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On the Power of the Object

History Making through Skilled Performance in Wooden Boat Building

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Abstract: By skillfully shaping and producing objects human beings externalize and make real their future-oriented imaginaries and visions. Material objects created by skilled performance make human lifeworlds durable. From the point of view of history making, wooden boat building is a particularly rich domain of skilled performance. This chapter is based on two research sites, one in Finland and the other in Russia. The analysis is divided into four layers or threads of history making, namely personal history, the history of the wooden boat community, the political history of the nations and their relations, and the history of the boats themselves as objects of boat-building activity. The chapter ends by discussing our findings and their implications for the understanding of skilled performance and history making in work activities and organizations.

4.1 Introduction

Skilled performance is often regarded as a foundational element of one's identity and self-esteem (Sennett, 2008). We find this view somewhat limited. For us, skilled performance is above all how history is made. By skillfully shaping and producing objects human beings externalize and make real their future-oriented imaginaries and visions. Material objects created by skilled performance make human lifeworlds durable. This way, skilled performance on objects both stabilizes and transforms ways of organizing life. Building on accumulated experience and projecting forward in time, skilled performance is movement between the past, the present, and the future. This is the core of history making.

In his important book on history making, Callinicos (2009) distinguishes between three kinds of agency involved in history making: the pursuit of private goals in routine conduct, the pursuit of public initiatives, and collective pursuit of social transformations (Callinicos, 2009: 1–3). While useful as an antidote to the opposition between agency and structure, this view ignores what we see as the core of human agency, namely our capacity to transform the world and ourselves by means of object-oriented instruments. This transformative agency cuts across all the three types of history making named by Callinicos.

For us, skilled performance of productive actions to create objects of use value is the foundation of agency and history making. This comes close to the idea of material agency, discussed by Malafouris (2013), Olsen (2010), and others. We agree with Malafouris in that "agency is the relational and emergent product of material engagement" (2013: 148). However, material engagement is more than an encounter between a subject and a material object. Such encounters are embedded in historically evolving activity systems mediated by instruments, communities, rules, and divisions of labor. As Marx (1983: 287) pointed out, human beings "make history, but they do

not make it just as they please: they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past."

The importance of skilled performance is vividly present in traditional crafts, so much so that crafts and craftsmanship are sometimes equated with the very idea of skill. This may also lead to a nostalgic idealization of crafts as the true form of dignified human production. On the other hand, many traditional and endangered crafts are experiencing a revival, often facilitated by social media as a means of sharing products, ideas, and instructions. More than ever before, defense of traditions and bold innovation are now intertwined in crafts (Adamson, 2007; Crawford, 2009). Why is this happening?

In cultural-historical activity theory, the concept of object plays a central role in efforts to understand why people do things. The object is understood as the true motive of the activity (Leont'ev,[1] 1978). The object first emerges as raw material or a problem to be shaped and worked on, then gradually takes the shape of a product or outcome. In capitalism, the producers are separated and alienated from their objects, mass-produced for exchange value and profit. In general terms, the revival of craft in our era may be seen as a search to overcome alienation and rediscover meaningful objects and use values. In this chapter, we aim to go beyond such a general explanation. We will suggest an expanded conceptualization of the object as an entity that has the power to mobilize activities and to drive human actions in history-making processes across the past, the present, and the future. History making is here understood as a drive deriving from the object of activity—the assertive orientation to be part of history.

Wooden boat building is an example of a craft struggling to find ways to sustain and revitalize itself. Until the nineteenth century wooden vessels dominated the construction of boats worldwide, but later this highly skilled craft was replaced by industrial construction of metal vessels (Slaven, 2013). Nowadays the occupation of building wooden boats mostly exists as a hobby of enthusiasts, facing great economic difficulties when trying to turn professional (Chapelle, 1994). The position of this craft has its own peculiarities in different parts of the world, due to cultural and historical characteristics of the development of the trade. In this chapter, we focus on wooden boat building in Finland and Russia.

From the point of view of history making, wooden boat building is a particularly rich domain of skilled performance. Wooden boats, especially historical replicas, are objects loaded with history. The very building of a wooden boat is necessarily an attempt to rediscover and revive ideas, practices, and skills of the past. At the same time, building a usable wooden vessel is a challenge to test the viability of historical heritage in present and future contexts of life, requiring adjustments and inventions that go far beyond replicating the past.

Our inquiry aims at answering the following questions: (1) What kinds of history making may be identified in the activity of wooden boat building and how do the different modes of history making interact? (2) How does skilled performance on the object of activity contribute to history making in the craft of wooden boat building in two different cultural settings?

In the next section, we will discuss our conceptual framework, drawing on cultural-historical activity theory and focusing specifically on the relationships between object, skilled performance, and history making. We will then describe the two sites of our research: Finland and Russia. After that, we will present our data as well as the methods of analysis we will employ. The actual analysis is divided into

four layers or threads of history making, namely personal history, the history of the wooden boat community, the political history of the nations and their relations, and the history of the boats themselves as objects of boat-building activity. In a separate section, we will then explore the overlapping and interplay of these four layers in our two cases. The final section of the chapter is devoted to a discussion of our findings and their implications for the understanding of skilled performance and history making in work activities and organizations.

4.2 Conceptual Framework

In cultural-historical activity theory, human activity is understood as an object-oriented, culturally and socially mediated system. The object of the activity is regarded as a defining component without which the activity could not exist (Leont'ev, 1978). Identifying the object of an activity can help us understand "what makes people strive for something beyond the immediately obvious goal or situation" (Engeström, 1995: 411). The object of the activity is understood not merely as a thing, but as the carrier of motivation, direction, and sense of activity, as something "toward which an act is directed, i.e., something to which a living being relates" (Leontyev, 1981: 49):

> We shall also, accordingly, limit the concept of object. It is normally used in a dual sense: in the broadest one as a thing standing in some kind of relation to other things, i.e. as "a thing having existence"; and in a narrower sense—as something withstanding (German *Gegenstand*), resistant (Latin *objectum*), that to which an act is directed, i.e. as something to which precisely a living creature relates itself as the *object of its activity*—indifferently as outward or inward activity (e.g. *object of nutrition*, *object of labour*, *object of meditation*, etc.). From now on we shall employ the term object precisely in this narrower, special sense.

(Leontyev, 1981: 36)

For Leont'ev, "the object of an activity is its true motive" (1978: 62). Subsequent studies in activity theory have discussed objects as complex and contradictory assemblies of entities embedded in social and economic relationships, with various individual motives stemming from and attached to a single object (Engeström and Blackler, 2005; Miettinen, 2005; Nardi, 2005; Sannino, 2013). The object is seen as raw material or problem space toward which the activity is directed and which is molded and transformed into outcomes with the help of mediating instruments (tools and signs). The object manifests itself differently for different participants of the activity, representing different positions and perspectives. The relations of subject and object are described with the use of such words as "passion," "desire," "drivenness," and "power." Such objects are not limited to physical things, they include also relatively stable "immaterial" entities such as songs or theories.

Objects are always in the process of transition and transformation. But it would be a mistake to assume "that objects are constructed arbitrarily on the spot; objects have histories and built-in affordances, they resist and 'bite back'" (Engeström and Blackler, 2005: 310). Sannino (2013) points out that a subject may develop a very personal, almost intimate relationship with the object, to a point at which the subject

is truly driven by the object in a lifelong pursuit of it. But this is not a one-sided process in which an object possesses some kind of magical power over humans.

In the tradition of cultural-historical activity theory, objects are seen in their dynamic contradictory movement. This view is closely related to the work of Knorr-Cetina (1997) on "sociality with objects," emphasizing the open-ended and permanently incomplete character of objects, a quality that generates a "structure of wanting," an insatiable drive to push the object forward. In a similar vein, Smith (1996) writes about the dynamic origination of objects, and Gosden and Marshall (1999) use the notion of "cultural biography of objects" to illuminate temporally evolving relationships between objects and people.[2]

Activity is driven by its object; at the same time the object is generated and transformed through activity. This calls attention to skilled performance in object-shaping actions. Drawing on Wartofsky's (1979) concept of secondary artifacts and Rabardel's (2003) notion of instrumental genesis, we see skill as a relatively durable, repeatable, and transmittable way of approaching and completing an object-oriented task with the help of physical and mental instruments. This means that a skill itself may be understood as an artefactual formation, or a secondary artifact.

This does not mean, however, that a skilled performance is the same as executing a static routine or a fixed algorithm. Performing a complex skilled action such as a competent medical diagnosis (Engeström, 1995)—or selection and application of appropriate tools and materials in preparing a part of a wooden boat—is not reducible to the accumulation of massive amounts of repetitive experience. This is so simply because the tasks are typically infinitely diverse and constantly evolving. In other words, skilled performances are characterized by continuous "surpassing ourselves" (Bereiter and Scardamalia, 1993). These two sides—the artefactual durability and the processual tendency to go beyond what is already mastered—make a skilled performance truly a dynamic unity of opposites.

Shaping an object by means of skilled performance results in history making. History is made at multiple interrelated levels, from the history of nations and cultures to the history of an individual (Scribner, 1985). A moment of skilled performance is always an intersection of multiple threads of history (Hutchins, 1995: 372). In the example analyzed in detail by Hutchins, the skilled actions of a navigation team on a large ship are intersections of the history of navigation and the navigation technology used on the ship, the history of the team and its individual members, and the history of the actions conducted in the activity. To understand skilled performance as history making it is of utmost importance to identify the strands of history pertinent to the particular object and activity under scrutiny.

We may now sum up our conceptual framework with the help of a diagram (Figure 4.1). The diagram is an application of the well-known triangular model of an activity system (Engeström, 2015: 63). The components of an activity system are in constant interaction, shaping and destabilizing one another. An activity system is the site in which agency and structure come together and turn into one another.

In Figure 4.1, we have used ovals to highlight the three focal concepts of the present analysis: the *object* (wooden boat), *skill* (understood as an instrument or secondary artifact), and *history* (understood as an outcome, made in the activity of wooden boat building). While skill is seen as an instrument in the uppermost corner of Figure 4.1, *skilled performance* is dynamically distributed in the entire activity system. It takes an interplay of all the components to accomplish skilled performance.

<COMP: INSERT FIGURE 4.1 NEAR HERE>

Skilled performance is motivated by the object that it produces. The object, such as a wooden boat, necessarily embodies both use value and exchange value. It is this contradictory nature of the object that makes skilled performance more complex than mere technical skill or perfection. In skilled performance, the internal contradictions of the object are negotiated. This means that much of skilled performance consists of choices, decisions, and resolutions rather than merely technical execution of appropriate procedures.

Skilled performance may be seen as weaving multiple threads of history. This does not necessarily mean that the actors are deliberately making history. Most skilled action is focused on the immediate task at hand. The historical consequences of the performance typically accumulate slowly and become visible long after the specific performance has been completed. On the other hand, skilled actors are often conscious and proud of their place in a chain of tradition and renewal. This historical connectedness may become a central focus of skilled performance when the task at hand is related to defense, reconstruction, or revival of a traditional craft or a historically significant object. The skilled performances examined in this chapter have both these characteristics: they deal with revival of the traditional craft of wooden boat building and with the replication of two historically significant boats. Thus, the role of history making in skilled performance is accentuated and made visible in the cases analyzed in this chapter. As stated in Figure 4.1, the outcome of the activity of wooden boat building is history, reproduced and revived in tangible products, namely historically significant boats.

4.3 Two Sites of Wooden Boat Building

In Finland, the construction of wooden vessels came under threat in the 1960s and 1970s with the introduction of aluminum, plastic, and fiberglass. Although modified with the modern technologies, traditional craft became unprofitable and builders faced the need to start using new materials apart from wood to be competitive in the market or close their workshops (Kivilaakso, 2006).

By the 1990s, it seemed that the tradition of building wooden boats would be lost. An association of wooden boat builders (Puuveneveistäjät ry) was founded with the aim to preserve unique skills of wooden boat building.

Our Finnish research site is situated in a shipyard in Suomenlinna Fortress in the Helsinki coastal area (Figure 4.2). Suomenlinna has a strong tradition of building and repairing wooden boats and ships, now supported by the Viapori Shipyard Association. The association owns a dry dock and several workshops in Suomenlinna. Specialists working on the premises of the association include a shipwright,[3] several skilled boat builders, and apprentices. Craftsmen manage their own registered private companies to be able to work with customers.

<COMP: INSERT FIGURE 4.2 NEAR HERE>

Different kinds of wooden vessels are repaired, restored, and constructed in the Suomenlinna area. Our data and analysis are focused on one of the recent projects of the association. Together with the historical Ehrensvärd Society, the association undertook the construction of a replica of an eighteenth-century rowing gun sloop, based on plans by the Swedish naval architect F. H. Chapman.

The original gun sloops were low draught, sea-going, and heavily armed oak vessels that were constructed for sailing as well as rowing. The replica gun sloop was

officially named *Diana* in the summer of 2014 after the first sea trials. Since the summer of 2015 it has been used to take tourists around the coastal area and for that reason it is equipped with two electric motors.

The woodwork for the gun sloop was led by an experienced Finnish wooden boat builder and shipwright who has completed formal training in wooden boat building. A changing group of up to seven apprentices took part in the building process. The apprentices came from several boat-building schools to get practical experience before graduation. Other specialists involved in the construction of the gun sloop included a boat designer, caulking specialist, blacksmiths, a sailing and rigging specialist, and electricians.

In Russia, as the empire's priority was the navy, at the end of the nineteenth century wooden sailing ships were rapidly replaced with metal ones. During the twentieth century the craft of wooden boat building gradually declined and was almost lost. In the 1980s and 1990s a wave of the revival was started by enthusiasts (Spassky, 1994). Today wooden boat building remains marginal in Russia, no formal educational programs are offered. In spite of this, wooden boat building is still sustained by enthusiasts, including three permanent shipyards and separate replicating projects. Government support remains nominal.

Our Russian research site is situated in a shipyard on the Solovetsky Islands (Solovki) in the White Sea (Figure 4.3). The Solovetsky Islands are an archipelago in which the Solovetsky Monastery has been located since the fifteenth century. The islands have a strong tradition of constructing wooden vessels and were always recognized as an important part of Russian navy fleet and maritime history. These traditions are now supported by the Northern Seafaring Fellowship (NSF; Tovarishchestvo Severnogo Morehodstva), a non-governmental organization which brings together scholars with an interest in the history of the Russian north and maritime history. The NSF runs a maritime museum and organizes ethnographic expeditions around the Russian north.

<COMP: INSERT FIGURE 4.3 NEAR HERE>

The focus of our study and the main project of the Solovetsky Maritime Museum is the construction of a replica of the historical vessel *St. Peter*. The original *St. Peter*, built in 1693, was the first ship in the Russian navy fleet. The project is funded by private donors.

A lack of space in the Maritime Museum has meant that the yacht has been reduced in length from 18 meters to 13 meters. The *St. Peter* replica vessel is used for the ethnographic expeditions of the NSF around the north of Russia, which determined the installation of an engine and three layers of planks. The construction started in 2003 and the work has been carried out mostly during summer periods due to harsh weather conditions.

All the work, including wood, metal, and electric parts, has been carried out by a group of mostly amateur carpenters.[4] During the long period of the construction process many people from different parts of the country participated in the building process, forming at some point a more or less stable core crew of carpenters. The builders have no formal boat-building education.

4.4 Data and Methods

The data for the present study were collected by observing work processes on site, by conducting interviews with key actors, and by documenting the mediating artifacts (templates, models, pictures, etc.) used by the actors. The present analysis is focused on the interviews. These were essential in making accessible the participants' perspectives and experiences of history making. The interviews were conducted as active, informal, two-way meaning-making conversations with only a general outline of topics to be covered. We wanted to keep the interviews as open and adaptable as possible to the interviewees' priorities (Gubrium and Holstein, 2002).

The interviews in the Finnish site were conducted between December 2011 and May 2013 during several short-term visits. The analysis for the current article focuses on nine semi-structured interviews with the master shipwright, two managers of the dockyard, and apprentices. Altogether these interviews lasted 5 hours, 13 minutes, and 32 seconds, containing 4,071 speaking turns.

The data collection in the Russian site took place in June 2012 and June 2013, during two lengthy field visits. Thirteen semi-structured interviews were analyzed for the current study, including interviews with the head of the construction, several carpenters, apprentices, and members of the NSF community. Altogether the interviews lasted 4 hours, 19 minutes, and 22 seconds, containing 1,390 speaking turns.

The interviews in both settings were conducted during the working hours in the shipyards. The interviews include numerous interruptions due to the ongoing construction process or moving around the dock area. They were video and/or audiotaped and then transcribed. The interviews on the Finnish site were conducted in English. The interviews on the Russian site were conducted in Russian and later translated into English by the first author.

Our initial interest was to find out how complex wooden vessels are built in conditions where blueprints are imprecise or unavailable and many of the builders lack skill and experience. The interviews did indeed illuminate the characteristics of skilled performance involved in this craft, but the most vivid and pervasive set of issues taken up in the interviews was the importance of history. Based on this preliminary reading of the data, we analyzed our data set by means of thematic analysis (Braun and Clarke, 2006). We initially searched for topical segments which made explicit reference to history. Overall, we found 161 segments of different lengths with references to history; ninety-five segments in the Finnish data set and sixty-six segments in the Russian data set.

We then looked closely at history-related segments in order to identify possible themes. Typical expressions of history included histories of construction of the vessels, description of one's own career as a craftsman, and histories of bigger historical events related to the current wooden boat-building activity. Four threads or layers of history became apparent in the data:

1) The personal history of the craftsman; discourse on the professional autobiography of the boat builder.

2) The history of the wooden boat community; discourse on the historical development of the community around wooden boats and their construction.

3) The political history of the nations and their relations; discourse on the connection between boats, maritime history, and general history of the nations.

4) The history of boats; discourse on the history of specific boats and ships as objects of wooden boat-building activity.

The specific characteristics and criteria of each one of the four threads will be explicated in the following sections. The number of references to each thread in the data sets is disclosed in Table 4.1.

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The numbers of references to threads of history are larger than the numbers of history-related segments. This is due to the fact that in the interviewees' discourse, multiple threads were often overlapping and intertwined. For example, an interviewee might talk about the history of the construction of the boat (thread 4) and about the craftsman's development as professional (thread 1) in an intertwined manner in one and the same segment. We will examine this issue of overlaps later in a separate section.

4.5 Personal History of the Craftsman

The key characteristic and criterion of this first thread is talk about one's own experiences, feelings, and plans directly related to becoming and being a wooden boat builder. The talk is dominated by a first-person perspective.

4.5.1 *Finnish Shipyard*

This thread is filled with expressions of pride for the acquired skill (Excerpt 1) and of the pleasure of exerting the skill as a creative free agent (Excerpts 2 and 3). However, these personal histories are also saturated with apprehensive conflict statements about customers (Excerpt 3), difficulties of making a living with boat building (Excerpt 4), and the constraints of a trade which demands complete devotion (Excerpt 4).

Excerpt 1

Shipwright: I am building boats and ships from wood, almost for all my working age. That's the best I know.[5]

(I: 2, T: 144)[6]

Excerpt 2

Researcher: Ok. But then, if you consider yourself a designer?

Shipwright: Well, I suppose, I have to be . . . But I consider more like . . . I would be an artist.

(I: 2, T: 139–40)

Excerpt 3

Shipwright: I build a boat and then I sell it. It's sort of, nicer way. I don't have a customer. If I have a customer, it's all right. But it's better if I don't. I build a boat . . . as I want.

(I: 5, T: 397)

Excerpt 4

Apprentice 1: The basic problems in those wood, uh, wooden boat building jobs is that if you do it, you have to do it one hundred and ten percent [smiles] . . . It's a lifestyle and you just have to, have to want to do it. But somehow these boats in places, for example this dockyard, it somehow, pulls you back [smiles] . . . I, like now, say something for the record . . . if you come here in 2015, I will be here [smiles].

(I: 6, T: 103)

4.5.2 *Russian Shipyard*

In the Russian data, Excerpt 5 elaborates on the demanding nature of the work which involves dealing with the "new and unfamiliar." Similarly to the Finnish data, the tension-laden nature of this thread is evident also in the Russian data. Boat building was regarded with both fondness and apprehension, as something that attracts but also ties one down: "I don't want to fully bind myself with the boat" (Excerpt 6). Some aspects of the boat's life, such as the launching of the boat, have special drawing power and evoke strong curiosity (Excerpt 7). And there are expressions of pride in one's ability to make things manually and to "overcome yourself" (Excerpt 8).

Excerpt 5

Head carpenter: Well, none of us have full experience. I had some sort of general concept. I have already worked in Archangelsk . . . got some general ideas. Well, [name of a carpenter], he worked in a shipyard in Petrozavodsk. So he knows something about it. The most difficult thing here, in boat building, is kind of, to see it as a new and unfamiliar, is to understand how . . . any particular unit, well, how it must be done. Because the materials here are: wood. It is simple material. And if you know how the unit should be done, it is not a big deal to make them. As we have a design project . . . as the design project isn't so detailed, some of the units are not designed. This is where we turn to the books, look and do something like that.

(I: 2, T: 28)

Excerpt 6

Researcher: Are you planning to sail yourself?

Head carpenter: I think so . . . I plan to sail in the beginning, first year. Definitely during the tests. Then a big trip to an island [inaudible] is planned, there, to Novaya Zemlya. The area of Novaya Zemlya. I also would like to go here. But fully, kind of full time, I don't want to be on the ship. If the ship works for a long period, if it lives for a long period, the same crew sails, I would like to come here from time to time and go for a trip—a week or two. Something like that. I don't want fully bind myself with the boat. Because I also have a family, it is really complicated to combine this kind of life and family. When you are a sailor. The guys are divorced [laughs], for them it is [easier] . . . It is best for a sailor [pause]. Perhaps, the ones, who are building, are going to sail. Maybe, one will be a captain of the ship. Some of them, for sure.

(I: 2, T: 82–3)

Excerpt 7

Apprentice: Before I finish everything here, it won't be pulled out. I really want to take part when it will be pulled out. I will especially come here to see how he will be pulled out.

Researcher: And why exactly to see how it will be pulled out?

Apprentice: Well, it [pause]. Have you ever seen the boat launched out to the water? I've never seen it before.

(I: 3, T: 35–7)

Excerpt 8

Researcher: And you are now somehow able to make something out of wood?

Carpenter 2: Yes, I did, well, my first, my, perhaps, kind of a victory [smiles]. Perhaps, it-it is a two-step ladder, I made . . . I was, kind of, asked to make. And, to me, hmm, the guys know that I'm not strong, well, in doing something, but they said, well, without an-any, sort of, well, insinuations, I don't know, that I can't do it. I thought first and then made it . . . Well, like here, there is a saying, well: a carpenter carves wood—a wise man creates himself. Well, you go into sort of a stage of wisdom [smiles].

(I: 13, T: 124–5)

Overall, this thread is characterized by contrasting emotional expressions: pride, pleasure, and curiosity versus doubt, apprehension, and fear for economic insecurity and total devotion to a constraining trade. The multitude of partly opposite emotional stances implies that there is much more at stake than technical and cognitive mastery of specific skills. The object, the wooden boat, both draws the subject in and pushes the subject out. Skilled performance emerges as mediation of a tension-laden, emotionally charged relationship between the subject and the object, between the builder and the boat.

4.6 History of the Wooden Boat Community

The key characteristic and criterion of this second thread is talk about the community of wooden boat builders at large. The community may be framed primarily in terms of professionals (as in Finland) or more broadly, to include hobbyists and non-professional enthusiasts (as in Russia).

4.6.1 *Finnish Shipyard*

In the Finnish data, boat builders were described as a small, enclosed professional community on which economic strain is becoming increasingly heavy. The emphasis was on the individual master boat builder as an almost heroic figure representing ultimate skill in a threatened craft. This was reflected in a distinction between boat building and ship building (Excerpt 9).

Excerpt 9

Researcher: Ok. Isn't there a type of community of professional that you, kind of, keep in touch with or . . .?

Shipwright: Oh yes, in boatbuilding. In boatbuilding yes, but in ship building not . . . Because in shipbuilding I am the only one who's been employed now . . . And then, in Finland there are only three shipwrights. But boat builders there are quite a few. Although they are not . . . most of them are repairing and not building new boats . . . So, less than ten are building new boats.

(I: 7, T: 242–3)

4.6.2 *Russian Shipyard*

The Russian interviewees described their community as an internally strongly interconnected group of people who are interested in wooden vessels and marine history. The wooden boat community of Solovki was described as an enclave existing "outside the market economy" (Excerpt 10). The broader, nationwide community of wooden boat building was described as a few scattered and isolated islands of activity ("I vaguely heard about it"; Excerpt 11). The settings in which wooden boats were built for non-commercial purposes were described as short-lived efforts, a sort of a "romantic uprush" (Excerpt 11).

Excerpt 10

Researcher: So, you do not have any money issues?

Head carpenter: That is why a lot of peculiarities evolve; we don't have any deadlines. No precise deadlines. Like, the customer will give money and we will

> promise him to build. We don't have this. We postponed it for one year, then for another year. It happens because the customer, well, NSF is like a customer, they are not against extending the deadlines. For instance, we are not on time, but we need to make it of high-quality. It is very complicated to foresee. We have never built a boat like this . . . There are hardly places like this, perhaps, as we are outside the market economy.

(I: 2, T: 16)

> Excerpt 11
>
> Researcher: Is there any kind of school?
>
> Head carpenter: No. Basically, we don't have wooden boat building in the country. Excluding two shipyards in Petrozavodsk. Even one of them, one differs from the other. They have different managers. One builds and then sails boats to some expeditions. He builds this way: faster, faster, builds everything clumsy, just for selling faster, and then go sailing. Another, he has, like, a more commercially successful shipyard . . . Maybe, there is another shipyard there. But I vaguely heard about it. There they also build wooden yachts, but kind of varnished, like, beautiful, fashionable. That is all. In our country in wooden boat building there are only rare attempts to build some boat in some city. Here is one. In Piter, they have built Standart some time ago . . . But there was not enough of something for the second one. Neither interest, nor, maybe, strength . . . But these are not shipyards, it's sort of . . . a romantic uprush.

(I: 2, T: 23–4)

Overall, in this thread the communities around wooden boats were represented as surprisingly enclosed and insular entities with apparently little support from and connections to the outside world. Although the Ehrensvärd Society and the Viapori Shipyard Association have webpages which include information about the gun sloop, the internet and social media were not mentioned at all by our Finnish interviewees. The Russian group has a relatively detailed website, and the interviewees referred to their active use of the internet as a means to look up technical information, to order supplies and tools, and to recruit people. However, their use of the web was mainly limited to interaction with people who are interested in the Russian north or Solovki.

4.7 Political History of the Nations and Their Relations

The key characteristic and criterion of this third thread is talk about the connections of boats to historical epochs, events, and persons who have played major roles in the political and military shaping of the nations and their relations. In both of our two cases, the boats under construction were replicas of historically significant originals. Thus, the utterances categorized in this thread were mainly, but not exclusively, related to the historical origins and meanings of the particular boats or boat types under construction.

4.7.1 *Finnish Shipyard*

The first two interview segments (Excerpts 12 and 13) explicate the important role this boat type played in the naval strategy of Sweden in the eighteenth century. The gun sloop was strategically successful as it was designed for swift and agile maneuvering, by rowing and by sail, in the treacherous shallow waters of the Finnish archipelago, and had a low profile making it very hard to hit for the enemy ships. The

shipwright emphasized that the gun sloop was a pioneering accomplishment in that it was constructed on the basis of actual drawings made by a naval architect, apparently without much concern for the expense (Excerpt 13).

Excerpt 12

Manager: As a tactic, it was very good, it was shallow, going rather fast and, like . . . The naval battle of Ruotsinsalmi.[7] They say it was . . . they won because of these [points to the boat under construction].

(I: 2, T: 48)

Excerpt 13

Shipwright: She [the boat] was going to be very good for that time, end of the 1700s, because she was drawn, and the top naval architect drew her, drew the model. And there was no end to the money, how much it cost, because it was the king's . . . for the king's navy. At that time, I think that at that time, it didn't matter how much it costs, when the king was telling someone what to do.

(I: 4, T: 492)

The historical significance of the boat was translated into a rule that required great fidelity to the original.

Excerpt 14

Shipwright: This boat, this ship is only done like this because the customer wanted exactly the same ship that was built in 1700.

(I: 4, T: 318)

4.7.2 *Russian Shipyard*

Perhaps reflecting the fact that Russia is and has been a great power, the Russian interviewees emphasized the fact that their boat's original model belonged to the emperor and represented the beginning of Russia's naval power (Excerpt 15).

Excerpt 15

Member of the NSF community: To remember, 10 years ago we started building the ship. Who came up with this idea—not me . . . Well, if there is a shipyard, there should be a ship. That is, probably, it matured naturally . . . Why this ship, Saint Peter? A replica of a historical vessel, a yacht that was built in 1693 for Peter I, the Sovereign's yacht, by shipbuilders of Arkhangelsk led by Dutch masters. Why exactly this yacht? Maybe because Peter I sailed on it to Solovki to a pilgrimage in 1694. Maybe because it's a yacht not in the modern sense, not in the modern meaning of the word, but it is a military boat. It is the first ship of the naval fleet, created by Peter. That is, several senses, meanings came together. And maybe more was known about this ship than about any other ancient ship.

(I: 12, T: 1)

Overall this thread reveals an important component of the motive driving the activity of wooden boat builders. The boats in our two cases are not just any boats, they are representatives of a past heroic era. Building these boats makes the builders messengers of history: their products will literally bring history to the present and future. From the point of view of skilled performance, this mission of bringing history to the present is a dilemma, as it is not possible to reproduce a completely true replica of the original historical model in present-day conditions. We will discuss this dilemma in the next section.

4.8 History of Boats as Objects of Wooden Boat-Building Activity

The key characteristic and criterion of this fourth thread is talk about the material and technical aspects of the construction of the boats in line with their prospective use. This thread opens up the relationship between the boat builders and their object of activity as it becomes crafted by their hands on a daily basis. This thread also reflects the continuous movement and dialogue between the past and the present embedded in efforts to turn historical boats into modern use.

4.8.1 *Finnish Shipyard*

In Excerpt 16, the Finnish shipwright described the boat as a product of the individual shipwright's deliberate choices, as an object carved by his own intentions, including modifying the original design to produce a better result: "So, I am building it as I want." This bold stance was immediately tempered by the statement "it has to look similar to the 1700s boat." The need to modify the original model for modern use comes up again in Excerpt 17: "it is good for the passengers; you have more space." The dilemmatic relationship between the needs of modern use and fidelity to history is nicely condensed in the statement: "There are going to be two electric motors. But the rowing, they will be rowing it as well."

Excerpt 16

Shipwright: The shipwright. The shipwright decides. Like here, the customer hasn't been here seeing this at all. So, I am building it as I want. But the first thing was that it has to look similar to the 1700s boat. So, I change what I want. So, I try to do it better to my knowledge.

(I: 4, T: 450)

Excerpt 17

Researcher: Typically it had 2 guns, front and back.

Manager: Front and back. Yeah.

Shipwright: And that deck, which I am doing now is with one gun and they turned the gun. There is more space used for the gun in the deck and that's why we thought that it is good for the passengers; you have more space.

Researcher: Yeah, ok. What is this going to be used for?

Manager: As a tourist [vessel], around the Suomenlinna. There are going to be two electric motors. But the rowing, they will be rowing it as well.

(I: 2, T: 40–5)

4.8.2 *Russian Shipyard*

The Finnish shipwright emphasized his own deliberate decisions in the shaping of the boat ("The shipwright decides"). The Russian head carpenter also emphasized deliberate decisions aimed at a compromise: "a historical vessel and also we tried to squeeze something modern out of it" (Excerpt 18). However, these decisions are framed as collective; the interviewee used the pronoun "we" five times and the pronoun "I" not a single time.

Perhaps because of its more collective nature, the Russian case also demonstrates the need to attach explicit, publicly available representations to the skilled performance of building the boat. In Excerpt 19, a carpenter surprised the interviewer

by telling that he and his colleagues have written and inserted in various places in the boat messages for people who may be later repairing the boat: “the boat is stuffed with messages” (Excerpt 19).

Excerpt 18

Researcher: Was your purpose to build a boat as comfortable as possible for expeditions?

Head carpenter: Yes. At the same time to fit it to some sort of historical image. I mean, we could have built a totally comfortable boat, totally modern with all the possible equipment, which eases the sailing. As we need this [history], that we have this kind of sails, we have more difficulties. Well, it is going to be sort of a compromise: a historical vessel and also we tried to squeeze something modern out of it.

(T: 2, T: 63–4)

Excerpt 19

Carpenter 1: I offered everyone a chance to write. But somehow, [they] were busy, I decided [to do it] alone . . . Just to write myself. Then . . . well, the boat is stuffed with messages.

Researcher: Really? Do you, like, I mean . . . isn’t it the only one? Where else?

Carpenter 1: Somewhere there . . . We wrote. Even a coin somewhere . . . someone put a coin. Some of the old, even a commemorative ruble . . . It is interesting, you know, you are making something, and then: Oops! Pictures. And the carpenters who made the boat, looking at you.

(T: 8, T: 10–14)

Excerpt 20 is illuminative from the point of view of skilled performance. The head carpenter described the choice of the paints for the boat as a lengthy process of experimentation with an uncertain outcome (see also Figure 4.4).

Excerpt 20

Researcher: Well, the choice of color. It’s a long process?

Head carpenter: Long. Turned out to be long . . . Yeah, let’s see how it [the paint] will cover. If it covers at all . . . If not on the first time, we’ll have to do it twice . . . Well, nothing will go wrong with it . . . Well, in five years we will again have to tint. . . . Well, if we put it properly. Then what have we mixed there? It also doesn’t affect them very well, the fact that we mixed different kinds of paint. Maybe it will only become stronger from this [laughs]. Falls off, yeah.

Researcher: Is it not special, not marine paint? No?

Head carpenter: No, it’s, it’s . . . Yes, well. It’s meant for painting boats. The main components. And those that we add, well, they are also . . . They are all, all marine, but they are different, from different manufacturers . . . Maybe it will fall off right away [laughs]. Or, the other way [smiles].

(I: 9, T: 97–8)

<COMP: INSERT FIGURE 4.4 NEAR HERE>

Finally, in Excerpt 21 a member of the NSF community emphatically concluded that all one needs to build a boat is a desire to build one. This seems to stand in contrast to statements such as those in Excerpts 5 and 8, emphasizing the demanding nature of the skills required in building wooden boats. On a closer reading, the interviewee in Excerpt 21 did not denigrate the importance of skills; the interviewee simply asserted that the skills have been well acquired over a lengthy process by initially inexperienced participants because they have been driven by the desire to build a boat.

Excerpt 21

> Member of the NSF community: To build? To build, you need one thing, a desire to build the boat. That's all, you need nothing else. Just desire. Even skills, as it turned out. All the guys, who are building now, except for one, have never built a boat . . . Yes, and H [head carpenter] has never built a boat himself. He participated in the building process. I mean, the head shipwright. That is, he was told what to do. And here for this, during the building process, one can say, this is his child. That is, he built this all [inaudible]. And the guys who were coming here, many of them have never held an ax in their hands. Well, okay, ax—sort of, figuratively . . . Carpenter's tools. Where are they now? They are making furniture quite, quite professionally.

(I: 11, T: 65)

Overall, this thread is rich in examples of the tension and movement between fidelity to historical models and attention to the needs of modern use. Another tension emerges between the dominance of a single master ("I") and the emphasis on collective achievement ("we"). This is closely related to the tension between tacit acquisition of skill and explicit depiction, representation, and sharing of procedures. Finally, a tension emerges between routine performance of pre-defined procedures and open-ended experimentation.

4.9 Situating the Threads in the Activity System

The four threads of history found in the data may be mapped on and viewed as constituents of the activity system of building wooden boats, introduced in Figure 4.1. The first thread, the personal history of the craftsman, corresponds to the component "subject" in the activity system. The second thread, the history of the wooden boat community, corresponds to the component "community," but includes also material on "division of labor." The third thread, the political history of the nations and their relations, is more problematic. In the activity of the builders, the political and naval history of the nations was a source of "rules": the boats needed to be built to replicate the originals as faithfully as possible. The fourth thread, the history of the boats themselves, is obviously connected to the "object," but also to "instruments." Figure 4.5 depicts the threads in their respective places in the model of the activity system.

<COMP: INSERT FIGURE 4.5 NEAR HERE>

The four threads cover all the components of the activity system. As constituents of a dynamic system, they are not isolated or static. This calls our attention to relationships between the four threads.

4.10 Overlapping Threads

We find it significant that rather than representing a single historical thread, the majority of history-related segments in our data refer to multiple threads of history. The threads are intertwined in the data in different ways. When a segment contains more than one thread of history, we call it an overlap. First, we look at the number of overlaps in both sets of data. After that, with the help of examples from the data, we examine how the threads are intertwined.

4.10.1 *Finnish Shipyard*

As shown in Table 4.2, in the Finnish data more than half of the history-related segments contained overlaps. The threads of personal history and history of the community had the highest percentages of segments containing overlaps. These two threads were also particularly tightly interwoven with one another. The thread of history of nations overlapped strongly with the history of boats, whereas the latter overlapped primarily with the threads of personal history and community history.

<COMP: INSERT TABLE 4.2 NEAR HERE>

In the following example (Excerpt 22) the shipwright is explicitly tracing at the same time the historical threads of his personal development as a skilled craftsman (thread 1) and the development of the community around wooden vessels (thread 2). The segment implicitly refers also to the history of old galeas[8] (thread 4), which are at risk from disappearing in a short time.

Excerpt 22

Shipwright: When I started repairing these, galeas built after the war, there were no shipwrights in Finland. Nobody knew how to replace a plank into a ship. So when I went to boatbuilding school first, and then, then I sort of drafted into this ship-owners' group and then they asked me to find out and learn how to replace planks, because they were all rotting. But when I started, there weren't any. Then we built it in Åland, in Ahvenanmaa. A boat, a ship, about this size. And then I went there to teach them the craft which I had just learned myself. I went to teach them how to build a ship. So, that's when it started, in the 1980s.

(I: 5, T: 117)

In the second example (Excerpt 23) the shipwright is primarily discussing the life of the boats (thread 4), not as something standing alone but as stemming from their use in the community in the past, present, and future (thread 2). Boats in this excerpt are also referred to almost as human beings.

Excerpt 23

Shipwright: They were broken, like these ribs here . . . Seven or eight from the back. They were . . . They have been driving too fast. If you go with this motor boat and bang it against the waves, the ribs, they broke . . . So, uh, you have to be careful. I know that some of the smaller boats have been destroyed, or lost . . . But it's better I don't hear . . . Yes. They have paid it.

(I: 8, T: 583)

4.10.2 *Russian Shipyard*

In the Russian data over 60 percent of the history-related segments contained overlaps (Table 4.3). The profile of overlaps differs from that of the Finnish data. In the Russian data, the thread of history of nations had the highest percentage of segments with overlaps, and it overlapped with the thread of history of community more strongly than in the Finnish data. The thread of personal history contained the lowest percentage of segments with overlaps while in the Finnish data this thread contained the highest percentage of segments with overlaps. These findings support our earlier observations that the Russian activity system was more collectively oriented and also more oriented to issues of political history of their nation than the Finnish activity system.

<COMP: INSERT TABLE 4.3 NEAR HERE>

In Excerpt 24 one of the carpenters discussed how international maritime history (thread 3) and the history of the construction of their own vessel (thread 4) are

intertwined. This intertwining of histories creates disruptions on the way to pursue efforts towards the object (thread 4).

Excerpt 24

Researcher: That is, basically, regarding the color, it will look like an old boat.

Carpenter 3: St. Peter was . . . I think, it was just, exactly could be green. Could be blue . . . too. But there also was blue, kind of pale . . . Blue paint is generally very expensive thing, since the Egyptian times . . . There's, these, sapphires, blue ones . . . stones, some very expensive. Very expensive paint.

Researcher: Well, as I understood the color selection was a very long process?

Carpenter 3: Whose? Ours? Painful . . . Then it doesn't historically fit; some wanted orange, like Nelson's ship. That is the end of the eighteenth century, nineteenth century. And the yacht is of the seventeenth century . . . Well, a disgrace. We have a modern yacht. Can you imagine the hodgepodge! Everything must be done with taste. With a sense of proportion.

(I: 5, T: 17–20)

In Excerpt 25 one of the members of the historical community elaborates on the emergence in the Solovki community (thread 2) of the need to build a wooden boat with specific parameters (thread 4). The boat should at the same time have historical significance and fidelity (thread 3). The result of these overlapping threads of history making was a compromise: "we had to shorten it a bit."

Excerpt 25

Member of the NSF community: We were still thinking, well, there were different questions, which boat to build. Somehow we came across this boat, the yacht, St. Peter . . . Um [we were] looking for any boat historically connected to Solovki . . . On the other hand, [we] were looking for a boat not very large in size. That's it, it [had to be] wooden, historical, more or less tangible parameters, so that it was possible to build inside this building . . . Well, the yacht St. Peter, that historical one, it was close to these parameters, although its original measurements were bigger than what we built. It was 18 meters, I think, the length. And we have 13. That is, well, we had to shorten it a bit.

(I: 11, T: 13)

The overlaps found in our data depict how the skilled construction of wooden vessels is dependent on and generative of multiple interwoven threads of history making.

The revival of a craft skill emerges as a complex challenge of creating connections between personal history, community evolution, the political history of the nations, and the history of the particular vessel under construction. We interpret our findings to indicate that the denser and richer the overlaps and interconnections become, the more robust and resilient will the skilled performances and the continuous activity themselves become.

4.11 Discussion

Recent analyses of the revival of crafts regard these waves as unique events and responses to a specific cultural and historical situation (Peach, 2013). However, the object of the craft activity seems to be missing in most analyses, as if craftsmen and women would be driven just by the process of the work alone or merely responding to cultural and historical circumstances. At the same time, the craft object is often said to be something that defines craft (Risatti, 2007), and some attempts at discussing the power of craft object to drive collective actions have been made (von Busch, 2013).

In the introduction we posed two questions: (1) What kinds of history making may be identified in the activity of wooden boat building and how do the different modes of history making interact? (2) How does skilled performance on the object of activity contribute to history making in the craft of wooden boat building in two different cultural settings?

In the light of our analysis, the object of the activity of wooden boat building appears as a heterogeneous formation resembling a texture of four interwoven threads of history: personal history, community history, the political history of the nations and their relations, and the history of the boats themselves. The four threads overlap and become intertwined, in different patterns depending on the cultural and historical specificity of the local activity system.

As a texture of overlapping threads of history, the wooden boat has the power to mobilize human efforts in the pursuit of the object. These efforts are history-making efforts; they represent an assertive orientation to be a part of history. In our data, history making consists in reviving an endangered skill, bringing back to life boats from the past and shaping them for a new use in the present and future world. Boat builders create personal and collective relationships with their boats. Craftsmen's professional development as well as enthusiasts' personal development are strongly tied with the past history and future trajectory of their objects, the boats. These findings are in line with the recent research of Kaplan and Orlikowski (2013) on "temporal work" in organizations.

The objects of craft in our analysis do not act as mere material things. Wooden boats as objects of craft have deep roots in culture and history, they are challenging and resisting objects. The drive deriving from the object is not individual. The power of the object brings together and mobilizes efforts of communities of professionals and enthusiasts in preserving, performing, and producing the endangered skill and the historically significant boat.

Skilled performance in our analysis emerges as a dynamic and tension-laden phenomenon. The pervasive dual character of skilled performance is manifested at the personal level in our data as a tension and movement between curiosity and pride of the craftsman on the one hand and apprehension toward the constraints of a trade that requires total devotion on the other hand, as well as a tension between building a boat to one's own standards and having to build the boat to fit the customer's demands in order to earn a living. At the level of the community, tensions appear between the dominance of a single master ("I") and the emphasis on collective achievement ("we"), as well as between the closure and openness of the community. At the level of the history of the nations, we observed a tension between fidelity to historical models and attention to the needs of modern use of wooden boats. Finally at the level of the boats themselves, there is a tension between reliable and repeatable routine performance on the one hand and improvisation, experimentation, and going beyond the established procedures on the other hand, as well as between a tacit acquisition of skill and an explicit representation and sharing of procedures.

We now return to our initial model of the generic activity system of wooden boat building, presented in Figures 4.1 and 4.5. This model may now be enriched to represent our main findings in a condensed form (Figure 4.6).

<COMP: INSERT FIGURE 4.6 NEAR HERE>

The two key messages of Figure 4.6 are that: (1) skilled performance may be understood as a systemically embedded and longitudinal phenomenon that spans between the past, the present, and the future; and (2) the skilled performance of boat

building is driven by a tension-laden object. The threads of history making are threads of dealing with tensions and contradictions.

The two local instantiations of the generic activity of wooden boat building differ from many other forms of craft revival as well as from one another in some important respects. Perhaps the most striking differences pertain to involvement in social media and to the nature of the communities in the two sites.

The global virtual communities of craft revival generated with the help of the internet and social media were not mentioned in the two sets of interviews. This is in stark contrast with some other crafts, for example, knitting. The twenty-first century has seen a resurgence of knitting, coinciding with the growth of the internet and internet-based technologies, as well as the general "handmade revolution." The internet allows knitters to connect, share interests, and learn from each other across the globe. Among the first internet knitting phenomena was the popular *KnitList* with thousands of members, followed by the even more popular *Ravelry*. Blogging added fuel to the development of an international knitting community. Traditional designs and techniques that had been preserved by a relatively small number of hand-knitters are now finding a worldwide audience.

In contrast to the global virtual knitting community, the wooden boat-building community of the Finnish site looks more like a carefully bounded craft workshop or a traditional apprenticeship setting described by Rorabaugh (1988). The Russian community emerged as less enclosed, probably because it was much more dependent on volunteer enthusiasts than the professionally led Finnish community. But even the Russian community was not oriented to the global spreading and sharing of their ideas and practices.[10]

Two possible explanatory factors seem rather obvious for this relative isolation. First, wooden boats are larger, more expensive, more laborious, and less mobile than knitting objects. Thus, they are more difficult—although not at all impossible—to depict and share. Second, wooden boat builders seem to be almost exclusively men. There were no women among our interviewees, simply because except for two episodic appearances we found no women involved in the two activity systems we studied. This deep-seated male orientation seems to be connected to the historically very male imageries of building, seafaring, and even naval warfare—resulting in a virtual exclusion of women. One wonders to what extent the continuous threat of extinction of wooden boat building might be perpetuated by the self-contained orientation of the boat-building communities themselves.

The historically somewhat stagnant construction of the communities of wooden boat building has important implications for the modes of skilled performance. In traditional craft shops and apprenticeship settings, skilled performance was largely something that could and should not be explicitly and publicly represented—it could only be acquired by imitation and trial and error, and the skills were to some extent "secrets of the trade" (Gowlland, 2012; Hosfield, 2009). Opening up the community with the help of social media makes it necessary—and surprisingly easy—to represent complex skilled performance publicly to global audiences. This typically happens by merging multiple modalities, from text to talk to pictures and diagrams to live video.

At the beginning of this chapter we wrote: building on accumulated experience and projecting forward in time, skilled performance is movement between the past, the present, and the future. This applies not only to specific moments of skilled performance but also to the continuous activity system of wooden boat building in general, struggling between inward-oriented adherence to the past and outward-oriented search for future possibilities.

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Table 4.1. Number of references to different threads of history in the data

Thread of history	Finnish data	Russian data	Total
1. Personal history of the craftsman	42	36	78
2. History of the wooden boat community	43	32	75
3. Political history of the nations and their relations	18	14	32
4. History of the boats	42	51	93
Total	145	133	278

Table 4.2. Overlaps between threads of history making in the Finnish data

Thread of history making	Total number of segments	Number of segments containing overlaps	1. Personal history overlaps	2. History of community overlaps	3. History of the nations and their relations overlaps	4. History of boats overlaps
1. Personal history	42	25 (59.5%)	-	20	1	10
2. History of community	43	24 (55.8%)	20	-	2	10
3. History of the nations and their relations	18	7 (38.8%)	1	2	-	6
4. History of boats	42	19 (45.2%)	10	10	6	-
Total	145	75 (51.7%)	31	32	9	26

Table 4.3. Overlaps between threads of history making in the Russian data

Thread of	Total	Number of	1. Personal	2. History	3. History	4. History

history making	number of segments	segments containing overlaps	history overlaps	of community overlaps	of the nations and their relations overlaps	of boats overlaps
1. Personal history	36	17 (47.2%)	-	9	4	11
2. History of community	32	23 (71.9%)	9	-	6	15
3. History of nations and their relations	14	13 (92.9%)	4	6	-	9
4. History of boats	51	30 (58.8%)	11	15	9	-
Total	133	83 (62.4%)	24	30	19	35

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Notes

[1] The name of the founder of cultural-historical activity theory has been transliterated from Russian to English in at least three different ways: Leont'ev, Leontyev, and Leontiev. In this chapter we will use the first version, Leont'ev. When we refer to published English translations, we will use the form used in the specific publication.

[2] The relationship between activity theory and actor-network theory is more complex and would require a discussion beyond the scope of this chapter (see Engeström, 1996; Miettinen, 1999).

[3] The master boat builder in the Finnish site calls himself a shipwright.

[4] The boat builders on the Russian site refer to themselves as carpenters.

[5] Interviews in the Finnish site were conducted in English and transcribed verbatim.

[6] I = interview transcript number; T = turn(s) of talk in the transcript.

[7] *Ruotsinsalmi* was a naval battle fought in the Gulf of Finland in the Baltic Sea, outside the present-day city of Kotka, on July 9–10, 1790 during the Russo-Swedish War (1788–90).

[8] Galeas are small trading vessels which were commonly used around the Baltic Sea and North Sea areas from the seventeenth century all the way up to the twentieth century.

[10] There is at least one active American online journal and website (<https://www.woodenboat.com>) and one EU-funded website and newsletter (<http://www.boat-building.org>) devoted to wooden boat building. These clearly attract followers internationally.