of to this type of research would be that there is an asymmetry of reflexivity between researcher and the subject as provider of data, especially if there were little or no interest or capacity, as is the case with subjects that have cognitive disabilities, in reflection on the part of the subject. As it stands, the matter is rather the opposite. He has taken an active interest in the papers I have written and the issues that I discuss and there has always been a strong element of self-critique and reflexivity in matters pertaining to education, I do not presume to speak more generally, in his conversations with me. This in itself could bring further problems in the shape of conscious or unconscious shifts in his stories to better correspond to the questions I am discussing. With regards to that I feel reasonably justified in thinking that having known him for such a long time before these questions were ever raised between us gives me good opportunity to gauge if that were the case. Much more decisive is the fact that the questions are hardly such that there is any particular yes/no answer that I am looking for, rather the conversations are explorative and, hopefully, he will be as surprised and interested in the kind of conceptual clarifications and developments that result as I am.

4.3 Engaging in conversation

As part of the spectrum of interviewing as research method (Taylor & Bogdan 1998:87-116) these conversations correspond to what they call "in-depth inter-

viewing” which they describe as: “nondirective, unstructured, non-standardized, and open-ended interviewing.” This has been the case with the conversations that provide data for the present study. Data collection consisted of a series of mostly one-hour long unstructured biographical conversations that stretched across almost a whole year with significant periods during which very few occurred. Most of the conversations took place in the mornings together with breakfast. During these dialogues, Wolfgang B. was asked to speak about his vocational education and the learning experiences he had during the time of his training. In considering the kind of questions asked, a *Bildung*-oriented biographical conversation is one where the questions asked are framed in words like: “looking back, what stands out as the most valuable/intense/-special/memorable etc. experiences of your education?” In focusing on issues of *Bildung* in action the above questions need to be followed up, when necessary, with questions such as “can you give me an example?” “can you describe the process?” and the like, all in order to get at how these *Bildung*-affordances were enacted.

My role as conversation partner has been to navigate between what Kvale & Brinkmann (2009) call searching for precious ore and being a fellow traveller. With these metaphors they describe two different stances: looking for something (*Bildung*) and asking questions that lead the conversation in that direction or participating in a shared journey where destination and route might be more or less unknown. On the one hand, I have had an increasingly clear idea of the aim with our conversations and given my previous history with Mr. B. a fairly good inkling of “the precious ore” that was there to be unearthed. On the other hand, the conversations have been a shared journey (exploration) in the sense that Mr. B. and I together were engaged in travelling through his educational biography. In practice this meant that I had to take care not to steer the conversation when it seemed to digress, except on occasion, that I had to “forget” what I already knew so that I didn’t drive the conversations too much and that I had to co-experience the complexity of remembering events from 60 or 50 years ago. Both stances have one thing in common: listening. But perhaps two different kinds of listening, one more intent on sniffing out something specific and one more intent on providing a space for something to become “unforgotten.” I have tried to switch between these two ways of listening.

Much of what is said regarding interviews as a method of research, especially in the life history genre (cf. Taylor & Bogdan 1998:95-101), is concerned with issues that tend to arise when sensitive matters emerge. This is not surprising since a large part of life history research is concerned with the biographies of people who in one way or other are marginalized or under duress. The latter is the case with West’s (2001) research into inner city general practitioner lives and the former in the life history research of Taylor & Bogdan that has included the life of a transsexual and of two persons deemed mentally retarded. In such circumstances potential issues of anonymity, conversations slipping into therapy, painful subjects being broached, questions of veracity regarding statements on issues of contention, etc. become important to consider. The present study has little of these ques-

tions, it deals with occurrences a long time ago, it is related to matters of successful education so there is little critique that might harm someone and the person telling his educational biography can look back upon a professional life that has been experienced as meaningful. This I would argue is a relative strength of biographical Bildung studies and perhaps a precondition when there is a prior history between the researcher and the person telling her or his story.

4.4 Transcribing, translating, editing

4.4.1 Transcribing

The conversations were recorded and then transcribed with focus on the contents of conversation and only the content-relevant paralingual utterances were included in the transcripts (mostly laughter). Thereafter I returned to Mr. B. to fill in the spaces where a line of thought breaks off or opens into areas of experience that hold potential for further conversation.

4.4.2 Translating

There are two ways in which I have worked with the transcripts, one is going directly from the transcript to a descriptive text and the other is translating the Swedish original into English and editing it for coherence to present as a quote. In its original, Swedish, a part of the transcript might look like this, where new lines imply short pauses and new paragraphs generally imply that there has been a significant pause:

W: Nånting som har följt mig och jag vet inte jag har inte tittat var det kommer ifrån, vem, schau um dich schau in dich, schau in dich schau um dich, alltså det där med att det kan ju tolkas när det gäller färdighet säkerheten i det hela moralen i det hela är ju
det är ju alltid strävan efter Fläckenlosigkeit, fläcklöshet
alltså det är
det var det som egentligen var fascinerande och när man kom ut träffa andra hur dom arbetade vad som var viktigt en
den viktigaste representanten i det som har med det att göra det var Altermatt
det var alltså en Schweizare som levde i Paris vi blev väldigt goda vänner och han sa att
arbetsmoralen moralen i produkten ska vara väl synlig och det ska vara vackert
det ska inte bara vara vackert utan det ska vara skönt och det behöver inte ha en tusendels mm exakthet men det ska vara exakt.

This then needed to be translated into English (to be clear, this and at least the more obvious editing parts described below were done simultaneously but are presented here separately in order to avoid confusion):

W: Something that has stayed with me and I don't know I haven't tried to find out where it originated, who, schau um dich schau in dich, schau in dich schau um dich, and you know it being that it can be interpreted with regards to capability the certainty or skill [säkerheten] in it all the morals in it all are It's always the striving for Fläckenlosigkeit, impeccability [literally spotlessness] you know it's it's what actually was fascinating and when one got out to meet others how they worked what was important a the most important representative in these matters was Altermatt who was a Swiss person who lived in Paris we became good friends and he said that the work ethic the ethics connected to making the product should be clearly visible and it should be beautiful, not just beautiful but fair and it doesn't have to be exact down to the last 1000th of a millimeter but does have to be exact.

Such translations often proved to be difficult owing to unfinished sentences, unclear grammar and Swedish or German colloquialisms that do not easily translate. So the verbatim conversation is only really available in Swedish. Having translated the transcription I have reworked it further in order to support readability, in effect often doing this together with the translation:

W: Something that has stayed with me and [...] I haven't tried to find out where it originated, who [said it]: Schau um dich schau in dich, schau in dich schau um dich [Ger. look about or outside of yourself look inside yourself, look inside yourself look about yourself in the sense that you look outside and find yourself there and you look inside yourself and find the world]. And you know [...] it can be interpreted with regards to capability, the certainty or skill in it, [...] the morals in it it's always the striving for Fläckenlosigkeit, impeccability [literally spotlessness].
[...]

The most important representative in these matters was Altermatt who was a Swiss [bookbinder] who lived in Paris. We became good friends and he said that the work ethic [...] connected to making the product should be clearly visible and it should be beautiful, not just beautiful but fair [Ger. Schön] and it doesn't have to be exact down to the last 1000th of a millimeter but does have to be exact.

At this point, I would take the text back to Mr. B. for some checks. In the above text especially asking what he meant in distinguishing beautiful and fair as well as to make sure that my interpretation of Schau um dich etc. is correct, perhaps ask-

ing for some further comments or more detailed examples there given the rather cryptic character of what he is trying to explain.

A large part of the case presentation does not consist of direct quotes from the conversations but of a descriptive narrative that I have constructed based on the contents of the conversations. In some parts this is a fairly straightforward presentation of a conversation and in others it is a recombination of up to four different conversations that all touched on the same subject from different perspectives. Here is a short description from the case:

Later Mr. B. was given the task of replicating an historic gilding and chose one made by one of his favorite gilders, the 18th century master Derome. A contributing reason for this was that Derome's original stamps were there at the Ecole and he was free to use them. He had to struggle with them however since they were well used already and worn down and when he showed Mondange his work, proud as a peacock for having managed to get something out of the stamps, Mondange coolly took out a compass going over the entire pattern and pointing out every imperfection. Then he asked Mr. B. why he hadn't used the replica stamps recently made and hanging there on the wall saying that they were absolutely flawless, one could take a replica and go to the Bibliotheque Nationale, take out the original book and fit it in the pattern perfectly. This happened after Mr. B. had worked for about a month and when he almost exploded in Mondange's office Mondange calmly asked why he didn't pose more questions before beginning his work, why he didn't stop and take some time to reflect on the process before him rather than spring into action immediately.

This description is based on the following conversation, bear in mind that I have translated the conversation into English here to facilitate reading, in constructing the case I moved immediately from Swedish transcript to English description:

W: I took the best, I thought that's the original I didn't see, literally [didn't see], I saw the conditions of the gilding-stamps but I don't know, if you think about it, you have something in your hand that is, that you admire so much, you have something in your hand that is so valuable, this is the original, Derome himself has used these stamps and they're in a sorry state because they've been used for 300 years and you have them in your hand and you work with them and you're happy and you make a lousy piece of work in proportion to what one would require or that he wanted today and then he lets me work with it and afterwards he says to me: there are modern replicas that are exact, we've measured them, you can take one of them [to work with] and that came after and I wasn't particularly happy and then he says they are so exact you can go to Nationale and I did it, I was so frustrated over the time I had spent [...] what do you call it? You admire something and it is almost as if the complexity of the feeling I can't describe all the things that come into play you do it [the work] and then afterwards there's someone who says: yes so they are the originals, so what? We have engraved replicas that are so exact that you can go

to Nationale and bring the corner stamp and you can put it in Derome's original binding and it fits perfectly and you, and that's the sensibility that you develop through this kind of repeated practice, it's that you finally can say, ah, I'm home. And what is what is that then? And then you take a deep breath and then you do it again, better, more correct, and you do it and...

Mondange [wanted me to understand] be hasty but in a calm way, get a grip, think before you start running you know...

And somewhat earlier in the conversation as a general characterization of Mondange:

W: And it was incredibly irritating sometimes it was so irritating for me that I went home livid really and then I worked and came home and told Roche: shut up, leave me alone, and he said: Mondange? -OUI...

Note the reference to a month, which is not specified in our conversations but was added after I went back to ask Mr. B. about how long it took. Also note the reference to Derome. When it comes to names of people or firms as well as place names I have frequently had to do some additional checks to get the spelling right and to find out a bit more for the sake of coherence. With one exception this consists of adding dates, other numbers, short explanatory notes and the like. The exception is towards the end of the case where Mr. B. discusses Cusanus and where I found *Idiota de Mente* in order to consider the issue more extensively.

4.4.3 Editing

When it comes to the presentation of data there is first the issue of choosing what to include in the case presentation, the total transcript runs for more than 80 pages and much of it is digressions or touches on questions that are not immediately related to Mr. B.'s vocational education. As a consequence I have excluded about 30 – 40% of our conversations. Most of this is to do with examples from his later work at the L-school, not a vocational education institution but one where he taught upper secondary students as well as a form of curative or supportive education. Other parts that have been left out are technical discussions between us regarding matters of bookbinding and details that are more concerned with work and social life, for instance, there are some long passages that discuss his educational experiences on an uncle's farm. I have also refrained from going into his more personal life and the reader needs to be aware of this because it might seem as if I am presenting his life story as it relates to his education, which in many ways I am not.

A good example occurs in the conversation about the Ecole Estienne where Mr. B. talks about his time in Paris. During these years, he was in his second marriage and his wife was also a bookbinder who trained with him there. In other

contexts we have had reasons to talk about their shared occupational life, especially with regard to a film they were commissioned to make on the basis of book-binding that was rejected by the Scandinavian master's association because there were female hands at work in it. So not only is there a considerable lack of information about Mr. B.'s working life in what follows, there is even less about more personal experiences. This is clearly a problem in some ways since one's personal life cannot be cleanly separated from one's education etc. and one might at least consider if it expresses a male point of view in the sense that it so easily blends out personal issues. On the other hand I would be perfectly able to tell my vocational education biography without ever hinting at my skin color and no one would be the wiser if my pseudonym was say, Eric. Which isn't the same as saying it hasn't been an issue biographically for me just not in connection with VET. Again, my own male point of view might be far more important here than any question of ethnicity which, incidentally, did play a role for Mr. B. in France where they called him *Le Viking* (the Viking), rather than the Teuton or something similar. He speaks at times about the complicatedness of being at once from a Germany still freshly remembered as the belligerent in two world wars and from a more highly regarded Sweden.

When it comes to the presentation of our conversations in the case chapter, I have had Freeman's discussion in mind when he writes (more about this below, 5.3) that (2007:141f):

It means [...] that a portion of narrative inquiry ought to be directed toward writing about human lives in such a way that their own inherent poetry can be made visible.

One way of thinking is that the flow and inherent poetry of a conversation would gain from a literary reworking to get at the meaning. This means eliminating most of what is common in narrative studies such as marking where words are left out, inserting explanations and additions in square brackets and a more or less frequent use of paralingual annotations, i.e. marking out sighs, laughter, etc. Another, which I have followed, is that the conversations themselves carry an inherent poetry that is lost with too much translation. Our conversations have needed some editing in order to be legible but beyond that I have left them as they were. I have done this because staying close to what was said and how, the particular poetry of Mr. B.'s remembering emerges. My aim has been to let the way in which our conversations approached matters of *Bildung* remain because *Bildung* is not a finished narrative but an ongoing process in which the articulation is also relevant. This is not the same as making the cadence of our conversations the subject of further analysis although it does leave that potential open. Finally, one might not agree with the above reasoning but there is also the ethical matter of seeing to it that one's research remain as transparent as possible. By providing an extended presentation of how I have moved from the recordings through transcription and editing

to the final case presentation together with some longer dialogues in the case (as well as a fairly extensive case as such) the transparency of my interpretations is increased. If this comes at the cost of some readability, I am willing to live with that.

To be clear about the different aspects of the transcripts that have been left out, here are examples of all the types mentioned above: Mr. B.'s later work at the L-school, parts of the conversations that become technical, ie. where we talk about techniques of bookbinding etc. or that relate biographical matters outside of vocational education, such as childhood and working life. Finally parts where the conversation turn to more general statements or where Mr. B. recounts episodes that are in part relevant to the case but that I have chosen to more or less exclude from the finished presentation.

4.4.3.1 Digressions

W: Well it shows, it shows...

We've talked about it before, for example it was never a question that everyone participated, that there was an intense associative life in the community, that one was part of the music association, that one

Well I can only it's also a story but it's an

It's far worse than the flag it's

Social life in a neighborhood was many times centered round an innkeeper that went completely without saying, the parents went there regularly one's friends gathered there regularly and then the following happened and I was there, the nicest innkeeper became ill, he sells the place and as an adolescent you follow you hear that yeah well it wasn't 100% anymore when he became sick etc. and it's probably good, etc. and there's a social considerateness and it doesn't matter if it was an innkeeper or some retailer or someone with a store, some baker or butcher or something, it was just there and still is today.

He sells and the new innkeeper is really one might say incapable of understanding what he's bought he's totally uninterested, I've thought many many times about how pitilessly we took revenge on his incapability.

The first thing he did was that he closed the bowling alleys, he closed them for us youngsters and when something like that is cut, for me it was surprising that he didn't understand that the 15 guys who were made homeless precisely because it was a place for you to breathe so he got himself some enemies and not just any enemies but he didn't just do this to us youngsters he did it to the older people too, he wanted to modernize the restaurant and it became fairly large I don't remember how many seats but it was large he renovated and he should have known when he got a shipment of cement bags and we, a Saturday night pissed off we took the bags and separated them, carried them, we looked like shit afterwards, and we placed them in a row upright and cut their bottoms so that it looked like Neckarstrasse had cement bags along the sidewalk on Sunday morning and he should have thought to himself what am I doing really?

And then he closed during that time of the year when you just don't close for vacation, he closed then to take a holiday and that's when some of the older people got the brass orchestra from the Fire brigade and took down his sign and carried it under large fanfare down to the Neckar river and buried it there.

You see, and he still didn't get it...

4.4.3.2 Technical conversations (talking about an old gilding-stamp Mr. B. had)

W: And it's the heat the capacity to retain and give heat away evenly in one of those gilding-stamps, that's something you decide, it has looked exactly like the others and you can see what's left over here and here and then that I've filed it down further to try and make it work but if you look at its proportions then you can see that it really is too slender to hold the heat.

The gift of Mondange for me was always work with a nursery rhyme when you stick the stamp in a gas-flame to heat it, and look at the flame, its proportions that it's so and so tall you always work in a rhythm, the rhythm saves you from doing unnecessary stuff, it's the repetition, you can count one two three four five or you can say a nursery rhyme or something, make up your own mind and then do it so that you always work with that rhythm and then it becomes automatic that you can learn, oh this nursery rhyme has a completely different rhythm, it is worse in its rhythm than another and then you also have to think about all the other things, the differences in color is marked, and then it's the color that when you've polished a stamp it gives the shine back to the gilding and all these things in engraving you come to understand and that because there is Beryllium in it the stamp is somewhat brittle compared to the softer one but on the other hand its edges remain sharp even if you work with it a very long time.

4.4.3.3 Childhood biography

W: Ooh, yes,

I don't know how I came to be there, it was either through a friend or my parents or, in any case it was a youth-camp in Lorch and we lived in the Cloister and immediately groups formed.

R: Was this both boys and girls?

W: No, just boys, and there was an unwritten law that we could pull pranks on each other, I think the whole thing lasted about a week, I'm not even sure so much happened it could have been two but anyway we were there and Kurtz was there to cast a bell with us and we cast a church bell.

R: How many were you?

W: I would guess about 100
Circa...

R: So when you say about 100 that means you were mostly watching the process?

W: No we all had assignments that were minutely divided that's part of what I thought about later afterwards the organization was so self evident you do this and this etc. and anyway we stole the flag from the group we hated the most and one of us climbed up the lightning conductor on the church tower and stuck it there at the top, lucky for us we were so light weight, later there was a stern sermon that brought to our attention that the higher you get on a lightning conductor the less safe it is and if you fall from that height... and we were found out.

And we thought my God what's the punishment for this going to be? And to remind us that you don't do those kinds of things and endanger your own safety we did there was a cooperation with the cemetery by the church and he said: not as punishment but as a help for future consideration for yourselves and others.

Man soll nicht nur an sich selbst denken wenn man sich in fahr begibt sonder auch daran denken das der der seine ehre verloren hat in grössere gefahr schwebt um die ehre wieder herzustellen. [one should not just consider oneself when going into danger but also think about that the person who has lost his honor is in even greater danger in order to regain it]

And we had to do a complete inventory of the crypt and afterwards give a lecture to the others.

R: You had to go through all the contents?

W: Everything, history... concluding the lecture you have to be able to answer all questions posed by the audience and that was work! And luckily there are always people that if you happen to stumble upon them you're really lucky and there was this older gentleman who passed us by as we were.

And he asked: boys what are you doing? and we told him and he laughed and then he helped us.

He said: hey boys what are you doing, tell me, not: what the hell do you think you're doing? And then: have you thought about the gravestone? How it's been carved? Have you considered how the mossy parts highlight the writing even better than if it were incorrectly carved? And that's the kind of encounters that... "Can you read what it says there?" and you get all this help I can't remember it all anymore but there were sentences and proverbs.

4.4.3.4 Vocational biography

W: One of the things that surprised me the most was when I got back from Sweden [after 18 months] I came home to Werastrasse in the evening and the

next morning at six thirty there stood my old master by my bed and said: get up you damn lazy-bones.

And he says to me and this is really not possible when you're journeyman things should change and your status automatically becomes You [Sie] rather than you [du] and that whole complexity who in the company will ask you to become you with each other before it was all: Herr Deliz, Herr Steinbrecht, etc. and you have your journeyman certificate and they all come to you and say now we're inter pares.

And there he is saying you [du] to me still and I [laughs] say: Herrmann.

I'll never forget my mother she said what kind of horrible behavior is that towards your master and I answered I don't care I haven't had any sleep and I'm really really tired.

And he said: sleep is something you can do when you're dead get up we've got work to do and then he dragged me to the workshop.

R: But you weren't actually working there by then?

W: No he heard that I was coming back and, looking back, perhaps I was unfair to him many times when I thought he was an asshole.

4.4.3.5 General statements

R: Regarding Begabtenförderung, did it prevent you from going to the evening courses etc.?

W: You know, Ruhi, the encouragement, it was like when the Waldorf school is at its best you know the potential that you have, that Steiner [Rudolf Steiner, founder of Waldorf education] brought up at an early date it really has to do with the will to be socially thoughtful or considerate. My father told me of apprenticeships that were exemplary and there has always been a Begabtenförderung, you can call it a master's association that has tried to include coworkers who are the top of their capacity and understanding egoistically, but where that egoism hasn't been allowed to concern itself with itself only but has also become a social asset or resource.

4.4.3.6 Partly relevant episodes

W: When I came to Paris, I was

I actually have the gilding-stamp, or the spike, left that I got from Roche's father Flety after 14 days. He was the spider at the center of the web in the world of books there in the Master's association and I spoke with him early, you know it was such luck and joy for me to meet Roche and Maurice Flety and I told him about the dreams I had starting with meeting Altermatt in Switzerland and Flety thought I was nuts: you came here to learn gilding, what for, you're a bookbinder so why learn gilding? I said: I have to be able to gild my

own books... But that's the gilders job! I said: but I don't have one in Stockholm I have to do it myself.

4.5 Analyzing the transcripts, building the case

The structuring of the conversations has been undertaken in order to allow for a paradigmatic analysis in which common themes are identified (Smeyers & Verhesschen 2001, not to be confused with the previously mentioned paradigmatic case study). This began as a process of rather unstructured reading in an attempt to get a better sense of what Mr. B. speaks about without having any particular conceptual lenses. This does not mean that there was no pre-judgment involved but rather that I did not approach our conversations with a fully formed conceptual tool. This is with the exception of *Bildung*, which, I would argue, was something that informed our conversations almost from the start although in different ways given the long period during which they were recorded. In fact, throughout the first conversations one can detect an obvious tension between my asking about general *Bildung* in the apprenticeship and a clearer concept of *Bildung* in vocational contexts that only emerged as I realized that my questions led the conversation away from issues of vocational education.

My initial reason for looking more closely at questions of aesthetics and ethics was guided by there being a multitude of instances in which Mr. B. mentioned beauty or excellence in the sense of virtue or character and both are important in the conceptual field of *Bildung*. This, in turn, prompted a more systematic reading of the conversations where every instance that might reasonably be interpreted as having to do with aesthetic matters or matters of virtue was highlighted.

In the case of aesthetics, I was already familiar with Schiller's work and given his importance to the classical German concept of *Bildung* it seemed like a good choice to use his aesthetic concept in the analysis of Mr. B.'s recollections. Had I been working more from the tradition of liberal education I would perhaps have chosen Dewey's *Art as experience*. This also illuminated aspects of his vocational education with regards to its structure that would perhaps otherwise have been deemed outside of what one would consider aesthetic.

In the case of vocational excellence the process of finding what I judged were the appropriate analytical tools took longer. They wound up being Aristotle's concept of *phronesis* or practical wisdom together with some aspects of narrative inquiry. Regarding Aristotle, this had to do with a wider discussion about the contextuality of vocational knowing where some different perspectives currently have been proposed (cf. Dunne 1993, Hinchliffe 2002, Lum 2003, Winch 2012). Of these, Aristotle's distinction between *techne* (the art of making) and *phronesis* is fairly common. This is testified to in that those writing on the issue from other standpoints (Hinchliffe 2002, Lum 2003) at least spends some time arguing why we should not make use of Aristotle whereas the reverse is not the case. By making *phronesis* the analytical lens, rereading our conversations became an issue of find-

ing those parts that expressed deliberation about matters of excellence. The narrative character of these instances together with the discovery that there is a discussion in connection with phronesis within the field of narrative inquiry prompted the step of considering these narratives of deliberation as stories.

4.6 Methodological limitations

A vocational education biography case study comes with some analytical limitations. A large part of this is lack of social, historical, cultural and economic contextualization. Since the type of analysis I will be making does not rest on this but is geared towards educational processes this is not a decisive limitation *in this context* however, the inclusion of more statistical and historical data might well have allowed for both deeper and more differentiated analysis in some respects. If this represents a possible but not certain limitation there are at least two ways in which the study has some clear limits. First, in a lack on knowledge about the specific local educational contexts. By this I mean that I know very little beyond what Mr. B. has told me about the apprenticeship context in Stuttgart in the early 50s or about the workings of the Ecole Estienne in Paris in the 60s. At the very least knowledge of these contexts would allow for a richer case description and more comparisons, which in turn would deepen the reflections and analyses. Second, as a single case all the potentials of a comparative analysis are removed. This has been a matter of making the most of my personal connection to Mr. B., which has made it easy to conduct a time intensive explorative study. I have thus judged that the individual case was more important at this juncture than having several cases that were all less extensive. I have pointed out the ways in which multiple cases open new paths of analysis in the articles and, for now, left it at that.

5 Ethical issues and axiology

5.1 Formal ethical considerations

The Swedish Research Council (Gustafsson et al. 2011) has formulated four ethical requirements: that the subjects of a study be informed of its purpose and their part in it as well as their right to withdraw at any time; that the subjects of a study have agreed to participate; that the subjects of a study are treated with confidentiality and that data are only used for research purposes. Furthermore, Linden West (2001) in his study *Doctors on the Edge; general practitioners, health and learning in the inner-city* has raised some ethical questions on the topic of auto/biographical research. His study was on General Practitioners in the inner city where interviews were made with active professionals in a relatively small context making anonymity difficult to maintain, and sometimes very sensitive issues were raised. Compared to this, the study I am conducting is with a more or less retired practitioner, deals with rather less sensitive issues and where most of the people that were involved in his education once are long since passed. Thus, I consider both individual and group-level ethical problems to be negligible with regard to anonymity. This is further supported by my initial conversation with Mr. B. about agreeing to participate and confidentiality. He expressed no hesitation about possibly being identified even though it is hardly impossible given the unusual character of his biography. We have returned to the issue a few times since then with the same result.

Mr. B. and I reached an agreement that the conversations are to be regarded as his narrative and I have returned the texts to him for approval before publication. I have made it very clear that anything he would wish remained unpublished upon further consideration is at his discretion and if the data were to be used for any other purpose than for research it would be in the literary publication of Mr. B.'s biography subject to his full approval.

5.2 The ethics of restorative narrative research

Ruthellen Josselson (2004) writes that there are clear differences in interests, methods and ethics between hermeneutics that have a demystifying (or suspicious) perspective and hermeneutics with a restorative (or faithful) interest. Both are equally valid depending on what one's aim is and this in turn will influence the other steps one takes in the systematic reflection on what issues and impacts one's

work might have. To put the problem distinctly: the hermeneutics of demystification risk causing unnecessary pain and suffering to those thereby exposed as well as of objectifying the people participating in the research. The hermeneutics of restoration risk covering up dissent, difference and marginalization within narratives and also contains an inherent tendency to support the status quo. Clearly there are certain issues that are better dealt with by uncovering or exposing something hidden, especially in circumstances with strong imbalances of power or in psychology, at least in the classical psychoanalytical perspective. But such cases also bring with them a load of ethical ramifications with regards to the anonymity of the participants and the actual possibility for change brought about by the research.

None of this presupposes that a research project cannot have more than one purpose or that different hermeneutical perspectives could inform different parts of it. Some areas of research, to take an example, have simply never been described before and require some kind of restorative work before one can even embark on a more critical project. When it comes to the purposes of this case study the main focus is constructing a biographical narrative. In this sense, the hermeneutics of restoration are central to the research I am doing up until the analysis begins. At that point elements of demystification need to be employed and in a sense become employed by the narrative itself since the surfacing of a buried educational narrative is often enough to call into question aspects of established practice from which it deviates. One man's restoration might be the other man's demystification.

A fundamental epistemological aspect of any research, as discussed previously, is that we need to create a narrative of experience in order to structure it (cf. Heron & Reason 1997 and ch. 3.1). To even attempt to communicate an experience of something, even if the contents of that communication are entirely critical, is in itself an act of restoration or faith, ie. our critical capacity is always fundamentally grounded in a trust that our narratives share something substantial with experience. With this, perhaps too brief a remark, I wish to emphasize that restorative hermeneutics in a narrative or aesthetic sense underlie even our most critical scientific endeavors in a tacit form, the way Polanyi differentiates between distal and proximal knowing and then goes on to talk about our indwelling in that which is proximal, ie. so close to us that it becomes tacit or unspoken (Polanyi 2009 [1966]). Narrowing the view to restorative narrative case study research, Josselson (2004:6) writes that the fundamental aim is to "try to understand the Other as they understand themselves." She immediately goes on to quote Ricoeur who writes, "the imprint of this faith is a care or concern for the object and a wish to describe and not to reduce it." In describing the work of restorative hermeneutics she writes (2004:6):

Narratives of interest from this point of view tend to take the form of a *Bildungsroman* in which the narrator accounts for a process of self-formation and

self-development through experiences of learning and enlightenment and/or through conflict and challenge. As researchers our effort is to unearth the meanings inherent in the narratives we obtain, remain faithful to the (multiple and layered) intentions of the narrator (Tappan 1997) rather than trying to construct them differently.

Following this, I have tried to be faithful to the narratives of Mr. B. in my analyses. Here I am also engaging with what Mark Freeman writes (2007:141f):

It means [...] that a portion of narrative inquiry ought to be directed toward writing about human lives in such a way that their own inherent poetry can be made visible.

I have referred in this context to the idea of "poetic science," a form of critical narrative inquiry that would lie at the intersection of art and science and that would support not only the *epistemological* aim of increasing knowledge and understanding of the human realm but also the *ethical* aim of increasing sympathy and compassion [...]. Perhaps in the name of scientific legitimacy there remains a tendency in narrative inquiry to minimize the artful dimension and to maximize the dimension of scientificity, thereby leaving the aforementioned "deep human stuff" to poets and philosophers. But the social scientist, broadly conceived and imagined, can and should enter into the endeavor and, when the situation calls for it, do so as imaginatively and artfully as possible through creating work that not only purveys knowledge of this or that area but that uses writing, that uses *form*, in a way that truly serves the content, and the *people*, in question. This is a challenge – a poetic challenge – for autobiography and narrative inquiry alike, and it is well worth pursuing. [*italics in original*]

The people served here in this sense, beyond Mr. B., are those engaged in vocational education broadly speaking. However, the issue raised by Freeman needs to be considered in connection with another risk: romanticizing the past. Avoiding an overly romantic view of crafts, a view deeply embedded in our culture by now (cf. Mishler 1999:7), depends on the context one places the narratives in and the analysis one engages in which depends on the questions one has. I have not set out to argue the relative merits of being a craftsman but to explore Bildung-related experiences in vocational education. If I were asking questions about the more general educational situation for semi-industrial workers in southern Germany post WWII the experiences of one very skilled craftsman are hardly representative and much of lost opportunity, exclusion, negative workshop-experiences, etc. would be obscured.

Romanticizing a case such as this is something that arises mainly when it is taken for an indication of how crafts vocational education is experienced *in general* rather than for the outlier it is. That Wolfgang B.'s and my own vocational educations have been such positive parts of our biographies hardly implies that this is some kind of norm. It does imply that these experiences are something interesting

and worthwhile to examine in their own right. It depends also on what kind of critical research one is pursuing. Avoiding a romantic picture is easier to do in studying negative cases rather than positive ones and positive cases run the risk of reinforcing dominant narratives. On principle, approaching the issue from the inside should be just as valid. In effect by presenting especially worthwhile cases an attempt can be made to change “the system” from within acknowledging that reforming it is possible rather than calling for revolution or drastic change. Clearly, this runs the risk of cooptation just as negative critique runs the risk of comfortably criticizing without providing any actual thoughts for concrete change.

5.3 Axiology

In the general context of ethics in research it is also important to consider the values that undergird a study and to reflect somewhat on the risks and problems connected with them. In the talk about Bildung and vocational education there is a value judgment that needs to be acknowledged. It takes it as given that whatever other aims education serves it *should* also serve the aim of human flourishing (cf. Biesta 2014, Campbell 2013, Curren 2008, Heron & Reason 1997, Hinchliffe 2004, Laszlo et al. 2012) and I understand Bildung as shorthand for many of the various aspects inherent in the concept flourishing. This is the most fundamental reason for why pursuing such an inquiry has value and meaning, ie. we need to ask questions about Bildung in vocational education and training because it is important that VET contribute to human flourishing. It is, of course, just as important that VET contribute to human expertise and competence (and in many ways this in itself is a contribution to flourishing), and such studies abound, but VET more than general education exists in a tension between different metaphors: that of the human individual as a person and that of her as a resource. I am not claiming that all Human Resources departments share the latter view because of their name. Rather, I am trying to describe opposite ways of understanding work: on the one hand work forms a significant part in the biography of most human beings and on the other hand work, and the labor that performs it, is viewed as a piece in the larger machine-like structure of a company. This is not the same as having different logics or rationalities such as those of production and education; I find these largely compatible in many circumstances. It is an issue of differences in the view of what a human being is or can be in relation to work. Within educational institutions it is fairly common that teachers take some kind of Bildung-view in relation to the students even if opinions diverge sharply on what this means in practice. VET through its proximity to, or as part of, a world of work and production is much more intensely subjected to the tension I have just described.

Bildung as shorthand for aspects of human flourishing is, however, a very imprecise concept in several ways:

1. First, getting a driver's license, to take an example, could contribute greatly to a person's flourishing, by increasing the sense of autonomy and achievement, even though the training itself placed no emphasis on *Bildung* whatsoever. There are questions also relating to the social situation of a person receiving education where just being able to earn one's living and have some freedom from debt can have a liberating effect on the formation of someone's biography.
2. Second, it is not always easy to tell the difference between a human resources discourse of lifelong learning, social skills, employability, personal initiative, etc. and what amount to much the same concepts in the philosophy of *Bildung*. There is a need here for a critical view of the context in which these perspectives unfold, not least since there exists a well-argued critique of *Bildung* as a non-political educational philosophy that has contributed to, or at least stood by, during the growth of totalitarian regimes (most notably National Socialism, cf. Thompson 2006, Rittelmeier 2012a).
3. Third, perspectives that emphasize unusually positive experiences of education need to be sensitive to the risks involved, especially the risk of masking, or remaining ignorant of, power-related issues that have to do with gender, ethnicity, class or disabilities.

There are few clear answers to these issues in the text, partly because they are not subject to a solution but rather require a constant awareness, some might say vigilance, especially in relation to one's own judgments, expectations and beliefs.

6 The case

6.1 Introduction

This presentation rests on about 20 hours of recorded conversation mostly in the mornings together with breakfast in Mr. Wolfgang B.'s workshop. I have structured the presentation so that there is a brief biographical sketch to begin with. After this introduction, there are four major chapters: childhood, apprenticeship, work in Sweden and the Ecole Estienne in Paris. Added to these are a couple of chapters that relate to my own apprenticeship with Mr. B. Throughout I have left names of people now deceased in full and for those possibly still living or where the matter might be deemed sensitive, I have left the family name out or omitted the name entirely.

The focus of the case presentation has been twofold: one is to provide a narrative of Mr. B.'s vocational education biography and to have it reasonably coherent. The second has been to attend to those instances where Mr. B. speaks more in depth about the enactment of educational measures, ie. where he comes to speak of how a teacher did something, the details of an educational process and the like.

Finally, since the case as presented here is fairly long I have at times commented on, called attention to, and discussed some matters related to Bildung in action, Bildung through making, etc. especially in places where there are longer quotations from our conversations.

6.2 Biographical sketch

Mr. Wolfgang B. was born in Stuttgart in the southwestern part of Germany in 1935, the youngest of three siblings. His father, Wilhelm, worked at the Technische Werke Stuttgart or TWS (technical works) and his mother, Maria, previously ran a large kitchen or worked as a chef at a restaurant before becoming a housewife. As can be reckoned, his childhood was interrupted by WWII during which he was, for long stretches, evacuated to an uncle's farm. About 50% of his classmates didn't survive and he tells vivid stories of experiencing some of the bombings of Stuttgart, once reaching the shelter together with his sister as the last people to be let in before it closed leaving all other late comers to be victims of the attack. His father was a fierce anti-Nazi who, as far as Mr. B. can surmise, escaped incarceration and death mostly because his knowledge was too valuable to the war-effort. Thus, after the war, Mr. B.'s father was one of the people entrusted

with writing what they colloquially called Persil-certifications or testimonials (Persil being a laundry detergent, in the context understood to wash away the “brown stains” on someone), which would certify that a person was not a full collaborator.

After the war, when schools began reopening, Mr. B. together with everyone else took an exam to determine what grade to enter and after some years he completed his Abitur at age 17. He remembers an episode from his time in school that was characteristic of his father. In their classroom they had a band of gilded calligraphy that ran on the wall just below the ceiling where it said: “School is where one learns a science or art through rules.” His father bribed the janitor to get in one night with a friend who was a gilder and together they erased the previous text and in its place they wrote: “School is where one, as our Kings did, comes to social appreciation and to art through a craft.” Apparently, it took weeks before any of the teachers realized that something was amiss.

After school, his initial thought was to study biochemistry but his father told him first to “learn an honest profession” which led him to a bookbinder’s apprenticeship. It is worth keeping in mind that apprenticeships at that time were not easy to come by and Mr. B. was taken up as one at a firm perhaps in part owing to his father’s personal relationship with the owner of the bookbindery. It was also not overly common for someone having finished their Abitur to become an apprentice, most students with this degree would go on to university studies.

From 1952 to 1955 Mr. B. was a bookbinder’s apprentice. After finishing the apprenticeship and becoming a journeyman Mr. B. decided to go to Sweden for 18 months to do some of his journeyman training there in preparation for taking a master exam. Doing part of the training in a foreign country counted twice with regard to time so 18 months would be equivalent to three years, his aim at that time being to become the youngest master bookbinder ever in Germany. However, as he tells the story, he arrived in Stockholm 10.30 pm on October the 15th 1956, went up to the top of the Katarina elevator, which has an iconic view of Stockholm city, and decided on the spot that he wanted to live there.

After completing his 18 months he returned for a mandatory 3 months to Germany before moving to Stockholm where he was hired by a large industrial bookbinding firm as head of their finishing department. Here he worked for about four years until he decided to go back to his hand binding, got a studio-workshop and began attending courses at the Ecole Estienne in Paris. The Ecole at that time was considered the world’s foremost college for learning the graphic arts and it was there that he, in the span from approximately 1963 to 1968 or 69, earned his master certificates as bookbinder, gilder and engraver. He did this, traveling back and forth between Stockholm and Paris, spending very roughly about seven months of each year in Paris and working in Stockholm during the other parts.

After finishing at the Ecole he spent about seven years as a successful craftsman in his workshop before, in 1975, taking up a part-time job as teacher of bookbinding at the L-school, a Waldorf (Steiner) school in a suburb of Stockholm. This

grew into full time work over the course of the late 70s and until 2009 that is what he kept on doing and where I met him as a student in the early 90s. After retiring in 2009 he has returned to his workshop and taken on some new apprentices.

His life after the Ecole has not been included in the case (other than when we speak about my apprenticeship with him) since it doesn't immediately concern his vocational education as craftsman. It does, however, suggest a reason for his articulate thoughts on matters of education.

6.3 Childhood

The vocational education that Mr. B. received was not limited to his apprenticeship and further training. His father, uncles and others introduced elements of this earlier, especially if one considers forms of pre-vocational education in which someone is made part of a field of vocational practice. One example of the latter is when the apothecary in Giengen an der Brenz asked Mr. B. to help in the gathering of medicinal herbs. Another is the story Mr. B. told about his uncle Otto who took him and some of his friends to a thermal power station where they were taught its various functions, steam flow in connection with temperature and the like.

To get an idea of the kind of context in which he grew up after WWII his four best friends: Kalle, Martin, Siegfried and Dieter had fathers in the following professions respectively (more or less, Mr. B. didn't exactly ask for their formal qualifications). Civil engineer, technical foreman (Werkmeister) at Blohm und Foss (a company working in shipbuilding, turbine construction and other things), baker, and something to do with metal, perhaps casting. The mothers were not always as prominent in vocational contexts, Mr. B. remembers Kalle's mother as active in a chamber orchestra, Martin's mother as engaged in church work perhaps as some form of clerk, Siegfried's mother was also part of the bakery and Dieter's mother worked in a kindergarden. All of these provided context for his activities, for instance, Kalle's father owned and managed a group of workshops focused on casting models for Audi, Mercedes, Horch, MSU, etc. and they were always welcome to visit there and make things, he was also regularly part of the life of the bakery, and so on.

This then is one aspect of his childhood and adolescence: that he was surrounded by fairly well educated, highly skilled, professionals in mostly manually or craft oriented vocations and that they all contributed what relevant knowing they had to him and his friends. He also showed an interest in engaging with these opportunities.

Another aspect that relates to this from his childhood is inextricably tied to the years after WWII when Stuttgart was mostly ruins, about 80% of the city was destroyed he says. They would spend hours cleaning bricks from mortar to make them reusable, gathering copper and other metals from ruins as scrap, or recycling the metal in shell-casings from ammunition that could be found everywhere and

that had malfunctioned. They were asked to calculate volumes of rubble and how long it would take to move, to measure a cleared site in preparation for new buildings and just generally to assist in any way possible with the reconstruction of the city. He compares the city after the war to a stack of ants, everyone worked on reconstruction and the amount of mutual assistance is hard to fathom.

Finally, he was also introduced to aspects of vocational training by his father. We came to speak about one such instance where he was given a task taken from the apprenticeship training of many metal related vocations: that of making a perfect iron cube. I am including most of this conversation because it touches on the kinds of issues raised in asking about how skill training and elements of *Bildung* can be a common goal of education. It also serves the purpose of giving a more extensive presentation of how Mr. B. speaks and articulates his thoughts and experiences. The context is Christmas, probably 1952, where he was given a rough iron cube, 8x8x8 cm and some tools as a present from his father. In this and the following quotations I have edited the text somewhat to increase its readability removing things like repetitions of words and half sentences, my comments and clarifications as well as some paralingual aspects are in square brackets:

W: It starts with you thinking that [the task is] completely unnecessary and then you still can't get away from the fact that with the experience you have, the respect you have for your father and what you experience in [...] the loving gift that's really poisoned [in that it leads to an immense amount of work] so there you are, weighing your options...

And you don't just throw the lump of metal out from the balcony and into the vineyard [...] and hubris sets in and you think to yourself, this can't be that difficult and then the next step is your thinking: well of course I'll do this old man.

And [...] it's like fishing, you're hooked now and added to this is your temperament and the utter rage you feel when it dawns on you [how difficult it actually is]. [...] When you get how devilish the metal is, and then you [...] start experiencing what's [...] in that stupid lump, you discover that there's a direction in which the fibers run...

[...] So you have four sides that are totally different from the other [two] sides [...] and then [...] you make all possible mistakes, [...] the differences [across the surfaces and between the sides of the cube] are so large and you've got a need to measure and to decide when is it good enough? You have to have some kind of mirror, I had a mirror in him where I said: "this must be good." [And he replied]: "good?" [And I said]: "yes, isn't this good?" And then he took it and colored [the surface] and held it up against the falling light and said: "look at it yourself, are you satisfied with this, it looks like the surface of the moon." [And my reply was]: "yeah, but how then?"

Having introduced the task and its complexity, Mr. B. starts to talk about the technical aspects of making a perfect cube, the tools, the techniques, the exactness and, perhaps most importantly, issues of perception. The capacity to perceive

unevenness, experience the direction of fibers in the metal and the relationship between tool and material in one's own body movements. In effect pointing to the degree in which skill intersects with an expansion of one's sensing-capacities (what Polanyi calls *connoisseurship* (2009 [1966] and in Dormer 1994)) in order to perceive things that were literally imperceptible before.

R: So how did he color it?

W: That's when you get to the tools, you have a perfectly polished steel plate that you color and [...] it's kind of like a perfectly smooth and straight stamp pad.

R: 190 points of contact [at equal distance] was the minimum on a square cm. [referring to a previous statement by Mr. B.]

W: Yes and so you get to the next question: well, how can I achieve that? And you get your next tool which was a steel scraper [...] You don't normally consider how much of precise movement [...] that we're capable of [...] with our body. [...]

R: But a steel scraper is that something else than the three files you got?

W: Yes I got scrapers in two different forms that were extremely hard. The piece of iron I got [to make the cube from] was comparatively soft. That's also just a grotesque experience to have, that you can have steel with which you can cut other steel, and then when you temper that other steel it becomes close to impossible to cut anymore. These are transformations that you're aware of, or semi-aware, and when they happen it's an experience that you're holding there in your hand: I've made this, I've changed it, what was once possible isn't anymore, what really happened here? You know, all these questions that surface after a while and that have to do with tool use, it's not the tool that's really the most important thing, but the continuous growth in knowledge that you achieve. [...]

Do you understand, when you get a task: 190 points of contact per square cm, [...] the kind of "goddamn if I'm not going to succeed" that you develop. [...] I said: "hey dad, is it possible to cheat in the measurement?"

"Well yes," he said, "if you have a surface that is 8x8 cm then you can choose to measure that part of the surface, 10x10 mm, that you've achieved the best result on and just say the rest of it is almost as good."
[laughs]

And, well, how do you explain that experience, [...] and the will to achieve an exact surface across 64 possibilities and that's where you get into trouble. [...]

R: What do you mean 64 possibilities?

W: 8x8 that is.

This conversation about tools, the repeated attempts at thinking through the task and experiencing how inadequate one's analysis has been as well as the first reference to something one develops beyond this in stubbornness (goddamn if I'm not going to succeed) indicates something of the ways in which making tasks can be sources of education and *Bildung*. In the following part Mr. B. circles back into all these issues and elaborates:

R: How long did it take you to make the cube?

W: About a year or so [working on and off]. [...] I came away [from it] in so many different ways, being really happy, or so pissed, or when I was sad, but [...] the most important thing I learned, [...] I can see that now, the main result, is care. It's care and *Geduld* [Ger: patience], patience, [...] and then the will, I want to, I will do this, I will be able to do it.

[Continues to talk about the tools he borrowed] The files were from Glardon, a Swiss firm. That's also something I have my father and my uncle to thank for, that when I came to Sweden [I had already heard] my father speak about metals, and the Scandinavian gift was always present there [...] I'll never forget my first reaction to hearing about the Vikings: "whaddaya mean?? Swords? Hedeby?" [a Viking settlement in present day northern Germany]

Those archeological finds of swords, of the damask [a technique of folding steel], or of forging together what is soft and hard and tough, and combining it to one form, he thought it was the epitome of mythology, of culture, the pinnacle of, well, human intelligence, craft intelligence to be able to do it. [...]

I got a pair of white gloves from him. "What am I supposed to do with these?" [And he replied]: "you're so dirty and your hands are warm, if you're working with a try-square and are supposed to measure and you hold it in your hand and put it in your pocket it becomes inexact." And then I got [a lecture] that had to do with temperature and it got so extreme, you can imagine an 18-year old who encounters five degrees of difference in warmth in a tool, it's like: "um, ok, so?"

[laughs]

And then you've got this incredibly ingenious person across from you who says: "Yes but [...] when you went straight from bathing and lay down in the sun, how did that feel? How do you think the metal experiences warmth?" And that just leads to even more go or determination [Swe: *jävla anamma*]⁵ and suddenly you develop a kind of considerateness that to many people seems ridiculous.

Having added more aspects of character formation such as patience and care to that of stubbornness, Mr. B. also elaborates on two fields of knowledge that were

⁵ Here and in other places I have included the original expression or word because they lack a precise translation and this makes it possible for an inquisitive or bilingual reader to follow up on them. It is also important to be clear about translations that are ambiguous and where leaving the original expression out would give the impression of a more straightforward match than is actually the case.

introduced to him through the work: cultural history (Hedeby) and physics (expansion of metal). The point to keep in mind throughout is that all these things are said in a context of countless hours of work and thereby personal experience, what we can read as a narrative in the space of a few minutes tends to disguise this. Continuing the conversation Mr. B. again circles back to these themes and also introduces a more elaborate description of the process:

W: The most important thing that you can get when you're doing something like that is that nothing is impossible.

[...]

It was completely incredible everything that happened during that time, the experience of the material, of the treatment or work, the experience of failing to get a side of the cube even [...] And then: what happened? Looking back and being completely objective about it, what happened there, what happened before, why was I such a fool and [...] started there before I did this and this and this? Really it's a possibility to develop the capacity to think and reflect before acting.

R: But what's striking to me is also, the effect of it all must [...] have depended very much on you having been almost lured into the work, it's not exactly the way it normally is with the cube where some poor apprentice gets it with an: "ok time to make this 'cause it's part of the [apprenticeship]."

W: Yeah, or else... [spoken with a threatening voice] [...]

R: Yeah, and then you're standing there suffering through it. [...]

W: I wish it had been possible to record [the process] you know, I mean, he knew who I was, he knew how to give me a gift that really was a gift and that was connected with an earlier gift of forging silver-steel and everything surrounding that. My interest was really in crafts generally one might say, but he told me one time: "well it might seem [...] easy to make the cube, but then there are some other forms too, when you're done with the cube why not make a tetrahedron?"

[laughs]

And that damn Plato, the result of it was also the impulse [...] to concern myself with [the geometry involved], I tried to read Plato at the same time [...] and that wasn't exactly easy. The result of his gift was so much more than just metal.

R: Specifically, apart from Plato and patience, care, etc. is there something else you're thinking of when saying more than just metal?

W: The kind of impatience that I had made me the best customer at Zahn und Nopper, a tool and machine firm in Stuttgart. Some of the salespeople, when they saw me coming they left. [...]

[laughs]

R: Why?

W: I wanted a file that was quicker and easier. My father must have had an obscene amount of fun you know, I went to Zahn und Nopper and they were the best store in Stuttgart. "So I'm making this [cube]." [And the clerk replied]: "well ok good." [And I said]: "I want a better file."

"Well it'll have to be a Dick and a Glardon."

"Which one?" [I said]

"Well, this and this, in this order. One zero, two zeros, three zeros. A one, a two, a three." [measurements of the file's fineness]

"Is there any better than that?" [I asked]

"Nope."

"Whaat!?" [surprised]

[laughs]

And then, you know the development at that time on the part of machines, it wasn't exactly where we are today and [...] you'll excuse me but I was lazy, but not stupid, I [...] went to Zahn und Nopper and said: "what would it cost to mill an exact cube?" [ie. to make it in a machine]

[laughs]

R: You seriously considered milling an exact cube to give your dad then?

W: No not to give him but to mill it and see if it's possible to do it by machine, I thought a machine would be able to do it much easier, much faster, much better. And the guy looks at me and says: "sure, of course we can do it, it costs so and so." And I almost died [from how expensive it was]. And after you've milled it in the machine and it's all polished and so on, you still can't get away from having to scrape it by hand. [...]

In answering the question: "apart from patience etc. what else?" with a long description of experiences had in trying to figure out a way to get the work done quicker, better, more efficiently, Mr. B. elaborates on the sort of inquiry that one can develop in learning craft techniques or skills. Thinking of it from a Bildung perspective the comparative balance between inquisitiveness and desire to make things quick and the stubbornness not to give up when this wasn't always successful is tacitly described here as an important part of what made this work part of an education for Bildung rather than boredom.

W: You know, [...] my father he didn't just give me a blueprint of how to do it saying: "ok so now you do like this and then like that." He just said to me: "you need *one* surface that you proceed from." [And I said]: "well that's pretty obvious isn't it?"

"Yeah but you need *one* surface and then you proceed from it to measure the others."

“And what am I supposed to do this on? The floor?”
“No you’ll need to have a measuring-plate of diabase.” [a kind of granite stone]
“Ah, ok, when will that arrive?” [I said] “Is it going to take long?”
[laughs]
[...]

R: How long did it take?

W: It was already there. [He said]: “go down to [the basement], there’s a package there that it is wrapped in, make sure you’ve got clean hands, wear gloves. [...] And there’s a try-square in the wooden box [...] when you take it out wear the gloves, I don’t want your dirty fingerprints on it.” [And I said]: “how do I measure?”

“Well you choose the side that’s the least amount of work.”

[laughs]

“Ok but how?” [I asked]

“Use the light. And you measure, and look how much you need to remove and then you draw.” [...] He went about helping me at every important step in the process but never without me asking him first.

R: Draw?

W: Well if you have a cube that’s a bit “so and so” then you measure. You’ve got six sides that you have to consider, so if you have one even surface then the most intelligent thing isn’t to start with one side, and that’s something I realized afterwards, and that’s bitter.

R: But that’s what he said. [...]

W: What? He told me: “If you have a cube, then you’ve got six identical sides and if you’re to make a cube from something that isn’t even then you have to choose a side that you fit the other sides to.” And I reasoned like a thresher [Swe: tröskmaskin, a way of saying not very intelligently], I figured the side that was the most even, that’s the one to start with. [...] Then I heard someone say: “Hey, you can’t have a side [as point of departure] that isn’t smooth or that isn’t completely even. You [...] have to measure [the cube] free hand and look at where the differences are and then you have to calculate all the angles [and proceed from the side] where you have the least amount of work left.”

And then he said: “well [...] this is where you develop judgment, if you go back and take another side, if you judge that side to give you the least amount of work in the future then skip the one you just started working on.” And it’s pretty interesting to start your work in the confrontation with all that and then [...] it’s easy as hell if you’ve got a computer that you can input all the measurements into and then it’ll do all the calculations for you and tell you where to start. But it’s not 100% certain that it has got it right either since well [it depends on how you’ve thought yourself when inputting the numbers].

Throughout the conversation, Wolfgang brings up at least three levels of development connected to the cube. The first is in connection with the immediate work-related experiences, becoming skilled, expanding one's perception, learning to think in a way that allows one to solve the practical problem of how to proceed, etc. The second is in connection with certain capacities or character-traits that are practiced such as patience and care. The third is in the inclusion of knowledge-related issues such as history (Hedeby), geometry (Plato) and metallurgy. In many ways the conversation is a miniature of the whole case.

6.4 Apprenticeship

Mr. B. became an apprentice at a firm run by a bookbinding master named Hermann Hensler. Getting an apprenticeship at that time wasn't easy and Mr. B. also found that the quality of education could vary from workshop to workshop. These variations were related to who ran the workshop but also to the size where some were too specialized or small to be able to provide a good all-round training. The three year bookbinding apprenticeships were split into two paths, one that led into craft binding and one that led into industrial binding but they had enough elements in common that one could earn a dual certification with approximately six months of further training.

In addition to working in the workshop four days a week, the apprentices also went to vocational school on Fridays. The teachers there made sure that what could not be covered in each apprentices workplace training was compensated for at the vocational school. They were also taught school subjects according to what their previous education had been, something that varied greatly given that some apprentices had various degrees of interrupted schooling on account of WWII. The general subjects were often taught in relation to crafts, Mr. B.'s example being physical education (gymnastics), which was arranged as strength training, ergonomics and relaxation exercises all explained as supportive of better workmanship.

The workshop training and the vocational school together made up the basic, mandatory part, of the education the apprentices received. Added to this were a number of elective courses that the school provided, which were given on weekends and in the evenings. These ranged from edge gilding to geometry and heraldry. The apprenticeships were also embedded in the cultural life of Stuttgart at the time and they were expected to play an instrument as well as take dancing lessons. Together with their teachers at the vocational school they also made excursions; they visited monasteries like Eberbach and Maulbronn as well as libraries and other places. During these, they would learn about architecture, history and art. It was also possible to take part in the voluntary master-preparatory course that began in the later stages of the apprenticeship. If they were considered unusually talented they could be invited to Begabtenförderung (further support for talented students). This was organized as a cross-vocational education where apprentices from dozens of different vocations met for internships each year.

6.4.1 The workshop

Wolfgang B. was in a medium sized workshop together with two other apprentices, Christel and Herbert. When he started his apprenticeship there the workshop comprised about 25-30 people, which had grown to around 50 by the time he was done. His master Hermann Hensler, seems to have been a fairly good organizer of the workshop making sure that Wolfgang received an education that covered both hand- and industrial binding. At the same time, Wolfgang spoke repeatedly (both during our conversations and at other times) of Hermann's explosive temperament and the frequent conflicts between them.

After finishing his apprenticeship, the so-called Freisprechung, the oldest journeyman, Michel, asked him: "tell me, what are you, on the whole, most pleased with now after being done with your Freisprechung." Mr. B. replied that during his whole apprenticeship his master had never been able to catch him and beat him and the whole group of journeymen listening began laughing and said they were especially impressed by the time Mr. Hensler snuck up behind him and he ducked beneath the table in the last second leaving Hermann completely at a loss. There are several passages in our conversations where Mr. B. narrates how Mr. Hensler would call his father Wilhelm to shout in the phone about how impossible his son was and how his father saved his hide on these occasions.

In the day-to-day education his main teachers at the workshop were the journeymen who worked there and the woman who was head of the hand-binding department, Helga Prohaska, whom they called the sous-chef. Together with the other workers they would often make fairly large orders of books at a time where a lot of the work still had to be done by hand. He remembers the division of labor that they created as connected to an atmosphere of incredible joy saying that:

We had a colleague [Karl W.] who was just wonderful, he was the joy [of the company] and I don't know how many [poems he knew] he knew Schiller, he knew Hegel, he knew Mörike, and most of it by heart and he sang like a larch. It happened that we would sing in canon while we worked and some times Hermann could take it and sometimes it drove him totally mad. [...] It's hard to describe how amazingly fun it can be if you for instance are engaged in finishing books and you have a cooperation from right to left. The first one stands there applying the paste to one side of the book and then the next one sits or stands and places it in the cover and gives it to the third person who pastes the other side and gives it to the fourth person who closes the cover [...] and the fifth person places it in the press.

The kind of work-ethics that were passed on to the apprentices are epitomized in a memory Mr. B. has of Helga telling him that:

It doesn't matter if it's the University or the State archive or if it's a private customer, the differences in quality that we work with is just an address, the quali-

ty itself has to be a unifying thread throughout all our work. No differences, the basic work has to stay the same no matter what institution or client we have. It's the aesthetic part that differentiates the work, if it is supposed to be something solid and simple like for a library or something [more complex in style].

[I find it hard to understand how one can] consciously allow for predetermined breaking points [Ger. Sollbruchstelle] to remain. That's basically swindle, and it's not about saving on costs but rather that the investment one makes is towards oneself, call it vocational ethics or honor or whatever [...] but you bring that fraud home with you and you live with it and in time what you are starts to wither and disappear [on account of it].

6.4.2 The vocational school

The apprentices went to the vocational school every Friday and sometimes for excursions and the like on weekends and evenings. Wolfgang B.'s main teachers at the vocational school were named Mr. Baun and Mr. Kausch. They were responsible for staying in touch with the masters at the various workshops to ensure that whatever an apprentice might be unable to learn at the firm would be compensated for at the school, often by directing some other apprentice who was already familiar with the skill or technique to assist. Mr. B. speaks of it saying:

He [Baun or Kausch] knew exactly where we were [in our development] who worked in which workshop and he could arrive in the morning and say: you take care of Friedelin and show him what you've been doing for the past two weeks.

There were also opportunities to make unique things, Wolfgang made a jewelry box, a fellow student a leather-coated case for his horn, and so on. Together with these practical matters, they had various lessons and lectures given by Baun and Kausch as well as other guest teachers. They would also go on both long and short trips to libraries, monasteries such as Maulbronn, Lorch and Eberbach as well as other important cultural sites. Wolfgang explains:

When we were out on excursions there was always a solemn dinner included [...] where it was a matter of course that they would talk about, for example if they were in a wine district, vineyards, their location, etc.

In our review of the case, Wolfgang emphasized that the teachers at the vocational school were masters in engaging their students in projects that took them beyond regular school hours, that they knew what their students were interested in and strove to make that the point of departure.

6.4.3 Voluntary courses and other parts of the education

These contained a broad spectrum of electives. Mr. B. explains that they would stretch across perhaps a semester and that it was possible to take part in a couple during the same time span where one might be two evenings per week, say Tuesday and Thursday, and the other might be on Friday, Saturday and Sunday. They often ran one after another on the same evening so that one course would go between 18.00 and 20.00 and the other would then run between 20.00 and 22.00. Given the voluntary nature of the courses Mr. B. explains that of the twenty or so apprentices who finished their apprenticeship in the same year as he did perhaps half of them were only sporadically partakers and a third not at all for various reasons. One of his co-apprentices at Mr. Hensler's firm, Christel, lived a ways off in Ludwigsburg and Mr. B. figures it was possible she took courses there that he was not aware of.

They were also invited to hear lectures at the Höhere Graphische Fachschule (perhaps best translated as The Vocational College of Graphic Arts). There was one in Stuttgart and one in Ulm that they visited. As examples of what they would learn there he mentions a series of two or three lectures on color and a time when there was a lesson on gold foil for prints where both users and manufacturers were invited to give presentations. During the latter half of the apprenticeship, it was possible to start attending master-preparatory classes where the groundwork was laid for continuing as journeyman to become master. This course would run regularly every other week for a day as a rule of thumb, it also depended on the circumstances such as when guest teachers had time or what a particular project required.

Wolfgang spoke most extensively of one evening course that he attended on learning edge gilding. Other courses, some of which were part of the master-preparatory work included a number of different bookbinding techniques: at least 2 on cloth binding, 2 on parchment binding, 2 on leather binding etc. There were also courses on framing pictures, one on making a lamp-screen, one on folding paper from 2 to 3 dimensional forms, and more.

6.4.4 Begabtenförderung

Early on in his apprenticeship Mr. B. was invited to participate in what was called Begabtenförderung, ie. support for talented students which continues to this day in various forms in Germany. The formalities surrounding this were unclear to him but in practice it meant that for about three months each year he would take part in various educational activities. These three months were not all at once, but parsed out. Sometimes they were interned at the Akademie Comburg (which still exists albeit devoted to other educational activities) for up to a month, at other times they met for shorter periods. Part of this took place on their holidays so of those three months per year not all of it was instead of time spent in the workshop and at the vocational school. During these times Mr. B. together with 50-100

other apprentices from various vocations did a number of things. Mr. B. recalls his edge gilding teacher, Lange-Otto, saying that through it they sought to train the future generals or leaders in industry. Later, after completing his apprenticeship he was invited to partake in higher or further Begabtenförderung, something he declined.

At the courses they would often hear presentations of different vocations, presentations that included a lot of practical demonstrations. He remembers a gunsmith and gun engraver presenting their crafts as well as a miller who came and spoke to them at length about making grind stones. There was also a lot of general education in mathematics, geometry, physical education, questions about health and safety at work, etc. This included cultural studies where Mr. B. remembers one particular man who spoke to them about Reuchlin (1455-1522) the early German humanist who, among other things, wrote a Hebrew grammar as well as a book on the Kabbalah. They would go for excursions in the local geography, visiting a number of dripstone caves and archeological digs by the Bodensee and in the Lohndal. During these excursions they would learn about geography, geology, history, etc. Finally, they also made a lot of visits to various firms such as Göppinger Kaliko (makers of artificial leather and bookbinding cloth), Zerkall (paper mill), Mercedes and Böckler (aircraft manufacturer).

Taken together these experiences were an important part of Mr. B.'s apprenticeship giving him a view of, and feel for, the richness and variety of human culture and technical know-how.

6.4.5 Episodes from the vocational school

One part of the vocational school that Mr. B. remembers in detail was the way their teachers would "punish" those apprentices who were late to school three times, or, in his case, apparently didn't approach a course with sufficient enthusiasm.

There were punishments for being late [...] one got an extra task to complete and I was never late but Kausch said to me that there is a spring house in Maulbronn with a fountain [...] I want a reconstruction from you. I guess he felt that I didn't find certain lessons necessary, [...] and I tried to avoid doing it and that wasn't possible. [...] So I returned with the first sketch and he said that looks just like you do, a bit fuzzy around the edges, try taking that to a stonemason. [...] So I said: fine I'll take it to my uncle [who happened to be one], and he [the uncle] laughed so that it could be heard all over the neighborhood. [...] And I got really pissed [...] and I [went back] brought measuring-tape, a compass and a ruler and measured it from the base to the top. [...] And really, the experience of beauty and exactness [...] it was so damn beautiful [...] and then what does he do? He takes a needle-compass and goes through all the proportions and looks it up to compare with what he already has in a book. [laughs]

Going to Maulbronn⁶ from Stuttgart took about eight hours back and forth on his bike at the time so having to do the work twice was a matter of considerable labor. However, as he says, he arrived at a profound experience of beauty and harmony of proportion, something that remained as a defining experience from then onwards. I remember him referring to this episode now and then throughout my apprenticeship but not in such detail. He also recalled the “punishment” of a fellow apprentice:

I can't remember Baun or Kausch ever moralizing, if there was a discussion [about not wanting to do some appointed task] [...] ok, then you can choose, there are three other possibilities that might suit you better...

We had one fellow traveler, Werner S., a guy like a bear, just short of two meters. [...] He was supposed to bike to Lorch to draw the church tower above the grave of one of our great noble lineages and he says: “I won't do it, I don't want to have anything to do with those bastards.” And Kausch knows that he's very smitten by one of the girls and so he looks at him and says [...]: “well ok, but, there are morning gifts that are on exhibit, you can measure and describe one of the engagement rings.” We sat there all of us, [...] it was like watching fly fishing and he swallowed the bait, [...] and went from something comparatively easy to a task that [...] when I think about making a watercolor [aquarelle] enlargement of a ring with a cut and polished stone [the degree of difficulty is huge]. And Kausch says: “since you're so big and [the rings] are so small, why don't you draw three or four?” And he agrees [...] and I laughed at it the entire way back home. [...] I experienced him the week after, he started during the weekend, and then he came back to us and was all flustered over how much work it was [...] and how unfriendly the guards were. [...] It took him about four or five weekends [laughs] and when he [brought his drawing] and Kausch looked at it, Kausch said: “what kind of stone is that?” [Werner replied]: “a green one.”

“Yes but it's not green, I told you to make a copy, that's [...] the wrong color.” [...]

He got engaged later, I'm sure one of his failed drawings still hangs on the wall in his home if he's still alive. [laughs]

These events led to the whole class visiting Siegle, a color-manufacturing firm in order to learn more about various pigments. Returning to this theme in another conversation, Mr. B. remarked that he came home frustrated with the amount of work it was to draw the fountain and a friend of his father, Egon who was a medical doctor laughed and said:

⁶ This story about Maulbronn was one of the initial sparks in calling my attention to the potential of doing a larger biographical study. It also occupies an important place in the life of Mr. B. and in the analysis in the first article. Furthermore it ties in to the concluding reflections in this section. Considering all this I could think of no better illustration for the study than a picture of the fountain at Maulbronn which is why I have chosen it for the cover of the thesis.

Oh, but it's self-evident, through it [the task] es entsteht Staunen. [It leads to Staunen, which is something of a mix of wonder, amazement and marvel]

This marvel or amazement is another way that Mr. B. describes what he felt after having completed the drawing of the fountain. Returning to the initial considerations of Bildung and reflection in action they are both provoked by an interruption or surprise. If the related episode led to a sense of amazement Mr. B. also speaks of one in which the element of provocation was at the forefront. One Friday they received an essay-writing task, this was the only real essay writing they did that Mr. B. recalls, apart from it they would describe a work-piece each week with a technical description of process, materials, etc.:

Our teacher says: "you get the next three Fridays off, [...] but [during that time] you are to write an essay [...] entitled *Meister die Arbeit ist fertig soll ich sie auch gleich flicken?*" [Master, the work is done should I go straight to repairing it?][...]

And I came home [all frustrated] [...] and my father laughed the whole weekend [...] And I said [to my father]: "but it's a paradox, it's um..." and my father looked at me and said: "yes well try to put yourself in the shoes of a person who has an accident at work." [...]

"Yes but the work isn't done if you have to repair it immediately." [...]

R: Do you remember what you wrote?

W: Yes [...] I got really insulted by the whole idea [...] I wrote about the kind of state I would have to be in to say something like that to my master. The first sentence ended with: my master would have boxed me across the ears all around the workshop. [laughs] I also wrote that it implied that my master was really bad who gave me neither the knowledge nor the capability, that he gave me a task that I took too lightly or that was beyond my capacity. [...]

I think [...] it originated in a discussion among the masters about the quality of the education in the workshops and [the teacher's reaction to it], that it was his [Baun or Kausch] idea that every apprentice would [...] reflect on the instruction they got. [...]

This type of task seems to have been characteristic of the vocational school, the teachers there would pick up on some important issue and use it to create an educational opportunity. They were at other times given reading assignments such as Schiller's *Aesthetic Letters* (2010 [1795]), but the follow-up to this was not first and foremost part of a lesson but rather occurred as opportunities arose, during work or during breaks for lunch, etc.

6.4.6 An episode from the voluntary courses: edge gilding

Teachers at the evening and weekend courses came from a network of specialists, one of these had the nickname Lange-Otto (Tall-Otto). He worked at the Württembergische Bibelanstalt and taught a course in edge gilding (edge gilding is the technique with which one applies gold-leaf to the edges of book-leaves). We came to speak extensively about this course as an example of how they were taught the techniques and skill involved in edge gilding. Lange-Otto took them to the forest to show them the trees, Hainbuche (Hornbeam in English), used for the presses and pressing-boards and why this particular wood had to be used rather than any other. He furthermore taught them how to make their own edge gilding tools and spoke to them about gilding from a scientific and cultural perspective, for instance going into an extended discussion about the reasons for gilded weathercocks on churches.

In this context we also came to speak of the kind of reflection that can emerge from such an education in conjunction with complex craft tasks. Mr. B. and I returned to a theme that's been a regular source of explorative investigation, discussing differences between various carats of gold, the purpose of using wax and how to reason when something goes wrong:

It isn't just the technical part of it but all these questions, what am I doing wrong [when it doesn't work]? Is it the egg whites? Is it in the combining [of distilled water] with the egg white? Is it paste, is it the bole, why use bole? And so on. And then you can go back to the technical studies they've done and then you can ask yourself: the agate I have, which agate am I using? And then the paradox: you have a newly purchased agate that is highly polished and no one has told you that you have to dull it a little to achieve the best result with gold. And you achieve it and then it [...] really runs contrary to what you learnt about it being perfectly polished, that the more perfect surface you have the better your results will be.

This type of inquiry or interest is frequently a topic for our conversations. It is perhaps worth considering also in the context of a biographical narrative because it indicates the extent to which a vocational education can shape one's perception of the world. A contributing reason for vocational education being a source of *Bildung* is the way in which it can open our eyes to the artifacts, tools and materials we are surrounded by.

6.5 Working in Stockholm

As mentioned in the initial biographical sketch, Wolfgang B. arrived in Stockholm in the winter of 1956. Coming to Stockholm was the result of applications

sent to several countries and there were firms in Philadelphia, San Francisco and Rio de Janeiro who also replied that they had a spot for him. Choosing Stockholm was a matter of being able to visit back home comparatively easy, within biking distance as he expressed it. For the first 18 months he worked at a firm called Nyléns and he continued working there, after briefly returning to Germany, as the head of the finishing department until 1960 when he quit and began working at Hedbergs, a workshop oriented towards hand binding.

Fairly soon after arriving in Stockholm Mr. B. began giving courses for other bookbinders at the apprentice level covering things such as edge gilding, box making, paper bindings, etc. However, Mr. B. remarks that several of those who participated later switched their line of work and that it was clear that the development in Sweden in the bookbinding part of the graphic industry had an American trajectory. By this he means that a high level of vocational knowing was replaced by far reaching automation and work-place arrangements of a Taylorist nature, quoting one owner of a firm who was fairly prominent at the time as saying:

We're not interested in people who are well educated, we're interested in completely unskilled workers [colloquially in Swedish called *blåbär*, literally blueberries] who [...] we train during the morning and then in the afternoon they can start producing and continue doing that for the rest of their lives.

The conversation goes on with Mr. B. calling that whole attitude unbelievably cynical, hiding behind the argument that technical progress inexorably leads to vocational education becoming unnecessary for most workers. He found it to be a misuse of power that destroyed the possibility for development and learning among workers on a level he calls horrifying. The same person also ran a one-day course in how to use large paper-cutting machines that can slice through whole packages of paper, with between 100 and 500 sheets, at once. They brought in whole stacks of paper straight from the factory, he estimates about 3 metric tons, to practice on and then threw it all away in a container. This episode became so emblematic to Mr. B. of a wasteful and foolish way of training that I recall him bringing it up in conversations regularly during my apprenticeship and after.

At 23 years of age, Wolfgang became head of the finishing department at Nyléns. He was at the time by far the youngest person in the department and four or five of the workers there who were somewhere in the range of 40 or 50 came to him and told him bluntly that he wasn't even an idea in his parents minds when they learned their trade. He continues:

And so I had a meeting with them outside where I had to tell them [...] that my responsibility is in organization, that does not free you from having a personal responsibility in production and when you'll come face to face with me is when your work is bad or insufficient.

Following this, one of his first fights was to remove the differences in pay between men and women, where the women were paid less for the same amount of work. This brought him in conflict with the Master's association that his boss Nylén was afraid of going against. He succeeded because the head of the trade union, Edvin, happily supported him laying the groundwork for a lasting friendship.

Not everything was a matter of conflict and disappointment in industry, he speaks repeatedly about the pride and joy in making larger editions of books with good quality as well as working with the most modern machines available. He also speaks about the freedom he experienced in Sweden compared to Germany. He bought his first pair of jeans and sold his suit, didn't have to address everyone as You (Sie) and Mr., and the weight of post-war reconstruction was lifted. At one point he refers to the Bauhaus idea that it's supposed to be a joy for the machine to make something that is beautiful. When he began working in the industry they made beautiful books that were well bound and as he said it: "a hell of a lot of them per hour," and every time they made a batch he says he thought:

650, 700 happy people who can hold such a product in their hand, and [...] it didn't cost a fortune, and one didn't exclude four fifths of society from taking pleasure in it.

6.5.1 Returning to the craft from industry

The decision to leave work at Nyléns was part of our conversation from different perspectives. There was one episode where Mr. B. visited another large firm, Es-selte, and said:

The guy who received us told us that they had just made a technical reorganization and instead of making 800 they made 1400 and I thought my God, wait a bit, is that what you can turn into?

In noting this Mr. B. is referring to a sense that he didn't want to turn into a person who spoke and thought in what he perceived to be an entirely narrow way, focusing solely on effectiveness.

Another perspective emerged when Mr. B. came to talk about adhesive binding which is the technique used when making paperback books where the book is just glued at the spine and not bound with thread. Throughout the history of adhesive binding the main issue has been the quality of the glue, the time it takes for the glue used to age and become brittle at which point the book falls apart. Using cheap glues that age rapidly has been a point of continuous contention in the bookbinding industry and Mr. B. remembers a discussion at the Master's association regarding a technique called Lundbäck-gluing that originated in Germany. For the most part Mr. B. dislikes the whole idea of adhesive binding since cutting the spine of the book in order to glue it essentially prevents any long term binding

which means that such books only last for a few decades at the most. He calls it both deeply immoral and a way of stealing culture from the future. He even made some experiments exposing the glue from the above-mentioned technique to extreme temperatures of heat and cold at which the length of life promised by the developers was proven wrong. When the objection came that no one has such cold or hot temperatures indoors he replied that the heat is about the temperature of a book in a bookshelf in the summer sun and the cold that of the indoor temperature in a summer cabin during winter.

Such developments also contributed to his choice. But when questioned further about it Mr. B. emphasized that returning to the craft side of bookbinding was in the end less a matter of being disappointed with developments on the industry side than it was a matter of asking: “ok, I know this now, what else is there to learn in the world of books?” He continued saying that when he spoke to his father sometime in 1961 or 62 his father told him to go back and continue his education. Part of it also had to do with making things beautiful, seeing some amazing exhibitions of fine bookbinding as well as making some things himself on the side. His employer, Sture Nylén, came to him around Christmas 1956 and asked if he could make a series of high-end bindings and the next year when Sture again asked for help he himself suggested making a series of exclusive cigarette cases clothed in leather and all these things contributed.

Finally, during the years between finishing his apprenticeship and going to Paris he came to know bookbinders who in various ways became important influences on how he thought about the craft, the one he spoke most extensively of was named Altermatt. They became close friends and it was Altermatt who suggested he go to Paris for further study. He remembers Altermatt saying that:

The work ethic [...] connected to making the product should be clearly visible and it should be beautiful, not just beautiful but *Schön* [fair] and it doesn't have to be exact down to the last 1000th of a millimeter but it does have to be exact.

Together all of these different impressions, people and personal reflections (and presumably many others) contributed to the decision to leave his job in industrial binding and to continue his education as a bookbinder, as well as adding gilding and engraving. After leaving Nyléns he came to work at Hedbergs, a hand-binding firm, for a few years approximately 1960-64, while setting up his own workshop and beginning his studies at the Ecole Estienne.

6.6 At the Ecole Estienne

In the 60s the Ecole Estienne in Paris was known as perhaps the world's foremost institution for education in bookbinding, gilding, engraving, case making, and

other related arts and crafts. A number of very prominent French craft masters taught there and simultaneously carried on their own professional work. It was possible for the students there to be made part of such work, which was considered a great honor, and in general the things they did there weren't just items made for practice and then discarded but were part of some wider purpose. However, Mr. B. repeatedly emphasized the difference between himself and most of his fellow students at the Ecole. Two reasons were simply that he was about 5-8 years older than most of the others and not from France which meant, among other things, that he had to pay a higher tuition. Furthermore he remains unsure of the degree to which he was given a freedom in choosing courses, when to attend and when to be absent and in Sweden, that the other students did not get. The following descriptions are therefore not necessarily emblematic of the kind of education one might have received at the Ecole. In Paris he quickly developed a strong friendship with a fellow bookbinder Roche Buisson whose father, Maurice Flety, held a very long title as one of the central people in the organization of the masters of the graphic professions.

6.6.1 Raymond Mondange

In our conversations, both those recorded for the study and those we've had over the years about the Ecole, one person stands out: Raymond Mondange, Mr. B.'s teacher of gilding. Mondange seems to have been deliberately provocative in his interaction with Mr. B. there being a series of narratives where Mr. B. expresses the frustration he often felt together with admiration for what Mondange understood and was able to achieve. One time early on he was ordered to practice what might be called muscular attentiveness or balance and reflexes. This was to be done by throwing a golf ball against a wall in his back yard that had a rough surface and catching it 50 times with each hand. The whole thing made Mr. B. feel dumb and he laughs and says that he was lucky he went through with it over a period of time since Mondange checked with the manager of the building in order to be sure he did as he was told. Later Mr. B. was given the task of replicating an historic gilding and chose one made by one of his favorite gilders, the 18th century master Derome. A contributing reason for this was that Derome's original stamps were there at the Ecole and he was free to use them. He had to struggle with them however since they were well used already and worn down and when he showed Mondange his work, proud as a peacock for having managed to get something out of the stamps, Mondange coolly took out a compass going over the entire pattern and pointing out every imperfection. Then he asked Mr. B. why he hadn't used the replica stamps recently made and hanging there on the wall saying that they were absolutely flawless, one could take a replica and go to the Bibliotheque Nationale, take out the original book and fit it in the pattern perfectly. This happened after Mr. B. had worked for about a month and when he almost exploded in Mondange's office Mondange calmly asked why he didn't pose more questions before beginning his work, why he didn't stop and take some time to reflect on the

process before him rather than spring into action immediately. Lest one get the impression that Mondange was inconsiderate there are many fragments of narratives where he assisted Mr. B. in various ways, took him out to lunch to discuss some problem he faced and, generally, was keen on helping Mr. B. achieve a high degree of skill.

Mondange would also regularly interrupt Mr. B. and the other students, about eight of them it varied between courses, and order them to go visit a fellow craftsman or a museum. One such visit was to a maker of handcrafted wood cameras for aerial photography and Mr. B. describes his workshop as filled from top to bottom with the most exquisite machines that the craftsman had modified from their original use to fit his camera building. These interruptions were mostly greeted with complaints by Mr. B. and the others since they seemed to have little relationship with learning gilding and Mondange would curse them out over it. In the end, they would always experience a sense of amazement and curiosity often leading to a whole sequence of further discoveries.

The most extensive such sequence began when Mondange walked by a couple of the students playing chess, something they often did when they needed a break. He turned around and said to them: "Gentlemen, I expect of you that by next week you have visited this ivory carver..." Immediately there was a groan from someone unhappy with the extra work. Mondange spun around like a cobra as Mr. B. recalls saying: "ivory carving was part of the first political revolution in ancient Rome," whereupon he gave a small lecture on pugillaria, boards of ivory often intricately sculpted on one side which the Roman senators would cover with wax on the other side to make notes in support of their speeches. These are believed by some historians to be the predecessors of the European-style book (the codex). Many of them can be found reused as decorations in the covers of medieval books and Mondange took them to the Bibilothèque Nationale to see some of them. He also suggested they visit the Chateau Chantilly where the library had some particularly important pieces ending by stating that the whole question would be discussed and examined a month later.

Many of the places they were directed to were in some suburb and took a while to get to and they were mostly very small workshops where perhaps at the most three visitors at a time would fit which meant that they divided into groups. Mr. B. arrived with his group at the ivory carver's and he proceeded to tell them about the differences in ivory from African and Indian elephants. When he heard that Mr. B. lived in Stockholm he showed them the tooth of a narwhale and spoke to them at length about Norse mythology. He also gave them directions to Cluny, a museum in Paris, which contained a collection of ivory sculptures, copies of book illuminations and woven tapestries. Talking to Mondange about these experiences made him hold a further lecture speaking about woven tapestries and symbolism. Mr. B. calls it Mondange's pedagogical masterpiece when he then announced their impending visit to Le Gobelins, a department of the Ecole where they taught tapestry weaving. It was clear that Mondange knew from having spoken to the ivory carver what had transpired during the visit. During their visit at Le Gobelins Mon-

dange asked them if they had thought about the extent to which tapestries and other weavings had contributed to culture and well-being and he asked if they knew of a gallery called Le Mur du Nomade. One of Mr. B.'s friends from Arles in the southern parts of France began muttering about the value of visiting some exhibit on Bedouin craft at which Mondange replied something in line with: "typical, you think all you get from Sahara in southern France is sand blown with the wind?" And then he spoke to them at some length about Arabic bookbinding. From their visit at Le Gobelin Mr. B. recalls how deeply the different fibers, wool, linen, cotton, hemp and seeing thread dyed in 40 nuances of blue resonated, all of this brought a newfound respect towards those tasked with translating a painted image into a woven design. As Mr. B. sees it what Mondange achieved was:

[And when we complained] and tried to explain to him that we were not overly enthusiastic at the prospect of traveling through the entire city to meet someone [...] he was both surprised, saddened and angry. Then he cursed us out telling us that the first thing one had to work at was one's pride over the excellence one possessed. [...] [To be aware of] that these were vocational cousins that could make life easier because you could go to them trustingly and say: "I've got this and that problem [...] do you have an idea, can you help me?" And then he said the really important part that stuck with me at the time, he said: "and don't forget when you visit someone who works alone and who strives for the exact same reasons as you are striving, to achieve the best possible results with his work. You visit him not as superiors but on an equal footing and ask for help and the person is able to assist you. It depends on your behavior towards him if you will get that assistance and at the same time it becomes a validation of his professional knowledge or competence, it's a mutuality, you need each other in order for there to be any development in work. It's something one doesn't achieve alone but always confrère [ie. as colleagues]." [...]

I was convinced that Mondange forced us to come to grips with an attitude we had that reached back 3- or 400 years in connection with an immense impoverishment of professional survey or general view [ie. in connection with increasing specialization]. And he constantly tried to counter it by drawing our attention to how intimately we [ie. the different crafts] were connected and how important it was that one took an interest in what the vocations were then and what they are today.

6.6.2 Life at the Ecole

During our conversations Mr. B. touched upon some other aspects in connection with the Ecole Estienne as an educational institution. One of them was the renovation of a wooden floor at the chateaux Fontainebleau that was perhaps 400 square meters, where most of the students from the workshops at the Ecole, about 40, had to go and scrape the whole floor with card scrapers (scraping is a form of planing of wood by hand). For a couple of weeks they worked on that floor and

Mr. B. explains how they would line up and the foreman would walk by everyone, check their hands, for wounds etc. go through how to tape the card scraper and the protections used on the hands and knees. They would work for 20-30 minutes and then have a 5 minute long break for gymnastics and relaxation exercises, they were taught how to massage each other in order to avoid unnecessary muscle pain, etc. The same card scrapers are, incidentally, used in the process of edge gilding in order to prepare the edges of the book so that they become perfectly smooth.

Another topic was the interaction with some of the famous artists of the time. Both Salvador Dali and Yves Klein commissioned work from the masters at the Ecole and Mr. B. was invited by Mondange to assist in working for both, in the process participating in the development of several complex technical solutions to the designs that they had supplied.

6.7 After the Ecole

Between 1968 and 1975 Mr. B., after having completed his education at the Ecole, went on working in his workshop taking on various commissions. In 1975 he was contacted by teachers at the nearby L-school, a Waldorf (Steiner) school where bookbinding is part of the curriculum at the upper secondary level. Over the next few years what had initially been just a part time job grew until he finally more or less ceased working with commissions. During his more than 30 years at the school, he not only taught bookbinding but developed a curriculum for the subject. He was one of the people mainly responsible for the building of a crafts-house in the mid-80s in which workshops for bookbinding, weaving, woodworking, ceramics and smithing are housed and generally participated in, or was the originator of, a wide variety of craft educational initiatives. In that time, he also had former students and others in the workshop on an apprentice-like basis.

6.8 Auto/biographical notes

The following focuses on those parts of the conversations that touched on comparisons between my apprenticeship with Mr. B. and his own. They not only provide further context to what he said about his vocational education they also include aspects of Bildung in action that would have been difficult to get at if we hadn't shared this educational context. I have included a brief outline of our history before returning to matters raised in our conversations about vocational education in bookbinding.

When I first met Mr. B. was probably at the time I was in 6th grade, ie. 1990, and he taught us practical geometry through the construction of a dodecahedron-shaped lantern in paper for the annual light celebration in late November at the school. I don't remember those events, apart from my lantern, my first real memories being from one or two years later when I spent a longer period of time in his

workshop. I wound up spending an unusual amount of time in the bookbinding during my upper secondary school years and decided I wanted to learn the craft while I was in 11th grade (the second to last, at the time I had just turned 18). When I asked Mr. B. if I could stay on as an apprentice he explained to me that in many ways the school offered less than ideal circumstances and that I was nevertheless welcome to stay on.

My apprenticeship lacked any formal structures, apprenticeship training in Sweden at that time was subject to changing regulations and differences between professions which worked itself out so that there wasn't any institutional basis other than the test one could take in order to earn one's journeyman certification. This situation meant that there was no financial support. I had a choice between a part-time job and applying to the university in order to satisfy both an academic curiosity and having the combined student grant and loan support the craft education. I chose the latter and apprenticed for close to five years rather than three, completing it in the spring of 2002.

In many ways then, my apprenticeship was radically different from the one that Mr. B. went through but in one respect there was a remarkable (and to me at the time, as far as I can recall, unknown) similarity, namely in the comparative breadth of our vocational education. His was more consciously aimed at by the institutional context in which it took place and mine more an effect of a comparative lack of institutional context. However, the variety of work and impulses that one can receive in a school environment is also in many ways richer than that of most firms or workshops. The main difference in this breadth, as I can see it, is that his had more of a technical and practical, in the sense of manual, slant whereas mine turned out to be more academic.

This is not the place to discuss more in depth the differences and commonalities between our apprenticeships, nor the gaps caused by my learning the craft outside of a network of active professionals. There are further questions raised by the steep decline of bookbinding, especially in the hand-binding area, leaving us today with a craft that has experienced drastic contraction and as a consequence, perhaps more than anything else, a resulting poverty of professional culture, ie. the kind of vibrant exchange of experiences and ideas that can arise when a group of highly skilled professionals come together. Such exchanges need a certain foundation in professional continuity and number of practitioners or it will be so dependent on a few personalities that when these disappear most of the cultural exchange goes with them.

I have included two discussions from the conversations that were about the education I received as an apprentice. They are there because they speak to how Mr. B. has transformed his own educational experiences into enacted teaching and into a view of education. They are also there because they relate to the issues being raised subsequently regarding *Bildung*.

6.9 Conversations about my apprenticeship

Part of the conversations we had turned to matters connected to my own apprenticeship with Mr. B. between the fall of 1997 and spring of 2002. At one such time I asked him if he had some kind of curriculum for my training, expecting an answer that had to do with learning various techniques and skills at different times and in a certain order. However, he instead came to speak about an episode in my apprenticeship and how he had worked to instill an element of vocational virtue that he feels is important. He begins by speaking in general terms of what he intended above and beyond teaching me to be a capable bookbinder:

One aim [with the apprenticeship education] was to develop the ability to look further than just “I’m done” and then to walk away, a modern word is sustainability instead of doing something that is as quick and as simple as possible.

[...]

I had to call your attention to: “Ruhi, [...] we help the students, we do parts of a process for them helping [them] across thresholds, but it demands your full presence. You’re responsible for the joy of a student, you can’t make any mistakes.” And I could only work like that because it wasn’t a threat but really an appeal to you to gather yourself because this is important and I don’t know if you remember your questions. For instance, you said: “look at me how I’m doing it now, am I doing it correctly? What am I doing wrong? What could I do better?” And that was the dialogue, and then we talked about what you did.

[...]

In a normal apprenticeship you can stand on the other side of the table and tell your master “sorry, it didn’t turn out better than this,” that was never the case with you and I made sure of it actually, that you didn’t develop such an attitude.

(Compare this with the essay he had to write at the vocational school.)

R: [surprised] How?

[...]

W: Do you remember that we always made almanacs for the bazaar in November? [a reference to geometrical embroideries made in 6th grade on colored paper that was glued onto thick cardboard and turned into calendars] Do you remember that there were a couple of girls that came late after we had made them and asked to have theirs done and you forgot to use a [thin sheet of glossy paper between the calendar and the cardboards] and everything was in a hurry and I stood there and thought to myself: “should I say something?” But instead of reminding you about the paper I said: “Ruhi, quick in and out of the press.” And you looked up at me and you were a bit irritated and you put the first in the press and I said: “out.” And you took it out and part of the cardboard was stuck to the calendar and you started to swear over yourself, you’d forgotten the paper because you were annoyed at the girls who disturbed you in another

job you were doing. And there was no need for verbal corrective, it was an experience of: “aha,” you relived, remembered everything we’d talked about regarding pressing [...] and all of that you literally owned and then it’s not: “ah sorry, it didn’t get any better than this.” [...] That was the kind of reality or experience that you had, that: “ah, that’s just not allowed to happen,” and you saw the girls and their expectation, the whole complexity. I didn’t have to argue with you, you had no chance to just say: “sorry it didn’t get better than this,” but instead you encountered an immediacy of neglect that gave you armor [for the future] through it.

[...]

Luckily you didn’t leave it in the press long but still long enough that [the glue had gone through some of the holes that the embroidery had made in the paper causing it to stick to the cardboard on top of it in the press] and it could be saved. [...] That it was for one of the girls who was really a pain in the ass made it even more relevant because I paid attention to the next one you made and if you had repeated the same mistake with the second as well and not made an immediate correction then I would have had to tell you: “Ruhi, not one more time.” [Spoken with a voice as in Ruhi, never again or else] And that wasn’t necessary and what is that? Is it morals? Or is it care and considerateness? Or, what is it? It’s a complexity one develops that exists beyond the technique.

This type of dialogue, further analyzed in my second article (Tyson under review), surfaces a process of deliberation concerned with how to teach technique or skill and virtue at the same time. Narratives like it bring us close to a teacher’s reflective process regarding *Bildung* in action and, at the very least, show that this comprehension of a situation need not remain tacit.

6.10 Wolfgang B. reasoning about education

During our talks Mr. B. came to speak of the educational ideal that emerged from conversations he had with fellow craftspeople who were also engaged in teaching and that he strove for in my apprenticeship: “I didn’t have a vocational ideal [for your education] as in: bookbinder, but, as I said earlier, as in: Bauhof.” At one point he characterized this as:

It ended with us [Wolfgang and some craft-teaching colleagues] agreeing that there is only one possibility for a future education and that is the oldest form of Bauhof. The idea that, among other things, stood behind the building of our great cathedrals. [...] Education cannot work pedagogically [...] without the Bauhof idea, ie. the understanding that the plurality of needs and knowledge, the intense will by the mason, scaffolder, structural engineer, architect, artist, sculptor, all of them need to aim at a common goal. [...] Back then it was the dome, today, it is the human being.

The Bauhof, a concept Mr. B. says he took over from Hans Sachs (1494-1576) is mostly known from the similar context of the great Cathedral constructions where the architect together with the masons and other craftsmen worked together in a Bauhütte. In the context of Mr. B.'s reflections, Bauhof can be taken to mean a group of craftspeople that together strive for the common aim of building a cathedral. However, later in our conversations, Mr. B. makes a further distinction between Bauhöfe focused on cathedral building and those focused on building large municipal structures that he exemplifies with what in southern Germany is called a Fruchtkasten (generally called Kornhaus or Kornspeicher). This is a large, often multistory, structure built to contain grains, cured foods, and more for the community. A building he characterizes as not only beautiful but also the basis for the survival and life of a community in times of scarcity.

He describes the cathedral-building Bauhof as basically hierarchical in its structure, whereas the one aimed at the construction of the Fruchtkästen was fundamentally non-hierarchical in the sense that the whole community came together to build, care for and use them. The larger ones could be three, four, or even seven stories high, sometimes built so that there was access to three stories from roads at different levels, ie. built against hill sides. Some would have a ground floor that could be converted to a community feast hall. To emphasize the level of craftsmanship, that it wasn't a glorified barn, Mr. B. compares the parquet flooring in one of them with that in the bookbindery at the L-school, and comes out in favor of the Fruchtkasten. Given these complex constructions the need for cooperation among a diverse set of crafts was not much less than that needed for the cathedrals.

Continuing his line of thought he calls the Bauhof aimed at building the cathedrals mostly a closed society. Both in the sense that there were literally more or less secret societies of craftsmen formed in and around it but also in the sense that you were only permitted to participate on a strictly hierarchical basis according to your capabilities, ie. a fundamentally elitist organization. The Bauhof aimed at building structures needed by the community is one he characterizes as an open society. He goes on to say:

The open Bauhöfe were so independent, so much a natural part of community life. [...] It [the closed Bauhof] is as if I as a craftsman or as a teacher at the L-school would parse out my knowledge according to what I thought about another person's competence or how much they were willing to pay.

The reasons for including these aspects of our conversations are several. One is that it calls attention to the different traditions that exist among craftspeople when it comes to their vocational education and training as well as their practice, and these traditions are relevant when considering ways in which craftspeople speak of Bildung. I remember Mr. B. telling me at least three stories of meeting colleagues who maintained an incredible knowledge and skill while at the same

time charging exorbitantly to teach what they knew and/or maintaining strictly hierarchical and partly secretive organizations. Another is that the focus of the whole case receives a conceptual summary in the above reflections. Finally, it is perhaps possible to make things even clearer by closing this case presentation with a story Mr. B told me many times over the course of my apprenticeship. It is unclear exactly how he picked up the version of this story that I know, he refers vaguely to having read a short version during the 50s and come across a longer one perhaps 20 years later.

Nicholaus of Cusa (Cusanus) lived from 1401-1464 and was an important Cardinal in the Catholic Church and a philosopher. As one version of the story goes (he tells it with minor variations each time and I remember it in my own words) Cusanus was visiting Rome and a friend of his who was a Bishop told him when they met that he had with him at his home the most profound philosopher he'd ever met. The Bishop begged Cusanus to immediately accompany him home to meet this man who is called the Layman, ie. he is not a priest but illiterate, in the original latin: *idiotia*. Well at his house, they search for the Layman who is nowhere to be found until finally he is discovered sitting in the stairs that lead to the cellar where he is occupied with carving a wooden spoon. This is quite embarrassing to the Bishop who asks him why he is doing work better left to the servants, shouldn't he be more concerned with philosophical contemplation? To this the Layman replies: "I am working formatively on the whole spoonness of the earth" (*Ich arbeite formend an der ganzen Löffelheit der Erde*). This resonates especially with one of the German poet Novalis' aphorisms (from *Blütenstaub* 32nd fragment, 2008): "Wir sind auf einer Mission, zur Bildung der Erde sind wir berufen" (We are on a mission, we are called (berufen) to the Bildung of the Earth). Bear in mind that *formend* is synonymous with *bildend* which is the verb-form of Bildung.

Interestingly, in looking for something approaching this story in the writings of Cusanus, one comes across a treatise called *Idiota de Mente* (the Layman on the mind or spirit (Hopkins ed. 1996 [1450])). In it Cusanus retells a much longer conversation with the Layman. The Bishop is here called the Orator. They find the Layman carving a spoon but not at the Orator's house, his embarrassment is still there but the Layman's answer is somewhat different and longer: "I am gladly engaged in these tasks which constantly nourish both body and mind," and then he spends several paragraphs speaking about spoons and spoonness in the context of platonic philosophy. Basically, the Layman uses spoon as an illustration of a material exemplar of the idea or spoonness of the spoon, thus touching on Plato's philosophy even though he himself has not been able to read Plato.

The version told by Mr. B. takes things in a completely different direction and his guess is that he has a later version perhaps formulated in part as a craftsman's pun on Cusanus and in part as a serious challenge to Cusanus' understanding of what it entails to make something. In this "new" version the issue is not to illustrate a philosophical point but rather actual work on that which has spoonness in the earth. In a Bildung related context it is important to be aware of the philo-

sophical traditions that live among craftspeople independently of the more literate academic one but without, thereby, lacking in originality. In this respect one might at least consider the degree to which craft vocational education has been, and perhaps remains, a largely embodied and orally transmitted form of Bildung (cf. Ong 1982) whereas much of what is written about as Bildung takes writing as a practice for granted as of central importance to the process of Bildung. As part of the craft of bookbinding it would surely be ironic of me to suggest that writing is irrelevant to a tradition of Bildung through making and it is hardly the rejection of written matter that this case and the story of the Layman imply. Rather, I would suggest, it is in arguing that carving a wooden spoon can also be a philosophical activity and in cautioning against assuming that a manual practice is a lesser source of potential Bildung thus motivating the removal of the practical origins of much educational matter in order to present it largely as texts.

6.11 The case and Bildung in action, initial reflections

Before I move on to discuss the research questions and to summarize the articles, a few reflections on the case. How does the case as a whole increase our understanding of Bildung in action in a craft vocational context? Parts of the case are analyzed in the articles and some broader reflections on Bildung and vocational education are undertaken in the discussion. But on a more immediate level, directly relating to the aim of the study, where do we stand?

The case consists of the biographical narrative of Mr. B.'s vocational education together with episodes he remembers in greater detail as well as the auto/biographical parts where his reflections and deliberations on teaching in relation to my apprenticeship come more into the foreground.

Bearing in mind the discussions on Bildung and the practice turn in chapters 2 and 3, I think the case contributes to our understanding of craft vocational Bildung as it stretches across a whole life course and how this life course branches out into episodes that are especially rich in descriptions of Bildung in action. Furthermore, it is in the biographical account of the educational path, the institutions and the curricula, that the structures which have afforded the enactment of Bildung, ie. Bildung in action, become visible and receive their context.

Bildung in action through making is most extensively described in the episodes about the cube, edge-gilding and the account of my making calendars, including also the episode from the vocational school if drawing and painting are understood as making action.

Vocational Bildung in action includes the same calendar making and edge-gilding episodes as well as the narrative describing how Raymond Mondange taught. Furthermore, the structures discussed, ie. curricula, voluntary and mandatory courses, etc. are affordances of Bildung in vocational contexts but also as such

become an experience of vocational Bildung in action. With this I mean that, for example, the whole structure of Begabtenförderung as it is experienced is a source of Bildung in action in the biography of Mr. B.

7 Research questions and article summaries

At this juncture I will repeat the aim of the study once more as it was stated in the introduction: The aim of the study is to increase our understanding of Bildung in action in a craft vocational context. This is part of a research context that on the one hand brings together Bildung and vocational education and on the other hand tries to differentiate our understanding of the actual practice of teaching vocational subjects, techniques and skills, ie. didactics or “in-action.” The following research questions are meant to deal with this aim by taking a closer look at some of the most salient aspects of the case.

7.1 Research questions

From the various topics related to Bildung in vocational contexts through making covered in the case I have moved on to analyze and discuss two in greater detail: aesthetic Bildung in a vocational context and the development of vocational excellence (excellence here understood as what might be termed vocational virtue and judgment). The method has been to use specific philosophies of Bildung as conceptual lenses in the analysis of the case to identify some of the specific contents and faculties of Bildung (the process of arriving at them has been described in chapter 4 on method). Using these philosophical perspectives in the analysis is a way of increasing our understanding of Bildung in action in a craft vocational context by going beyond the initial reflections at the end of the case chapter. In effect answering the question: *how* is our understanding increased, beyond being enriched by an extensive example?

1. In the first article the question is: what constitutes aesthetic Bildung in craft vocational education and how can it be enacted, especially in the field of vocational subjects, ie. in the teaching of a subject or a technique.

This was initially formulated as: what constitutes aesthetic Bildung in action in a craft vocational context, especially in the field of vocational subjects, ie. in the teaching of a subject or a technique.

2. In the second article the question is: How is vocational excellence taught in the double sense of considering the act of teaching itself and the extent

to which such considerations of teaching episodes themselves in turn contribute to the development of excellence.

This was initially formulated as: How is vocational excellence part of Bildung in action throughout the case, in the double sense of considering the act of teaching itself and the extent to which such considerations of teaching episodes themselves in turn contribute to the development of excellence.

With both of these questions there is a confluence of issues concerning vocational Bildung in action through crafts. Considering the case, Mr. B. is both speaking about his Bildungsgang, his Bildung biography as it has related to his vocational trajectory, and about some of the contents, forms and specific episodes that were part of it. These latter aspects form the major focus of the articles and after summarizing each article I will take this one step further in considering its relation to Bildung in action.

7.2 Aesthetic Bildung in VET

Here I will present a summary of my article *Aesthetic Bildung in vocational education: The biographical case of bookbinding master Wolfgang B. and his apprenticeship* (Tyson 2014) together with a discussion of how it relates to Bildung in action. The abstract to it reads:

In the present article I will be discussing the importance attributed to aesthetic experiences in the vocational education of bookbinding master Wolfgang B. using the philosophy of Friedrich Schiller both to understand what constitutes these processes and to examine Schiller's thoughts in the light of his recollections. By doing this I hope to elaborate on a potential, and often overlooked, Bildung-related possibility or affordance at least in craft vocational education and training (VET) as well as to articulate a pattern that can be generalized from into other VET contexts.

This leads to a richer understanding of the potentials inherent in teaching skills or capabilities and the pedagogy needed to elicit these as opposed to the belief that teaching technique is a straightforward and unambiguous issue of manual practice. These are in the realm of aesthetic and ethical learning potentials (given that such learning is never automatic) as well as in the connections that one might establish to various fields of scientific and cultural knowledge. Through all of this there emerges a partial description of a vocational Bildung tradition that has its roots in the teaching of crafts.

In the article, given its format, I had to limit myself to a few examples from the case, namely the ones that concern what they called punishments at the vocational

school and learning edge-gilding, both from Mr. B.'s apprenticeship years. When considered in the context of the whole case it is worth taking into account the close connection Mr. B. makes between quality and aesthetics, mentioned explicitly when discussing two of his teachers, Helga Prohaska and Altermatt. In reworking our conversations into the case some of the repeated qualifying terms get lost when what amounts to an hour of talk is condensed into a descriptive paragraph or two. There are three such parts that I have noted in the case presentation, using terms such as beautiful and amazement: when he speaks about his experience working in industry, when he speaks about visiting other craftsmen etc. as part of his education in Paris under Mondange and when he speaks about the Bauhof ideal and Fruchtkasten. These, in particular, are relevant to the argument made in the article.

7.2.1 Article summary

In the article I focused on developing a perspective on aesthetic Bildung that had its basis in Schiller's work (2010 [1795]). Schiller develops an anthropological perspective on the human being where we are placed in the space between two drives: the form (ideal) and the sense (matter) drives. These two, in their extremes determine us thus destroying whatever freedom we might have and leading us into complete order (form) or chaos (sense). Schiller then posits a third drive that arises between these two calling it the play drive or aesthetic drive. In this we find ourselves in a state of relative freedom because the play-drive gives life to form and form to matter, which is, in effect, a definition of aesthetic activity.

How does this relate to the case? Aesthetic Bildung has been a core part of the Bildung tradition since the time of Schiller. However, less attention has been paid to this aspect of the Bildung tradition in those discussions that concern themselves with Bildung and VET. Especially beyond a concern with how aesthetic activities can be integrated into vocational training (see chapter 2). At the same time the case contains numerous references to beauty and aesthetics. As discussed in chapter 4 on method this was one aspect in the initial case analysis that prompted a more detailed look. This led to a twofold analysis of the apprenticeship-part of the case. The first considered the structure or curriculum of the apprenticeship with its concentric circles of learning affordances: the basic educational structure of workshop and vocational school, then the next circle of voluntary courses and other extracurricular activities and finally a third one of being invited to participate in the Begabtenförderung. The second considered a couple of episodes regarding how the education was enacted that were of relevance from the perspective of aesthetic Bildung. These centered on how punishment was understood at the vocational school and on how the teacher of edge gilding went about organizing his course. As mentioned above, several other parts of the case can be added to the analysis in order to give it further depth.

The definition of aesthetic Bildung provided in the article as a point of departure follows Dietrich et al. (2013:9) and states that "Bildung is the formation of

character or personality in and through aesthetic experiences.” In the twofold analysis mentioned, Schiller’s status as a paragon in the development of thought about aesthetic Bildung and his attention to the human being as embodied (the sense drive) were prominent in the choice of having his philosophy be the conceptual lens for understanding Bildung through making (called craft vocational Bildung or vocational Bildung in the article). Furthermore, Schiller’s focus on beauty as a concept became central in the ensuing analysis. Schiller writes (2010 [1795]:70 my translation):

Through beauty, the sensory [embodied] human being is led to form and to thinking; through beauty the spiritual human being is brought back to matter and given back to the world of sense.

The episodes chosen can be understood as illustrations of how the sensory human being is led to form and thinking, ie. as descriptions of Bildung through making as it moves from embodied action to thinking and reflection, including a growing interest in the wider scientific, historical and cultural aspects of the activity. I made it clear in the article that beauty as understood here does not create such a process automatically, that would contradict Schiller’s entire argument about the aesthetic condition being one of freedom, but rather that it is what makes a process eminently pedagogical. With this, I mean that a process of training can be initiated and carried through without any reference to, or interest in, beauty but such a process would only peripherally be about Bildung. Furthermore, I argued that an important part of this is that Schiller’s aesthetic concept encompasses far more than just the traditional artistic activities known to us. This allows for an analysis of the case, in the article especially the episode about edge gilding and the entire structure of Mr. B.’s apprenticeship, where more can be understood as examples of aesthetic experience than just explicitly artistic activities. The relevance of conducting case studies of vocational education from this perspective is that it allows us to uncover ways in which beauty and aesthetic activity can be incorporated into training processes that were previously unknown to us and difficult to conceive of. The arts occupy such a prominent role in our understanding of aesthetic Bildung that empirical research really can support an expansion it. This was expressed as:

In the longer run such differences in vocational Bildung biographies can contribute to a more differentiated understanding of general theory as well as the surfacing of elements that were not even clear in the more philosophical deliberations.

In further analyzing the case, I argued for a pattern that becomes visible through Schiller’s perspective owing to his understanding of the aesthetic condition as one of freedom and meaningfulness. Mastery in becoming skilled contains, from this

perspective, a potential aesthetic component in the sense that we become free in relation to whatever task the skill gives us capability of dealing with. Skill or technique, even in its most limited interpretations, thus contains more than simple proficiency. I also argued that both the structure of Mr. B.'s education and the way his teachers went about enacting his training call attention to the pedagogical character of it. There had been, both in the structure and the performance of his training, a far-reaching educational reflection embedded into it. The point was to make clear how complex a vocational training is if we try to break it down into subjects.

7.2.2 Further reflections in relation to Bildung in action

The article might have been called *Aesthetic Bildung in action through making* in order to express its topic in the context of the thesis. There are two lines of argument in the article that relate to the aim of the study as a whole. The first expands upon what might be understood as aesthetic Bildung including far more than the established arts and their related activities. The second discusses ways in which aesthetic Bildung has been afforded in the process of learning bookbinding, through the structure of the apprenticeship and through the different ways in which the teachers taught. Some of these ways fall within a more traditional understanding of what aesthetic Bildung is and others require that expanded interpretation through Schiller referred to above. From this perspective the case is about a wider view of what could be considered aesthetic contents of Bildung, aesthetic processes of Bildung, aesthetic contexts of Bildung and how an aesthetic faculty for Bildung is developed. The contents have come to include forms of practical knowledge (in the sense of Heron & Reason 1997) in which the sense and form drives are liberated through a beautiful exercise of skill. The process has come to include such educational Bildung in action as the narratives of "punishment" and edge-gilding describe, showing different ways in which interruptions and surprises were made part of the apprentices' education. The context can be understood as how the whole apprenticeship was structured with its richness of educational affordances that went beyond those parts that were mandatory. One might object that precisely those areas where affordances of Bildung were most intense (Begabtenförderung, evening courses) were thereby not participated in by everyone and the issue is tricky. Bildung cannot be forced but at the same time there's a significant risk that voluntary evening and weekend courses or education given only to especially talented invitees creates further social stratification and exclusion. The aesthetic faculty for Bildung is surfaced through the narrative as such. In speaking about his aesthetic experiences, Mr. B. demonstrates that they have added to his capacity for interpretation, ie. for making something meaningful. This is also borne out in that several of his stories, particularly that of having to draw the fountain in Maulbronn and his memories of Mondange, are stories he has drawn from in his own educational activities. Aesthetic Bildung is difficult to discuss in clear terms because, as the above indicates, contents, processes and the

faculty of aesthetic Bildung are interdependent and perhaps even impossible to separate in practice.

Returning to the relevance of surprise or interruption as a source of Bildung this comes through clearly in Mr. B.'s discussion about being sent to Maulbronn and the "Staunen" or amazement that he came to experience in reconstructing the fountain. Less obvious are the interruptions caused by Lange-Otto in taking them to the forest to see the trees from which some of the tools were made and his insistence on discussing matters of science and culture relating to edge-gilding with the apprentices. This is similar to what Raymond Mondange does at the Ecole where the disruptive character of his interventions comes through with more force.

The issue brought forward in the preface about general competence and vocational subject knowledge (or skill, in German: Fachwissen und können) being developed in tandem, receive pointed illustrations throughout the case (making the cube, the "punishment," Mr. B.'s deliberation in relation to my apprenticeship). What also receives articulation is the plurality of ways in which this tandem is a matter of educational judgment, which is equivalent to an aesthetic one. This tandem is not given and not unambiguous, rather it is a (perhaps even the) relationship that can be called into being in any number of ways depending on our capacity for imagination. And, as Swinton (2011:157) writes:

You can only imagine what you have been taught to imagine. So, for example, we could look at the literature within the caring professions not simply as sources of knowledge to help us to practice better, but also providing new visions which fund our imaginations in ways that allow us to see the world differently.

I would not go quite as far as categorically stating that one is unable to imagine what one hasn't first been taught to imagine. But I agree that narratives of aesthetic Bildung in action can help us imagine new and novel ways of enacting further aesthetic Bildung. This is a point that bears repeating because we need to go beyond the philosophical or discursive discussion stating that educational judgment is an act of imagination and that teaching skill in tandem with general competence can be done. The question is: how does this occur? How is such aesthetic judgment described, how are instances of this "in tandem" characterized? And this is one of the main themes of the present inquiry. It is through a growing number of narratives answering these questions that we can begin to articulate the tacitness of aesthetic and ethical practice and to challenge mechanistic metaphors of vocational education without recourse to the retrenchment Schön (1987) and Rauner & Bremer (2004) mention in the preface.

7.3 Educating for vocational excellence

This is a summary of my second article (Tyson under review) and corresponds to my second research question: How is vocational excellence taught in the double sense of considering the act of teaching itself and the extent to which such considerations of teaching episodes themselves in turn contribute to the development of excellence. The abstract reads:

The focus of this article is on education for vocational excellence (the combination of virtue and good judgment or *phronesis/practical wisdom*) through the examination of episodes from the auto/biographical study of master craftsman Wolfgang B. Vocational excellence is an issue sometimes discussed with regard to teacher training for schools and universities, often from an Aristotelian perspective, but less often when it comes to teaching and teacher training in the various models of crafts apprenticeship education that exist. Even though there is no lack of arguments made for the excellence one is able to develop in learning a craft there are fewer takes on *how* such educational aims have been enacted. This is problematic because teaching vocational knowing, including excellence, thereby becomes a more tacit practice than it needs to be and more systematic reflection is inhibited.

I will be considering these problems through the educational biography of a master bookbinder, gilder and engraver, Mr. Wolfgang B., and two stories he tells, one of his education in Paris and one of his own deliberations in teaching bookbinding.

In doing this I am arguing for a systematic narrative approach to researching and teaching how to teach vocational excellence and by extension more generally with regard to teaching. This not only does justice to the particularity of practical wisdom but also calls attention to the imaginative character of being able to deliberate wisely.

In the article, owing to the limited space, I refrained from making *Bildung* part of the discussion even though excellence as it is understood throughout: the combination of virtue and capacity for wise deliberation, can be considered central to some parts of the *Bildung* tradition. For instance, van Manen (1995) writes of tact, one possible virtue in teaching: “tact is a kind of scholarship and *Bildung*.” As with the first article, I was limited in how much of the case study I could draw on for the analysis. The two episodes discussed can be extended to include the same episode on “punishment” at the vocational school that is discussed in the first article as well as several minor references throughout the case especially the repeated return to issues of quality, parts of the episode about the cube and the reflections about the Bauhof ideal.

There is an ongoing discussion within the field of pedagogical content knowledge (PCK) on “the wisdom of practice” (Evans 2007, Shulman 2004, 2007) that considers narrative or case study perspectives in researching PCK. This

discussion runs parallel to the point of view taken here but, to my knowledge, has not taken a biographical or apprenticeship (craft) perspective which is the main reason for not pursuing it further *in this context*. If I were exploring the implications of the case for say, teacher training, the issue would be different.

7.3.1 Article summary

In the article, I defined excellence as a combination of virtue and the ability to deliberate wisely how to practice that virtue in a situation. Someone might be a very generous person but still lack judgment as to how to be generous in a specific situation either giving too much or too little, or to the wrong person or in such a way as to cause insult, etc. To a degree it might be argued that this is part of the virtue itself, or that it constitutes part of another virtue, say tactfulness, but it seems equally clear that part of it has to do with judgment or practical wisdom as Aristotle calls it. This understanding of excellence (expertise being the more specific capacity to make something well) was then brought together with the question of how to educate for excellence together with expertise. In particular, how matters of virtue and good judgment are taught during the process of education.

There has been an ongoing discussion of this in the field of academic teacher training but not in that of apprenticeships. My suggestion being that this has less to do with any tacit education for excellence than with apprenticeships having emerged from a tradition that was largely personal and oral, ie. unwritten. This leads to two kinds of questions or issues. On the one hand leaving such questions as virtue and good judgment unexamined allows for the inherent conservativeness of oral culture to remain, both for the good and for the bad. There are plenty of examples of apprenticeships in which neither virtue nor judgment were taught but rather vices. On the other hand we also pass by opportunities to find out in better detail what it is that does make apprenticeships such valuable contexts for vocational education and, what its characteristics are when it promotes unusual excellence. How was it taught?

In discussing the case I focused on the stories about Mr. B.'s teacher Mondange and on the episode in which he describes his own deliberation with regard to my apprenticeship education. Both of these discuss aspects connected to the development of excellence. In the case of Mondange by his interruptions of their work in order to provoke them into a wider interest in what colleagues were doing and awareness of a responsibility that they shared for each other. In the case of the narrative about my own apprenticeship by exemplifying how deliberation with regard to excellence ran parallel to teaching a skill.

In order to conceptually frame these narratives and place them in a context of contemporary debate on these topics I turned to Aristotle and his distinction between *techne* (the art of making) and *phronesis* (practical wisdom) in *The Nichomachean Ethics* (2009). I have discussed this more in chapter 3. In developing these distinctions it was possible to clarify what the narratives were saying. They were instances of *practical* wisdom in that they spoke of a particular situa-

tion, or string of them in the case of Mondange, and how the teacher dealt with it. Furthermore, the narrative of Mr. B.'s deliberation was a narrative where an instance of the relationship between practical wisdom and *techne* became visible in the process of education.

To make the context of the narratives clear as instances of practical knowledge I moved on to discuss narratives as a form of knowing in relation to *phronesis*. My point, leaning on the work of (Caduri 2013, Carr 1999, Connelly & Clandinin 1990, 1995, Gallagher 2013, Lewis 2011, Smeyers & Verhesschen 2001, Worth 2008) was that since practical wisdom is about particulars, narratives as a form of knowledge representation are better suited to convey it than propositional or declarative statements. The main reason is because narratives remain in context. However, the caveat was also made that not all good teachers of craft are good storytellers nor are narratives limited to the conveyance of instances of practical wisdom. They are just as well suited to convey instances of vice and folly. The argument from this was that research collecting stories of education for vocational excellence:

Represents an important empirical source of knowledge about how such education has been enacted and interpreted. Because excellence is fundamentally practical in Aristotle's sense of particular and situational it seems difficult to even get at this aspect of vocational knowing without including a rich collection of stories. This has been argued in a more general sense as the education of narrative imagination and why we should teach literature in schools (cf. Nussbaum 2001, Worth 2008) although to my knowledge it has not been discussed as a way of collecting a literature of *vocational* relevance since it would be highly context-insensitive to expect masterpieces of world-literature to relate directly to the entwined art (*techne*) and practical wisdom of teaching a subject or skill.

This was followed up at the end of the article with a reflection on the potential in systematically gathering such narratives and what a comparative study might have to offer in terms of research possibilities. The conclusion was that such narratives represent an articulation of otherwise tacit knowledge that is especially important to have access to as a teacher since teaching a vocation involves excellence both in relation to the vocation and in relation to the activity of teaching. Such stories are a form of knowledge because they serve as sources for our narrative imagination, which is the capacity we need to develop of imagining a good action in a given context. The more stories we know, the more substance we have to assist us in imagining or deliberating on what constitutes a good action.

7.3.2 Further reflections in relation to Bildung in action

In some ways imagining might express the above argument more accurately than deliberation because deliberation calls forth an image of reflective detachment whereas many, perhaps most, situations that invite a virtuous response do not allow for this but ask us to act with some speed. Imagination allows for an understanding of this that considers *phronesis* as a way of seeing a situation wisely and seeing or imagining the right course of action more in the sense of a painting than a narrative, recalling the argument of Heron & Reason (1997) about presentational knowledge forms.

One aspect of the argument put forth in the article, that narratives are a way of articulating practical wisdom, is equally applicable to Bildung as a biographical process since biographies are narratives and they are particular. Thus, the argument in an expanded version would be that if we want to know how to educate for Bildung, narratives of such an education, ie. narratives of Bildung in action, constitute such knowledge. They do so in two ways, as narratives in and of themselves by serving as sources of narrative imagination for practitioners, curriculum designers and policymakers alike but also, given a more systematic collection of such narratives, as sources for further scholarship. For instance, having identified the making of the metal cube as an important source for Bildung through making in the biography of Mr. B. it is possible to consider if this perhaps represents a paradigmatic, in Flyvbjerg's, (2006) sense of the word, Bildung-task in the metal crafts. However, that would require a collection of stories about making the cube where perhaps the conclusion is that owing to the unique circumstances of Mr. B.'s exposure to the task it represents a unique experience of Bildung as well. A systematic approach to narratives of Bildung through making might uncover a sequence of craft tasks that are unusually frequent sources of Bildung in biographical reflections. At the same time the process of Bildung in action related to these could receive articulation in the form of stories about what teachers did, how they acted, how they contextualized a task, the structures and curricula that the task was embedded in, and so on.

Returning to Schön's statement (1987) that he is not immediately concerned with how wisdom is developed in reflective practice, that development is the focus of the article. The close relationship between reflection in action and an educational intervention for Bildung in action becomes especially clear in the conversation about making the calendars. There Mr. B. describes a process of reflection in action aimed at ethical Bildung in action on my part. Similarly, the episode from the vocational school regarding "punishment" alludes to an act of reflection in action on the part of the vocational teacher when he moves from one suggestion to the next in trying to get Werner to bite on a Bildung-related task. By articulating processes of reflection in action aimed at ethical Bildung in action these narratives provide examples of how such processes occur. This returns us to the statement made in discussing the first article that it is through a growing number of narratives that we can begin to articulate the tacitness of aesthetic and ethical

practice and to challenge mechanistic metaphors of vocational education without recourse to the retrenchment Schön (1987) and Rauner & Bremer (2004) mentioned in the preface.

8 Discussion

Die Berufsbildung steht an der Pforte zur Menschenbildung.
Kerschensteiner (1904:50)⁷

Bildningens enda fiende är ytligheten.
Liedman (2001:45)⁸

Die Liebe herrscht nicht, aber sie bildet; und das ist mehr!
Goethe (1999:98)⁹

This biographical case study has been about exploring Bildung in action through making in vocational contexts. In what follows, I will open the discussion with some critical reflections. I will then go on to discuss the aim of the study related to Bildung in action, Bildung in vocational contexts and Bildung through making, concluding with some final remarks.

8.1 Critical review

In this critical review I have tried to gather together in one place the most important limitations and critical viewpoints in order to consider them once more. First out are what I have called the limitations of the study.

8.1.1 Limitations

The most important limitation to the study is that it's a single case study. This is not primarily a matter of not being able to ask systematic comparative questions (I have discussed what these could be like in the articles and below, 8.2.1) but a mat-

⁷ In English: Vocational Bildung (the literal translation of Berufsbildung, I have been calling this Bildung in vocational contexts or, at times, Bildung through vocational education) stands at the gate to Human Bildung or the Bildung of the human being.

⁸ In English: The only enemy of Bildung is superficiality (literally in Swedish remaining on the surface, yta, of things).

⁹ The German bildet is the verb form of Bildung. The sentence has been variously translated into English as: *Love does not dominate, it cultivates; and that is more!* (Weigand), *Love does not rule, but it trains* (Carlyle), *Love rules (and reigns) not, but it forms (builds and 'trains')*; (Wakeman), source: wikiquotes on Goethe in English.

ter of being confined to a monological perspective on Bildung in a vocational education biography. Without at least a few more similar studies it is difficult to know if the reflections developed here contain underemphasized conceptual spaces. Perhaps the vocational education biography focusing on Bildung of another old expert craftsperson would reveal further processes, contents, etc. of Bildung through making, Bildung in vocational contexts and Bildung in action that require reevaluation or reframing of what I have hitherto developed. I would expect as much and therefore caution that this is hardly more than a first articulation of these concepts.

What about the questions raised in the chapter on method regarding narrative cases running the risk of inherent conservativeness and/or becoming mere anecdotes? The former will be discussed shortly (8.1.2). The latter is a matter of how well the aim and research questions have placed the biographical narrative into an analytical framework. As I have tried to argue, such an analytical framework needs to allow a conceptual structuring and illumination of the stories. Furthermore, this needs to be a reciprocal action, the stories need to add to the concepts and illuminate them as well. I will turn to these matters after rounding out the critical review discussing, in turn, Bildung in vocational contexts, Bildung through making and Bildung in action once again in relation to the case and the articles.

8.1.2 What do we mean by the word “work”?

Speaking of issues, there are some that have been touched on briefly in the preceding text and that need to be tackled. One is the question of what we mean when talking about work and vocations.

Work is an extremely vague term that can encompass everything from poking around in one's garden to sitting at a conveyor belt assembling components. It stretches from almost complete autonomy to complete subjugation depending on what the power-relations are that organize the work. Work, for many, is the central way of being part of society, but for many others it is that which causes a sense of alienation and subordination (cf. Hinchliffe 2004). For some, work is just a way of making ends meet but nothing with which their identity is strongly connected. For others, work is part of the very core of their identity, often with regards to craftspeople incidentally. It is no wonder then, that the term calls forth quite varied feelings and associations in people.

These issues are no less important in relation to a case study on the vocational learning experiences of a craftsperson in the 1950s and 60s. Depending on how one understands work, the evaluations and interpretations of the case can be quite different. My focus on a case that is both about an unusually successful craftsman and about unusually good vocational education might be taken as an unintended support of education that furthers an uncritical view of capitalist economies. To a degree this is perhaps unavoidable since one might use it to bolster arguments against more critical perspectives, similar to critique of the human flourishing argument (cf. 5.3). My counter would be that unless we are so disillusioned as to

have little faith in social reform, cases of excellence regarding Bildung and vocational education can also lead to developments that benefit those who presently suffer. This in part is related to how we understand vocations, where one and the same vocational title say, bricklayer can mean very different social realities in different countries. As I have tentatively concluded in my article on aesthetic learning processes in vocational education there is good reason to suppose that many traditional craft vocations and more generally the German concept of Beruf contain implicit Bildung properties (cf. Winch 2006b). This leads me on to the next issue.

8.1.3 Is Bildung in vocational contexts still a meaningful educational aim today?

Is Kerschensteiner's claim, echoed by Blankertz and Fintelmann, that vocational Bildung stands at the gate to human Bildung still relevant? In Germany the conversation has been long and heated over the extent to which it remains relevant to have the kind of tightly structured educational paths into certified vocations (Berufe) that is still to a large degree the case and, as a consequence, if Bildung through vocational education is not mostly a relic (Lange et al. eds. 2001). At the same time, in Britain, scholars such as Lauder (2011) and Winch (2012) have recently argued that it might be wise to move towards the German concept of Beruf rather than to view occupations as a loose confluence of different skills. It remains, in all this, that very few people today have the opportunity to explore a vocational identity in the sense that a more or less traditional craftsman is/was able to, while at the same time the interest in craftsmanship and similar concepts remains high (cf. for example Crawford 2009, Dormer 1994, Sennett 2008). I am in no position to comment on this in any extensive way but there are two things that the case as a whole suggests which I consider worthwhile discussing. One concerns some further reflections on the value of research into the vocational education of highly skilled craftspeople even though they represent a fraction of the workforce. The other has to do with some further thoughts on the relationship between Bildung in vocational contexts, the construction of occupational categories and biographical trajectories (to which I will return in part 8.2.1).

Because apprenticeships originated in the traditional crafts and in many ways remain a highly regarded form of vocational training and because craftsmanship is a strong metaphor used for scores of other activities than making things with one's hands, there is reason to investigate craft vocational education. This is especially the case, as I have noted, when one thinks about craft-like capabilities to which I count teaching and subject teaching to the extent that they are forms of practical knowledge. At the same time, there are also significant differences between contemporary crafts and their medieval forebears, which the case speaks to. There is an undercurrent in it that does not primarily construct a vocational identity around a "traditional and romantic" view of crafts but that also speaks of the joy

in overseeing the industrial production of books as long as the same love for quality and care for the consumer remains as in the craft department. For Mr. B. this is in many ways the deciding difference between the Bauhaus school to which he feels related and the arts and crafts movement of Ruskin and Morris towards which he expresses some reservation. It also places strong emphasis on the pleasure in a division of labor that retains its human dimension in the sense of not being coerced and “managed,” so there is no attachment, on principle, to making something oneself from beginning to end. It is not then, an example of a withdrawal from modernity. If research into crafts education is to hold any significant relevance to contemporary issues it needs to be aware of this conflict *within* the culture of crafts, where the withdrawal from, and critique of, modernity is clearly present. I am assuming here that any retreat from modernity into traditionalism is fundamentally impossible and involves the construction of a past that has never existed as such. This is a discussion that is, of course, open to argument.

8.2 Bildung in and through vocational education

From the case study I have taken two contents and processes of Bildung: aesthetic Bildung in a vocational context and education for vocational excellence and made them the focus of a more extensive analysis. A third one, regarding the strong presence of a “Humboldtian” understanding¹⁰ of Bildung in the case is in the process of being written, where the analytical concept is based in Humboldt’s Bildung philosophy. A fourth one might be based on a philosophical investigation into the educational Bildung ideal formulated by Mr. B. in discussing the Bauhof and Cusanus.

Our understanding of Bildung in action in a craft vocational context has been increased from two directions through this. On the one hand, I have tried through the analyses to question some assumptions about how we conceive of Bildung in craft vocational contexts, this has been the case in discussing aesthetic Bildung through Schiller and in discussing excellence from the standpoint of Aristotelian ethics and narrative inquiry. On the other hand, I have also tried to explore and demonstrate how such narratives can offer a way to document practical knowledge, thereby making the larger case too, that teaching, including subject teaching, is first and foremost a form of practical knowledge that it only makes limited sense to speak and write of without recourse to narratives. This extends to include the argument central to the thesis that Bildung in its various aspects is tied to subject teaching or skill training and that we can conduct research into this by collecting biographical narratives of Bildung in action.

¹⁰ That is, Bildung as a broadening of one’s horizon, as a widespread orientation in the world.

What I have tried to make clear is that any craft-like practice also contains aspects, such as but hardly exclusively Bildung, that are not readily accessible to observation or participation. The exception being circumstances where one is lucky enough to be present at the right moment and often not even then as with the case of the cube, which only in retrospect is able to reveal to us those aspects that hide behind hundreds of hours of practice, patience, anger, exasperation, joy, etc. This goes a long way towards explaining why such a peripheral occupational category as crafts¹¹ still makes sense to explore and examine and why biographical studies are an important part of research into didactics.

In the following, I will go over some more general reflections concerning Bildung in vocational contexts as it relates to biographical trajectories and occupations. I will then move on to discuss the issue raised in the study regarding Bildung through making namely the aptly named “lure of technique” (subtitle to Dunne’s book *Back to the rough ground, practical judgment and the lure of technique*, 1993). Finally I will also consider Bildung in action once more.

8.2.1 Bildung in vocational contexts or Bildung, biographies and occupations

Bildung in the context of vocational education is not only an issue of understanding how elements of an education come to be experienced as sources of Bildung. It is also a matter of gaining a view towards the broader patterns of how this expands throughout a life course, ie. how these elements of Bildung are brought into a fruitful interaction with working life. In the case of Mr. B. this is hinted at in the parts that discuss coming to Stockholm and working in industry as well as the later change to working as a teacher at a Waldorf (Steiner) school. From such a single case there are perhaps few conclusions to draw other than the fairly obvious ones, that it exhibits a pattern of lifelong interest in learning as well as an unwillingness to remain in occupational contexts once they are not perceived as offering much more in terms of further Bildung. Notice that this pertains both to industrial bookbinding and studio bookbinding without the craft itself being the issue, rather the contexts are what change the most.

These Bildung issues are rarely dealt with in vocational education contexts, exceptions being Gessler (1988) from an empirical perspective and Fintelmann (1992) as well as Blankertz and Gruschka (1974) from a conceptual or philosophical one (as discussed briefly in chapter 2). Rather than going back to and expanding their arguments at this point, I will round things out with a review of what sort of questions this kind of perspective allows one to ask:

¹¹ Although it is worth noting, as discussed briefly in my first article (Tyson 2014), that crafts have never been an occupational field in which a large number of people have been engaged.

1. First, one might have a general, comparative interest in vocational biographies that exhibit strong elements of *Bildung* throughout the life course in order to see what kinds of patterns there might be.
2. Second, one might, as Gessler and Fintelmann do, have an interest in asking how an early craft education influences a person's further vocational trajectory when that craft education is not understood primarily in an occupational sense but rather in the sense of *Bildung* through making. This could be enlarged, given the possibility, to other vocational fields apart from crafts, shifting then from making to something else say, caring or designing. It might be added that the premise of Gessler's and Fintelmann's reasoning is twofold: first, that a young person benefits from learning a manual vocation in very general and wide-ranging ways (see chapter 2 on the Hibernia school for an elaboration and references); second, that much vocational education would benefit by proceeding from the immediate and concrete to the abstract. So, for example, becoming a medical doctor would be preceded by education for and work in immediate care-taking and then a middle step of working in some kind of applied therapy (Fintelmann 1992).
3. Third, one might find patterns of occupational constructs that are especially conducive to trajectories of lifelong *Bildung* in vocational contexts (as well as the opposite). This might seem more straightforward than it is. Of course, working in settings with little or no support for further education and advancement to new, and sometimes more complex, tasks can be expected to at the very least not be supportive of such trajectories. However, consider the structure of the *Begabtenförderung* that Mr. B. describes from his apprenticeship as well as the way his teacher in Paris, Mondange, taught. There is a heavy emphasis in his vocational education biography on getting to know a wide variety of different crafts and the inspiration that these provided.¹² Perhaps a closer examination of a handful of biographies with an emphasis on *Bildung* in various vocational contexts would find similar accounts, either formal as the *Begabtenförderung* or informal, as Mr. B. describes when speaking about his childhood.

¹² I have as previously mentioned ignored, but am aware of, the troubling side of *Begabtenförderung*, that it was open only to the most talented. This is an aspect of it that warrants some afterthought, at least in contexts of *Bildung* unless one fails to see a problem with the *Bildung* aspects of a vocational education being available only to an elite.

In asking the earlier question: are vocations becoming more and more irrelevant?, we might consider what a coherent, initial vocational education provides a person for her continued biographical trajectory but specifically, looking at particular vocations and particular educational contexts. In that way perhaps a more balanced answer could emerge where certain vocations and contexts are understood as more conducive to experiences of *Bildung* and perhaps also at different times throughout a life course. Another question is to what degree it benefits a young person to be initiated into a vocational context of a complexity comparable to that of Mr. B.'s apprenticeship. Through my own apprenticeship, disregarding my further work and training as bookbinder, I have at the very least come to understand what it means to be skilled, what to expect and look for in terms of training and to value, more than almost anything else, the development of practical judgment. By this I understand the capacity to weigh different courses of action and choose wisely, to organize processes, to know how particular the knowledge often is for one to be able to judge accurately what a reasonable course of action or quantity or cost is, and similar issues. Such comprehension might be thought of as contents and faculties of a *Bildung* that is vocational, ie. that are specific to a sufficient (craft?) vocational training.

We might also consider, to illustrate that habits of mind are difficult to break, what potential value craft vocational education could have if we let go of the occupational aspect, ie. the aspect that assumes one also has to work as a carpenter, bookbinder, etc. The fact of the matter is that there already exists, and has existed for almost 100 years, a form of teacher training in which elements from craft and art education are viewed as central to that training. I am thinking here of the practice of Waldorf (Steiner) teacher education. The point being that there are already groups of people who have a somewhat different conception of what, in this case, the occupation of being a teacher entails, differing also within that group. Perhaps it is not only possible but a way of gradually creating another view of schooling to think that arts and crafts elements may, to a degree, have lost their occupational meaning but have come to take on heightened relevance in teacher training as well as, potentially, many other vocational education paths.

Biographical cases of *Bildung* in vocational education can assist us in thinking about the scope and potential in vocational education and training. They can help us see the ways in which vocational subjects and tasks exist in tandem with affordances of *Bildung*. More than that, they also surface ways in which vocational education and work have become part of a process of *Bildung* that demystifies aspects of craft vocational education by taking away some of the romanticism that clings to things we do not fully comprehend or discern. At the same time they re-enchanted (as a colleague put it) such educational practices by providing us with actual, as opposed to just imagined, pathways through which vocational education, work and flourishing can coexist and support each other.

8.2.2 Bildung through making or the lure of technique

Dunne's critique (1993), echoing Gadamer quoted in chapter 3.1.2, is that there exists a belief that one can reduce teaching to a simple exercise of didactical technique, subject to straightforward evaluation, bear in mind that my definition of technique in chapter 3 does not fit this interpretation. What happens is that technique ends up being understood as a machine-like activity and then thought of as either desirable because teaching thereby becomes *accountable* and possible to research in a causally predictive manner or undesirable because teaching is thereby *reduced* to a mere skilled reproduction of what "science" has determined is the best method. In this account, the machine-like metaphor applied to skills, in particular making-skills, is then taken into other vocational contexts that are considered craft-like such as teaching.

Precisely because technology exercises this powerful "lure" on skill training, there is an urgent need to speak about it in a more complex and sensitive manner. Also to look at the ways in which ethical and aesthetic judgments and actions are rooted in, and proceed from, what we do when we make things, something the case highlights throughout and from various angles.

The machine-like metaphor for understanding craft-like professional knowledge is difficult to let go. Recourse, as discussed briefly in the second article and more extensively in chapter 3, is then sometimes taken in phronesis because Aristotle describes it as being practical and therefore concerned with particulars and not possible to reduce to a set of rules, principles or guidelines. But this has often meant degrading *techné* in the process, rather than striving for an understanding of craft-like knowledge that is less dominated by analogies with mechanical systems.

One might argue that today's working life revolves around degrees of automation, division of labor and pre-determined outcomes that resist the inclusion of phronesis. Thus Ponte and Ax write with regard to teaching (in Kemmis & Smith eds. 2008:X):

The praxis concept, as further developed over the centuries, offers an alternative to the dominant metaphors in present-day teaching, which have been derived from domains of practice other than education. A striking example of this is the language used in connection with issues of total quality management (TQM): tailor-made teaching; client-oriented services; closed chains of information exchange; achievement-based reward and so forth. All of these notions have been developed in the world of industrial manufacturing and, more specifically, the domain of predictable technologies and closed production processes.

However, this risks creating a dichotomy between instrumental technical *training* and a more humane Bildung-oriented *education* (similar to that which Gadamer creates, cf. 3.1.2). On the one hand, through a division between phronesis and

techne which mostly tends to overlook the ethical affordances in making and producing. On the other hand, by taking negative examples of technical rationality as the basis for a critique rather than considering examples of the joy that one can experience in creating an effective division of labor or the freedom achieved in automating those aspects of production that can be automated.

I will bypass here the social and political question of how we conceive of techne and dealing with it from an educational standpoint. The case narrative, in my view, is a paradigmatic one of how technical training in the sense of learning how to make something expertly not only provides ethical and other Bildung-affordances but represents the *precondition or foundation* for them.

The problem with technique and skill, if we let go of the machine metaphor, is not in rational organization, ie. rational organization is not identical with machine-like organization. Rather it rests with the way intense training has a risk of cutting one off from a wider context, as the biographical case discusses with regard to both the apprenticeship and the Ecole. This is a fine distinction and easy to miss, since the intellectual, perceptual and moral isolation a singular focus on training can lead to, might very well be similar to that of reasoning mired in metaphors of technology. The point, though, is that a pedagogical intervention here does not gain much from moralizing or in a general critique of technical rationality but rather grows from *disturbances* and *surprises* enacted in vocational training that actively bring wider perspectives into play. In other words, Bildung in action is an educational issue central to vocational education and training.

8.2.3 Bildung in action through making in vocational contexts

The case presents an argument for how vocational subject teaching, skill teaching and teaching a technique can become sources of Bildung in a multitude of ways. Furthermore, biographical narratives of such experiences can be powerful sources of knowledge about how to enact a vocational education that affords Bildung experiences. Finally, the longer biographical narrative, and not just the episodes, represents a way of researching vocations or vocational fields as sources of Bildung. It cautions us to be wary of dismissals of vocations from tomorrow's working life, not because they are impossible to dispense with but because they serve an educational (Bildung) purpose and as such support processes of lifelong learning. Similarly, it encourages some reflection on the fact that as Mr. B. has told his story, formal schooling and the teachers at his schools have played the greatest part in what he remembers as Bildung experiences in his education. This may be because of the way I asked my questions and it may also prove to be unusual when contrasted with biographical accounts where expertise has been achieved in less formal settings. In any case it calls attention to the importance of good vocational teachers, which is hardly surprising and, I argue, suggests that the role of narratives in the education of these teachers could be expanded greatly.

Bildung in action, as an aim of biographical research, produces results that span from descriptions of educational interventions to biographies recounting a path of vocational training. When we can view these side by side in one case it becomes apparent how much Bildung in action is the reciprocal interaction between them. The paths described, in this case going from school through a bookbinder's apprenticeship into Swedish industrial bookbinding and then on to further training at the Ecole Estienne is a path of Bildung affordances as they existed at that time and in those places in relation to this craft. Especially the apprenticeship seems to have been organized with a very clear understanding of such affordances. The episodes told present ways in which his teachers and he made these affordances *count*. What emerges is an account of the education of both a reflective and a *bilded* practitioner.

When Sven-Erik Liedman writes that the superficial is the only real enemy of Bildung it is worth considering it in relation to the story told at the end of the case about the Layman and the spoonness of the earth. This is, as I understand it, a paradigmatic example of when a craft activity reveals its full Bildung potential. Seeing spoon carving merely as spoon carving is being superficial. So is reducing the complexity of becoming competent to the ability to effect certain performance outcomes allowing for maybe the central aspect of VET (skill) to be stripped of precisely those elements that make it into something more than an imitation of a machine. And really it is the other way round; many machines are built in imitation of *parts* of skilled practice. Perhaps one of the most important tasks of research in general is going beyond the superficial. I can only hope that in the context of vocational education and Bildung the present study has been a step in such a direction.

8.3 Finally: an excursion with Goethe

The quote from Goethe at the start of the chapter: *Die Liebe herrscht nicht, aber sie bildet; und das ist mehr!* (love does not rule or dominate but it cultivates and that is more!) is from the final pages of a less known work, *The fairy tale of the green snake and the beautiful Lily* (Goethe 1999:98). With it I think Goethe articulates what are both the preconditions for Bildung and the results of it. I mean this in the sense that love or, what amounts to the same thing, interest, is either awakened by the process of Bildung and/or the process of Bildung is the result of interest. No content, task, curriculum or whatever can disregard this when reflection turns toward Bildung. When matters move too far in the direction of control and domination, Bildung as part of the aim of education is effectively squeezed out.

I find it interesting that Goethe wrote the fairy tale as a response to Schiller's *Aesthetic Letters* transforming their philosophical language into fairy tale imagery (Safranski 2009). In it there are two countries divided by a river (what amounts to Schiller's form and sense) and the story, in part, revolves around a prince who is

desperate to unite with the beautiful Lily, ruler of the land on the far side of the river (the land of form), who unfortunately kills any living thing she touches (evoking the opposition between life and form). In a sense, much education remains stuck in the same opposition, intellectual, general education on the one hand and practical, vocational education on the other. To the extent that academic institutions receive vocational education and take responsibility for it, there is a continuous risk that what actually happens is the same as what happens when the Lily touches the prince: he dies. In less metaphorical terms, the situated, experiential and particular knowledge that forms such a major part of many vocational fields is ignored in favor of general, propositional knowledge that is marginally useful in actual practice. For Schiller aesthetic activity, play, was how to counter this and Goethe raised him one in transforming the argument as such into art (narrative and imagery).

I hope to follow their lead in moving forward by examining teacher-training programs in which aesthetic activities play a central role but this is not the place to elaborate further on that and so I would like to conclude by offering the reader my sincere thanks for her or his patience and time in reading the study.

Sammanfattning

Yrkesbildning i handling

En fallstudie av hantverksmästare Wolfgang B. och hans yrkesutbildningsbiografi

Abstract

Studien behandlar frågor rörande bildning och yrkesutbildning ur ett biografiskt perspektiv. Dessa frågor begreppsliiggörs i termer av bildning i handling utvecklat i relation till Schöns koncept reflektion i handling; bildning genom hantverk som ett sätt att tänka på bildningsprocesser knutna till händernas arbete; och bildning i yrkessammanhang, dvs. yrkesutbildnings- och arbetsrelaterade sammanhang. Begreppen berikas av en utförlig auto/biografisk fallstudie rörande hantverksmästare Wolfgang B. och hans utbildningsbiografi där fokus ligger på bildningsberättelser i vilka bildningsprocesser och handlingar skildras tillsammans med de institutionella och utbildningsmässiga strukturerna. En del av dessa bildningsberättelser har blivit föremål för analys i två artiklar. Den ena befattar sig med frågor rörande estetisk bildning i yrkesutbildning med Schiller som filosofiskt perspektiv. Den andra befattar sig med frågor rörande utbildning för yrkesmoral med Aristoteles begrepp *techne* och *fronesis* som perspektiv. Resultaten är en utökad och differentierad förståelse för bildning i yrkessammanhang, särskilt i relation till den ömsesidighet som råder mellan färdighetsträning och bildningsorienterad undervisning liksom i relation till de unika perspektiv som auto/biografiska studier av hantverkare i pensionsåldern kan tillföra det forskningsområde där biografi, bildning i handling och yrkesutbildning möts.

Inledning

Det forskningsfält som behandlar yrkesutbildningsfrågor är vanligtvis inte associerat med frågor rörande bildning. Trots detta har det under de senaste åren publicerats ett antal böcker och artiklar som behandlar yrkesutbildning och bildning (implicit eller explicit), hantverk och arbete (t ex. Lange et al. red. 2001, Sennett 2008, Volanen 2012 och Winch 2012). Det blir ännu tydligare om hela 1900-talet tas i anspråk där framstående gestalter i tysk reformpedagogik som Kerschensteiner (Gonon 2002), Blankertz (Keim 1985) och Fintelmann (Rist & Schneider 1979) befattat sig ingående med yrkesutbildning som yrkesbildning. Fokus har varit bildningsfilosofi och en del praktiska initiativ. Problemen som man därmed lyft fram och diskuterat är de ofta förekommande dikotomierna

mellan bildning och utbildning; mellan färdighetsträning som ett maskinliknande övande och färdighetsträning som en bildningskälla; och mer generellt bildningsvärdet i (ofta hantverksliknande) yrkesutbildningar och yrkesuppgifter.

När det gäller empirisk forskning så finns det mindre gjort kring bildning och yrkesutbildning. Det är framför allt i Tyskland som det finns en tradition genom *Bildungsgangdidaktik*-forskningen (Trautmann red. 2004, Meyer 2009b). Den har fokuserat på bildning ur ett empiriskt biografiskt perspektiv och har sina rötter i Blankertz studier (Terhart 2009). Liknande arbete har gjorts av Gessler (1988) i relation till Hiberniaskolans integration av allmänbildning och yrkesbildning. I Gesslers fall dessutom i ett sammanhang nära den föreliggande studiens eftersom Hiberniaskolans yrkesbildningstanke framför allt inbegriper lärlingsutbildning inom en rad hantverk. Men det behövs mer forskning kring en problematik som diskuterats så pass utförligt filosofiskt och som så ofta resulterat i ett avfärdande av yrkesutbildning, inte minst kring yrkesbildningsdidaktiska processer, det som i studien kallas bildning i handling och som bygger på Schöns arbeten om reflektion i handling (1983, 1987, red. 1991).

I sina arbeten har Schön utvecklat ett resonemang om hur praktiker reflekterar i handling och kring handling samt hur utbildningssammanhang ser ut där sådan reflektiv praktik utvecklas. Ett av Schöns huvudsyften är att visa att professionell utbildning inte i första hand består i att lära sig applicera teori på problem utan om att förstå en yrkespraktik, dess problem, sammanhang, perspektiv, osv. Där Schöns intresse framför allt gäller det "hantverksmässiga" i professionella utbildningar så är fokus här på det "bildningsmässiga" och på relationen mellan undervisning i ett yrkesämne eller färdighet och bildningsrelaterade frågor. Därav den Schönrelaterade konstruktionen Bildning i handling. Till skillnad från reflektion i handling som Schön visar går att beskriva och analysera genom observerande fallstudier så är bildning i handling sällan något som går att fånga i själva bildningsögonblicket. Bildning i handling utgår istället från bildningens biografiska karaktär (Rittelmeyer 2012a) och närmar sig bildningsdidaktiska frågor genom biografiska utbildningsberättelser.

Studiens syfte är att utöka vår förståelse av yrkesbildning i handling i ett hantverkssammanhang genom en utforskande biografisk fallstudie: hantverksmästare Wolfgang B. och hans yrkesutbildningsbiografi. I den har berättelser som beskriver omdömen eller överläggningar, innehåll och uppgifter relaterade till bildningserfarenheter liksom även institutionella utbildningsformer och andra beskrivna strukturer en central roll.

Även om bildningsprocesser inte är möjliga att helt planera eller förutsäga så är bildningsrelaterad forskning viktig av två skäl. Dels kan bildning i handling utforskad genom biografiska studier synliggöra och representera bildningsdidaktisk praktisk kunskap till gagn för andra praktiker. Dels så kan bildning i handling genom biografiska studier möjliggöra analyser av mönster i bildningspotentialen i yrkessammanhang liksom systematiska, jämförande forskningsarbeten.

Eftersom studien är utforskande och bildning en tradition med brett innehåll så är det möjligt att ur syftet lyfta fram ett flertal forskningsfrågor. De två som jag

lyft fram här korresponderar med de två artiklar som utgör stommen i sammanläggningsavhandlingen och behandlar frågor kring estetisk bildning i ett yrkessammanhang och utvecklingen av yrkesmoral.

1. Vad utgör estetisk yrkesbildning i handling i ett hantverkssammanhang, särskilt i relation till yrkesämnesfrågor, dvs. i undervisning rörande ett yrkesämne eller en yrkesfärdighet?
2. Hur är yrkesmoral en del av bildning i handling i studiens berättelser? Detta i den dubbla bemärkelsen av hur det förekommer i berättelsernas skildringar av utbildning samt i relation till hur sådana berättelser i sig bidrar till utvecklingen av yrkesmoral eller föredömlighet.

Bildning och yrkesutbildning

I studien är bildning det centrala begreppet som operationaliserats i termer av bildning i handling, bildning i yrkessammanhang, bildning genom hantverk och estetisk bildning.

I korthet så omfattar bildning traditionellt kvalitéer som karaktärsdaning, vidgning av kunskapshorisonterna, kultivering, upplysning och emancipation. Framför allt karaktärsdaning sträcker sig över stora områden inbegripande moralisk och estetisk karaktär, liksom utveckling av emotionella och viljemässiga karaktärsegenskaper, tex. tålamod eller noggrannhet. Bildningserfarenheter framträder ofta som tydligast i biografiska skildringar (Rittelmeyer 2012a) och har även en lång historia i självbiografiska berättelser och bildningsromaner som Goethes *Wilhelm Meister* eller Rousseaus *Emile*. Det är med utgångspunkt i den nära relationen mellan bildning och biografi som forskningsarbeten på bildningsområdet har som mest att hämta eftersom bildningsprocesser blir synliggjorda i livsberättelser.

Bildning i handling fokuserar på biografiska skildringar i vilka berättelser om bildningsprocesser, dvs. undervisningssituationer, innehåll och uppgifter framträder i den biografiska återblicken. På samma sätt som Schön (1987) i sin diskussion kring den reflekterande praktikern frågar hur man utbildar denne så har diskussionen här varit hur man utbildar, eller snarare bildar, den bildade praktikern.

Bildning i yrkessammanhang berör bildningsrelaterade processer som antingen utspelar sig i arbetslivet eller genom en yrkesutbildning (eller både och).

Bildning genom hantverk är ett sätt att diskutera och synliggöra sådana bildningsprocesser och innehåll som uppstår genom händerna, dvs. genom att tillverka och reparera saker.

Estetisk bildning är sådana bildningsprocesser och innehåll som har sitt ursprung i estetiska erfarenheter och aktiviteter, något som i studien definieras närmare med hjälp av Schillers filosofi.

Det praktiska kunskapssammanhanget

Studien placerar sig i den praktiska filosofins kontext, inte bara genom Schöns arbete men också genom användningen av Aristoteles distinktion mellan *techne* (konsten att tillverka/göra) och *fronesis* (praktisk klokhet). Därtill genom ett narrativt kunskapsfokus som bottnar i Heron & Reasons (1997) argumentation att estetiska (presentationella skriver de) kunskapsformer är den första formen i vilken vi bearbetar våra intryck/erfarenheter. De menar att ett estetiskt omdöme och en estetisk bearbetning är nödvändig eftersom intrycken i sig inte säger oss något om vad som är viktigt eller relevant, därtill är de alltid utan egna avgränsningar och oöverskådligt mångfaldiga och vi måste själva sätta gränser, göra urval, vilket är en estetisk process. Det är på den grunden som det narrativa kunskapsfokusets vilar eftersom erfarenhetsbaserad, praktisk kunskap artikuleras tydligare i berättelser än genom mer generaliserande påståendesatser.

Auto/biografisk forskning

Studien är rotad i den auto/biografiska forskningstraditionen (Elbaz-Luwisch 2014, Roth 2005) med sin användning av biografiska och autobiografiska data. Den hämtar en väsentlig del av sitt kunskapsinnehåll ur den långa kontinuitet som råder genom min tidigare lärlingstid hos Wolfgang B. Det är något som bidragit till en gemensam kontext, en möjlighet till bättre kännedom om många av de bildningsberättelser som Wolfgang talar om, samtal kring jämförande hantverksbildningsfrågor och möjligheten att göra studien omfattande genom ca. 20 timmars intervjuutid spridd över mer än 20 tillfällen.

Metod

Fallstudiemetodik har i studien använts i flera analytiska syften (Flyvbjerg 2006, Larsson 2009, Thomas 2010): för att lyfta fram mönster, för att skildra ett paradigmatiskt fall och för att generalisera genom kontextlikhet. Urvalskriteriet har varit ett biografiskt fall med en ovanligt välutbildad yrkesperson i syfte att ha särskilt stor möjlighet att komma åt rika bildningsberättelser situerade i exemplariska eller ovanligt bra utbildningsmiljöer (Wolfgang B. har tre mästarbrev: bokbindning, förgyllning och gravyr). Analysen av samtalstranskriptionerna har varit paradigmatiske (Smeyers & Verhesschen 2001) vilket innebär att återkommande teman identifieras, här i relation till bildning. Två sådana teman var referenser till estetiska kategorier som skön, vacker, harmonisk respektive moral- och föredömlighetsteman som kvalitet, omtanke, moral. För att formalisera och systematisera analysen vidare användes Schillers estetiska (2010) [1795]) bildningsfilosofi samt Aristoteles etiska filosofi (Dunne 1993, Hinchliffe 2002, Lum 2003, Winch 2012).

Fallstudien

Wolfgang B. föddes i Stuttgart 1935. Efter andra världskriget avslutade han sin skolgång med Abitur (Tysklands högsta gymnasiala examen som ger tillträde till

universiteten) och valde på faderns inrådan att gå en lärlingsutbildning som bokbindare. Han avslutade den 1955 och reste i oktober 1956 till Stockholm för att gå 18 månader av sin gesällutbildning där. Men han bestämde sig redan första natten i staden för att han ville bo där och blev kvar som chef för bokbinderiavdelningen på Nyléns industribokbinderi. Där arbetade han fram till början av 60-talet då han bestämde sig för att återgå till handbokbinderiet och skaffade en egen ateljé. Ungefär mellan 1963 och 1969 gick han kurser på Ecole Estienne i Paris, dåtidens kanske mest framstående skola i de grafiska konsterna och gjorde sina mästararbeten som bokbindare, förgyllare och gravör. Under hela perioden arbetade han växelvis i sin ateljé i Stockholm och gjorde sin utbildning i Paris. Efter att ha avslutat utbildningen så fortsatte han att arbeta i ateljén fram till 1975 då han blev tillfrågad om han kunde tänka sig att undervisa en del i bokbindning på L-skolan. Den undervisningen växte under de närmaste åren till ett heltidsarbete och han ägnade de följande decennierna (tom. 2009) med att bygga upp en verkstad, medverka i bygget av ett hantverkshus och i utvecklingen av en kursplan för bokbinderi. Efter sin pensionering från skolan har han återgått till arbete i sin ateljé.

Här följer ett utdrag ur en av berättelserna från tiden i yrkesskolan i Stuttgart för att illustrera vad fallstudiens innehåll rör sig kring.

På yrkesskolan som vi gick till en gång i veckan fick man bestraffning, en extra-uppgift, efter tre försena ankomster, och jag som aldrig kom försent men där de kanske tyckte att jag var för ointresserad eller nåt, jag fick i uppgift att åka till Maulbronn [ett gammalt cistercienserkloster] och teckna av deras brunnshus. Och att ta sig dit var ingen enkel sak, jag fick cykla, det tog cirka fyra timmar enkel resa och sen kom jag tillbaka med min skiss och min lärare sa: ja, den är precis som du lite luddigt i kanten, gå med den till en stenhuggare och vad tror du han säger? Och jag sa: jag går med den till min farbror som är stenhuggare. Och det gjorde jag och han titta på den där och så skrattade han över hela nejden. Och jag var verkligen sur och sa: jaha så du som är så jävla bra hur skulle du göra? Och han svarade: ja jag skulle ta med måttband, passare, linjal och jag skulle mäta upp [den] verkligen från sockeln till spetsen. Och jag blev så sur så jag gjorde det. Och den upplevelsen av skönhet och exakthet [man fick], det var en matematisk proportion som var så jävla vacker... Och vad gjorde min lärare sen? Han tar en nålpassare och räknar ut proportionerna och kollar upp det i en bok han har. [skrattar]

Berättelsen fortsätter med att ta upp vad en annan av lärlingarna fick till uppgift.

Första artikeln

I den första artikeln (Tyson 2014) *Aesthetic Bildung in vocational education: The biographical case of bookbinding master Wolfgang B. and his apprenticeship* publicerad i *Vocations and learning*, diskuterade jag vikten av estetiska erfarenheter i fallstudien med hjälp av Schillers filosofi. Estetisk bildning och yrkesutbildning har

diskuterats emellanåt men inte utifrån en mer utförlig estetisk filosofi något som bidragit till att estetisk bildning i första hand kommit att förstås i termer av att inbegripa konstämnen i yrkesutbildningar. Med stöd i ett par av Wolfgangs berättelser och i lärlingstidens utbildningsstruktur var det möjligt att utveckla en fördjupad förståelse av den estetiska bildningspotentialen i hantverksutbildningar och att synliggöra ett bildningsmönster som kan vara överförbart till andra yrkesutbildningssammanhang. Detta rörde sig framför allt om ett berikande av hur man kan förstå möjligheterna i färdighetsträning och pedagogiken som krävs för att utveckla dem. Det sträckte sig från etiska och estetiska erfarenheter till möjligheter att knyta träningen till olika vetenskapliga och kulturella kunskapsfält.

Andra artikeln

I andra artikeln (Tyson under granskning) låg fokus på utbildning för yrkesmoral eller yrkesföredömlighet, dvs. kombinationen av dygd och gott omdöme eller praktisk klokhet/fronesis. På samma sätt som i den föregående artikeln var det berättelser ur fallstudien som diskuterades och var föremål för analys, denna gång med utgångspunkt i Aristoteles. Genom att föredömlighet hos Aristoteles ges två sidor: kapaciteten att handla dygdigt/moraliskt och klokheten att kunna bedöma hur en praktisk, dvs. unik och situerad, situation ger utrymme för handling så blir det också möjligt att förstå praktisk klokhet/fronesis som en delvis narrativ kunskapsform. På så sätt får berättelser av den sort som analyseras i artikeln betydelse eftersom de synliggör praktisk klokhet och möjliggör systematisk analys.

Resultat

Det övergripande resultatet av studien är en empirisk fördjupning av hur man kan förstå yrkesbildning i handling genom hantverk. Utöver artiklarnas mer ingående analyser så har fördjupningen i relation till yrkesbildning skett genom att synliggöra hur en avancerad lärlingsbaserad yrkesutbildning inbegriper potentialen för ett omfattande bildningsinnehåll. I ett diskussionsklimat där tvivel regelbundet uttrycks kring den fortsatta relevansen av yrkesutbildningar till förmån för mer modulbaserade utbildningar inriktade på enskilda färdigheter (Lange et al. red. 2001, Lauder 2011, Winch 2012) är det en maning till återhållsamhet. Även om yrkesutbildningar inte alltid är nödvändiga i relation till arbetslivets förutsättningar så är det både möjligt och sannolikt att de kan bidra med bildningsprocesser och innehåll som också är av värde för näringslivet.

I relation till bildning genom hantverk så har studien som helhet tillsammans med artiklarna bidragit med en kritisk analys av relationen mellan bildning och färdighetsträning. Det har varit möjligt att i analysen förtydliga att den ofta förekommande oppositionen som konstrueras mellan å ena sidan att mekaniskt lära sig en färdighet eller teknik och att utveckla en praktisk, situationsrelaterad klokhet/förmåga grundar sig i en förenkling av vad det innebär att bli skicklig. Denna förenkling vilar i sin tur på att maskinen görs till metafor för teknik i bemärkelsen av färdighet. Det är visserligen möjligt att reducera en färdighet till en enkel kapacitet att reproducera vissa resultat men precis lika möjligt att, som fallstudien visar,

låta färdigheten bli utgångspunkt för ett varierat bildningsinnehåll, inte minst utvecklingen av föredömlighet/yrkesmoral.

I relation till yrkesbildning i handling genom hantverk så är studien ett argument för *hur* yrkesämnesundervisning och färdighetsträning kan bli en källa till bildning på en mångfald sätt. Därtill så kan biografiska berättelser om sådana erfarenheter bli till kunskapskällor rörande hur man kan gestalta en yrkesutbildning som också utgör en potential för bildning. Slutligen så representerar den biografiska berättelsen som helhet ett sätt att utforska yrken och yrkesfält eller områden som bildningskällor. Studien uppmärksammar vikten av berättelser som en praktisk kunskapsform i utbildningen av yrkeslärare.

Bildning i handling som en målsättning med biografisk forskning ger resultat som sträcker sig från beskrivningar av pedagogiska interventioner till biografier som beskriver en hel yrkesutbildningsväg. Det som har trätt fram i skildringen är berättelsen om både en reflekterande och en bildad praktiker.

Acknowledgements

I owe a great debt of gratitude to the many people who made this research project possible. My thanks and appreciation go out to my supervisors Inger Eriksson and Maud Baumgarten, to my readers Ingrid Carlgren and Lars Mouwitz, to Viveca Lindberg and Lazaro Moreno Herrera who run the Graduate School in the Pedagogy of Vocational Subjects and to my fellow research students as well as colleagues in the VET-group. I am also grateful to those in the wider community of scholars who took time and interest in the work as it progressed, who offered helpful comments and often their own texts as support (in no particular order and with apologies to anyone I may have forgotten): Randall Curren, Gert Biesta, Elizabeth Campbell, Freema Elbaz-Luwisch, Stephen Billett, Roslin Brennan-Kemmis, Franz Kaiser, Christian Rittelmeyer and Phillipp Gonon. My thanks also to my places of work for giving me the time and support needed for the project. I also owe the photographer Jan Schliebitz my gratitude for allowing me to use his beautiful picture of the fountain at Maulbronn on the cover of the thesis.

To conclude, there is no greater gratitude than that I owe to my friend and teacher Wolfgang B. It extends so far beyond this particular collaboration of ours that I could hardly begin to articulate it. There is a gratitude that cannot be spoken but that needs to be lived and expressed through that life. This is that kind of gratitude.

Los Angeles, January 2015

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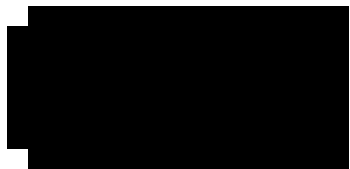
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Aesthetic Bildung in vocational education: The biographical case of bookbinding master Wolfgang B. and his apprenticeship

Ruhi Tyson 2014

Accepted to Vocations and learning DOI 10.1007/s12186-014-9120-1

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Abstract

In the present article I will be discussing the importance attributed to aesthetic experiences in the vocational education of bookbinding master Wolfgang B. using the philosophy of Friedrich Schiller both to understand what constitutes these processes and to examine Schiller's thoughts in the light of his recollections. By doing this I hope to elaborate on a potential, and often overlooked, Bildung-related possibility or affordance at least in craft vocational education and training (VET) as well as to articulate a pattern that can be generalized from into other VET contexts.

This leads to a richer understanding of the potentials inherent in teaching skills or capabilities and the pedagogy needed to elicit these as opposed to the belief that teaching technique is a straightforward and unambiguous issue of manual practice. These are in the realm of aesthetic and ethical learning potentials (given that such learning is never automatic) as well as in the connections that one might establish to various fields of scientific and cultural knowledge. Through all of this there emerges a partial description of a vocational Bildung tradition that has its roots in the teaching of crafts.

Keywords: Apprenticeship; Bildung; Schiller; Aesthetic education; Bookbinding

There were punishments for being late [...] one got an extra task to complete and I was never late but Kausch said to me that there is a spring house in Maulbronn with a fountain [...] I want a reconstruction from you, I guess he felt that I didn't find certain lessons necessary, [...] and I tried to avoid doing it and that wasn't possible [...] and so I returned with the first sketch and he said that looks just like you do, a bit fuzzy around the edges, try taking that to a stonecutter [...] so I said fine I'll take it to my uncle [who happened to be one] and he [the uncle] laughed so that it could be heard all over the neighborhood [...] and I got really pissed [...] and I [went back] brought measuring-tape, a compass and a ruler and really measured it from the base to the top [...] and really, the experience of beauty and exactness [...] it was so damn beautiful [...] and then what does he do? He takes a needle-compass and goes through all the proportions and looks it up to compare with what he already has in a book [laughs].

From the biographical case study of Wolfgang B.

Introduction

What constitutes aesthetic Bildung in craft vocational education and how can it be enacted? This is the general focus of the present research article. I have tried to understand this through the philosophical lens of Friedrich Schiller and his *Letters on the aesthetic education of man* (1795 [2010]) together with the vocational education biography of bookbinding master Wolfgang B.

Asking such questions in the field of vocational education and training (VET) is important because they are part of an effort to articulate the ways in which VET contains the potential for an intrinsic Bildung element that is not (on principle) at odds with the need for a rational and instrumental technical mastery of skills and competences.

This is connected with a point made by Billett (2011), that VET over the years generally has been defined by powerful others who claim better knowledge and understanding than those actually engaged in the work to be educated for. It stands to argue then, that one way of taking some of this power back is to describe such educational traditions that have emerged from *within* VET practices and in the process to appropriate such philosophical perspectives that are available and seem worthwhile from outside of them (ignoring for the moment that being a philosopher is also a vocation). In the case of the Bildung tradition, and here one might well add the in many ways parallel tradition of liberal education, this appears to be all

the more meaningful given the long history of positing a dichotomy between vocational and general education (Billett 2011; Gonon 2002; Winch 2012; Volanen 2012).

In the following I will try to explain the value of considering these questions with the particular help of Schiller rather than someone else as well as the sense in choosing a biographical case study as a source of data. Furthermore I will have to define the concepts of aesthetic education and *Bildung* as well as to situate the whole undertaking in the larger conversation about VET, *Bildung* and aesthetic education. Although Schiller's aesthetic concepts have served as the philosophical lens that I have used in order to structure and understand the case study (ie. to know and identify the "what" with regards to the specific case) I will introduce the case first because it gives context to the more general conceptual discussions that will follow. This also means that I will keep the introduction to the case as short as possible and only after its presentation return to issues of methodology and analysis more thoroughly. I invite any reader who would rather know something about the concept of *Bildung* and of Schiller's contribution to it to first skip right to those parts and then to double back to the case.

This leaves me with the following structure:

1. The case. 2. Methodological and interpretive considerations. 3. Aesthetic and vocational *Bildung*. 4. Schiller's aesthetic philosophy of education. 5. Concluding remarks.

1. The case: a bookbinder's apprenticeship

I have conducted a series of explorative interviews with an expert craftsman, Wolfgang B. who, having been born in 1935 in Stuttgart, has reflected on, and told stories from, his training in Stuttgart in the 50s as bookbinder and in Paris in the 60s as gilder and engraver (the conversations covering his Parisian education are, for reasons of space, not considered here).

Situating the case

Historically, in Europe, there has been three general ways in which vocational education has proceeded. By far the most common has been learning through participation where the level of skill varied widely, this holds for most farmers who until comparatively recently had no formalized educational path as well as for a large variety of what may be called semi-skilled occupations such as sailor or servant. Another path reaching back to at least the middle ages encompasses the vocations one could learn at the universities in subject areas such as law, medicine and theology. The third path consists of an equally ancient model of training: that of apprenticeship in a more or less defined craft vocation. This is sometimes conflated with learning through participation although the craft apprenticeships contain a structure of learning that is much more than that, especially at the higher degrees of journeyman and master. For instance, journeymen were expected to travel for a designated period visiting different workshops and learning from what the masters in each one had to teach, each level or degree required the completion of a test and there was a strong sense of being part of a profession. As Christopher Frayling (2011:64f) points out, referring to Robert Blauner, being a craftsman in medieval times meant belonging to a very select group of defined occupations with a high degree of skill and knowledge. Apprenticeship as a form of vocational education thus goes back a long way and was participated in by comparatively few people.

Because of the long history of VET in crafts, the many ways that this history has been translated into modern practices of VET, as well as the inspiration for philosophical reflections on education and work they have provided; there exists a rich background to which case studies of expert craftspeople speak (recently for instance, in Crawford 2009; Dormer 1994; Dormer ed. 2010; Frayling 2011; Sennett 2008; Volanen 2012; Winch 2012).

The apprenticeship

Wolfgang B. was born in Stuttgart in 1935. Initially, after WWII, when schools began reopening he completed the Abitur (the diploma giving one access to university studies in Germany) at about age 17 and first considered becoming a biochemist when his father said: “you can do that later but first learn an honest vocation”. This in turn led to him trying out his uncles sculpting but quickly switching over to bookbinding.

He explained that the bookbinding apprentices in the region had contracts with various firms, from large bookbinderies with both hand and industrial binding departments to small workshops with one or two apprentices. His was a medium-large workshop where he was one of three apprentices. The training was three years and split into a crafts path and an industrial path but they intersected to such a degree that it was possible to earn a dual certification with around six months of extra study (which he did). Not only was it difficult in those post second world war times to even find an apprenticeship, Wolfgang B. also mentions that the quality of education could vary quite a bit from workshop to workshop. His seems to have been one of the better.

Added to this was the vocational school that they all went to every Friday and where its teachers had close contact with the masters at the workshops in order to find out what the apprentices could not learn in their respective workplace and thus what needed to be compensated for in the vocational school. Apart from technical education in aspects of bookbinding they also received a portion of basic education according to what kind of previous schooling they had had (at that time, so close to the end of WWII, there were large differences between students depending on if, and for how long, they had been soldiers rather than in school), these subjects were generally oriented towards the craft so that for example the gymnastics taught was a gymnastics concerned with strength training, ergonomics and relaxation practices.

This was the mandatory part. Outside of mandatory education was a wide spectrum of elective courses given through the school that were open to the apprentices in the evenings and on the weekends, courses that ranged from edge gilding to geometry and heraldry. The apprentices were also more or less expected to play an instrument and participate in dancing lessons as well as the general cultural life of the city at that time. They would make excursions to monasteries such as Eberbach and Maulbronn, as well as other places of interest to look at architectural proportions, visit libraries and learn history as well as art. In the later stages of the apprenticeship they were invited to start participating in the voluntary master-preparatory course. Finally, if they were considered exceptionally talented, they could be invited to Begabtenförderung (further support for talented students) where apprentices from dozens of different vocations went for three months each year (it differed from year to year if these months were in one stretch or parsed out and the education partially occurred during vacation time) for an internship that included even more courses of a general educational nature as well as a rich variety of visits to firms where contacts were made and insights gained into the various professions represented at the Begabtenförderung. Wolfgang B. remembers, for instance, visits to a gun-engraving shop where impulses for his later engraving work were received. Finally he also mentions the exchange of perspectives with students of different vocations as being intensely valuable during those months.

A more complex and detailed description is surfaced in those parts of several interviews where he turns to pedagogical situations at the vocational school or the process of learning edge gilding. If the initial description has provided a rough sketch of how he remembers the structure of his initial vocational training these next two examples will give an idea of how teaching was enacted and experienced.

“Punishment” at the vocational school

Wolfgang B.’s main teachers at the vocational school were named Mr. Baun and Mr. Kausch. In speaking of the experiences that were had there, they are generally remembered as intense Bildung experiences, in part by aiming at providing experiences of beauty and proportions. The initial quote, where Mr. B. speaks about an episode during his apprenticeship where his teacher required him to travel to Maulbronn in order to make an accurate sketch of the

fountain there, is part of an extensive story. It begins in a reflection on the kind of punishment meted out to those apprentices who were late three times to vocational school, or apparently, in his case, were not enthusiastic enough about a course. For him, going to Maulbronn from Stuttgart was not simple given the state of the roads and other infrastructure at the time which meant that he had to ride his bike there and back making just the travelling a matter of ten hours or so. And then he had the initial work rejected as too inaccurate and had to undertake the journey one more time. But through the process of drawing the fountain he describes how he arrived at a deep experience of its beauty and harmony of proportion something that I remember him referring to every now and again for as long as I have known him even though the present narrative was new to me.

He also recounts the punishment experienced by a fellow student saying (I have placed Mr. B's. para-lingual utterances in brackets and my clarifications and additions in square brackets):

I never remember Baun or Kausch moralizing, if there was a discussion [about not wanting to do some appointed task] [...] ok, then you can choose, there are three other possibilities that might suit you better ...

We had one fellow traveler, Werner S., a guy like a bear, just short of two meters, [...] he was supposed to bike to Lorch to draw the church tower above the grave of one of our great noble lineages and he says: I won't do it, I don't want to have anything to do with those bastards, and then Kausch knows that he's very smitten by one of the girls and so he looks at him and says [...]: well ok, but, there are morning gifts that are on exhibit, you can measure and describe one of the engagement rings. And we sat there all of us [...] it was like watching fly fishing and he swallowed the bait [...] and went from something comparatively easy to a task that [...] when I think about making a watercolor [aquarelle] enlargement of a ring with a cut and polished stone [the degree of difficulty is huge] and Kausch says: since you're so big and [the rings] are so small, why don't you draw three or four? And he agrees [...] and I laughed at it the entire way back home. [...] I experienced him the week after, he started during the weekend, and then he came back to us and was all flustered over how much work it was [...] and how unfriendly the guards were [...] and it took him about four or five weekends (laughs) and when he [brought his drawing] and Kausch looked at it he [Kausch] said: what kind of stone is that? [Werner replied]: a green one.

Yes but its not green, I told you to make a copy, that's [...] the wrong color.

[...]

He got engaged later, I'm sure one of his failed drawings still hangs on the wall in his home if he's still alive (laughs).

This led to the whole class visiting Siegle, a firm that made colors, to learn about differences in pigments. There are other, less elaborate stories that point in the same direction.

The teacher, Mr. Kausch, appears to have taken great care in seeing to it that apprentices came to the tasks at least in part out of their own volition. Mr. B. mentions at one point that he came home and complained about the heap of work his task entailed whereupon a friend of his father, Egon, a medical doctor, laughed and said: "Oh, but its self-evident, through it [the task] *es entsteht Staunen* (it leads to Staunen which is something of a mix of wonder, amazement and marvel)." As Mr. B. speaks of it, the connections seem to be between experiencing something as beautiful, gaining that experience through work (ie. the experience does not exhaust itself through a brief look at something but rather opens itself up to "Staunen" through a deeper participation) and the development of a certain care. With care I mean two things, first in the sense of a wider interest and drive to learn about something as with the visit to Siegle, second in the sense of being engaged, ie. caring about the quality of one's work.

Learning edge gilding

The evening and weekend courses mentioned were achieved through a network of specialists affiliated with the vocational school, one being a man they called Lange-Otto (Tall-Otto), who came from the Württembergische Bibelanstalt to teach edge gilding (edge gilding is the

technique with which one applies gold-leaf to the edges of book-leaves). Mr. B. used the edge gilding course as an example of a teaching-method often employed. He explained that together with being taught the manual techniques of edge gilding they were also taught how to make the various tools, the different properties they had, going as far as to visit the woods where the trees (Hainbuche, Hornbeam in English) grew for the presses and pressing-boards. Lange-Otto would also bring up less technically related subject matter such as possible reasons for gilded weathercocks on churches and other questions of both science and cultural history. In this regard the style of teaching seems to be in the vein advocated in the writings of, among others, Kerscheneister (Gonon 2002) and Dewey (1966 [1902]) in that it aimed to lead the apprentices into vast knowledge subjects through an engagement with the techniques they were learning in the context of their vocation.

A further look at our conversation about issues surrounding the technique of edge gilding provides a view of the kinds of exploratory questions that one might encounter in a complex craft task. Thus he speaks at length on the need to use wax and bole (a sort of clay used as pigment) and the differences between various carats of gold and goes on saying:

It isn't just the technical part of it but all these questions, what am I doing wrong [when it doesn't work]? Is it the egg whites? Is it in the combining [of distilled water] with the egg white? Is it paste, is it the bole, why use bole? And so on. And then you can go back to the technical studies they've done and then you can ask yourself: the agate I have, which agate am I using? And then the paradox: you have a newly purchased agate that is highly polished and no one has told you that you have to dull it a little to achieve the best result with gold, and you achieve it and then it [...] really runs contrary to what you learnt about it being perfectly polished, that the more perfect surface you have the better will your results be.

These are issues that in the context of hours of similar talks between us in the workshop resonate with a body of experience that can seem opaque to the outsider. It might appear far removed from what ordinarily would be considered an issue of aesthetic Bildung, being rather questions of understanding and reflection, of knowledge and skill. The absent center of the conversation, the actual work of edge gilding with its gold-leaf, paste, bole, brushes, agate and wax, the way one has to move into a rhythmic breathing in order not to accidentally blow the thin gold leaf away, is in itself easily experienced both as profoundly beautiful and as something that leads to "Staunen" even though it hardly qualifies as a work of art in the usual sense.

It indicates the extent to which vocational education can be a systematic pedagogical process. If Lange-Otto had not taken the potential inherent in teaching a series of manual techniques and actualized part of it then that potential for a wider understanding would remain dormant. This is not to say that there is no given relation between cognitive capacities and manual ones. Becoming skilled with one's hands also changes how one thinks. This happens on a more fundamental level where Schmalenbach (2007) and Wilson (1998) have provided valuable discussions on the current state of research and more specifically with regards to different tasks such as in bookbinding where learning how to make boxes surfaces the degree to which an apprentice is initially capable of moving between two- and three-dimensional thought: cutting the pieces from a flat surface and assembling them into something with three dimensions while having to keep in mind that the flat surface, even a sheet of thin paper, does have a thickness that needs to be accounted for.

It also points to a distinction that is worth keeping in mind when reading the following definitions of aesthetic Bildung and vocational Bildung. This distinction has to do with Bildung through expanding on the potentials for knowledge development in craft-related tasks and Bildung through vocational mastery. The former is possible with little practice whereas the latter occurs precisely as a result of practice.

Having presented those aspects of the case most relevant to the perspective in this article I will give a short review of the methodological and interpretive considerations that have gone into the documentation and analysis of the case study.

2. Methodological and interpretive considerations

In discussions about didaktik (simply put: what we teach, why and how) there can sometimes be a gap between knowledge expressed as general statements and knowledge of situational practice. General statements about how to teach something are not immediately applicable to specific situations, rather they require interpretation in order to be enacted and most situations are so ambiguous that there is a possibility for several different rational interpretations.

Both for research purposes and for practical purposes, the gathering of instances that are exemplars of such enacting is important because it is through this that we can begin to think about what aesthetic Bildung as part of vocational Bildung actually has come to be. This is a take on Kemmis' and Smith's (2007) argument about enabling praxis as well as Thomas (2010) considerations of case studies as abductive studies leading to phronesis rather than inductive studies leading to general concepts. Phronesis is a term taken from Aristotle meaning prudence or practical wisdom. Thomas uses it in a wider sense than Aristotle does taking it to mean "practical knowledge, craft knowledge, with a twist of judgment squeezed into the mix" (2010:578). Where Thomas speaks of phronesis Larsson (2009) writes about the possibility of pattern recognition through case studies using the example of a case study identifying a hidden curriculum at one educational institution. The same pattern of hidden curricula could then be found at other institutions. Recognizing patterns is a way of raising tacit dimensions of practices to a visible and articulate level something I view as a reflective approach to Thomas understanding of phronesis. I will return to the potential patterns in the case as it relates to the initial question of what aesthetic Bildung in craft vocational education can be understood as, in the concluding remarks.

These then, are the main reasons for conducting case studies of vocational Bildung, that they can get at descriptions at several levels, of how an education was enacted. Following the discussion by Thomas (2010), this is in order to generate a form of knowing that is not a theory of vocational Bildung but knowledge pertaining to practices that support aspects of vocational Bildung and how such practices speak to theory.

This is also why I am not undertaking here to argue the merits of aesthetic education in VET in general, because this value is either decided beforehand through one's philosophical anthropology (which Schiller represents here), or it becomes apparent through a sufficient number of cases (where one single case is not enough).

Having said that, there are considerations with regards to the systematic pursuit of this type of inquiry. Cases may be researched in different ways, biographically or institutionally, through participation and/or interviews. I have here a case that is biographical, based on conversations. Choosing a biographical approach has to do with the Bildung-oriented perspective of the inquiry. The philosophical tradition that Bildung traces back through has a history of biographical, as well as fictional, accounts (so-called Bildungsromanen) that reflect on processes of Bildung as turning points in the life of a person. Empirical research that concerns itself with vocational Bildung from a biographical perspective is not very common but two examples that both make partial or whole use of biographical accounts in order to describe paths of vocational Bildung can be found in Gessler (1988) and Corsten & Lempert (1997). The former is a study regarding the vocational education at the Hibernia school in the Ruhr area of Germany and its influence on the continued life-trajectories of former students. The latter is a study on ethical development among apprentices in Germany that combines a biographical approach with other ways of exploring the issue.

Choosing to build a case around an older, expert craftsman is a way of trying to engage the issue of vocational Bildung from a position that might reveal issues not so easy to surface or perceive if the case were the biography of an average craftsperson recently done with her apprenticeship. The same choice also supports reflection on theories of Bildung to the extent that such criteria are indications of a biography that contains rich experiences of vocational Bildung.

Although the present concern is on aesthetic Bildung the full case is explorative in the sense that I have aimed for a very saturated description of Mr. B.'s vocational biography and how he remembers it. Vocational Bildung has more to it than aesthetic aspects and by taking an

open approach to the interview process, ie. asking very generally about the vocational learning biography of Mr. B., my aim has been to produce a rich or thick description of various aspects of vocational Bildung. Having transcribed these conversations I have proceeded with a paradigmatic analysis in which common themes are identified (Smeyers and Verhesschen, 2001). In practice this meant sitting down and reading and rereading the transcriptions and marking out different themes that recurred frequently such as questions of beauty or workmanship, ethics or morality in work and reflections on the historical tradition of vocational Bildung that Mr. B.'s education was part of.

These themes were then given a more systematical analysis, in the case of this one through Schiller. Choosing Schiller as a theoretical or philosophical lens through which to analyze the case has three reasons. The first is the central role that Schiller has played as a theorist of aesthetic Bildung (Dietrich et al. 2013; Rittelmeyer 2005, 2012a). The second is the comparative abstractness of Schiller's writing which accentuates the contrast with the case and allows for easier recognition of similarities and differences. The third is that the initial vocational education of Mr. B. took place in a cultural environment where Schiller remained a paragon of thought and although I do not know if his teachers were influenced by his writing it is not unreasonable to assume so, at least indirectly.

This particular case study has in many ways been possible because I have been both student and apprentice with Mr. B. and we thereby share a vocational life-world as bookbinders even though it is worth emphasizing that the context of our vocational education couldn't be more different. He apprenticed in a workshop at a time when the craft was still a vibrant part of the economy in Germany and later on worked and learned in Sweden and France. I, in the years 1998-2003, apprenticed in the Waldorf (Steiner)-school where he had been working since the late seventies (ie. outside of the normal economic and productive context of a bookbinding firm), at a time when the craft had been in serious decline for quite a while.

There are, of course, many issues one might raise in objection to conducting research with someone so familiar. However, one needs to differentiate here between critical or suspicious hermeneutical research and restorative hermeneutical research (Josselson 2004). In critical hermeneutics the case is viewed as presenting something other than its actual meaning whereas in restorative hermeneutics the issue is about reconstructing a narrative. Psychoanalysis or interrogation are examples of the former, Bildung-related biographical narratives or the articulation of (some kinds of) tacit knowing are examples of the latter. By having a restorative rather than critical approach there are both general and particular issues that need to be kept in mind.

Generally this has to do with issues of emphasis and de-emphasis in the conversations. Given their focus on Bildung and thereby experiences of meaningfulness they tend to gloss over negative experiences as well as drudgery, boredom etc. It also takes a different approach than say, narrative psychology, by being concerned with vocational learning experiences thus sidestepping questions of other learning experiences and personal history (ie. family history and the like).

More specifically, at least two areas benefit from our close association: one being our shared understanding of the craft (bookbinding) and one being that I am partly able to compare the contents of what is said today with what I was once told five or ten years ago. I would also not attempt the research in question if there wasn't on the part of Mr. B. a strong element of self-reflectiveness and interest in the issues at hand thus giving it the form of a collaborative inquiry rather than a more one-way process of information gathering.

In a wider context then, this is the kind of case study that emerges from the auto/biography school of research. In it the slash between auto and biography is sometimes taken to mean some combination of autobiographical and biographical study or the way one's own autobiography influences one's work with other people's biographies (West 2001:33ff and more generally Elbaz-Luwisch 2014). It is predominantly in this sense that I have understood this inquiry with an emphasis on the biography part. Thus the main thrust of the inquiry has been the vocational learning biography of Mr. Wolfgang B. and the autobiographical aspects of it, our relating of it to my own vocational learning biography, have served to assist in a more complex understanding of this.

Regarding the interviews, they were conducted in Swedish (sometimes with German interludes) and I have transcribed them into text with a fair degree of faith to the spoken word but have, for the most part, refrained from noting pauses, para-lingual expressions, etc. since my analytical interest lies not in the syntax and form of what was said but in the contents. The focus on content is also why I have chosen to present portions of several different interviews as third person descriptions instead of always staying with the spoken word. The interview quotes and the descriptions have been checked by Mr. B. in order to assure that what he intended to say is also reflected in the final presentation both with regards to the contents and the context.

3. Aesthetic and vocational Bildung

Wilhelm von Humboldt is perhaps the most important classical expounder of the Bildung-concept in Germany together with Herder and Goethe but it is a contemporary of theirs, Friedrich Schiller, who is considered most responsible for discussing the Bildung value of aesthetic education (Diedrich et al. 2013; Rittelmeyer 2012a). Although the tradition of Bildung in general, especially in a wider sense incorporating the sometimes-equivalent tradition of liberal education, has received attention in contemporary and older philosophical works on VET and crafts (Crawford 2009; Dormer 1994; Dormer ed. 2010; Frayling 2011; Gessler 1988; Gonon 2002; Keim 1985; Lange et al. 2001; Obermann 2013; Sennett 2008; Volanen 2012; Winch 2012), Schiller is seldom discussed. The few times when Schiller is referred to in VET theory and philosophy seem to be either in a more limited discussion on the value of the arts in VET or, in passing, as part of historical development (Volanen 2012 and Sennett 2008 respectively).

Empirical research focusing on aesthetic Bildung in vocational education tends to dwell on the kinds or modalities of different art activities and what they can offer. Thus there are some older studies from the eighties that document projects where aesthetic activities such as drawing and painting were integrated into training offered at large companies such as Ford and Voith in Germany (Brater et al. 1987, 1986, 1985). There are some newer studies that focus on aesthetic activities in the course of training people in socially oriented vocations such as education and therapy (Schmalenbach 2011) and more generally on the integration of art in vocational education (Brater et al. 2011; Brater & Wagner 2011). This focus on the classical arts in many empirical studies opens them to the criticism that Rittelmeyer expresses in his overview of research on aesthetic Bildung (2012b). He writes that much research on the transfer effects of artistic activities to other domains of activity suffers from a lack of theoretical rigor when it comes to thinking about what defines artistic activities and how they interrelate. It is not self-evident that listening to Mozart, painting landscapes and dancing waltz are comparable aesthetic experiences although this is sometimes tacitly assumed in studies. The need for an adequate theory of aesthetic Bildung in connection with empirical research is thus clear, biographical cases such as this can further assist in bringing to light ways in which these theoretical considerations are actualized.

In the context of this article my understanding of the concept of aesthetic Bildung follows Dietrich et al. (2013:9) and focuses on Bildung as the formation of character or personality in and through aesthetic experiences.¹ Furthermore, aesthetic Bildung goes beyond any single aesthetic experience and focuses on the way in which we integrate experiences into a larger whole, our life or biography (Dietrich et al. 2013:32). It is this understanding that I seek to differentiate through Schiller's philosophy and the case study.

Vocational Bildung

¹ In this I follow Dewey's understanding of aesthetic experience as being about far more than appreciating "high art", in effect it is the quality of an experience that determines if it is aesthetic rather than what is experienced (Dietrich et al. 2013:59f).

One reason I will shortly be turning towards Schiller is his insistence on the relevance of our embodiedness (what he calls the sense-drive). When Kerschensteiner writes about vocational Bildung in *Begriff der Arbeitsschule* (Gonon 2002) he is primarily considering the Bildung potential inherent in manual (ie. embodied) activities. If Humboldt conceived of Bildung as a primarily extensive education that provided the formation of personality and character with a broad horizon, thinkers such as Kerschensteiner conceived of a form of Bildung in which learning a specific set of capabilities was equally important (Gonon 2002). This is part of what I understand when using the term vocational Bildung and where such an understanding sometimes does not align with theories of what constitutes general Bildung.

Kerschensteiner's work in Munich at the beginning of the 20th century is one attempt at enacting ideas of vocational Bildung. This was carried further after WWII in the Ruhr-area by Blankertz in his *Kollegschule* and by Fintelmann at the *Hiberniaschule* (Keim 1985; Obermann 2013; Rist & Schneider 1979). The polytechnical tradition that emerged in eastern Germany at the same time should also be mentioned (Keim 1985).

Vocational Bildung here is limited to what I in the following will call craft vocational Bildung. This is not the same as limiting the issue on principle to craft (or manual) vocations but consists in the view that they contain a paradigmatic form of Bildung that has potential also in other vocations. Furthermore, the word craft in this context does not imply a traditional understanding in which an electrician, a plumber, a sanitation worker, a surgeon or a mechanic do not fit. These all have working with their hands in common and if we do not usually consider surgeons, mechanics and sanitation workers in the same breath this has just as much to do with the social construction of their respective vocational education as with any intrinsic differences.

The other part of craft vocational Bildung that leads me back to the philosophical discussion of Schiller (and with him Kant) is that of beauty (in the sense of making a beautiful object or experiencing the beauty of an object made). In the episodes recounted, beauty is central to Mr. B.'s descriptions and given the centrality of the concept for Schiller this is an important part of what makes Schiller's philosophy relevant to thinking about craft vocational education.

4. Schiller's aesthetic philosophy of education

In the classical German Bildung-tradition, Schiller stands out as the one who in his contribution placed the most distinct philosophical emphasis on aesthetic activity² and aesthetic education (Rittelmeyer 2012a:101ff). His most elaborate discussion is to be found in *Letters on the aesthetic education of man*, written slightly more than 200 years ago (1795 [2010]).³ These letters were written in response to the then recently published *Critique of*

² This emphasis on aesthetic activity rather than aesthetic experience is one of the reasons that Schiller's *Letters* are more relevant to the present perspective than Dewey's *Art as experience* (2005 [1934]). Not that aesthetic experience is irrelevant to Schiller but rather that aesthetic activity implies a more intentional stance on the part of the subject. Aesthetic Bildung is not something we experience passively but something that requires an aesthetic act.

³ In my reading of Schiller I am taking a rather a-historic approach and the conclusions I draw are, at least to some degree, not to be found explicitly in his own writing. Furthermore, as Hansjörg Hohn remarks (2002a:61): *there is hardly a statement in his oeuvre which is not contradicted, or so it seems, at another place*. The point for me, though, has not been to remain utterly faithful to Schiller's own thought or to reconstruct its historical development. It has been rather like finding an old but perfectly made tool and using it with materials that were not available at the time the tool was made this in turn casting new light also upon the tool itself. This is also the reason why I have been content to make use of the *Letters* and leave aside Schiller's other writings. Other discussions of Schiller's contemporary educational value can be found in Hohn 2002a; 2002b; Rittelmeyer 2005; 2012a; Vinterbo-Hohn & Hohn 2006. I have refrained from involving the wider discussion to be found in philosophical writing on aesthetics such as in Gadamer mostly because it would require too much space. This does leave a number of critical perspectives on Schiller by the side and I refer the interested reader to Christian Rittelmeyer's excellent review and discussion (2005).

judgment by the philosopher Immanuel Kant and contain many of his central concepts while at the same time disagreeing with parts of his argument (Hohr 2002a, 2002b).

In Schiller's view the human being is placed between two opposite drives: the sense- or sensuality-drive and the form-drive.⁴ But this opposition or dualism leads to, and is resolved in, a third drive: the play- ludic- or aesthetic drive.

As Schiller describes it the senses and corporeality or organism constitute the sense-drive, ie. our orientation towards the world and our being in it. In the form-drive we find that which is the polar opposite: concepts and rationality. He includes in these drives the opposites of passing moment (sense) and eternity (form), of total randomness (sense) and complete order (form), of spirit (form) and matter (sense) and so on. In both of these we are equally limited, on the one hand by the intrusion of the immediate (and corporeal) world and on the other by the logical, formal structures of our consciousness. Thus there would be no individual autonomy but only determination (through biology/matter and idea/form) if the human being were exhausted in this dichotomy. At this point Schiller describes a third drive that asserts itself between sense and form, a drive he calls the play-drive (Ger. Spieltrieb).⁵

Schiller describes the character of play as follows (2010:60):⁶ "the word play designates all that is neither subjectively or objectively coincidental and yet at the same time neither inwardly or outwardly exerts coercion." In other words, when we play we give form to matter without being constricted by the impersonal laws of rationality or the equally constrictive process of sensation. In play we strike a sort of higher balance between form and matter where neither is made to dominate the other. He goes on to equate artistic/aesthetic activity with play seeing them as possessing the same qualities and states that it is here, in play that we come into a state of freedom. One might consider the way children can have a box be one time a house and another time a boat as an example of the liberated form- and sense-drives and how this is repeated in a sculpture where, again, conceptual forms and matter are liberated through play and given what Schiller calls a living Gestalt⁷ or form.

In the context of the case, encountering the tools and materials that need to be mastered as a bookbinder are part of what the sense-drive is about on a level above that of simply being in the world. The concepts that inform the tools as well as the formal knowledge of, for instance gilding, are part of what the form-drive opens to us.

The play-drive asserts itself in at least three different ways in relation to this. First, in the development of competence with the given tools and materials where a point is reached through sufficient practice in which we achieve a kind of freedom to engage with the world of sense or matter, ie. to play with it in Schiller's sense. Second, in that practice also deepens our conceptual understanding of what we are engaging in to a point where the initial rules of the craft become rather like suggestions that can be played around with. Third, through the ability to make something that is beautiful, ie. more immediately as aesthetic activity.

Bildung then, in Schiller's understanding, consists of the play- or aesthetic-drive liberating the form and sense poles of human experience and doing so, to quote Rittelmeyer's summary of the argument in the 13th letter, through: "the utmost extension and sensory development of the sensory part of the human being and the deepest intensification of her rational or cognitive capacity" (2012a:110f, my translation). Craft vocational Bildung placed in this context is concerned with elevating this form of aesthetic Bildung further through the above-described practice and increase in capability. This can be understood in a different way by considering Schiller's characterization of freedom as a state of active determination (aktiven

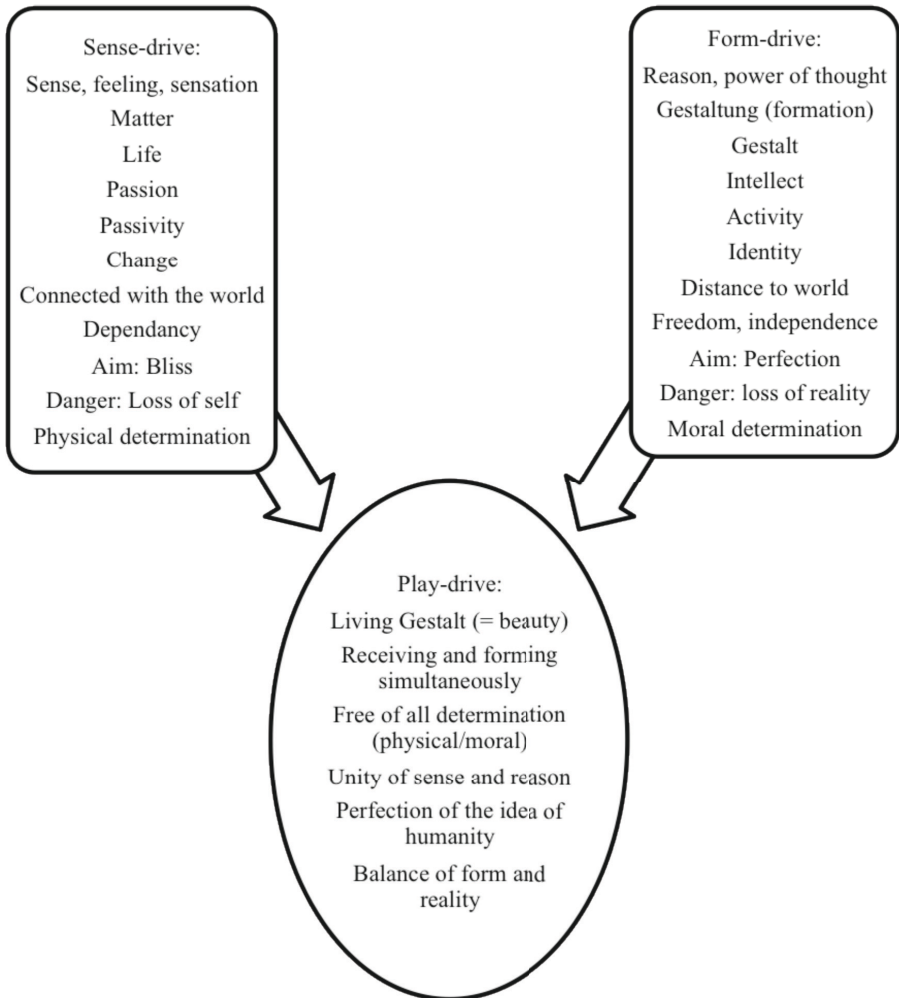
⁴ Schiller more commonly calls the sense-drive "Stofftrieb" which could be translated as material, substance or stuff, none of which read easily in English. The following discussion of his concepts should clarify his choice of words.

⁵ The German word Spiel is actually a blend of what the words play and game denote in English.

⁶ I have translated this, and the following quotes from Schiller's text from the German original.

⁷ Gestalt is difficult to translate from German and so it often remains as in Gestalt therapy. The direct translation would be form and in the context of how Schiller characterizes the form drive it makes sense to understand it in terms of the spiritually or ideally formative force or gesture that gives form to a living process.

Bestimmbarkeit) in which man neither passively suffers being determined by the world through sensation nor is he, as individuality, determined by the rational intellect's general concepts (2010:80f). Becoming expertly capable, as hinted at in the description of gilding, allows one to enter into such an aesthetic state of active determination. What was initially in part being overwhelmed by matter and in part following general rules of thumb becomes a state of freedom in which one can explore and actively search for novelty. Before I move on to discuss Schiller's understanding of beauty, here is a graphic overview of Schiller's three concepts (taken from Dietrich et al. 2013:42, my translation):



Schiller's concept of beauty

Among the themes developed in Schiller's *Aesthetic letters* the concept of beauty is central. He writes (2010:70):

Through beauty the sensory [embodied] human being is led to form and to thinking; through beauty the spiritual human being is brought back to matter and given back to the world of sense.

One might consider the episodes recounted about "punishment" at the vocational school and learning edge gilding as exemplary ways of enacting this. In the first case because amazement (Staunen) at beauty and harmony of proportion was the door through which a wider world of knowledge was opened and at the same time this was not divorced from the practical work of drawing or painting, of developing capability and perceptiveness. In the second case the less explicit beauty of experiencing gold-leaf and the edge gilding process was used as a source, by the teacher Lange-Otto, for wide-ranging discussions of culture and science as well as for an extensive pursuit of further practice, learning to make tools, recognize the different materials involved, etc.

It is worthwhile to reflect here that one might dispense with beauty from the above episodes and still remain with an educational process. Mr. B. could have been given the task of making an exact drawing of his neighbors' house instead, edge gilding with its almost unavoidable potential for aesthetic experience could be substituted for some other capability with no such inherent quality. What Schiller asks for is not automatic and the role of beauty is subtle.

Beauty provides a shift through which the Bildung potential of an educational process is given priority. Kerschensteiner approaches this issue in his theory of Bildung when he takes up the same polarity that Schiller starts with: life and form (Gonon 2002:149ff). For Kerschensteiner however, these are bridged through work whereas Schiller posits the more abstract definition of beauty as living Gestalt/form. Work, as the case presented shows, does not exclude an educational emphasis on beauty. The episodes recounted are instances of how what sometimes are considered two separate educational aims: rationality, efficiency and utility on one side and aesthetic Bildung on the other, are not separate out of any necessity. Furthermore, considerations of how to provide experiences of beauty in vocational education need not stop at integrating art subjects at the expense of vocational subjects in practice. One of the main reasons for case study research on aesthetic Bildung experiences in vocational education is the way in which it provides novel ways of considering what is possible while remaining in a framework where the aim is vocational competence or excellence.

5. Concluding remarks

What constitutes the aesthetic education of Wolfgang B.?

In returning to the apprenticeship described by Mr. B. there are several ways in which aesthetic aspects of vocational Bildung seems to occur.

One is how the training was enacted where the various courses and activities were given a form that also supported the unfolding of aesthetic activities and experiences.

The second is in how the teachers enacted their educational responsibilities.

The third is in the personal experiences Mr. B. describes in relation to gilding (as a paradigmatic example) where the various materials and tools, the mastering of the skills required and the cognitive comprehension of gilding besides the influence of the teacher were a source of vocational Bildung.

None of the ways in which aesthetic aspects of vocational Bildung occurred are automatic in a vocation although perhaps more likely in some than in others. By approaching the issue from the perspective of an actual case it is possible to both examine the theoretical side of it and to consider how otherwise abstract ideals have been enacted. If I had presented my own vocational learning biography as a bookbinder there would be a general agreement on an abstract level but the enactment would, to a large degree, be different. In the longer run such

differences in vocational Bildung biographies can contribute to a more differentiated understanding of general theory as well as the surfacing of elements that were not even clear in the more philosophical deliberations.

Patterns in the case

To begin with aesthetic education in VET in Schiller's sense is far from restricted to education in the arts. It involves aesthetic experiences rather in a wider sense of autonomy and meaningfulness. It involves successive degrees of freedom in relation to matter (the sense drive) through the striving for technical mastery of a difficult task. Thus, indwelling in technical mastery is an aesthetic component that may be forgotten or tacit but that is potentially there to be articulated. This carries some important implications given that technical skill more often than not is perceived as simply being proficient in making or doing something (cf. Dormer 1994; Dunne 1993; Volanen 2012; Winch 2012⁸), thereby adding to the prejudice that technical mastery is something separate from more complex matters. The issue is important because it informs the way we think about and teach vocational skills and the way we construct curricula. Practicing traditional arts such as music, painting or dancing may be the most direct way of accessing that experience of autonomy that Schiller writes of and his "educational anthropology" (Rittelmeyer's words, 2005:book title) presents an argument for the value of working with more focused artistic activities in at least initial VET. What the case study of Wolfgang B. adds is a perspective on how one can suffuse vocational education with context sensitive aesthetic activities.

I see no reason why these considerations would not be equally valid across other vocations and training systems. The experiences described might be understood as tied to "making" professions but it seems to me that potential experiences of beauty are widely dispersed in work-life today. One might consider education, medicine and similar professional spheres. It also makes sense to reflect upon how a vocation is constituted socially, if the potential is explored in practice of including performances or competences that support aesthetic activity. Given the emphasis placed by Wolfgang B. on his teachers at the vocational school it might serve as a caution to underestimating the potential of schools in VET. This is not to say that the workshop was empty of important educational experiences or devoid of any educational thought. He and his fellow apprentices were very consciously moved around to learn all aspects of bookbinding both hand and machine. What it does imply is that there is a potential in learning vocational skills that requires an active *pedagogical* intervention in order that they unfold the aesthetic Bildung potentials inherent in them in any systematic way (apart from those Bildung experiences that one has by becoming skilled).

This has bearing on how we think about the transformation of vocational knowing or skill into vocational subject knowledge. It shows that such transformation is no straightforward process but rather one that includes our general conceptions of the aims, value and contents of a vocation and the human beings who are to learn it. Given the strong emphasis on bringing out the relationships between subjects, vocations, knowledge contents, etc. in the Bildung-oriented vocational education that Wolfgang B. describes it would also seem that an intense focus on modularized and outcomes oriented VET acts to inhibit such a process (although it should be obvious that there can be no talk of preventing it since an aesthetic experience can

⁸ Dunne's discussion is especially relevant since his critique is that there exists a belief that one can reduce teaching to a simple exercise of technique, subject to straightforward evaluation. What happens is that technique ends up being equated with the same kind of mastery that a machine has and then evaluated as either desirable (teaching thereby becomes accountable and possible to research in a mechanical manner) or undesirable (teaching is thereby reduced to a mere skilled reproduction of what "science" has determined is the best method). I think the combination of Wolfgang B.'s case and Schiller's thoughts call this view into question even though it follows from Schiller that one might well find any number of cases where technique has become nothing more than replicating a machine. This however is not a necessity but a consequence of how someone was taught and that same someone understood to learn. If being like machines is the metaphor we feel best captures what we want skill-education to be then fine, but it is hardly the only metaphor available.

really occur anywhere). This is also, from another direction, the argument of Christopher Winch (2012) where he, among other things, refers to the German concept of *Beruf* as a way of bringing together a set of capabilities with an extensive context-sensitive base of knowledge to create a vocational identity.

Final thoughts

In presenting parts of a case study on the vocational learning experiences of a master craftsman I have tried to show that (my interpretation of) Schiller's understanding of what constitutes aesthetic education allows us to see parts of a *Bildung* oriented vocational education.

In this I have tried to bring to light the ways in which Schiller's *Bildung* perspective is relevant to thinking about, and perceiving the potentials inherent in, vocational education. This is firmly connected to the anthropology in Schiller's thought: that man is at heart an aesthetic being and that this entails a more or less successful lifelong struggle towards increasing freedom (the connection with issues of lifelong learning would take me beyond the article format and I leave the reader to make it for the time being).

Part of this vocational *Bildung* tradition is captured in the words of Hans Sachs⁹ (1494-1576) shoemaker and mastersinger, quoted to me numerous times during my apprenticeship:

Geselle ist der was kann	Journeyman is he who knows/is capable
Meister ist der was ersann	Master is someone who can encompass and create from a totality (ersinnen can mean to plan, create, invent, a complex word)
Lehrling: Jedermann.	Every man is an apprentice.

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⁹ The claim that this goes back to Hans Sachs is Mr. B's. I have not been able to verify it having found it in several different versions and generally passed on as words of wisdom among German craftsmen. It crops up in any number of places when one starts to look, for instance quoted in a plenary session in the German Bundestag June 27th 2003 regarding changes in laws governing crafts (*Handwerksordnung*). Perhaps this is a less manifest reason for the success of the German apprenticeship system, that there still exists a strong culturally based *Bildung* tradition among those who look back to the apprenticeship system as their source.

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Educating for vocational excellence: the auto/biographical exploration of enacted craft pedagogy

Abstract

The focus of this article is on education for vocational excellence (the combination of virtue and good judgment or phronesis/practical wisdom) through the examination of episodes from the auto/biographical study of master craftsman Wolfgang B. Vocational excellence is an issue sometimes discussed with regard to teacher training for schools and universities, often from an Aristotelian perspective, but less often when it comes to teaching and teacher training in the various models of crafts apprenticeship education that exist. Even though there is no lack of arguments made for the excellence one is able to develop in learning a craft there are fewer takes on *how* such educational aims have been enacted. This is problematic because teaching vocational knowledge, including excellence, thereby becomes a more tacit practice than it needs to be and more systematic reflection is inhibited.

I will be considering these problems through the educational biography of a master bookbinder, gilder and engraver, Mr. Wolfgang B., and two stories he tells, one of his education in Paris and one of his own deliberations in teaching bookbinding.

In doing this I am arguing for a systematic narrative approach to researching and teaching how to teach vocational excellence and by extension more generally with regard to teaching. This not only does justice to the particularity of practical wisdom but also calls attention to the imaginative character of being able to deliberate wisely.

Keywords: Aristotle; Phronesis; Narrative; Craft; Auto/Biography

Introduction

Vocational education¹ and training (VET) is more than a matter of learning know-how and theory. There is also a question of developing excellence (virtue² and good judgment), something recently discussed in a number of publications dealing with the people professions, especially teachers (eg. Bondi et al. eds. 2011; Kinsella & Pitman eds. 2012; Sockett 2012). More specifically, Biesta (2014) has discussed how educational judgment and wisdom are taught to becoming teachers, Gallagher (2013) has argued for moral education through narratives, and Kemmis & Smith (eds. 2007) how to enable praxis (virtuous action) in education.

¹ Education throughout this article is understood as encompassing both teaching and learning where the emphasis is on teaching in a wide sense including the teacher's activity as well as the influence of curriculum and environment. Learning denotes the various ways in which someone receives and interprets this. In biographical studies of education it is often possible to understand what is said both from the perspective of teaching and of learning since a description mostly includes aspects interpreting the activity of teachers and personal reflections on learning. The two episodes in this study are predominantly about the teaching side of education and I will be using the term education whenever the argument does not require a clear separation of teaching and learning. Whenever the term teaching is used it is used specifically to discuss teacher's enactment of pedagogical judgment.

² I will be following Aristotle's understanding of virtue but that still leaves the matter open as to what kinds of virtues there are in vocational contexts. I am approaching the matter from an empirical perspective so this remains to be clarified in connection with the case but other than that I will refrain from further discussion since this is not a study aimed at mapping out vocational virtues.

How has this been discussed in relation to the various models of apprenticeship that exist? Taking the original apprenticeship tradition, that of craft education, there are several accounts, both personal and scholarly, on the subject of the kinds of excellence promoted in becoming a craftsperson (eg. Crawford 2009; Dormer 1994; Engström 1995; Gatz 1949; Middleton 2000; Sennett 2008; Volanen 2012). However, there is close to nothing said about *how* this is or was taught. This is perhaps due to the tacit³ character of the matter, or perhaps more accurately, due to its remaining largely a matter of personal, oral (as distinct from written) practice. But does it need to remain that way and what does it imply for the quality of such education? Perhaps just as important, if apprenticeship is a role model for a good combination of education and work, *how* does it afford an education for excellence? *How* did the teachers educate for such excellence?

It is important to bring this matter into the context of apprenticeship-type learning environments because if virtue and judgment are traits we develop through practicing them so is vice. In leaving the *how?* relatively unexamined we run the risk that what is practiced in workplace-based education are vices rather than virtues and take for granted that the actual process of teaching virtue and judgment is (or should be) almost completely tacit, personal and situational. Lastly, it is doubtful if there are as many wise teachers as there are apprentices, meaning that some apprentices will find themselves taught by teachers who are not paragons of professional virtue, to say nothing of the environments that might support or detract from such an education. The foundation of the following inquiry is the educational biography of bookbinding, gilding and engraving master Mr. Wolfgang B. Presenting and examining a pair of narratives from the larger biographical case will help ground the discussion and clarify how biographical narratives increase our understanding of education for excellence in a craft-like setting. Before presenting the narratives I will discuss the concept of excellence and its roots in the philosophy of Aristotle (to which all of the studies in the first paragraph refer). Having made that clear I will go on to discuss what a narrative form of knowledge has to offer in combination with the Aristotelian perspective. There follows a brief methodological discussion of narrative auto/biographical studies as a way of researching education for excellence empirically. From this I will move on to present the two case narratives as examples of how excellence in apprenticeship-like craft VET settings has been aimed for.

The legacy of Aristotle

The meaning of excellence (virtue and judgment) is far from straightforward and needs to be made clear so that the narratives introduced become understandable as narratives of excellence. Over the past decades Aristotle has received growing interest in this regard (eg. Biesta 2014; Bondi et al. eds. 2011; Carr 2006; Gallagher 2013; Kemmis & Smith eds. 2007; Kinsella & Pitman eds. 2012; Kristjánsson 2013; Sockett 2012). Furthermore, his philosophical distinction between *techne* (the art of making) and *phronesis* (practical wisdom) has been part of a wider controversy on the nature of practice and skills (cf. Dunne 1993; Hinchliffe 2002; Lum 2003; Winch 2012).

³ Here and in the following I will be using tacit in the sense that something is left unsaid or not attended to rather than the sense that something is fundamentally impossible to articulate. My use then is more in line with Polanyi than with Wittgenstein.

Aristotle, in *The Nichomachean Ethics* (2009), discusses virtue in two ways: moral virtue and intellectual virtue. Moral virtues pertain to character traits such as courage or charity whereas intellectual virtues count among them the ability to deliberate well with respect to any moral virtue, ie. to exercise these virtues wisely. This intellectual virtue is called phronesis or practical wisdom and as such points in two directions: being wisdom it is concerned with universals of ethics, being practical it is concerned with the particulars of experience as well, ie. practical denotes that which is situated, contextual and experiential. The orientation of practical wisdom is towards making good decisions or judgments in relation to particular situations and this necessitates a rich store of experience in order to be able to correctly recognize and judge a situation. Aristotle concludes from this that youth and wisdom are incompatible and it is part of the present argument that some of this can be alleviated through narratives of excellence. The reflective or deliberative character of phronesis also brings it close to Schön's (1987) discussions about reflective practice, to which I will return briefly, after the case narratives.

In the same book Aristotle discusses another concept, *techne*, roughly translatable as the art of making or craft. *Techne* is described as that which aims at production and he gives examples such as boat building, medicine and navigation. Thus explaining *techne* in terms of skill, technique or craft is risky, since only by a stretch is it reasonable to call health the product of medicine comparable to a boat being the product of a shipwright. As Squires (2003, p. 4) points out, the way Aristotle writes about *techne* suggests that it is a comprehensive term that captures what we think of as occupations. Aristotle contrasts *techne* with phronesis by saying that practical wisdom is not about excellence in some restricted area of expertise but about being able to deliberate about what is good in general. He goes on to say that production has its end outside of itself, good boat building leading to good boats and good medicine to health. In contrast, the end of good action is itself, acting gracefully is grace, acting courageously is courage, etc. (Aristotle 2009, p. 105f. [1140a: 25-35, 1140b: 5]).

The emphasis placed on experience in developing practical wisdom or phronesis is a deciding factor in the interest it has sparked as a way of understanding practical knowledge in general (including vocational knowledge especially teacher's knowledge) and of characterizing it as strongly situational or context-bound (eg. in Carr 2003; Dunne 1993; Gustavsson 2002; Kemmis & Smith eds. 2007; Noel 1999). However there has also been critique of this (Curren 2010; Kristjánsson 2005; Squires 2003). In short, the critics argue that interpretations of *techne* that understand it as applied knowledge or as a simple, mechanical training in techniques, misrepresent Aristotle. In both cases skills and occupations are stripped of their experiential knowledge contents. Here I will take *techne* to mean the sum of occupational craft-like knowledge including a significant number of individual skills and techniques as well as propositional knowledge and a sufficient amount of vocational experience.

Through Aristotle it becomes clear that we can speak of two kinds of practical knowledge: *techne* and phronesis. The narratives about to be presented deal with both of these and in two distinct ways: the first one by reflecting on an intervention that interrupted the teaching of a *techne* (gilding); the second one by reflecting on a deliberation about how to promote a virtue in the process of learning a *techne* (bookbinding). Having discussed the meaning of excellence and how it relates to the other kind of practical knowledge, *techne*, I will go on to consider the narrative aspect of narratives of excellence. If excellence needed to be clearly articulated it is now an issue of explaining why we should consider it from a narrative perspective.

Narrative knowledge and phronesis

Narrative inquiry is a wide field of study with many diverging pathways (Clandinin ed. 2007). For the present purpose it's the discussion about how narratives can be understood as a way of formulating and conveying knowledge that's important (Caduri 2013; Carr 1999; Connelly & Clandinin 1990, 1995; Gallagher 2013; Lewis 2011; Smeyers & Verhesschen 2001; Worth 2008).⁴ The basic argument is that the kind of knowledge described above as practical and thereby situational, experiential and contextual, can be articulated in narrative form because stories remain with the specific. In contrast, decontextualized, propositional knowledge tends to lose any connection it might have had with a practical context. From this perspective, stories can be used to convey knowledge of both *techné* and excellence. One might use a story to explain what is essentially an issue of correct making or to present an example of excellence. In the case of practical wisdom, stories can also simultaneously be *about* wise deliberation (good judgment) and be *acts* of the same. With the latter, I mean that a morally charged situation might call for a well-told story of how someone once acted wisely. For example, the second narrative presented below is, in this context, about wise deliberation. In another context it might be an act of practical wisdom to tell it to a vocational teacher stuck with an educational problem to which it relates.

The narrative form of knowledge refrains from presenting practical wisdom in a decontextualized manner where it ceases to be *practical* wisdom (ie. concerned with particulars as Aristotle remarks) and takes on the guise of general statement. As such, the narrative way of formulating knowledge is especially well equipped to deal with issues of phronesis. However, it is important to emphasize that it is not a given to have a teacher of crafts that is fluent in telling stories of excellence. A teacher may just as well have a tendency to rather explain things as if they were universal, or to be a limited storyteller, or even one whose stories are full of vice and wickedness rather than virtue. Not recognizing this risks painting a very rosy picture of what it means and has meant to learn a craft or manual vocation. It also bypasses the scores of exploitative practices that exist and how sexist and racist discourses have been carried along through stories, jokes and other narrative elements. The narrative character of phronesis does not mean that intellectual virtue or practical wisdom *is* the ability to tell good stories about excellence (although being a good storyteller might be considered a virtue from this perspective). One could imagine a person completely incapable of speaking about phronesis in any way, narrative or other, but perfectly capable of acting wisely on account of her deep, wide-ranging and tacit experience. This person may also be a very good teacher to those in her care by tacit means.

Two common critiques of narrative knowledge need to be dealt with briefly. One is that the context dependency of stories means they tend to reproduce traditions, norms and discourses that are all but virtuous or liberating. Such critique, if applied generally, misses the equally relevant fact that stories can also be used to resist traditions and norms (Gallagher 2013, p. 7f). There is no real sense then to be

⁴ I have refrained from digressing into a discussion of how the concepts narrative and story are defined in the field of narrative inquiry. For the present study the definition of story and narrative is best given through the examples presented in the case episodes. As episodes they can be taken as shorter parts of a more elaborate storyline. This doesn't mean that more formal analyses of such stories together with more restrictive uses of the terms story and narrative (where they have partly separate meanings) is irrelevant, especially if there were a larger number of stories of vocational excellence to analyze.

generally critical or generally positive but rather a need to acknowledge that stories about excellence require deliberation on our part, including the stories presented here. The other critique is that stories are merely anecdotal and not really a form of knowledge. As Griffiths and Macleod write (2008, p. 124): “anecdotes are short biographical [...] accounts of incidents, told because they are thought to be interesting or amusing or to make a debating point.” It is easy to confuse two forms of knowledge here: the generalized and the contextual (Thomas 2010). Stories become anecdotes if their contents are taken as statements or proof of some general fact or as support for some such claim. For instance in arguing that immigrants are bad for one’s country and then telling the story of how one of them robbed a cousin. This is not the case with stories that convey elements of practical wisdom, where they are rich enough to stand alone and permit listeners to make their own interpretations and translations into situations relevant to them. This, in turn, is due to the significant amount of freedom we have in the interpretation of narratives (cf. Jardine 1992). Such translations or interpretations depend on the exercise of what Aristotle termed *phantasia* (imagination, Noel 1999) but perhaps even more profitable here is to involve Schiller’s ([1795] 2010) views on aesthetic activity, something I must leave aside here but that I’ve discussed recently (Tyson 2014). This freedom of interpretation is part of the reason why such knowledge is relevant in relation to practical wisdom and also why it can always be misunderstood, perverted or otherwise comprehended in a far from wise manner.

Research that collects narratives of education for vocational excellence not only represents an important empirical source of knowledge about how such education has been enacted and interpreted. Because excellence is fundamentally practical in Aristotle’s sense of particular and situational, it seems difficult to even get at this aspect of vocational knowledge without including a rich collection of stories. This has been argued in a more general sense as the education of narrative imagination and why we should teach literature in schools (cf. Nussbaum 2001; Worth 2008). However, to my knowledge it has not been discussed as a way of collecting a literature of *vocational* relevance since it would be highly context-insensitive to expect masterpieces of world-literature to relate directly to the entwined art (*techné*) and practical wisdom of teaching a subject or skill. Regarding the two episodes from the case, they are not necessarily the best examples there could be of formulating excellence in a narrative way. What counts as wise is open to debate and should be debated; this form of knowledge has value also because it can serve to elicit discussion about its merits and demerits. Before presenting the narratives, I shall say something about the methodology of the case study.

Remarks on method

Thomas (2010) has argued for using cases as a means not of developing theory but rather *phronesis*.⁵ For this to work, care in the choice of cases is important. In the present context a relevant case needs to contain stories where issues of vocational excellence are explored. Such biographical cases can, on principle, be found anywhere but chances of finding a rich source of stories increase by considering some formalities. One is a high degree of vocational expertise in the technical aspect of a vocation (which is usually the part that is addressed in formal qualifications). In crafts

⁵ Thomas uses *phronesis* here in a more general sense than I am doing. I would perhaps use a word such as context-related knowledge.

this could mean being considered among the best among peers or having more than one advanced qualification such as being a master of more than one craft. Another is choosing the biographical case of someone that is both considered a good teacher of her vocational knowledge and who has taken an interest in reflecting on the what's and the how's of her teaching.

Criteria for choosing the case

It is not easy to find people with a high level of training and interest in education much less to convince them to sit down for what amounts to more than ten, hour long, conversational sessions. I have the good fortune of having been Mr. B.'s apprentice more than a decade ago, which means that I had such a case right in front of me. He has three master certificates as gilder, bookbinder and engraver as well as more than three decades of reflective teaching experience. Another aspect is our shared vocational context and that I'm familiar with many of the episodes that he has recounted. Given the aim of the study this has been rewarding at least in two ways. First by allowing me to compare the present narrative with what I remember from the days of my apprenticeship and thereby to follow the continuity in what has been told. Second by having a shared occupational context to compare with and to situate the stories in, which allows for more to be said than would have been the case if we did not. The second story discussed relies upon this shared experience and is perhaps the clearest articulation in the whole case of how teaching technique and vocational excellence can be mutually supportive and also the degree to which this is dependent on context.

The criteria for choosing the case were to begin with personal and ad hoc, responding to some questions I had about my own apprenticeship. This almost immediately changed into a more reasoned deliberation in line with the previous paragraphs. That our conversations turned to issues of excellence was not initially a considered aim but rather, as I steered our conversations into stories as much as possible, these stories often turned out to be stories of excellence.

The study

The study was conducted as a series of conversations about the vocational education biography of Mr. Wolfgang B. All of them took place in his workshop, mostly in the mornings together with breakfast. They were recorded and transcribed and then brought back to Mr. B. for him to go through and check. Of central importance in the present context is that since I am looking at *how* an education for vocational excellence was enacted, the conversations needed to go beyond a biographical chronology. This is most clearly represented in the second narrative where Mr. B. begins with some general statements and it is my asking how, ie. for an example, that sets him off on the more detailed path in which he describes a process of deliberation and action. From a more formal perspective the study is grounded in the auto/biographical tradition where, for the present purpose, the slash between auto and biography is taken to mean some combination of autobiographical and biographical study or the way one's own autobiography influences work with other people's biographies (West 2001:33ff. and more generally Elbaz-Luwisch 2014).

Structuring data and analyzing it

The structuring of the narratives has been undertaken in order to allow for a paradigmatic analysis in which common themes are identified (Smeyers and

Verhesschen 2001). The analytical lens here is excellence cast in a narrative form. This means that the transcripts were initially read searching for any instance where the conversation turned to vocational excellence in the sense of virtue and good judgment. This was initially done using key words of moral or emotional character such as care, enthusiasm or anger and later with the help of Aristotle's concepts. Many such instances were discursive generalizations or stories that were either too short or too dependent on the overall biographical narrative to allow for separate discussion. This narrowed it down to a few episodes and from these two are presented here. Flyvbjerg in his article on case study research (2006) notes that case studies tend to suffer from extensive summarizing and thus the article format does not lend itself easily to the presentation of such research. This is an issue here because the episodes related below are part of the wider biographical narrative and receive important context from it. I cannot hope to show more, in this article, than some indications of the potentials connected with these kinds of case studies.

The auto/biographical case of master craftsman Wolfgang B.

The following consists in the main of two episodes from a series of long conversations with my former teacher of bookbinding Mr. Wolfgang B. These conversations were conducted predominantly with the purpose of exploring his vocational education biography but at times we also turned to compare what he had experienced to my own training with him more than 40 years later. It was during one of these excursions that the second episode below was recounted. Before I get to the episodes here is a short summary of the vocational education biography of Mr. B. (a more extensive one is presented in Tyson 2014).

Wolfgang B. was born in 1935 in Stuttgart, southern Germany. He graduated at 17 with an Abitur, the highest degree in the German upper secondary school system that allows one to study at the university. His initial thought was to become a biochemist but his father told him to first learn "an honest vocation" and so he ended up as a bookbinder's apprentice. The apprenticeship lasted from approximately 1952-55 and its basic format was four days in the firm apprenticed to, and one day at vocational school (the structure of the German dual system). After finishing his apprenticeship with a dual certificate as hand and machine bookbinder, Wolfgang B. went to Sweden in the fall of 1956 for 18 months as a journeyman and ended up staying. For a few years he worked at an industrial bookbindery as the head of the finishing department. Somewhere in 1959 or 1960 he decided he wanted to go back to hand binding and opened his own workshop. Here he taught other apprentices and after a few years began taking courses at the Ecole Estienne in Paris, at that time one of the foremost colleges anywhere in the graphic arts (or so he says, calling it the *crème de la crème* and Mount Everest). This is where he earned his master qualifications as bookbinder, gilder and engraver. His last courses at the Ecole were in 1969 after which he continued working in his workshop for another seven years. In 1975 he was asked to give some lessons in bookbinding at the L-school, a Waldorf (Steiner) school in a suburb of Stockholm. It was during his time teaching at the L-school that I met him as a student and then remained as an apprentice after graduation getting my own journeyman's certificate as bookbinder in 2002.

Stories of vocational excellence

In the following I have chosen to present two episodes and their context, one from Mr. B.'s time in Paris and one where he speaks about some deliberations on his part during my own apprenticeship. Outside of the full biographical context this might give the impression that the apprenticeship in Stuttgart was somehow not as interesting or important. However, in the space of our conversations that part of his education receives the most attention and there are episodes recounted from that time that would just as well fit within the framework of the present discussion. My main reason for going with these two episodes is that I have dealt more extensively with the initial apprenticeship in a previous article on aesthetic Bildung in vocational education (Tyson 2014).

At the Ecole Estienne

Among the teachers at the Ecole Raymond Mondange, his teacher in gilding, receives by far the most space in our conversations. His style of interaction with Mr. B. seems to have been repeatedly and intentionally provocative. At one point, in order to practice muscular "attentiveness," balance and reflexes he gave Mr. B. the task of throwing a golf ball against an uneven wall in his back yard and to catch it 50 times with the left and 50 times with the right hand. Mr. B. explains the more or less embarrassing and silly feeling in doing this and only discovered later that Mondange had checked with the building manager if he actually did as he was told. At another time Mr. B. chose to replicate a historic gilding by the famous 18th century master Derome, in part because the original stamps were at the Ecole and available for him to use. However, since they were 300 years old they were worn and difficult to work with. When Mr. B. turned his finished work over to Mondange he took out a compass and went over the whole cover noting all imperfections after which he asked Mr. B. why he hadn't used the perfectly new copies of the stamps recently made. This was after about a months worth of work and when Mr. B. almost blew up in his office Mondange calmly questioned why he wasn't more open to asking questions before going about his work. Why didn't he stop and take time to think before diving headlong into action.

One thing Mondange would do regularly was to interrupt the classes and tell him and the circa eight or so other students to go visit some museum or craftsman. They were sent to a maker of handcrafted cameras in wood for aerial photography and to a carver of ivory and other precious bone, to touch on some of the instances. The apprentices and students, as Mr. B. describes it, did not eagerly anticipate these visits (himself included), and there was regular complaining about being forced to visit places that had nothing to do with their work. Mondange would give them an earful and when they actually arrived at a workshop or a museum they would inevitably encounter workmanship, workshop environments and craftspeople that gave them experiences of amazement and further curiosity.

One such string of events connected to the carver began on a day when Mondange passed by as some of the gilding students were playing chess, a pastime they would engage in when they needed a break from working. He said to them: "Gentlemen, I expect of you that by next week you have visited this ivory carver..." And immediately someone complained about the extra task and Mondange turned around (like a cobra as Mr. B. recalls) and said: "ivory carving was part of the first political revolution in ancient Rome." There followed a little lecture on pugillaria, small boards of carved ivory that were covered with wax on one side in which Roman senators would trace the notes they needed for their speeches. They are believed by

some historians to be the predecessors of the codex (ie. common) form of the book and many can be found inserted into the covers of old books as decorations. So Mondange brought them to Bibliotheque Nationale to look at some of these books. He also suggested they go to Chateau Chantilly where the library contains some important examples and ended by saying that the whole issue would be discussed and examined a month later.

When they arrived at the ivory carver he started telling them about the differences between ivory from Indian and African elephants. Upon hearing about Mr. B.'s living in Stockholm he pulled out the tooth of a narwhale, started to talk about Norse mythology, and directed them to a museum in Paris called Cluny where there were beautiful ivory sculptings, copies of book illuminations and woven tapestries. When they returned to Mondange and told him about it, he replied in few words that of course all good older libraries had woven tapestries to help keep the cold out. He went on to hold one of his short gatherings where he spoke (and this Mr. B. calls Mondange's pedagogical masterpiece) to the whole group about woven tapestries and announced their impending visit to Le Gobelins, which was the department of Ecole Estienne where tapestry weaving was taught. While there, Mondange asked them if they were aware of a gallery called Le Mur du Nomade leading further into a whole conversation about Arabic bookbinding. Mr. B. recalls the richness of color nuances in wool, linen and cotton threads that were used to replicate motifs in the woven tapestries and the wonder that this whole world of craftwork evoked in them. What Mondange achieved was as Mr. B. describes it:

[And when we complained] and tried to explain to him that we were not overly enthusiastic at the prospect of traveling through the entire city to meet someone [...] he was both surprised, saddened and angry. Then he cursed us out telling us that the first thing one had to work at was one's pride over the excellence one possessed. [...] [To be aware of] that these were vocational cousins that could make life easier because you could go to them trustingly and say: "I've got this and that problem [...] do you have an idea, can you help me?" And then he said the really important part that stuck with me at the time, he said: "and don't forget when you visit someone who works alone and who strives for the exact same reasons as you are striving, to achieve the best possible results with his work. You visit him not as superiors but on an equal footing and ask for help and the person is able to assist you. It depends on your behavior towards him if you will get that assistance and at the same time it becomes a validation of his professional knowledge or competence, it's a mutuality, you need each other in order for there to be any development in work. It's something one doesn't achieve alone but always confrère [ie. as colleagues]."

[...]

I was convinced that Mondange forced us to come to grips with an attitude we had that reached back 3- or 400 years in connection with an immense impoverishment of professional survey or general view [ie. in connection with increasing specialization]. And he constantly tried to counter it by drawing our attention to how intimately we [ie. the different crafts] were connected and how important it was that one took an interest in what the vocations were then and what they are today.

In going back to Mr. B. with the account, he pointed out that Mondange emphasized the virtue in not keeping trade secrets but sharing knowledge as well as the importance of not becoming complacent as a craftsman. It may well be that the above

account is not a very good example of how to deal with these issues, that it is more an example of unwise deliberation to most people, but what it does show is *how* this deliberation was *enacted*, ie. how Mondange went about provoking his student-apprentices.

Deliberating on how to ensure vocational virtue is developed

In our conversations Mr. B. and I from time to time touched upon my own apprenticeship with him. At one such time I asked him if he had some kind of curriculum for my training, expecting an answer that had to do with him teaching different techniques in some sort of sequence. Instead he spoke about an episode in my apprenticeship and how he had worked to instill an element of vocational virtue that he felt was important. I am including it here because it gives a very clear idea of how Mr. B. deliberated in relation to a particular situation, ie. it shows how a general intent is enacted in context. Again, what is important is the view it affords to a *how* of educating for vocational excellence. Mr. B. begins by speaking in general terms of what he intended above and beyond teaching me to be a capable bookbinder:

One aim [with the apprenticeship education] was to develop the ability to look further than just “I’m done” and then to walk away, a modern word is sustainability instead of doing something that is as quick and as simple as possible.

[...]

I had to call your attention to: “Ruhi, [...] we help the students, we do parts of a process for them helping [them] across thresholds, but it demands your full presence. You’re responsible for the joy of a student, you can’t make any mistakes.” And I could only work like that because it wasn’t a threat but really an appeal to you to gather yourself because this is important and I don’t know if you remember your questions. For instance, you said: “look at me how I’m doing it now, am I doing it correctly? What am I doing wrong? What could I do better?” And that was the dialogue, and then we talked about what you did.

[...]

In a normal apprenticeship you can stand on the other side of the table and tell your master “sorry, it didn’t turn out better than this,” that was never the case with you and I made sure of it actually, that you didn’t develop such an attitude.

R: [surprised] How?

[...]

W: Do you remember that we always made almanacs for the bazaar in November [a reference to geometrical embroideries made in 6th grade on colored paper that was glued onto thick cardboard and turned into calendars]? Do you remember that there were a couple of girls that came late after we had made them and asked to have theirs done and you forgot to use a [thin sheet of glossy paper between the calendar and the cardboards] and everything was in a hurry and I stood there and thought to myself: “should I say something?” But instead of reminding you about the paper I said: “Ruhi, quick in and out of the press.” And you looked up at me and you were a bit irritated and you put the first in the press and I said: “out.” And you took it out and part of the cardboard was stuck to the calendar and you started to swear over yourself, you’d forgotten the paper because you were annoyed at the girls who disturbed you in another job you were doing. And there was no need for verbal corrective, it was an experience of: “aha,” you relived, remembered everything we’d talked about regarding pressing [...] and all of that you literally owned and then it’s not: “ah sorry, it didn’t get any better than this.” [...] That was the kind of reality or

experience that you had, that: “ah, that’s just not allowed to happen,” and you saw the girls and their expectation, the whole complexity. I didn’t have to argue with you, you had no chance to just say: “sorry it didn’t get better than this,” but instead you encountered an immediacy of neglect that gave you armor [for the future] through it.

[...]

Luckily you didn’t leave it in the press long but still long enough that [the glue had gone through some of the holes that the embroidery had made in the paper causing it to stick to the cardboard on top of it in the press] and it could be saved. [...] That it was for one of the girls who was really a pain in the ass made it even more relevant because I paid attention to the next one you made and if you had repeated the same mistake with the second as well and not made an immediate correction then I would have had to tell you: “Ruhi, not one more time.” [Spoken with a voice as in Ruhi, never again or else] And that wasn’t necessary and what is that? Is it morals? Or is it care and considerateness? Or, what is it? It’s a complexity one develops that exists beyond the technique.

In this dialogue, the first part, up until I ask *how?* demonstrates the intent that Mr. B. has of teaching some aspects of vocational virtue (to look beyond the basic act of making and tacitly involving such general virtues as honesty, care and presence) but really says nothing about what it entails. The following narrative is especially relevant because Mr. B. speaks of what he was looking for as a teacher, ie. how the described intent was present in the situation. That kind of attention is difficult to get at and reflect on by other means. This is because to observation it remains unclear if it was even a choice not to say something to ward off possible mistakes or if it was simply a question of not noticing in time. This attention to a situation as being morally charged or carrying moral potential is one part of what the episode allows one to notice and consider, the other part is how Mr. B. describes his deliberation, how he made what was a general intent into a specific course of action and reflection borne from the situation and context at hand.

Reflecting on the case narratives

In the first episode Mr. B. relates how Mondange deliberated wisely on what to do in order to awaken his students’ interest in their vocational cousins. His actual enactment of this might have lacked a certain educational tactfulness, or this provocative way of proceeding may be judged to constitute an educational virtue in that particular context with those particular students. What makes his deliberation wise? The case makes three arguments neither of which is definitive. The first is that Mondange recognizes this problem with professionalization and puts a lot of effort into countering it. The second that Mr. B. and at least some of the other students with whom he spoke came to judge it as wise. The third is that Mr. B. (and this is more apparent in the full case study) remembers Mondange as a significant role model for his own work as a teacher.

In the second episode Mr. B. recounts a situation where he made use of the skill-learning process (the making of the almanacs) to support an education for excellence. Again, one might discuss if refraining from preventing a possible mistake was a virtuous way of enacting his deliberation and thus if it is really an example of *practical* wisdom. Such discussions however, are one of the reasons why case studies in this form are valuable, they can help us become clear about not just our general aims but also the ways in which these are particularized and enacted. I would argue that it’s an example of practical wisdom, wise because the aim of the deliberation was

the development of care or considerateness and practical because it was borne out of a particular situation. In the latter sense it demonstrates the close affinity between this approach and that of Schön (1987) when he discusses the education of reflective practitioners. Schön uses a similar case-based approach to discuss the techne aspects of education for reflective practice and makes it clear that he is saying little about (1987:xiii): “wisdom in response to the ethical dilemmas of practice.” It is precisely to this matter that Mr. B.’s narrative speaks. He remembers a case of his reflection in action as it relates to wisdom in response to an ethical dilemma of practice.

The two narratives share a common theme of being about interruptions or challenges. In the first it is Mondange interrupting the practice of the student-apprentices and in the second it is Mr. B. allowing the workflow to be interrupted by not calling my attention to the lack of awareness that I had in the moment. Both interruptions in their own ways created challenges. The first by requiring the student-apprentices to overcome their unwillingness to engage in something apparently unrelated to their chosen practice. The second by requiring me to exhibit a sufficient degree of care and considerateness. Again this has a close affinity with Schön (1987, p. 26ff), who argues that reflection in action is mostly called forth on account of a surprise in the course of doing something. It may be that the similarities between phronesis and reflection in action imply that this is a more general pattern in education promoting excellence and that uninterrupted flows of training tend to inhibit its development. Or it may be that interruptions and surprises simply are more memorable.

Narratives of excellence in vocational education

My aim has been to suggest a way of dealing with the issue of educating for vocational excellence in apprenticeship-like settings. In doing this I have gone from discussing excellence in an Aristotelian philosophical context to arguing for narrative forms of representation as a way of conveying knowledge about virtue and practical wisdom. I have tried to show how auto/biographical studies can contribute such narratives by the inclusion of two very different ones from a larger case study. Both stories are about the central issue of this inquiry: *how* is an education for excellence enacted? In the first one Mr. B. describes how his teacher Mondange acted and in the second he describes his own deliberation. The first description covers a whole series of events and Mondange’s general way of pedagogical intervention. The second covers one particular instance in greater detail, including a clear discussion of how teaching a techne (bookbinding) and aiming for the development of a virtue are intertwined.

There are three benefits from developing this kind of knowledge further: in the education of practitioners, in research on excellence and VET and in the actual practice of teaching an occupation. In relation to the education of practitioners and (vocational) teachers such narratives can serve as sources for discussions about what constitutes excellence in professional action and as examples to use in calling apprentices’ attention to the tacit elements of the workplace practices they are exposed to. One might also use the format to create curricula in vocational training where, for instance, apprentices are tasked with interviewing teachers/masters about their education and examples of excellence in it and then return to share these as well as critically discuss them. The research related benefit has to do with a more systematic gathering of similar narratives. Such a systematic approach has the potential to describe and analyze a field of practical knowledge that, until today, has

remained largely tacit. Finally, these stories also have an immediate benefit in increasing the repertoire of practitioners' practical wisdom. With this I mean that a practitioner who has heard or read many such stories will have more to draw on in her own deliberations. As the presented narratives imply, this stretches from the enactment of a small curriculum to the immediate reflection in action on how to promote vocational excellence in an apprentice.

A critical issue is what happens to these narratives as they are taken out of their spoken context in time and place and written down. One might argue that this increases the risk of them passing over from a form of knowledge into anecdote. There are no clear answers to such worries, but it underscores that longer, more detailed and contextual narratives stand a greater chance of resisting such passing. Furthermore, this is the main reason for including the more abstract discussions about excellence and Aristotle as well as narrative forms of knowledge and practical wisdom. They create a conceptual structure that assists one in understanding what these narratives are about in this particular context (they could be about other things with a change of perspective). It might seem a shallow sort of analysis but my point is that we need to become more fluent in our understanding of practical forms of knowledge, not least among practitioners where there is sometimes much confusion about what counts as grounds for generalization and what a good story actually says. Thus my question about *how* a vocational education for excellence has been enacted is a question dealt with here on a fundamental conceptual level to show that these narratives are narratives about this and to discuss why that is of relevance to VET.

Concluding remarks

What the episodes considered imply is that stories of wise deliberation and judgment are a way of conveying vocational excellence that raises important matters of practice from their tacit dimension and that constitute an integral part of good vocational education. This holds especially in the education of teachers, be it teachers at workplaces, schoolteachers or academic teachers. They also hint at the sensitive character of such practical knowledge. When a wise teacher passes away so does her or his wisdom, unless it is remembered in stories. Who knows what further stories of excellence in vocational education could illuminate, that are forgotten as the sources of their oral transmission disappear? At this point the type of research I have been describing is closely related in spirit to the romantic movements interest in collecting and writing down folk-tales but rather than folk-tales this is concerned with the educational biographies of unusually wise teachers. This leads me back to the issues posed in the introduction: that relying entirely on the tacit or orally transmitted practical wisdom of teachers and expecting this to be taught more or less automatically from generation to generation, ignores differences between practices, and undervalues a more systematic reflective approach. It also assumes that teaching moral and intellectual virtue is something that requires less pedagogical effort rather than more.

My argument here is that a systematic gathering of excellence-narratives might very well cause a whole new field of practical knowledge to emerge from its relative tacitness. Would we find groups of stories relevant only to a narrow band of practitioners together with other more open types of stories? What kinds of stories would people considered practically wise tell about their education as medical doctors or computer scientists or musicians? Considering this, aren't we just at the very

beginning of waking up to aspects of vocational education and practical knowledge that are central to social development in the 21st century?

Acknowledgments

I extend my gratitude to professor Randall Curren for helpful comments on the section discussing Aristotle and to professor Gert Biesta for sharing a forthcoming text as well as helpful comments.

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Printed in Sweden 2015, www.us-ab.com



341900
Printed matter

This study looks at issues of Bildung and vocational education from a biographical perspective. These are conceptualized in terms of Bildung in action, developed in relation to Schön's concept reflection in action; Bildung through making as a way of thinking about processes of Bildung connected to crafts; and Bildung in vocational contexts. These concepts are enriched through an extensive auto/biographical case study of craftmaster Wolfgang B.'s educational biography focusing on stories of Bildung where processes and actions are described as well as the curricular structure of his training. The results are an increased and differentiated understanding of Bildung in vocational contexts, especially as related to the coexistence of skill training with education for Bildung.

ISBN 978-91-7649-073-0

Department of Education
Graduate School in the Pedagogy of Vocational Subjects

