ctive media, as discussed in the last chapter, is not simply the sum of dual microsystems, but is rather a dynamic infrastructure that shapes shaped by culture at large. Such analysis is neither neutral nor arbi- it provokes questions pertinent to the ideology and politics under- ng this ecosystem. This investigation of the culture of connectivity hope, clarify and sharpen the big questions regarding information ol in the geographies and politics of networked space.

CHAPTER 3

Facebook and the Imperative of Sharing

3.1. INTRODUCTION

In May 2010, Mark Zuckerberg told *Time* reporter Dan Fletcher that Facebook's mission was to build a Web where "the default is social" in order to "make the world more open and connected."[1] Other senior managers publicly underlined the company's ideal. Barry Schnitt, Facebook's director of corporate communications and public policy, revealed in an interview: "By making the world more open and connected, we're expanding understanding between people and making the world a more empathetic place."[2] And Sheryl Sandberg, Facebook's chief operations officer, in an interview with the British *The Guardian* proclaimed: "We have really big aspirations around making the world a more open and transparent place; we define our aspirations more in terms of that mission than in terms of the company's aspirations."[3] Facebook's mantra, that their mission is not just a corporate one but one pursued in society's interest, was endlessly repeated in the run-up to the company's initial public offering (IPO).[4]

With a claimed 835 million users worldwide in March 2012, Facebook is the largest social network site in the United States and in Europe, with the highest penetration among Internet users.[5] Size and dominance are certainly the most important reason for choosing Facebook as the first platform to dissect; what makes this choice even more compelling is that owners and users have been very outspoken in articulating norms for online social networking. The values of openness and connectedness are quintessentially reflected in the word favored most by Facebook's executives: *sharing*. In the context of connective media, sharing is an ambiguous term: it relates to users distributing personal information to each other, but also implies the spreading of that

personal information to third parties. The social meaning of sharing is often pitched against the legal term "privacy," which Mark Zuckerberg peculiarly refers to in the same *Time* interview quoted from above as "an evolving norm." Used in contrast to openness, the word "privacy" connotes opacity, nontransparency, and secrecy. If analogized to connectedness, the term connotes individualism and a reluctance to share. Counter to Zuckerberg's claim, I argue that *sharing*, rather than privacy, is the evolving norm. This norm is not simply "out there" in society and reflected online. Instead, owners and users have been negotiating the meaning of sharing from the very start of the Harvard-based college network in 2004 up to its Nasdaq debut in 2012.

But how did a specific ideological meaning of sharing—along with "friending" and "liking"—become dominant during this period? Analyzed through the multilayered prism of six interdependent elements, the transformation of these terms becomes apparent. By implementing various coding technologies and interface strategies, Facebook inscribed how online social interaction should be conducted. Users, from the very onset, countered this steering with a mixture of compliance and resistance. In the ensuing struggle, formatted content, governance policies, and business models appeared prime tools for intervention. Facebook's ideology of sharing pretty much set the standard for other platforms and the ecosystem as a whole. Because of its leading position in the SNS segment, the platform's practices substantially influenced the social and cultural norms that bolster legal values such as privacy and control over data.

Changing the meaning of sharing turns out to be vital to altering legal rulings concerning privacy and to accepting new forms of monetization. Whereas the term "privacy" commonly refers to the judicial realm, "sharing" involves social as well as economic norms, cultural as well as legal values. Therefore, the mass adoption of Facebook as the preferred Western engine for social networking deserves close scrutiny: How did the platform contribute to the normalization of a specific notion of sharing before this meaning becomes ubiquitously accepted and "legalized"? Looking at Facebook's powerful position in the ecosystem, one can hardly underrate its impact on networked manifestations of sociality.

3.2. CODING FACEBOOK: THE DEVIL IS IN THE DEFAULT

Technology

From a technological point of view, the two meanings of "sharing" relate to two different types of coding qualities. The first type relates to *connectedness*, directing users to share information with other users through purposefully designed interfaces. Facebook's interface allows its members to create profiles with photos, lists of preferred objects (books, films, music, cars, cats), and contact information; users can also join groups and communicate with friends by means of chat and video functions. Several features channel social interaction, including News Feed, for updates of stories from people and pages, the Wall for (public) announcements, Poke for attracting attention, and Status for informing others about your whereabouts or for announcing changes in your (relational, professional) status. Features such as People You May Know (PYMK) help you find friends; Facebook automatically signals which other people you may be interested in contacting and adding to your list—suggestions based on algorithmically computed relationships. Tagging names to people in pictures helps identify and trace "friends" across the network. The second type of coding features relates to *connectivity*, as they aim at sharing user data with third parties, such as Beacon (now defunct), Open Graph, and the Like button.

Distinguishing between the two types of sharing and their coding structures serves to address the issue of information control: who is allowed to share what data to what ends? Platform owners have a vested interest in complete openness on the side of users; the more they know about users, the more information they can share with third parties. By aggregating and processing data into targeted personalization strategies, they create value from data. Users, for their part, may deploy the platform to invest in maximum connectedness: the more connections users make, the more social capital they accumulate (Ellison, Steinfeld, and Lampe 2007). In many ways, Facebook's connective functions provide empowering and enriching social experiences. However, users' interest is not always served by complete openness; users may want to control third parties' access to the information they voluntarily or involuntarily entrust to Facebook. As a result, Facebook has a stake in promoting the first type of mechanism while diverting attention from the second type: the more users know about what happens to their personal data, the more inclined they are to raise objections. Owners' power over coding technologies thus gives them a distinct advantage over users in the battle for information control.

The transformative meaning of sharing becomes poignantly discernable in Facebook's history of coding features, both of the first and of the second kind, but for the purpose of this chapter, I will concentrate mostly on the second. During the first years after its inception, when the site was launched at the Harvard campus, Facebook's virtual space overlapped with the relatively protected space of educational settings. Sharing information by default meant sharing your information with designated friends and with other students. Starting in 2005, Facebook opened up the site to users

other than students and cautiously began to place (banner) advertisements in that protected social networking environment. The introduction of Beacon, in November 2007, caused quite a stir because it explicitly promoted the sharing of user information with commercial agents. Forty-four commercial websites, including Fandango, the *New York Times*, and TripAdvisor signed on to Beacon, allowing Facebook to send automated updates on purchases from these sites to a buyer's friends listed on Facebook. Users were enrolled in Beacon by default, and initially they were not offered an opt-out option. Only after vehement protests did Facebook give in to users' demand. Zuckerberg issued apologies, and in September 2009, the company shut down the service altogether.

The problem with Beacon was not that Facebook was not open enough about its sharing intentions; the problem with Beacon was that the company was *too explicit* about the intentions inscribed in its protocol. Users easily detected the conflict of interest arising from their personal purchasing data being distributed to all their friends and beyond. A second miscalculation was to openly identify the commercial agents involved in this scheme; by implication, Facebook was seen as serving the interests of companies rather than its users. But, most of all, it was a mistake to implement Beacon as a default in a social networking environment that, back in 2007, had not yet accepted "sharing with third parties" as a common standard. Facebook quickly adapted its strategies. Instead of conforming itself to the reining norm, it started to work on *changing* the very norm, replacing the narrow meaning of "sharing" with a more expansive one. Part of this new strategy was to open up the platform's technical potential to other companies interested in connecting with Facebook's users. Through the launch of Facebook Platform, in 2007, the company provided a set of APIs and tools that enabled third parties to develop applications supporting Facebook's integration across the Web, which they massively did. Since then, developers have generated millions of active applications connecting Facebook to other services and platforms. The contextual meanings of "connectedness" and "sharing" thus shifted from interaction *inside* the social network site to interaction with all virtual life *outside* Facebook's territory.

In May 2010, Zuckerberg announced two new features that formed a natural next step in this process: the introduction of Open Graph and the Like button. Both new interface features implied a definite move from the first to the second meaning of sharing. The Open Graph API allows external websites to deploy user data collected on Facebook to create personalized experiences on their own websites. Social plug-ins, as they are called, aim at connecting disparate corners of the Web and pulling them all together. Part of this integral effort to identify and align heretofore incongruent objects,

people, and ideas is the development of a standard to give every object—whether human or nonhuman, concrete or abstract—a unique ID: the OAuth 2.0 authentication standard, which Facebook adopted in collaboration with Yahoo and Twitter. The standard allows users to share their private resources (e.g., photos, videos, contact lists) stored on one site with another site without having to supply their credentials, typically username and password.

Connecting people, things, and ideas is also the principle behind the much-debated Like button, a feature that lets users express their instant approval of a specific idea or item and share it. For instance, if you discover a movie via a movie database, you can tag it there and this preference automatically appears on your Facebook friends' News Feeds. Three months after its introduction, more than 350,000 external websites had already installed the feature, much to its inventor's benefit. All user data collected on these external sites, including IP addresses, are automatically routed back to Facebook. In fact, Facebook records *any* user's presence on a site with a Like button, including nonmembers and logged out users; a Like box allows Facebook to trace how many users and which of their friends have pushed the button. The visible part of the interface calls attention to user-to-user interaction, suggesting that information stays within the first meaning of sharing. However, invisible algorithms and protocols execute the programmed social task of "liking." Personal data are turned into public connections, as the Like function is ubiquitously dispersed to many items on the Internet. Because of its omnipresence, symbolized in the generic thumbs-up icon, Facebook is no longer seen as the exclusive owner of this feature. Unlike Beacon, the massive adoption of the Like button has turned personal data sharing by third parties into an accepted practice in the online universe; hence, the Like button epitomizes the profound modification of a social norm.

Underlying these features are proprietary algorithms EdgeRank and GraphRank, which filter data produced by users and shape them into a meaningful stream of information for that specific user. In a detailed analysis of EdgeRank, media scholar Tania Bucher (2012a) shows that the algorithm favors certain users over others; for instance, friends with whom a user interacts on a frequent basis or on a more "intimate" level (e.g., via the Chat function) count more than friends you contact infrequently or who merely appear on your Wall. EdgeRank provides a filter that implicitly ranks the importance of friends. The problem is that users cannot know exactly how this filter works. All features added to Facebook have resulted in mostly invisible algorithms and protocols that, to a great degree, control the "visibility" of friends, news, items, or ideas. The objective is obviously

to personalize and optimize one's online experience; but the aim may also be to promote something or someone, although that aim may be hard to trace. You have to look under the hood, into the technical specifics of features, to understand the implications for users and society at large. This has not always been easy because Facebook has been reluctant to share information about its proprietary algorithms.

At the press conference announcing the Like button and Open Graph, Zuckerberg explained their rationale in terms of sociality, rather than in terms of technological progress or market value. He said: "The Web is at a really important turning point right now. Up until recently, the default on the Web has been that most things aren't social and most things don't use your real identity," adding that introduction of these changes would lead to a Web that is "smarter, more social, more personalized, and more semantically aware."[6] The term "default" in this explanation does not refer to technological or economic potential, but to social attitude. Indeed, the ubiquitous implementation of software entails a cultural rather than just a technological transformation (Fuller 2003). Facebook produces tools because people expect the Web to serve its users in a personalized way, helping them connect to all things they want and like, and to all people they know or would like to now. Underneath this user-centered rationale of connectedness is the owner-centered logic of connectivity: Facebook's interface foregrounds the need for users to be connected, but partly hides the site's mechanisms for sharing users' data with others.

Users

Facebook's unique selling point over the years has been its rapidly growing user base, not only in terms of sheer numbers but also in terms of diversity and global reach.[7] Behind these impressive numbers hides a more complex story of who these users are: their demographics, national and global distribution, and their online behavioral patterns. As explained in the previous chapter, this book is not concerned with actual users as empirical subjects, but tries to track how the usage inscribed in platforms triggers explicit users' responses. Over the past eight years, Facebook users have manifested themselves on the Web, commenting on their site and reacting to the changes implemented in its interface. How have users appropriated the normative architecture of Facebook's coding technologies? Did they support or criticize the (changing) social norms of sharing inscribed in the platform's interface? Let me first explain users' motivations for joining and enjoying Facebook before turning to various modes of resistance.

The steadily growing masses of users signing up for the service are proof of the site's becoming a centripetal force in organizing people's social lives. The principal benefits for users are, first, to *get and stay connected* and, second, to *become (well) connected*. Even though human contact through Internet sites has never replaced offline sociality, SNSs have arguably replaced e-mail and the phone as the preferred media of interaction for the younger generation (Raynes-Goldie 2010). "Getting in touch" and "staying in touch" are now activities completely centered on SNSs; the services facilitate the bridging of space and time and help people to keep updated on their friends' lives. Facebook's design makes subscribing feel like hooking up to a utility. Once a member, the social push to stay connected is insidious, especially for young people, because *not* being on Facebook means not being invited to parties, not getting updated on important events, in short, being disconnected from a presumably appealing dynamic of public life. SNSs, as researchers confirm, have become a leading space for accumulating social capital (Valenzuela, Park, and Kee 2009).

By the same token, Facebook has become a primer for promoting the self as the center of an extensive network of friends; the notion of "friending" relates to bonds that may also exist in real life, but equally refers to weak ties and latent ties. In online environments, people want to *show* who they are; they have a vested interest in identity construction by sharing pieces of information because disclosing information about one's self is closely linked with popularity. Psychology researchers Christofides, Muise, and Desmarais (2009) have argued that "identity is a social product created not only by what you share, but also by what others share and say about you. . . . The people who are most popular are those whose identity construction is most actively participated in by others" (343). Since Facebook is the largest social network, it offers the best potential for what Castells (2009) calls "mass self-communication."[8] In contrast to other mass media, SNSs in general—and Facebook in particular—offer individual users a stage for crafting a self-image and for popularizing this image beyond intimate circles. Popularity and disclosure are two sides of the same coin, and they mirror the double meaning of "sharing" as argued above.

The verb "friending" has become virtually synonymous with Facebook's demarcation of online friendship, and, as is the case with "liking," the concept is ambiguous and embattled. As described in the previous section, friendship is not only the result of spontaneous, human-based (inter) actions, but also the result of programmed sociality—relationships suggested by PYMK buttons and friends-of-friends algorithms. This "friendship assemblage" of technology and user thus defines "who our friends are, what they have done, and how many of them there are" (Bucher 2012b).

However, if we look at concrete users' articulation of friendship and their perception of online relationships on Facebook, researchers find that users actively engage with the site, building social capital by smartly playing out the various levels of friendship as well as exploiting the site's potential for self-expression and self-communication (Ellison, Steinfield, and Lampe 2011: 888). As Ellison and her colleagues conclude, users differentiate between Facebook friends and "actual" friends when gauging the quality of friendship. Indeed, even if users are aware of the fact that Facebook actively steers their online experience of friendship and converts their social capital into economic capital, they may still enjoy it.

The meaning of "friending" as inscribed in the interface is thus not simply accepted but also appropriated and contested by users. While a majority of Facebook users comply with the site's protocols for online sociality—which after all benefit their self-interests—a substantial part of its membership shows concerns about how data are used.[9] A small but vocal group of users have explicitly objected to the site's changing interface features. As briefly mentioned earlier, the company was flooded with protests when Beacon was introduced. Action group MoveOn.org organized a petition, and less than two weeks after Beacon's announcement, 50,000 users had joined a collective protest. In 2008, a class action suit was filed against Facebook and some of the 44 corporations enlisted in the Beacon scheme, resulting in the shutdown of the service and a settlement in court. User protests have occurred pretty regularly since the Beacon debacle, but never have had the same impact. When Facebook made substantial changes to its News Feed feature in 2009, over one million users joined the "Change Facebook back to normal!" group.[10] But whereas 50,000 protesters in 2007 still formed a substantial percentage of all Facebook users, one million protesters in 2009 represented only a small minority of the site's exploding user base. The protest caused only a ripple, and News Feed remained as implemented.

Another form of resistance favored by Facebook users critical of the company's data control strategies was to intervene at the technological level. There have been a number of attempts to thwart Facebook's control policies. For instance, hackers found out that Facebook distributes cookies to track user preferences even when users are logged out or haven't subscribed to Facebook.[11] Other forms of resistance include what Galloway (2004) would call "counter-protocological attacks": users write scripts that intervene with Facebook's interface design and intentionally block protocols. An example of such intervention is an app, offered on the site user-scripts.org, that allows users to dismantle all Like buttons.[12] Yet another kind of manifest intervention is the site UnFuck Facebook, run by a college student who deploys the Facebook Platform to publicize scripts that help users to remove ads and lists of recent activities from their log files. Facebook, needless to say, immediately strikes down challenges to its default settings. As the founder of UnFuck Facebook intimated on his site on November 15, 2010:

> I'm fairly certain Facebook has been intentionally breaking this script. Every time I release a fix a few days later Facebook changes to break the script. I did this several times and I'm just tired of fighting them.[13]

Resisting or subverting default settings requires both technological ingenuity and persistent motivation. Facebook has every interest in preserving its default settings that make information as open as possible.[14] The fight with defiant users over information control is played out over the tiniest technological details.

A subtler form of Facebook criticism is for journalists to discover and disclose strategic technical details of the platform's invisible tactics. For instance, in October 2011, *USA Today* journalist Byron Acohido was able to compile from interviews with senior Facebook staff technical details about how the social network keeps tabs on its users.[15] He found out that Facebook tracks loyal users as well as logged-off users and nonmembers by inserting cookies in your browser. These cookies record the time and date you visit a website with a Like button or a Facebook plug-in, in addition to IP addresses. Correlations between personal data and web-browsing habits could be used to reveal consumers' political affiliations, religious beliefs, sexual orientations, or health issues. When confronted with these findings, Facebook claimed it was using these tactics for security reasons, but, obviously, tracking these kinds of correlations could also become a tempting business model.

Some users disgruntled with Facebook's strategies decided to quit the site altogether, either as individuals or as a collective sign of protest. But quitting Facebook by unsubscribing is easier said than done. Etched into the engine's default is a protocol that sends deserters a number of automated messages containing pictures of "friends" who say they will miss you if you deactivate your account. Few users are resistant to such guilt-tripping, but even if they are, it is not sure they will be able to quit the site for good. To delete your account, you have to really search to find the suitable links, and if you merely push the "deactivate" button—rather than opt out of getting e-mails by pushing "delete" buttons—you can still be tagged and spammed through Facebook.[16] A group of vocal resisters called for collective action when they named May 31, 2010, Quit Facebook Day.[17]

The pledge was posted by users who deeply cared not only about privacy issues but also about the future of the Web as an "open, safe and human place." More than one year later, almost 40,000 users had actually resigned their membership—a number evaporating in the face of the site's monthly accumulation of users.

Over the course of eight years, there have been regular skirmishes between Facebook owners and users over the control of the site's default settings. Whereas Facebook has given in to some demands (Beacon), it has ignored others; the platform pushes three steps forward before users' demands force them to take one backward. What becomes clear is that coding technologies and user appropriations are tools to promote one meaning of sharing over the other. Facebook wants its preferred meaning of sharing, implying complete openness and maximum exchange of data with third parties, to become the "shared norm." Some users have publicly and vocally disputed this interpretation. Even though most protests are framed in the press as privacy concerns, the responses signal a wider scuffle between users' and owners' interest in information control.

Content and Cultural Form

The gradual shift from user-centered connectedness to owner-centered connectivity brought along a change in the organization of Facebook's content from a *database* structure into a *narrative* structure. In the platform's early years, content was generally organized around user connections, news and friends updates, and active discussions. Facebook's interface, as British researcher Garde-Hansen (2009: 141) observed, was presented as a database *of* users and *for* users where "each user's page is a database of their life, making this social network site a collection of collections and collectives." For some users, their page presented a personal archive, a way to share life histories and memories with selected others or open it up to the public at large. For others, SNSs appeared to be a "stage for digital flâneurs," a place to "see and be seen" (boyd 2007: 155). Content diversity allowed users to appropriate the site to suit their own purposes. Over the course of several years, the platform's owners clearly strove toward more uniformity in data input and began to introduce specific narrative features in the interface—a transformation that culminated into the implementation of Timeline in 2011.

With the advent of Timeline, every single piece of data previously uploaded on Facebook—text, picture, video, sound, but also Likes, Pokes, and so on—was automatically transferred onto the new compulsory format upon opening it. The new interface no longer looked like a random database (Manovich 2001) but is, rather, organized as a biography chronicling one's life up to the present. The resulting narrative is a construction in hindsight, a retroactive chronological ordering of life events. Starting with the most recent months, months are slipping into years when you scroll toward the bottom. The entire left side of the page is filled with events, "stories of your life" in the form of pictures, posts to friends, music that you like(d), recipes you exchanged, all your likes and pokes, updates, maps of the places you have been, and a lot more. The narrative presentation gives each member page the look and feel of a magazine—a slick publication, with you as the protagonist. With the introduction of Timeline, Facebook has crept deeper into the texture of life, its narrative principles imitating proven conventions of storytelling, thus binding users even more tightly to the fabric that keeps it connected.

Users responding to Timeline noticed this effect and commented on how memory and emotion are made part of the Facebook experience. The Timeline format cues members to post pictures from the pre-Facebook days of their youth—a baby picture, family snapshots, school classes, old friends, college years, wedding pictures, honeymoon—and thus experience content in terms of their life's story. As one blogger explains:

> Years-old memories flashed before me—old friends, old places, things I hadn't thought about in ages. I got sucked back into the past the same way I would have in front of my mother's old cedar chest, a trunk packed full of childhood tchotckes and pictures that holds our family's history. This innocuous social web tool had just made a powerful and convincing bid for more than my information or my time. Facebook was grasping at my emotions by way of my memories, and it was doing a damn good job.[18]

But while the transformation to Timeline caused enhanced feelings of intimacy, memory, and connectedness in some members, it roused suspicion and discontent in others, especially with regards to the release of more personal information. When switching to Timeline, every formerly inserted piece of data was set by default to "public" even if you had previously set it to "friends only." Users received a grace period of seven days to make decisions about their content's revamped presentation.[19] With every piece of data—both new and old—one had to decide to whom it would be accessible: to friends, a wider circle, or the general audience. And while research has demonstrated that Facebook users have gradually become more skilled in the techniques of audience appraisal (Marwick and boyd 2011), it is still likely that a large number of users accepted the automatic conversion of

their privacy settings, either because they did not know how to modify them or because they did not care. Critical users expressed their discontent mostly on account of involuntary loss of privacy; for some users the transfer to Timeline was also a wake-up call that "brought home to me *just how much* I had shared in the way of status updates, photographs, groups I had joined and Likes I had made."[20] Users also voiced concerns about the consequences if identity thieves used this feature to cajole information out of naive users.[21]

Facebook's new content architecture smoothly integrated the principle of narrative with the principle of connectivity. Apart from the fact that the narrative structure of the site's interface renders users' content presentation more uniform, the architecture also streamlines user input of data, thus facilitating data management and enhancing the application of algorithms. For instance, unified data input makes it a lot easier for companies to insert personalized advertisements for diapers in the Timelines of women with babies and toddlers. Another feature Facebook released simultaneously with Timeline, which received much less attention, was its Page Insight Data. The feature enables marketers to access real-time analytics that measure the effectiveness of their ads interspersed in Facebook's Timeline moment by moment. Leveraging these insights, companies can make decisions about what works and what does not, subsequently tweaking ads in order to optimize their effect. The introduction of Timeline, more than any other feature after Beacon, exposed content presentation as a bone of contention between owners and users. With an IPO nearing, Facebook's rolling out of Timeline caused worries that its move would trigger negative concerns, but as with most previous changes, Facebook soothed resistance by leveraging strategies at various levels. On one level, it offered users a chance to reorganize their content and reconsider their strategies to open up and hide information. On a different plane, Facebook offered advertisers and third parties more and uniformly accessible user data.

During the first eight years of the platform's evolution, technologies, users, and content mutually shaped one another. In 2012, none of these elements were the same as they were in 2004. Coding and content features affected user behavior, while user behavior and explicit responses prompted Facebook to adjust its strategies. Features such as the Like button and the Timeline format also had a profound impact beyond the platform proper, affecting online sociality as such. But before returning to the site's bearing on sociality, we first need to look at Facebook's strategies to establish a brand—a trademarked service that governs its user base while monetizing its resources.

3.3. BRANDING FACEBOOK: WHAT YOU SHARE IS WHAT YOU GET

Ownership

How does the ideology of sharing play out at the level of corporate ownership? When Facebook was launched in 2004, it was competing with several other platforms, such as Friendster, Myspace, and Xanga, to become users' preferred brand for online social networking. Eight years later, most early competitors have vanished from the scene or are left behind as "failed" sites with dwindling numbers of users. Few companies have experienced such a meteoritic rise as Facebook. From 2004 to 2012, the platform has remained in the hands of its initial owner, Facebook Inc. The company refused several offers by moguls like Microsoft and Google, and soon became too big to serve as takeover bait. With 2,000 employees and 15 offices worldwide, the company's size was surprisingly modest in relation to its net worth of almost 100 billion dollars at the time of its initial public offering in May 2012.

The branding of Facebook as *the* social network experience has grown steadily over the years. Size brings convenience for users and more advertising potential for owners, as Tim Wu (2010) has pointed out. Information companies vie to monopolize a niche from where they can comfortably try to encroach on other areas. As Facebook grew exponentially, it quickly outpaced competitors' user numbers through a winner-takes-all effect; Facebook's global reach often came at the expense of smaller (national) social network services.[22] The platform has played an important role in spreading (American) social norms into other national user communities worldwide. Because of their size and global reach, players like Facebook are not only frontrunners in terms of trying to beat the competition, but also in terms of defining mediated social habits in that particular niche.

Although Facebook quickly defeated its early rivals in the SNS market—by 2009, only Myspace was still holding a foot on the threshold—the company faced major challenges from large Internet corporations dominating other niche areas, such as search. In 2011, Google attempted to dethrone Facebook from its comfortable position by launching Google+. Strategically counteracting Facebookers' dissatisfaction with the site's privacy policy, Google+ introduced the features Circles and Hangouts in its interface—features that offered a more refined system for "sharing the right stuff with the right people," according to its website's promotional rhetoric.[23] In doing so, Google literally branded its new service to tackle its opponent's weak spot: the criticism about its contested default settings. Facebook almost immediately responded by adding the features Group Chats and Video Calling, enabling live communication through a corporate partnership with

Skype.[24] With the seamless integration of other apps, such as Spotify, users can choose to let everyone see what they are listening to.

At the corporate level, "sharing" has been assigned the additional connotation of *frictionless sharing*, a term again played out on two levels simultaneously: first, to accommodate users' convenience when they move from Facebook to other platforms without hitting another key or needing an extra click; second, to please platform owners by connecting Facebook to third-party applications and make all data available to all parties. In the words of Facebook's CEO: "Every app is going to be social. If we build the best service, there's massive value there. If we don't, somebody else will."[25] According to Zuckerberg, making everything social is a corporate ideology that is increasingly shared by other social media platforms as well as third parties. Apps, like people, are connectors that boost overall data traffic so all companies can benefit from the "massive value" generated by expanded connectivity. Facebook's strategy of enhancing its power in the ecosystem of connective media thus has a double focus: Zuckerberg counters (potential) competition by pointing at the inevitability of a changing norm ("everything is going to be social") before he invites competitors to join Facebook in their endeavor to create a "truly open and connected space."

In the venture capitalist economy of Silicon Valley, partnership deals, even with competitors, are as important as beating the competition: all companies have a common interest in making the online ecosystem uniformly accessible and shareable. Particularly in the last three years, Facebook has enlisted partners in other niches (games, video chatting, streamed music) in pursuit of promoting overall data traffic and enhancing connectivity in the name of a smoother user experience. Uninhibited data flows between platforms are vital to companies like DoubleClick (owned by Google) and Advertising.com (AOL) selling targeted personalized messages. Facebook also pushed for global acceptance of its narrative form: enforcing Timeline's architecture not just on individual members but also on companies and advertisers, Facebook drives them to sell brands through stories, for instance via personal tales of a product experience. By joining the ecosystem's bandwagon, many platforms attuned their corporate strategies to Facebook's normative definitions of sharing and openness.

In the months preceding its IPO, Facebook Inc was careful to craft its corporate image not as a multinational working in the interest of shareholders, but as a user-centered business that wants to share ownership with the people who made it grow.[26] To "sharing" was hence ascribed another ambiguous meaning in the context of shareholder ownership. The contentious relationship between owners, users, advertisers, and shareholders painfully showed in the wake of the company's going public: not only did General Motors withdraw its advertising account two days before the IPO, but a group of disgruntled users also filed a lawsuit against Facebook, accusing the company of misusing the Like button for sponsored stories without prior consent or even knowledge of users. The lawsuit was settled a month later, but it did not help to boost the company's public image. Three months after its IPO, Facebook shares had lost almost half their value, disappointing owners and shareholders alike. Obviously, the company's public status increased pressure on its owners to render the site more profitable, at the risk of further upsetting loyal users who are wary of increasing commercialization. This friction also shows at the level of governance.

Governance

Facebook's expanded norm of sharing is not only coded in its interface and user scripts, but is also crafted in its terms of service (ToS). The site's policies regulating online traffic are an eclectic combination of do's and don'ts, claimer and disclaimer, rights and responsibilities, and contractual agreement. Since 2007, Facebook's terms of service have been a constant bone of contention for its users. Complaints concerned the level of control over privacy settings, surveillance, and data mining, as well as the length and complexity of the company's terms. Objections have come from government agencies, advocacy groups, and users alike. Perhaps as a result of this criticism, the company has changed its ToS frequently. Since users are never explicitly notified of changes, it is difficult to keep up with policy adjustments. The majority of users never bother to read the terms they have to click-to-agree; most users tend to stick to defaults or are apathetic about privacy settings (Stutzman and Kramer-Duffield 2010; Madejski, Johnson, and Bellovin 2010). Nonetheless, Facebook's terms are a vital ploy in the battle to define what sharing is.

If we look more closely at Facebook's governance, the first thing to notice is that there are at least five different ToS levels: Facebook Principles, Statement of Rights and Responsibilities, Privacy Policy, Data Use Policy, and Platform Policy.[27] All policies are derived from Facebook Principles. The fundamental ambiguity of "sharing" is etched in the opening statement, which carefully crafts the company's mission:

> We are building Facebook to make the world more open and transparent, which we believe will create greater understanding and connection. Facebook promotes openness and transparency by giving individuals greater *power to share and connect*, and certain principles guide Facebook in pursuing these goals.

> Achieving these principles should be constrained only by limitations of law, technology, *and evolving social norms*. We therefore establish these Principles as the foundation of the *rights and responsibilities* of those within the Facebook Service. (Facebook Principles, emphases added)

The statement articulates the company's service entirely in terms of users' needs rather than the company's interests; "evolving social norms" are explicitly mentioned as a constraining force—a force outside Facebook's reach—but in fact, Facebook's rules are a major factor in steering these very norms.

In the remainder of the Principles text, the double meaning of "sharing" stands out in the first two principles, titled "The Freedom to Share and Connect" and "Ownership and Control of Information." Whereas the first principle marks one user's right to connect to another and to exchange data "as long as they both consent to the connection," the second principle actually undermines the platform's own declaration that people should "own their information" and should have the freedom "to set privacy controls to protect those choices," adding the following disclaimer: "Those controls, however, are not capable of limiting how those who have received information may use it, particularly outside the Facebook Service." This last phrase obviously relates to all third parties and companies connecting to Facebook—connections actively pursued by the company. Over the years, Facebook has indeed allotted its users more technical control over their data by adding privacy settings; but these settings do not cover "sharing" in the second meaning of the term, so the effect of these buttons is illusory if you take into account the disclaimer added in the second principle.[28]

This sustained ambiguity in the meaning of sharing has sparked legal dissent over the lawfulness of the platform's ToS, stemming not only from users but also from government agencies and consumer groups. In 2009, after Facebook had announced it would now treat users' names, profile photo, friends list, gender, and other profile data as publicly available information, the Electronic Privacy Information Center (EPIC), along with the American Library Association and several consumer rights advocacy groups, asked the American FCC to look into these changes. A lawsuit filed in Los Angeles in August 2010 claimed that Facebook's Like button intentionally exposes minors to unsolicited advertising; a similar concern was raised by Canada's Privacy Commissioner and the German state of Schleswig-Holstein, contending that all federal agencies should remove the Like button and similar plug-ins from their websites because it breaches national data protection laws.[29] And in August 2011, the German-based "Europe vs. Facebook" group called for legal and political action after it found out that Facebook keeps enormous amounts of data on file for a long time, even though Facebook claims to have removed it.[30]

Facebook's response to lawsuits and other allegations over its privacy policies has been to listen to user complaints and make amends when required by law. As described in the previous section, the debacle over Beacon resulted in a court settlement, requiring Facebook to spend $9.5 million on the establishment of a Privacy Foundation, with appointed users as board members.[31] After the complaints filed by EPIC, Zuckerberg issued a press release announcing the need for "companies like ours" to develop new models of governance: "Rather than simply reissue a new Terms of Use, the changes we're announcing today are designed to open up Facebook so that users can participate meaningfully in our policies and our future."[32] In a purported move toward online democracy, Facebook created two user groups to help it draft what would eventually become Facebook Principles and Facebook Bill of Rights and Responsibilities. All users could log into the "ballot page" to issue their vote on what these principles and bill of rights should entail—not unlike a virtual town hall meeting. An interesting caveat issued by Facebook was that the process needed to be finished within 30 days and would need to draw at least 30 percent of active Facebook users if its results were to be binding—a totally unrealistic goal considering the fact that the site already had over 200 million subscribers in 2009. Not unexpectedly, the attempt at "open governance" failed in its intentions, but nevertheless became included as Principle 9: "Facebook should have a town hall process of notice and comment and a system of voting to encourage input and discourse on amendments to these Principles or to the Rights and Responsibilities." Despite the specified rule, it is unclear to this very day how the company conducts "town hall meetings" or how it plans to muster "open governance" in future policy amendments.

Perhaps most remarkable in Facebook's deployment of its governance model as an instrument in the struggle over information control is the company's strategy of cementing the notion of sharing in user-to-user traffic. Putting the onus on user involvement while de-emphasizing Facebook's interest in commercial exploitation, the company's claim to transparency included in Facebook Principles is conspicuously one-sided. Transparency and openness apparently apply to users who are pushed to share as much information as they can, but does not pertain to owners reluctant to reveal information about their plans to share data for commercial purposes. As long as there is little openness about the platform's commercial strategies, the company's gesture to establish a semidemocratic governance structure remains entirely symbolic. So how open has the company been about its monetizing intentions?

Business Models

To better understand Facebook's monetizing capacity in the wake of the ideology of sharing, we need to return to the double logic of connectedness versus connectivity, a logic that is mirrored by users' interests in mass self-communication vis-à-vis the owners' interest in mass customization. Online social networks generate two more potential economic values besides connectivity: *attention* and *popularity*. In the "attention economy," attention means eyeballs or (unconscious) exposure, and this value is an important part of Internet advertising in the form of banners, pop-ups, and paid ad space on websites. Gaining popularity is important to people who want to boost their public reputation; identifying popularity is relevant to companies that want to seek out influential people or recognize prevalent trends. And yet popularity is not simply out there, ready to be measured: it is, rather, engineered through algorithms that prompt users to rank things, ideas, or people in relation to other things, ideas, or people.

Although popularity has no relation to values such as truth, trust, objectivity, or quality, it is often equated with these values. For instance, users trust their private profiling data to Facebook because they are invited to join the network by a friend, often as part of a preexisting offline network community, and to join other circles of friends while online. Users gain popularity when they get involved in more groups and make more contacts; having many friends on Facebook, after all, enhances your individual market value. The PYMK button uses the popularity principle by culling name suggestions from automated data and cookies. In other words, popularity rooted in *relative* connections between people on the basis of trust is translated into an automated, quantifiable commodity. When communities of users continuously push Like and Poke buttons, issue recommendations, forward favorite items, or state preferences on what's hot and what's not, information garnered through informal networks generates real value on the commodity exchange floor.

The values of attention, popularity, and connectivity have gradually and carefully been mixed to constitute the basis of Facebook's business model. Since 2010, Facebook has progressively opened up user data to extract more value out of the site, risking a serious loss of users through a steady erosion of privacy and trust (Nussbaum 2010). Economic success is highly dependent on a mixture of social media as meeting places (places to make contacts and socialize) and marketplaces (places to exchange, trade, or sell goods). Facebook's owners carefully nourished the site's reputation: a site needs many visitors and a high level of connective activity before it can monetize either one of these values. And yet because SNS sites are meeting places and not just marketplaces, they are different from conventional media. Network communities that collectively define popularity may be used for their evaluative labor or as deliverers of metadata, but they cannot be held captive to the attention industry. When users are no longer interested or when they feel manipulated, they may simply leave (Clemons 2009). In other words, the long-term viability of Web 2.0 platforms depends on a pristine equilibrium between attracting and exploiting communities, between entertaining users and making them participate (van Dijck 2009). The power of users rises above the normal capability of consumers to abstain from consumption because they are also value creators; users have the ability to exercise competent choices, grounded in their understanding of competing and even conflicting incentives and motivations. This strategic power of users thus poses a major challenge to Facebook's business model.

Not surprisingly, the platform waited several years to build a large and loyal member base and to test which values could render the site profitable. Whereas Facebook members, in 2007, were still reluctant to accept advertising in their informal socializing environment, tolerance for commercial infiltration of their social space expanded over the years. Since the Beacon debacle, the company has tried a mixture of strategies to monetize connectivity while building its brand. Banner advertisements appearing on a side bar are the most common tactic; like Google's AdSense, Facebook makes use of personalized targeted ads, connecting specific Facebook users to advertisers based on content interests.[33] Open Graph connects the company to an enormous quantity of data generated outside of its own service through Like buttons and similar apps, giving them access to a vast reservoir of marketing data, data on users' interests, and demographics. The Like button, as we now know, is vulnerable to Like-jacking and personalized spamming; users may regularly find recommendations on their News Feed or Wall that are ostensibly sent by "friends" but are in fact propelled by third parties using an unwitting friend's Like as an advertising ploy. Sponsored stories, as part of the company's narrative strategy, are claimed to be almost 50 percent more effective than targeted ads.[34] Users automatically approve this tactic by signing the ToS.

Advertising aside, Facebook has ventured into several other profitable business models, such as selling pages to major and minor brands. Virtually all multinationals, from Coca-Cola to BMW, are using Facebook for marketing and so-called "mouth-to-mouth at scale" promotion. They pay influential Facebook connectors—people with many friends—to promote their brand through the many intersecting groups and networks they are [illegible] Facebook owns an unprecedented reservoir of customized [illegible] and public relations are becoming a mixture of

science and statistics, and therefore a lucrative business model. Facebook's strategy also includes integrated pay services. Granting members of the site access to online games or apps such as CastleVille or Words with Friends, Facebook receives one-third of these sites' revenues. Besides being a social network, Facebook thus increasingly serves as a gateway and identity provider to selected services and goods. The platform becomes a closed membership alliance whose members' data represent valuable marketing and advertising niches to which companies can buy access (Turow 2006).

Facebook's business model is most certainly a contentious balancing act between stimulating users' activity and exploiting it; its success ultimately depends on customers' willingness to contribute data and to allow maximum data mining. Some economists have hailed this value as the corporation's most valuable resource, even though the specificities of its mining methods are far from clear.[35] At the other end of the spectrum, critics contend that platforms like Facebook are turning the Internet into a proprietary space where control over tools and services is firmly held by a small number of media corporations who are "pushing for control and exclusion as a means to exploit and reorient online users as consumer" (Milberry and Anderson 2009: 409).[36] Over the years, information about Facebook's business model has been carefully held from the public view. Up to its IPO in May 2012, the firm was conspicuously quiet about its plans to make its gold mine more profitable; the Nasdaq offering forced the company to make its revenue streams and data capitalization more open.[37]

In the overture toward Facebook's going public, we can again observe the divergent meanings of sharing being captured in one seamless notion. In a video roadshow released several weeks before the IPO, the company pitched its bright future prospects to prospective investors.[38] Facebook's top managers and CEO, along with two of the platform's biggest advertisers (Ben & Jerry's and American Express), explain their business strategies in an almost evangelical way, professing the company's "social" mission as an economic boon. A spokesperson for the ice-cream company echoes the rhetoric of Facebook:

> Messages on Facebook spread not just from business to consumer, but from friend to friend. At Ben & Jerry's, we're not just a company, we really are a friend to people. We want a holistic relationship with our community, our customers. We engage in a large-scale conversation.

In virtually every line of text in the 30-minute promotion video, values of connectedness and community are equated with connective values, smoothly aligning business models with user interests. Clients are communities and customers equal friends, warranting the identification of a new category of "frustomers." Facebook's mantra of making the world social is presented as a win-win business proposition. The double logic of sharing, as we have seen, is not just anchored in the site's business model, but penetrates every fiber of the company's philosophy, including coding features, user practices, content and ownership strategies, and governance models.

3.4. SHARED NORMS IN THE ECOSYSTEM OF CONNECTIVE MEDIA

The struggle over the meaning of sharing does not just reflect one company's effort to code and brand sociality, but also represents a *cultural* battle to establish a new normative order for online socializing and communication. Early stages of this struggle are articulated in the way Facebook has shaped sociality at the same time and by the same means as it has been shaped by technological advances, legal codes, and market forces. But the reason that Facebook has managed to impose its ideology on a vast number of users cannot be explained exclusively by the company's technical ingenuity or its visionary poise, inspiring a young generation's lifestyle. Facebook's distribution of the sharing norm has been widespread because its buttons have been effectively exported to other platforms, promoted by the frictionless sharing stratagem. Games, pay services, employment sites, and a large number of other online facilities have partnered with Facebook to benefit from its size, in lieu of sharing data with Facebook. Most online companies absorb Facebook's connectivity principle to offer a free service, collect data about users as they use the service, and sell advertising on the basis of these data.

Perhaps more significant than Facebook's export of buttons and sharing principles is the platform's acceptance into so many people's everyday routines. What used to be informal social activities in the private sphere—friends hanging out together and exchanging ideas on what they like—have become algorithmically mediated interactions in the corporate sphere. The significance of this transition, though, gets lost in the common vernacular of sharing, friending, and liking.[39] In less than eight years, the meaning of "sharing," once understood as user-to-user information exchange, has subtly been replaced by a meaning that naturalizes the sharing of personal data with anyone on the planet. Among teenagers, the idea of "friending" as building the largest possible network of contacts—a social badge of honor informed by the popularity principle—has been steadily on the rise. The concept of "liking" pushes popular ideas or things with a high degree of emotional value, arguably at the expense of rational

judgments for which there are no buttons in the online universe; "difficult but important" is not a judgment prompted by social media sites. Sharing, friending, and liking are powerful ideological concepts whose impact reaches beyond Facebook proper into all corners of culture, affecting the very fabric of sociality.

The normalization of a specific social rule at some point inevitably affects the process of legalization—of norms turning into laws. Media companies trying to change privacy laws recurrently invoke changed social norms to back up their argument. For instance, in December 2011, viewing-on-demand platform Netflix backed a bill in the American Congress that would amend the Video Privacy Protection Act, issued in the 1980s, prohibiting the disclosure of a client's personal information or consuming behavior without written consent.[40] Netflix lawyers argued that the law is outdated because people share their information all the time on Facebook and Spotify, so why can't they share information on videos they are watching? Doctors keen on keeping patients' private information confidential are puzzled to find that patients themselves publish the most intimate details of their illnesses on their Facebook pages. On a different note, job applicants have been asked during interviews to relay their Facebook passwords to prospective employers so they can check information that was intentionally set to "friends only."[41] The new norm of online sharing is thus invoked in other domains to forfeit individual rights or to push legal amendments.

And yet Facebook's normative dominance is not set in stone but is vulnerable to forces in the connective environment it helped create. Critical responses to the prevailing definition of sharing have come from individuals, legal agencies, and also from the market. First of all, a backlash from users is not unimaginable. Facebook resisters, according to the *New York Times*, are growing in number as people's worries over the platform's privacy policy increase.[42] There is a mounting awareness among users about the need to protect precious private information from the industry's calls for "openness."[43] In May 2012, with all eyes on the company's IPO, a class action suit on behalf of users was filed in a California court, claiming that Facebook improperly tracks and exploits its users. The joke "Why did Facebook go public? Because they couldn't figure out the privacy settings either" gained viral acclaim. Besides being the target of American lawsuits, Facebook's expanding definition of sharing has been the target of active monitoring by European and American watchdogs, NGOs, and consumer advocates such as the Center for Digital Democracy.

Perhaps more telling are *market* responses to the pervasive ideology of sharing. New services besides Google+ offer alternatives to people who feel uncomfortable with the principles undergirding the platform's dominance. They target Facebook's strength, which is simultaneously its weak spot: its generic user base and undifferentiated friending functions. Many smaller platforms, such as Path, FamilyLeaf, ConnectMe, Diaspora, and Pair, offer network services with specific restraints on the number of users or more user control. Other services envision a future of networked sociality in which users will be more aware of their data's value. Although studies show that many consumers care about the collection of personal data by an online company, few are willing to pay to protect it.[44] A few start-ups, such as Personal, operate on the basis of people taking control from the digital trails they leave on the Internet and sell their personal data for services they explicitly want.

Facebook's operational logic is indeed a powerful force in the ecosystem of connective media, affecting many other platforms and infiltrating many people's social lives, but there are also countervailing forces. And even if the platform seems invincible at the apex of its popularity, it is susceptible to the vagaries of the same ecosystem that helped make it big. If the world's users decide Facebook has lost its coolness, has sold out your private data, or has yielded to censoring governments, its popularity may dwindle. If lawmakers and governments get a mandate from citizens to secure more information control, Facebook's business models may become less lucrative. If competing platforms manage to attract substantial user bases and occupy new specialized niches in the social networking universe, Facebook's value may easily drop. In fact, many predicted this fate after the company lost a large chunk of its value in the first month following its IPO. The ecosystem of connective media has proven a capricious environment in which a platform's status is never secure.

But even if Facebook loses its cool as a platform, its ideology has spread so deeply into the pores of online sociality that its newspeak and mantras will reverberate for a long time. Facebook's ambition is not to be an open social network that lets its content and data be crawled by other engines, especially Google's. Instead, it wants to be a gateway to social content, a toll road to a data infrastructure that facilitates all forms of online commercialized sociality. In the video roadshow discussed in the previous section, Mark Zuckerberg elucidates Facebook as a core upon which other platforms can build: Facebook is "a *fabric* that can make any experience online social." The company's creed to make the world a more connected and transparent place has thus come full circle: if the world lets Facebook define the norms for online sociality, it will build a world powered by Facebook.