No Pain, No Gain: Pleasure and Suffering in Technologies of Leidenschaft

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"I broke my foot. I was leg pressing at about 1,450 pounds and ... the bone just snapped. But I had to keep it up. I couldn't flex my leg properly. I couldn't walk without crutches for probably three months. ... I was still training, and I competed, too. I trained my left leg and I trained my upper body, and I still competed at the European championships. I left the crutches in the hotel room and put on a strong face."

—Francis, age 30

Training for bodybuilding competition is clearly a serious business that inflicts serious demands on the competitor. Not only did Francis commit time and money to compete, but he also arguably put winning before his physical well-beingenduring pain and suffering from his injury. Bodybuilding may seem like an extreme example, but it is not the only activity in which people suffer in pursuit of their goals. Boxers fight each other in the ring; soccer players risk knee and ankle

injuries, sometimes playing despite being hurt; and mountaineers risk their lives in dangerous climbs. In the arts there are many examples of people suffering to achieve their goals: Beethoven kept composing, conducting, and performing despite his hearing loss; van Gogh grappled with depression but kept painting, finding fame only posthumously; and Mozart lived the final years of his life impoverished but still composing. These examples show that many great achievements come at a price: severe suffering.

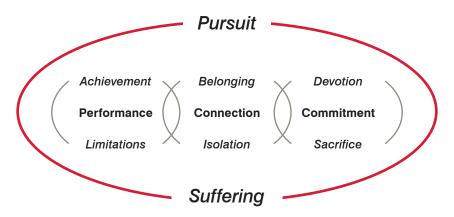
Hegel described the driving force behind such activities as leidenschaft, the German word for passion. He wrote that "nothing great in the world has ever been accomplished without passion." We prefer the word leidenschaft to passion because it combines "suffering" (leiden) with the single-minded pursuit of a goal (schaffen). Leidenschaft encompasses more than what people loosely call their interest,

hobby, or passion. Originally, passion described the dual nature of pursuit and suffering, but it has become a term that nowadays describes only pleasurable things like outbursts of emotion or romantic love.

The duality of leidenschaft has strong practical significance because it provides a fertile ground for the design of technologies. People embrace technologies that help them pursue their goals. Equally, suffering opens up opportunities and new challenges for technologies. However, it is unclear how interactions with and through technologies influence the duality of pursuit and suffering, and vice versa.

This article addresses this gap by presenting the findings from a field study of a bodybuilding social network site in relation to leidenschaft. By surfacing the technology features and their implications, we strive to guide the design of technologies for other leidenschaften—





▶ Figure 1: The duality of pursuing a goal and suffering contained in a leidenschaft unfolds in three interrelated ways—people strive for achievements, but struggle with their limitations; they seek belonging with others engaged in the same activity, but isolate themselves from the public; and they devote themselves to their activities, but must make sacrifices.

may it be playing the piano, competing in a triathlon, or any other activity people value.

The Three Elements of Leidenschaft

We observed members on BodySpace, a social network site specifically for people involved in fitness and bodybuilding. Similar to other social network sites like Facebook, BodySpace allows people to craft their profiles, establish connections, and communicate with other users through posts, private messages, and blogs. Additionally, BodySpace offers features such as training statistics and progress pictures to help bodybuilders keep track of their training. There is also a supplement store to generate revenue via the member network.

In order to understand the meaning behind the interactions on BodySpace and the site's significance for bodybuilding, two of us (Ploderer and Thomas) also worked out in a gym. We observed bodybuilders in various gyms, attended bodybuilding competitions, and interviewed 25 bodybuilders in the U.S. and in Australia. The triangulation of methods online and offline has enabled us (as nonbodybuilders) to acquire an

understanding of social network sites and bodybuilding itself.

Our findings show that the duality of leidenschaft unfolds in three interconnected ways: First, bodybuilders work hard to improve their performance and strive for a certain achievement; second, they seek connections with others sharing the same leidenschaft; and finally, bodybuilders invest time, work, and money in their leidenschaft and develop a commitment to it. All three aspects gravitate toward a positive end, but each also exposes suffering: The pursuit of achievements surfaces one's limitations; seeking connections with a group comes at the cost of isolation from others; and committing to a passion also implies sacrificing other things for it. As illustrated in Figure 1, these three aspects constitute dualities that reflect the larger duality of pursuit and suffering contained within a leidenschaft. Here, we use the case of bodybuilding to elaborate on these three dualities, and building on our previous work, we will discuss how the dualities open up opportunities for the design of technologies [1].

Leidenschaft and Performance.One element of leidenschaft is

that people strive for an achievement. Bodybuilders strive to transform their bodies in order to compete in bodybuilding shows, where they have to simultaneously look both muscular and lean. To gain muscularity, amateur bodybuilders usually work out in the gym once or twice a day, six days a week. Four to six times a day, they eat very healthy and regimented food, including various food supplements to grow their muscles. In order to get lean while keeping their muscle size for a competition, they go through what one of our participants, Bill, 27, called the "hell of preparation."

Over three to four months they maintain training intensity while gradually decreasing their food consumption. They literally starve in order to get their body fat down to 7 percent (women) or 3 percent (men). Such a low energy state can have severe physical and emotional consequences. Our participants reported that it is almost impossible for them to pursue their jobs or maintain long conversations. However, this is the condition that is necessary to enter a bodybuilding competition. While preparing backstage for a competition, they eat sweets, which spike their blood-sugar levels, giving them the energy needed to step onstage. Tanned, oiled, blinded by the strong lights, and almost naked, they pose for 10 to 15 minutes for the judges, a small audience of fellow bodybuilders, and applauding fans.

Competition forces bodybuilders to confront their limitations. This can lead to severe inner conflicts, as expressed by one of our participants, John, 28: "Well, we are never happy with our

[1] Ploderer, B., Howard, S., and Thomas, P.
"Being Online, Living Offline: The influence of social ties over the appropriation of social network sites." In Proceedings of the ACM 2008 Conference on Computer Supported Cooperative Work (2008): 333–342.

bodies; we always want more and more." No matter how much they improve, there is always someone else who delivers a better performance. Thus, the challenge is to remain aware of current abilities and limitations and prepare for the future performance to which they aspire.

The duality around performance creates opportunities for the design of tools that help people move one step closer to their goals. Tools provide access to information, which leads to improved performance. BodySpace is such a tool. It offers a mix of articles about training and dieting drawn from professional writers and users of the system. This information can have an immediate impact on training, but more important, it helps bodybuilders to plan ahead and establish goals. Setting short-term goals and tracking progress is a way of negotiating the duality of performance. On BodySpace, bodybuilders can set their goals, track their progress with statistics and photos, and write about their aims and current status in their blogs. BodySpace saves this information permanently and creates user histories that allow individuals to keep track of their progress. Their true value, however, unfolds when users share their histories with others. It becomes meaningful information from which others can learn and derive motivation, and with which they can compare themselves.

Inversely, such tools also surface a person's limitations. One of our participants, Lenny, 22, said he was not making enough progress in his training. Comparing his progress with others on BodySpace, he came to the conclusion that "it might be wise to have a break and then start again." But many participants criticized the lack of critical feedback in interactions with other BodySpace users. Bodybuilders need critical feedback to work on their limits. but as Jeremy, 50, pointed out: "They are so nice that they can't give you constructive criticism, because they are like 'I don't want to be mean or step on your toes' when they probably need it. So it's limited in the information you get."

These examples illustrate that people use tools to coordinate, improve, and sometimes also to reassess their quests for performance. However, the tendency to use tools for achievements can prevent critical feedback, which would help in dealing with limitations.

Leidenschaft and Connections.

A second element of leidenschaft is to seek connections with others who perform the same activity. Bodybuilders establish connections at the gym and at competitions—although the competitiveness and hierarchies at these places often complicate initial contact. Though scarce, these connections help people to obtain valuable information and motivational support. Beyond that, connections provide a sense of belonging to a community that shares the same interests, empathizes with one's suffering, and normalizes the sometimes painful activities.

Connecting with a community that shares the same leidenschaft also means the risk of social isolation from the larger community. The ascetic lifestyle of bodybuilders is not compatible with everyone else's way of life, as expressed by Jeremy: "You don't hang out with people that aren't on the same page, that aren't into the same lifestyle. Because they are drinking and smoking and eating bad foods and doing crazy stuff." Even most typical gym users cannot relate to the specific norms and activities of bodybuilding. As a result, many bodybuilders describe a sense of social isolation: "I was a lone, lone wolf," says Jeremy about his early days at the gym. "It's a very isolated, individual sport."

The duality around connection opens up opportunities for technologies to establish and nourish communities based on a shared leidenschaft. Social network sites like BodySpace allow people to establish personal networks within the bodybuilding community. Our findings indicate that beginner bodybuilders in particular use BodySpace to establish connections with other bodybuilders, because their circle of friends often has no interest in bodybuilding.

A major challenge in establishing connections online is trust. We would like to emphasize three interrelated design decisions that have contributed to a generally positive and trustful environment on BodySpace:

- 1. BodySpace users are identifiable through their profile information, which is important in establishing contact. Bodybuilders judge other BodySpace users based on the physical achievements displayed in photos and their congruence with other profile cues, like bodybuilding jargon or statistics.
- 2. BodySpace profiles provide transparency about friendship

requests. Confirmed friendship requests are listed as "friends." Unreciprocated requests are displayed as "stalking" on the profile of the person who sends the request, and as "fans" on the other person's profile. Such information helps to prevent spam requests and facilitates respect online.

3. BodySpace is designed as an open space to outsiders. Anyone can view profiles and observe any exchange of information (with the exception of private messages). The decision against privacy controls on BodySpace is important, because any leidenschaft carries the risk of obsessive behavior. While most bodybuilders live a very healthy lifestyle, some bodybuilders have developed pathologies such as overtraining, the consumption of performance-enhancing drugs, or distorted body image. BodySpace's open and public design has engendered an atmosphere that eschews such lifestyle choices. People interested in steroids, for example, usually congregate on private websites.

While BodySpace appears successful in providing a sense of belonging within the bodybuilding community, it slightly shifts the focus of social isolation. BodySpace has been successful in opening up the website to recreational gym users, who use it to lose weight or keep in shape. The interactions between bodybuilders and recreational gym users have fostered the exchange of knowledge and recognition across these groups, but they have also led to new tensions, e.g., what kind of photography or language is appropriate. Beyond

that, few professional bodybuilders use BodySpace, partly due to the lack of privacy. Most professionals have private websites controlled by their sponsors. Some professional bodybuilders also use Facebook, where they can keep their profiles restricted to their friends and redirect their fans to a public fan page. On BodySpace, however, amateur bodybuilders remain largely isolated from the most experienced people in their community.

Leidenschaft and Commitment. The final element of leidenschaft is the commitment people develop. Commitment grows out of investing in your passion, whether it is time, money, or hard work. Bodybuilding magazines suggest that every bodybuilder can be as successful as Arnold Schwarzenegger, as long as they commit to the "3 Ds of bodybuilding: Determination, Dedication, Discipline." Bodybuilders show the "3 Ds" in their consistent training and in their regimented diets. They transform their bodies in radical ways and they suffer for their passion by going through the "hell of preparation." They sometimes also sacrifice jobs, social relationships, and even their health because they are committed to what they do. Asked why they endure such a demanding lifestyle, bodybuilders tend to say they "love" it, which expresses the devotion that grows out of the commitment. Equally, many bodybuilders use the words "obsession" or "addiction" to describe their relationship with bodybuilding. These labels underline the inherent duality of devotion and sacrifice that bodybuilders

have to negotiate as a result of their commitment.

The issue of commitment opens up a design space for technologies that may be the most challenging of the three dualities presented in this article. Our findings show that BodySpace indirectly helps address this duality. BodySpace provides a theater in which people exhibit both aspects of the duality on a public stage. People display their devotion on BodySpace with slogans and photos, but they also share their training or diet sacrifices through blogs on their profiles. Moreover, BodySpace provides an empathic audience and rewards members with recognition for their commitment.

Two design features of BodySpace promote empathy and recognition: BodySpace has a news feed similar to Facebook's that keeps people upto-date with events in their network of friends. And BodySpace highlights user updates and the most popular profiles on the home page. In this way, bodybuilders get rewarded with attention, which reinforces their commitment. John offers this insight: "Bodybuilders need to be noticed. It feeds our muscle ego; it motivates us. There are thousands of guys who show photos [on BodySpace] of themselves in their bathroom in their underwear flexing. They aren't thinking about anything but to show off what they look like and to see for themselves what they look like. This all might be strange to the nonbodybuilding world, but not to us—it's normal." The social status of appearing as a top profile is sometimes also rewarded

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with fame beyond the website. BodySpace invites popular members to professional photo shoots with the intention of being featured in bodybuilding magazines like Flex or Iron Man to promote the website. This means that not only hard work in the gym but also self-promotion on BodySpace can lead to fame and strengthened commitment.

The flipside of success and popularity on BodySpace is that people predominantly present themselves in positive ways and leave out the negative accounts of sacrifice. It is easy to find competition success stories. People share accounts of defeats or injuries to a lesser degree on BodySpace, and it is virtually impossible to find a blog entry in which someone admits withdrawing halfway through the preparation for a competition.

Conclusion

Passion and leidenschaft have long been a central issue in philosophical debates about human values. With the recent renaissance of human values in HCI [2, 3], leidenschaft has also become a genuine issue for interacting with and through technologies. Our research makes a contribution to the debate on human values in HCI by relating leidenschaft with the use of existing technologies. Leidenschaft inherits three interrelated dualities, and technologies both reduce and increase them. People utilize technologies as tools to improve their performance—tools that help them work toward goals—but they fall short in managing personal limitations. People engage with online communities that provide a sense of belonging but

also pose challenges in terms of trust and may even further social isolation. People also adopt technologies as theaters to display their commitment to an activity. The theater provides an audience for accounts of devotion, but often lacks accounts of sacrifices

The practical significance of the dualities lies in the implications for the design of technologies for other leidenschaften. The major discrepancy in the case of bodybuilding is that BodySpace succeeds in addressing the pursuit of a leidenschaft in all its ways—achievement, belonging, and devotion—but is limited in incorporating the management of the various sufferings—limitations, social isolation, and sacrifice. Our findings indicate that users of BodySpace must find other ways to deal with suffering, often with the help of a close bodybuilding friend or on their own. The main lesson learned for the design of new technologies for passion-centric activities is that focusing on the positive aspects of a pursuit is not enough. Addressing both sides of the duality opens up opportunities for technologies that might be radically different from current ones. Tools that capture progress and achievements also need to reflect the limitations of people and support critical and constructive reflection. Community technologies must focus on strengthening trust within the community. Beyond that, technologies should support the exchange of information across communities in order to stimulate innovation and to break up misconceptions. Having a tool and community

that encompass both aspects of the duality also facilitates a theater where devotion and sacrifices are displayed and appreciated. Addressing these challenges with a holistic view is crucial, because technologies and leidenschaften shape each other and affect fundamental aspects of being human: how we spend our time and energy, how we feel about ourselves, and how we relate to others.



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