

**From Nature and Nurture, to Culture:  
Expertise and achievement from a sociological perspective\***

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## **Introduction:**

The sociological study of achievement should not be confined to the study of individual characteristics. One world-class Brazilian football player or one Kenyan runner may raise interesting questions about the role of socialization and the social environment in the production of a top world-class athlete, but it does not make for an interesting social phenomenon or a central sociological topic. The emergence of a large group of world-class athletes, coaches, and strong national teams that continue to come from a confined geographical area constitutes a social tradition, which is a topic for a sociological inquiry. It highlights the collective aspects of sport and the importance of culture and social organization (Thorlindsson & Halldorsson, 2019, 238).

The concepts of expertise and achievement overlap in various degrees across academic fields and subjects. Both these concepts involve the demonstration of skills as well as knowledge, attitudes and practical knowhow. In sport and art, expertise is often revealed in terms of achievement. Thus, the handball player Mikkel Hansen has great understanding of the game of handball, which is reflected in his moves, timing and goal scoring. His expert knowledge and skills allow him to achieve an expert performance and extraordinary results in his sport.

The literature on expertise and achievement —through a wide range of subjects such as the arts, sports, science and innovation—has centered on the classic debate of nature versus nurture (Ericsson, et al., 2006; *International Journal of Sport Psychology*, 2007; Polderman et al., 2015). Most scholars examining expert performance through the nature-nurture paradigm (most commonly from the fields of biology and psychology) have concluded that expertise is achieved through a complex and dynamic interplay of the two proposed key elements of expertise, which are on one hand the innate physical and/or cognitive propositions of successful individuals (nature) and on the other hand favorable social environments, which provide motivation and the opportunity to enhance the practicing of skills (nurture) (Baker, 2007; Lock & Palsson, 2016; Kong, et al., 2018).

A sociological approach to expert performance focuses on the nurture side of the nature-nurture paradigm. It has, however, mostly emphasized individual socialization from the perspective of psychological research (see Bloom, 1985; Csikszentmihalyi, Rathunde & Whalen, 1997; Ericsson, 1996; *International Journal of Sport Psychology*, 2007; Keegan et al., 2008; Pensgaard & Roberts, 2002; Starkes, 2000). This approach has primarily accounted for the role of socialization of successful individuals, through the role of the family as well as the role of other mentors, such as teachers and coaches, and the role of

deliberate practice in the development of expert performance in various activities. The tendency in this literature has been on examining cases on the individual level, but it has paid little attention to the collective levels (see for instance: Burgess & Naughton, 2010; Ericsson et al., 2006; Merton, [1960]/1973, 424; Mieg, 2006, 750; Thorlindsson & Halldorsson, 2019). This tendency is, however understandable. It is easier to illustrate and account for the role of parents, teachers, coaches and other mentors of selected successful individuals than to account for the “invisible” influences of the socio-cultural context on those individuals, or to explain the group dynamics that characterizes a particular place at a particular time. However, the familiar individual-level success stories are often of the odd-ones, the deviants, and those stories are the ones that make the headlines and grasp the attention of the academics and the general public.

Thus, the individual level approach to social influences over-simplifies the nurture aspect of expert performance because it overlooks the role of social mechanisms that work through the embeddedness of social actors in ongoing social networks (Thorlindsson, 2011). Furthermore, the socialization approach leaves out the wider social context that provides a central part of the social foundations of expertise.

A more genuine sociological approach to expert performance is especially valuable to expose the collective levels of the both the macro and the micro (the small group) context of expertise and achievement, (see Baker & Horton, 2004; Thorlindsson & Halldorsson, 2019) because it shifts the focus from an individual-level analysis to a more sociocultural analysis of the collective base for expertise and achievement.

It is not the aim of this chapter to underplay the role of genes and individual level socialization for expert performance, these elements are crucial for any great achievement in most skill-based activities. The intention of this chapter is to direct attention to the wider socio-cultural context of expertise and achievement, and in its role in shaping interests, providing motivations, establishing knowledge and opportunities for people within a specific social context to engage and excel in certain activities at certain times. Thus, in order to establish a comprehensive account of the subject matter, a holistic understanding of expert performance needs to account for collective level explanations of expertise and achievement – along with the individual level analysis. This is what a sociological analysis can bring to the table. In short, the aim of this chapter is therefore to demonstrate how culture affects, shapes and produces collective expertise and achievement. We make use of use of two case studies to highlight a sociological perspective on the collective base for expert performance.

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### **Social forces and collective basis of expert performance**

The influence of culture on all aspects of human society is beyond dispute. Culture is a crucial feature of all social groups from nations and communities down to small groups involving families, friends and peers. Culture may influence people's perceptions in many ways (Brekhus, 2015; McLean, 2017); it may provide a "tool kit" that helps us to deal with social situations of all kinds (Swidler, 1986); or schemas that influence cognition (DiMaggio, 1997); it may provide motivation for action (Parsons, [1937]/1968; Weber, [1930]/1992) or justifications for action (Mills, 1959/200; Scott & Lyman, 1968) or the dual process of both (Vaisey, 2009).

Culture may exist at both the the macro and micro levels. It may be part of cultural traditions, which reside at the macro-level, influencing generations of people. Various cultural elements may be dormant for periods of time but may come to life and awaken in national movements or come together and cluster in salient social issues. Macro cultures, in this sense, provide certain practices with meaning, opportunities to pursue and guide successful performance. This perspective emphasizes collective expertise and achievement as a cultural production, in macro-social context, highlighting the role of tradition, norms and values and attitudes for achievement (see: Archetti, 1999, Bale & Sang, 1996, Halldorsson, 2017; Lever, 1983; Livingstone, 2003; Oberlin & Gieryn, 2015; Prior, 2015, Thorlindsson & Halldorsson, 2019).

Sociological perspectives stressing the importance of macro culture, specifies a repertoire of activities, ideas, customs and methods, what Swilder (1986) named "a cultural toolkit", which dictates people's choices to the ones that are available in a given society (Faulkner & Becker, 2009, 192-193). People's choices, as for instance whether to practice playing handball or the trumpet, are therefore steered by the socio-cultural and historical context in which they are embedded as to the social networks in which they belong. The socio-cultural context further provides people with important know-how, the opportunity and support to engage in the particular activity, rather than doing something else. To prosper, the talent has to fit into the environment. Thus, expert performance has the tendency to be collective in nature where a group of highly skilled achievers in a given activity emerge from a particular place at a particular time, making expertise and achievement an interesting sociological phenomenon experienced at the collective levels.

The distinction and the relationship between culture at the macro- and the micro-levels is complex, often unclear and difficult to trace. Many sociological theories hold that macro-social variables, including cultural variables, do not influence individual outcomes

directly (Thorlindsson, 2011). Thus, the symbolic interaction theory of culture holds that cultural meanings, the use of cultural knowledge is inevitably tied to interaction and the small group (Blumer, 1969; Fine 2012; Thorlindsson & Halldorsson, 2019). The same cultural elements that exist on the micro-level may be part of the small group where they may foster new variations “idiocultures” (Fine, 2012). Research shows that expertise and achievement often cluster in confined geographical “hot spots” at particular times (Parker & Hackett, 2012). There is increasing literature that focuses on social networks and small groups dynamics (Christakis & Fowler, 2009; Fine, 2012; Smith, et al., 2018; Walton et al, 2012) in relation to expertise and achievement in various fields such as the arts (Becker, 1982; Collins & Guillén, 2012; Farrell, 2000; Overlin & Gieryn, 2015; Prior, 2015; Uzzi & Spiro, 2005), sports (Bale & Sang, 1996; Carlson, 1988; Chambliss, 1988; Halldorsson, Thorlindsson & Katovich, 2017), academics and science (Daw, Guo & Harris, 2015; Livingstone, 2003; Parker & Hackett, 2012) and creativity (Hemlin, Allwood & Martin, 2008; Sawyer, 2017). Sennett (2009) has in this respect argued that in medieval times it was through the crafts workshops, rather than the individual craftsmen, where various skills were promoted, preserved and enhanced.

The current literature shows how expertise and achievement are produced in small groups and social networks where, the sharing and tuning of ideas, through collaboration of peers, give rise to something new that emerges out of social interaction (Antin, 1984; Becker, 1982; Fine, 2012; Mead, [1934]/1972). Thus, it is through such groups and the interactions between group members where methods, and the honing of skills are redefined, and executed through trial-and-error practices. Those “hot spots” further create a form of *zeitgeist* where certain practices are celebrated and important know-how of best practices is spread through social channels which affects everyone connected with those networks, either centrally or peripherally (see Christakis & Fowler, 2009). Those emerging norms (or schemas) further get manifested as “the way things are” through explicit and tacit dimensions and give certain activities and methods validity and legitimacy in a particular place and time.

We must, however, bear in mind, as we have stressed above, that a valid sociological view on expertise and achievement does not only focus on small group dynamics but further on the wider macro social, structural, and historical contexts, which in the form of traditions, societal norms and values, shapes the interests, attitudes and behavior of individuals and groups, often within specific geographical space. Social

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networks do not emerge out of the blue, “they are the products of culturally informed action” (see McLean, 2017, 133).

Bourdieu ([1984]/2010) stressed how the selective attention (or inattention) of individuals towards any given activity developed unconsciously through culturally acquired schemas of perception, classification, judgement and interpretation. In this context Brekhus argued that “Our culture of perception are shaped by the groups and social networks we belong to and the structural and social conditions under which we operate” (2015, 33). In other words, social environments establish local interpretations of “what is important” as well as “how things are”; emphasizing what is relevant and how to do things (see: Becker, 1998). Thus, the framing, perception and attention to certain activities and events forms a specific (and local) social construction of reality for members of a given society at particular place and time (Berger & Luckmann, 1966; Brekhus, 2015; Goffman, 1974), where members of a given society become embedded into the surrounding culture (see Granovetter, 1986; Thorlindsson, 2011). Sociology, as an academic discipline, accounts for those contextual conditions of the development of expertise groups in modern society (Evetts, Mieg & Felt, 2006, 106). Those favorable or unfavorable conditions for a given activity take many shapes and forms. They are both explicit (what is said, what is written, what is taught) as well as tacit (what is) (Cianciolo et al., 2006, 613) and they can represent prestige, privilege and power (Mieg, 2006, 746). Culture, functions in this context, as Weber noted as “a web of significance” influencing individual preferences and behavior (in Geertz, 1973, 4-5).

Hunt (2006) argues that preferences shape early in life, in childhood and adolescents, where some activities gain more legitimacy than others. For instance, in the case of entrepreneur Steve Jobs, growing up in Silicon Valley surrounded him with engineers and a collective spirit and special emphasis on developing technological innovations. “Growing up, I got inspired by the history of the place...That made me want to be a part of it” (Isaacson, 2011, 10.) A few hundred yards away from Job’s home the government was building tubes and electronical transformers for missile systems. Jobs recalls: “You had all these military companies on the cutting-edge...it was mysterious and high-tech and made living here very exciting” (Isaacson, 2011, 9). In such social environment one is also more likely to find like-minded peers, as Jobs got associated with Stephen Wozniak, with him he later co-founded Apple. Silicon Valley was in this context “a magnet place” which gave meaning and legitimacy to certain activities (rather than

others) and where collaborative circles (see Farrell, 2000; Sawyer, 2017) were formed and further built to enhance expertise and achievement in a specific endeavor.

### **Two case-studies of successful, collective expertise: Icelandic handball and New Orleans Jazz**

#### *Icelandic handball – “Our boys”*

Iceland has a long history of success in men’s team handball. Since its first qualification for a major tournament, the 1958 World Cup, Icelandic teams have regularly qualified for major international tournaments; 37 and counting. The Icelandic team has further written its name in the history books by being the smallest populated nation to win an Olympic team medal – a silver medal at the 2008 Olympics – and a European Championship medal – a bronze medal in the 2010 European Championship. Iceland has gained significant status in the handball world and is frequently been referred to as “a handball nation.” Photo 1 illustrates Iceland’s involvement at the biggest international stage in the sport where the men’s national team is a regular contestant (see Halldorsson, 2017).



Photo 1. The Icelandic men’s national team in the tunnel preparing to play the hosts France at the 2017 World Championship.

The Icelanders started playing handball in the early twentieth century. It was a very convenient sport for the Icelanders both since it was played indoors – which was fitting

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for a nation with long, dark and harsh winters - and that the game consisted of fast action and high levels of team competition – which fitted the national character of play and showing-off skills (see Halldorsson, 2017; Thorlindsson & Halldorsson, 2019). Icelandic handball further advanced in the later parts of the century with the help of foreign expertise when qualified coaches from Eastern-Europe (mainly Poland and Russia) came and helped the Icelanders to raise the level of the sport by emphasizing the training of skills and game tactics (see Halldorsson, 2017; Thorlindsson & Halldorsson, 2019). Handball, thus, caught the national attention from early on and when the men´s national teams started to compete at high level international competitions the whole nation were captured by the sport (some figures show that over 80% of the population watched important games on television). International success further ignited national sentiments and national pride which resulted in the glorification of the players as “our boys” in the national discourse.

Thorlindsson & Halldorsson (2019) have argued that the handball success of Iceland cannot be explained by some superior physical attributes of the Icelanders – with links to the tall and strong saga age Vikings – since Iceland usually hosts smaller players and not as physically strong players as most of their opponents that draw on much bigger pool of players; but rather as a sociocultural product. More precisely, the early success of Icelandic handball created a zeitgeist for handball in the Icelandic community, which through the years has become a successful national handball tradition. In a small society, like Iceland, the important handball know-how caught on and spread within the handball clusters in the country, establishing important base of specific handball expertise. This handball tradition, that was mostly established from the 1960-80´s, has more or less held through the decades – despite the occasional highs and lows - where the tricks of the trade have been handed down from one generation to the next. The cultural continuity of playing handball is visible in how different Icelandic teams, at different times, typically play *the Icelandic way*.

The on-going success of the men´s national handball team, gives Icelandic handball prestige and legitimacy in the national discourse. The national team players gain specific status as the nations “boys” and they feel the gratitude and the national pride of the general public, both through media coverage and more importantly through face-to-face interaction as when they walk the streets in Iceland, sit in the hot-tub in the swimming pool or go to a local restaurant. Rewards are not only perceived in financial terms but also in gaining status and in belonging in a certain community and in having fun (Hunt, 2006, 34-6). The status of handball within the Icelandic community encompasses the players in



a “web of significance” where they feel a sense acceptance, pride and fulfillment and which further encourages future generations that handball is something worth pursuing.

Several scholars have argued that success is socially contagious, as it tends to rub off on those who are around (see Christakis & Fowler, 2009; Walton, et al., 2012). It is important to bear in mind that there are strong kinship bonds among the practitioners of the sport in such a small community where people tend to know each other, or know about each other, especially within a subculture like the local handball scene. One national team handball player recalls his youth when “National team players were training in the same sports hall as us, the youngsters. We usually had practice before or after their practice and of course, we knew them. They were our role models (see Halldorsson, Thorlindsson & Katovich, 2014, 147). It is within such a social context that Icelandic handball gained validity and legitimacy, where useful information was shared, and the best practices caught on by more or less everyone within the local handball community. The youngsters not only learn to right skills and techniques to play handball from their more experienced elders, they further learn the right attitudes of playing the sport, such as to “play with the heart” or to play with “the Icelandic madness” attitude (Halldorsson, 2017). The closeness of the youngsters to their successful elders also boosts their motivation and belief and instills feelings of destiny in gaining skills and success in a particular activity – which leads to “a stereotype lift” (Shih, Pittinsky & Amabady, 1999). The youngsters grasp the feeling that they *can* and they *should* be successful in handball as well as the generation before them and that they also will play at major tournaments like World Championships and Olympic Games like their local heroes.

Iceland has further earned a significant status in world handball (Gregory, 2012; Halldorsson, 2017, 5-7, Thorlindsson & Halldorsson, 2019) where some of Iceland’s players have been playing with the best teams in the world and where Icelandic coaches have high prestige and have been coaching some of the best national teams in the world (including European and Olympic championship winning teams). Icelandic coaches for instance coached five of the 24 national teams that qualified for the 2019 Men’s World Championship, more than any other nation. The recognition of the coaching expertise of Icelandic coaches, where foreign national and club teams seek to hire Icelandic handball coaches, are a mark of a successful handball tradition, that has been developing for over half a century, spreading from one person to the next, and from generation to generation.

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*New Orleans – “The University of Jazz”*

The second example is of the role and prestige of jazz in New Orleans, Louisiana. Jazz emerged to the American music scene in the late nineteenth century. Its origins have widely been contributed to the city of New Orleans where the blending of various cultural elements produced something new – *the gumbo* - that became to be jazz (Abdul-Jabbar, 2007, 221). In the beginning jazz had its roots in marching-band music and the early tradition in New Orleans, which for instance consisted of parades and funeral marches along with a vibrant nightlife, provided those early musicians of New Orleans a venue to perform (Faulkner & Becker, 2009, 88-89). New Orleans jazz became to represent its own distinct musical genre and a long list of jazz legends such as; Louis Armstrong, Mahalia Jackson, Sidney Bechet, Champion Jack Dupree, Doreen Ketchens, Louis Prima, Professor Longhair, Fats Domino, James Booker, Ellis Marsalis Jr (and his sons Winton and Branford), Terence Blanchard and Harry Connick Jr., to name a few.

A recent book on the story of New Orleans Jazz, accordingly titled “A trumpet around the corner” (Charters, 2014), highlights the cultural aspects of the emergence and continuity of jazz in the city where you could hear music coming out of people’s windows (Charters, 2014, 3). Green has in this context argued that young musicians “teach themselves to play music into which they are encultured and with which they identify, through processes of skill and knowledge acquisition that are both conscious and unconscious” (Green, 2002, 96). Thus, skill acquisition takes place both through formal channels as well as through informal contexts (see Halldorsson, Thorlindsson & Katovich, 2014). The interest in jazz, the opportunities to play jazz, and to acquire the expertise of being good at jazz, has been handed down from generation to generation in the form of tradition (see Shils, 1981). A former recording director Frank Walker even described New Orleans as “The University of Jazz” (Charters, 2014, 238). Contemporary jazzist Wendell Brunious further spoke in this context of the spirit of the late New Orleans born and raised jazz legend Louis Armstrong: “His spirit is all around. It is still here. Even though Armstrong moved to Chicago in 1922 and died in 1971, his spirit is still here” (Brunious, 2018). Drummer, Herlin Riley further elaborated on this point of growing up in New Orleans and stated, “To build a space shuttle, you have to know about the Wright brothers” (Riley, 2018).

The spirit of the old masters has endured through time and still influences new generations to take up jazz and learn from the past and more contemporary masters. According to drummer Johnny Vidacovich, jazz in New Orleans is in this sense about

“maintaining the past... That’s the way music was around here, constantly growing, and it has the past in it” (in Charters, 2014, 354). What is new incorporates something of the old and represents the past in the present (Shils, 1981, 35). The contemporary jazzists are in a Mertonian sense standing on the shoulders of giants (Merton, 1965). This strong tradition keeps on influencing the younger generations which is evident in everyday life in the city. Just walking the streets of New Orleans provides visitors with *the feel* of jazz. You can hear *a trumpet around every corner* and everywhere there are references to playing music, like the books on display in a children’s store in New Orleans in 2018 (see Photo 2). You wouldn’t find such books in the local bookshops in Iceland or in Norway.



Photo 2. Jazz children’s books displayed at a local children’s shop in New Orleans

There are countless of jazz experts in New Orleans that are looked up to, worshipped and imitated. The experts provide others with “a stereotype lift” (Shih, Pittinsky & Amabady, 1999) which motivates those, with less skills and status, to try to imitate the leaders and to learn the tricks of the trade. This culture is further emphasized by the competing of skills. To measure one’s skills against others provides upcomers with purpose, motivation and was also a way to have fun. Jazzist Lee Collins reflects on his experience of playing jazz in New Orleans.

It was a great thing in New Orleans. Everybody was trying to be the best, to be the King. But to be the best you had to work hard and fight for it. And everybody would be after the top man. They would go where he was playing, and when he was through playing they would get their horns out. They didn’t take their horns out just to come help him play; they would take their horns out to try to carve

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him. They wanted to see if they could beat him playing, and if they did, they took over and became the King (in Charters, 2014, 258).

The stereotype lift of upcoming New Orleans's jazzists further gives rise to the sentiments of destiny for certain groups within society (see for instance; Abdul-Jabbar, 2007; Coakley, 2013). The preferences of playing jazz and appreciating jazz is rewarded in the local community, whether it may be by parents, peers or the elders. It can further be framed as "the only way" for certain unprivileged groups within society as is illustrated in the words of one of the most famous New Orleans jazzist, Sidney Bechet:

You know, the Negro doesn't want to cling to music. But he needs it; it means something; and *he* can mean something. He's always got to be honest, and people are always putting him to music. "That's your place," they say. (Bechet, [1969]/2002, 8-9).

Thus, similar to the handball tradition of Iceland, the successful tradition of jazz in New Orleans has been handed down from generation to generation influencing the young to pick up a trumpet or a horn and start playing, which can become the initial steps in gaining jazz expertise.

## **Conclusion**

The two cases presented above illustrate how youngsters growing up in different cultures, learn to emphasize different activities, learn specific methods in the given activity, and to build ambitions in regard to the activity. These social facts (see Durkheim, [1895]/1962), in which the people within the different communities are embedded, have provided youngsters in Iceland with the belief that they can be successful handball players, but youngsters in New Orleans that they can be successful jazz musicians. The cultures further provide the youngsters with appropriate guidance, motivations and opportunities to pursue the given activity within a favorable social environment in which they can gain local prestige and fame. As a result, it need not to come as a surprise that while Icelanders produce a large group of handball experts, New Orleans's produces a large group of jazz experts. Thus, collective expertise and achievement are in this sense socio-cultural products, specific to a particular time and place (Thorlindsson & Halldorsson, 2019).

It is fitting to end the chapter with words of the New York based jazz pianist Duke Ellington, influenced by New Orleans's jazz, where he noted that the key to his successful career was: "being at the right place at the right time, doing the right thing before the right

people” (Szwed, 2016, 36). This saying highlights the key point of this chapter; in regard to acquiring expertise and gaining success in a given activity; time and place not only matters, but are crucial.

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