Principles of Social Interaction Design

An essay

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Introduction

Principles of Social Interaction Design?

Social media are talk technologies. They are the means of production in an age of communication. They aid in the production and exchange of knowledge and information and culture, based on human interests. They are media in which people see themselves represented. Their impact is as much psychological and social as it is technical.

In recent years, social media have come off the page. Social tools have become more talkative, mobile, and real-time. They have taken a conversational turn. And as these social tools increasingly facilitate relationships and communication, their role in these deeply personal and social dynamics has become a matter for design. The need for a deeper understanding of the fit between tools and social interactions calls for a new design practice. This is social interaction design.

Social interaction design sits somewhere in between people and technology — in a place one might call the social interface. And the interactions that concern social interaction design are those among people, not just between the people and applications.

Design is concerned not only with social media products and services but also what people do with them. Social interaction design covers the screen elements and application features of social media as well as "user" behaviors and social practices. It is in social practices, and the emergence of cultural pastimes and patterns of use, that social interaction design really comes into its own.

At the heart of social interaction design is a query. "What makes social media work?" Social media work because people figure out what a social tool is based on what they see other people doing. People are interested in the interactions and communications of people. Social interaction reveals what's going on — what an application or site is about. These are social practices, and they are established through the self-reinforcing activities of participating users.

If it is use that makes a social tool successful, can success be designed? Were hits like Facebook and twitter *designed* for their success? Or did their adoption become a virtuous cycle, piling on growth, and resulting in success? And if it's easy to identify the social interaction design in Facebook, what of twitter? Perhaps twitter owes its success less to design sophistication and more to simplicity?

Social interaction design wants to understand the ways in which the actions of individuals result in social outcomes. It wants a means of describing and explaining the communication and interaction practices of people in ways that relate to human interests. It wants methods and techniques that reflect what people do — not what technology enables.

This essay explores the factors that make up the user experience in social media. It is an examination of human psychology and the unique motives and motivations that underly use of social tools. It examines how users become interested in themselves and in others. And it proposes some design theoretical observations and descriptions tailored to the mechanics, if you will, of successful social media services.

The design world occasionally talks about "compelling the user" to behave in a certain way. Designers are encouraged to obtain desired behavioral outcomes by means of user incentives. Some designers may believe that "their" users indeed manifest the in-built preferences of the designer. Int eh world of social media, this kind of thinking has led to "gamification," "game mechanics," and more. Without directly confronting the assumptions made by game mechanics vis-a-vis the instincts of people and players, the case for design influence must still proceed from *user experience*. Incentives, motives, interests, needs, and so on must be recognized for what they are: human, individual, and social. Design might then seek to reflect and resonate with human interests. But it can never be the origin of them. This essay will argue that in social tools, the user interests must be qualified as competencies: skills of interpersonal and social interaction and communication.

These skills can relate to less obviously social habits, such as curating online content, social bookmarking, or building a "personal brand" and Klout. These are valid "user experiences," and so are worth examining for deeper human interests also. The diversity of users and the wide spectrum their interests that makes the design of social

media a unique challenge. And everyone is different. But unlike the design of physical products, the design of social tools depends absolutely and completely on the amplification of fundamental social experiences, no matter how much they are thinned out by the technology. Remove the audience, the representation of an audience, or even the hope of an audience, and all participation dies.

This essay will take some risks. In diving deep into the user experience, hunting for clues as to the motives, relationships, habits and more that inflect new social media uses today, it will at times seem to have taken the deep dive. Waters will become murky, far from the familiar shores of much of more conventional user experience design. That is because this essay is required to account for human interests and social practices that often have more in common with Shakespeare and Freud than they do the navigation of search results. The query may be different. But it's still, fundamentally, a query. Better to look than to assume; and better to invest in understanding what people do, than to reproduce how things function.

Luckily, a great amount of insight has been provided already by thinkers in fields of sociology, social theory, psychology, and more. The sociological tradition is steeped in admiration for what drama and literature have always known and practiced: that the peaks of social and cultural development are at the heart of the most seemingly banal and routine habits of the everyday. These are worth exploration. In what goes without saying, there is always a reason.

Psychology, more or less
Sociology is many things. Most relevant to this project is the sociology of social interaction. Simply put, social practices are recognizable social affairs. They are the encounters, exchanges, pastimes, ritual, and so on that people know when they see them. What matters to the designer is that the user already furnishes some understanding of what's going on. There is also sociology of time, of action, of structures and systems, and so some degree these will make their appearance in this essay. But for the sake of advancing a look at social interaction design issues, references will be implicit, including insights from Erving Goffman's "symbolic interactionism" and more from Anthony Giddens, Alfred Schutz, and others.

The view of psychology developed here centers on relations and relationships. Relations, because mediated interaction must by some

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means engage or "hook" a person by means of something greater or else and elsewhere. It's a medium of absence, of the small screen, and so depends on people having interests and inclinations, hopes, illusions, expectations and more, ready-to-go. Media theory furnishes insights into the particulars of mediated communication and interaction. And to some degree also media theory (and cultural theories) validate common popular themes and motifs — popularity, leader boards, celebrity, and other individualized and socialized variants that reference big media.

Talk systems

Social media are systems of talk. Talk is a wonderfully rich feature of social life. It provides ways to get things done while sustaining human contact at the same time. What people say, is not all that they mean. Through the organization of talk, people give face, feed each other's emotions, give and get attention, and of course, come up with things to say and ways to say them. All at the same time, and without having to think about it. The fact that most people have had some if not many moments of hesitation centered on what to say, how to say it, or whether to say it, on social media, is proof that the primary activity is talk.

One of the key features of speech is that statements and expressions are distinct from the form of their "delivery." It is possible to tell *what* is said and meant from *how* it is said. Innocuous statements can be veiled threats; compliments can be delivered back-handedly. A furrowed brow may be diffused by a wink. There are two orders then of meaning: the human intent or affect, and the actual passage of

speech used. Navigating these nuances and ambiguities is one of the reasons people spend time together. It's social activity.

Clearly, then, mediated interactions present a bit of a challenge. In the absence of face-to-face interaction, it's more difficult to tell the message from its delivery. Missing are a sense of tone, inflection, gestures and body language. Cues cannot be provided along with statements. And this is just the literal expression itself; there's also the technical means of expression. Status updates, tweets, blog comments, youtube video replies — all carry their own complexities, nuances, awkwardnesses, and more. Some make use of codified expressions, gestures, and responses, as with retweeting, liking, voting, rating, and more. But video, audio, and games even can be regarded as new modes of talk. The medium simply provides technical possibilities — if adopted and developed into familiar practices (even to insiders), the argument can be made that use of social tools is simply idiomatic.

Talk is a kind of action — specifically, social action. It is a kind of doing — doing by talking, talking about what is being done, and talk to confirm that the doing is done. It is social action because it assumes or addresses an audience. Even talk addressed to one person is social action. For the social interaction designer, this distinction is critical. For social action is not to be confused with straight-ahead user action. Social action is the kind of action that has social meanings. Not only must it be interpreted by another person for it to make sense and have effect; this interpretation is anticipated. A social act already assumes what it means *to others*. It is action that acts tot be seen; to be heard; even to be acknowledged, shared, or responded to.

The competencies relevant to use of social tools are thus fundamentally interpersonal and social. For they pertain to how well, how effectively, successfully, convincingly, etc a person negotiates

meaningful self expression and interaction online. Social interaction design is about these unique social competencies.

Talk can be organized for the purposes of social practices. It might be respected and channeled privately, or it might be the public focus of a site. Social tools make use of a kind of mediated talk. Given the high failure rate of social products and services, the social interaction designer wants to better understand the kinds of talk that work.

> **It's not the medium is the message, but the medium is the messenger.**

It might be used to maintain private relationships, or structured to surface expertise and attract commentary. Talk can be organized topically, by participants taking turns, and with the help of transactional features. Its form is transformed by the representations provided by the medium. (Video is a form, likes are a form.) Although talk begins as speech, it has a visual form when it is online. This means it can be structured, sequenced, stored, re-assembled, and more. It is represented, and it is a process. It has structure and architecture, and temporal organization (order of seriality and sequence).

Cues and ambiguity

Technology intervenes the natural, face to face encounters in which talk normally takes place. It tends to force implicit meanings to become explicit. What cannot be suggested or hinted at by other means (a look, a smile, etc) must be stated if it is to be communicated. When people use social media to communicate, they lose access to the implicit

Has an experience you have had online ever changed your opinion (either positively or negatively) about a brand or the products and services it offers?

No
34.70%

Yes
65.30%

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meanings conveyed face-to-face. The screen "brackets out" them out. It brackets out nuance and subtlety — the gestural and expressive aspects of interaction. Loss of facial cues, expressions, and social context and place all squeeze implicit and tacit communication to the surface. This loss is not catastrophic to the communication of
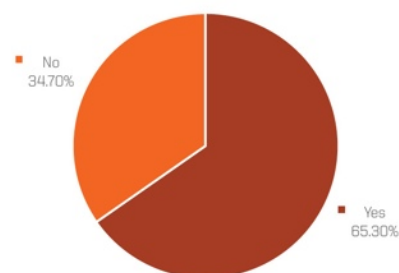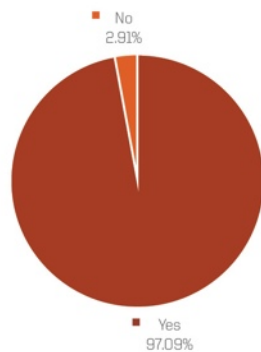
meaning, but does have profound consequences. One, is the burden of interpreting what the other has said and meant to say; another is elimination of the glance from the act of checking for the success of communication.

Has that experience influenced whether or not you purchased a product or service from the brand?

No 2.91%

Yes 97.09%

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Emotional content, where it matters, must be handled explicitly. It otherwise is at risk of being left out of communication. (And of course it can only be described and conveyed in words and online gestures — an act which risks undermining emotional content itself.) In mediated interaction, users can only direct their attention to what they have in mind, and to what is on the screen. Many of the emotional and personal interests traded among participants in face-to-face interactions involve multiple rounds of looking and looking back. These small and seemingly meaningless acts are precisely what enables communication to proceed. The act of looking, and the return of the look, sustain the interaction. With the glance, people ascertain what has been said, expressed, indicated, or suggested. In short, these little exchanges help to secure mutual understanding.

Social media bracket this moment out of the interaction. *Talking with* becomes *talking at*. Face comes off the person speaking and becomes just the form of expression. A smile, the symbol of a heart, another emoticon — one and the same for all.

It takes three days to come off social media habits.

In order for talk to work online, it must be published. It must assume a form that can survive its authorship. For this reason, talk takes the form of text messages, posts, comments, questions, and so on. Over time, these are established as new social practices. Social practices are stabilizing: they make successful interaction more likely. The

technical forms of representation also become stable. And so, communication features, such as the Like, become commonplace.

All talk, and all that is said in talk, intrinsically begs a response. Conventions ordinarily exist that articulate tacitly and implicitly what would qualify as appropriate or inappropriate responses. The same goes for situations in which a response is sought.

Talk can be captured and stabilized into conventions — known and familiar expressions, references, rituals, and so on. This not only helps communication to communicate effectively, it reduces the burden on individuals to negotiate everything they say to one another personally. Conventions reduce some of the personal shades of meaning, in exchange for more impersonal but broadly-accepted phrases.

The codificaton of talk, and a supply of expressive representational forms, create new possibilities and opportunities for communication. New things can be said; in more ways and across more screens. New ways of talking and of learning how to talk emerge.

In an age of communication, social media are a means of production.

In the absence of facework, stylistic elements serve as the means for capturing and showing personality and character online. New ambiguities created by the multiple possible interpretations of a gesture or action become a kind of residue. What has not been made clear, remains to be used and resolved later. Certain forms of interaction emerge, and some of these become quite compelling, precisely for the reason that they are not resolved in face to exchange.

The skills and competencies developed to match use of social tools are not natural-born talents — they are social skills learned, and are highly personal. No two users have exactly the same experience. And all are, by definition, basing their experience on interpretation.

Dysfunctional design?

Traditional software is designed to satisfy user needs and objectives effectively and efficiently. Design goals are thus relatively easy to anticipate and define. However, the user's goals and objectives in social media involve interactions with other users. Neither the interpersonal interests of users nor their communication with other users fit well into the goal-oriented models used by conventional software design.

Users learn less from an application than they do from the activities of others. Online activities that capture users' interests often because they become socially relevant. For many, online presence is something actively maintained, even if in the habit of excessive online use. (A frame that can be broken, but which is more easily sustained.) People develop habits around their own uses and activities around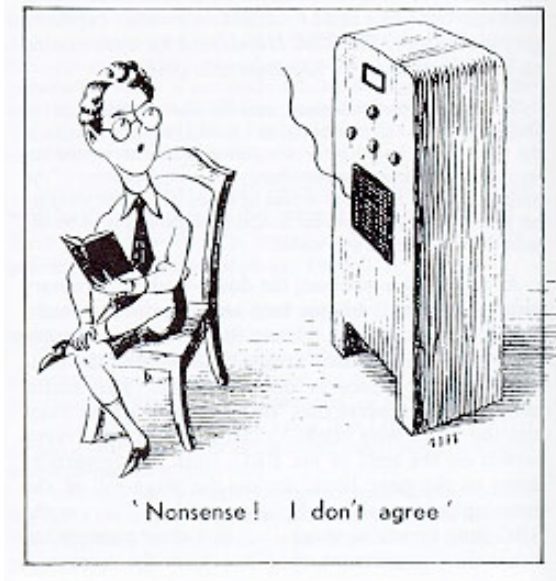 social interactions. Sustained use of social media has to involve people personally, must relate to how they see themselves and like to be seen, and contribute to ongoing personal and professional projects.

Google Buzz was email for the social media age — selectively public, more conversational than twitter, but less social and "egotistical." Until it became Google+, and social networking.

Some users of social media get heavily involved as participants and contributors. Others simply lurk, browse, read and enjoy what's been posted. Both types of users can be served by social media, and in fact should be. Active users produce the content that is consumed in time by passive users. And passive users providing the audience by whom many active users are motivated. For this reason, interests, not goals and objectives, are the better justification of user participation, and the better explanation of motives. Consequently, design approaches to social media need not seek efficiency and effectiveness, but should instead develop interest and engagement in social interactions and pastimes.

The asymmetry between the needs of active and passive social media users suggests new approaches to design and calls for new ways of appreciating the interests of active and passive users. The interplay between active and passive users can, for example, involve social dynamics. Consider the importance an audience of fans, readers, or

followers has for the pundit or expert; or the motivating power of an audience to a successful blogger or newsmaker. These are relationships, even if they involve little contact. In fact, social dynamics animate the audiences and populations of many kinds of social media. As pundits need their fans, status-seekers and aspirationals need their mentors and role models. Social organizers need friends and peers to invite to events, and to inform of their socializing. Artists need fans, too, as well as cheerleaders and boosters. On twitter, users who retweet and syndicate blogs enjoy knowing that their efforts matter to those who rely on them for news and information. Thought leaders write and contribute within communities passionate about common and shared topics of interest. And they, too, count the traffic and visibility that validates their efforts.

'Nonsense! I don't agree'

Software and system architecture cannot themselves provide all the guidance and navigation users need to understand what's going on and how to participate. Thus the designer's job is to structure social practices so that users learn from one another through observation and participation. Social media design may even be approached from a non-functional or "dysfunctional" perspective. Dysfunctionality in communication also acknowledges that the ambiguities and risks of social interaction can be motivating. For where these exist in everyday interactions, they often engender further communication. As will be clear further on, an appreciation of dysfunctionality in social software design opens up relational possibilities for users and systems alike.

Media and experience

In some respects, social media serve may seem like so many other communication tools, making their own unique contribution perhaps to the many applications of communication technologies over the past hundreds of years. But in other respects, social media are a singular blend of mass media and communication technology. They represent new forms of news, information, programming, and distribution. They have created new internet-based modes of creating, procuring, and sharing content. And, of course, new ways of talking. Social media produce and distribute content as a media form. Talk is their mode of production. Their form has become a means of talk.

Social media have developed in ways specific to their tools and social practices. People pursue their reputation, build personas, collect "influence." People check in, post and share photos, blog and comment. These practices accrue particularly to products and services that have successfully gained traction and sustained audience and member attention. Their success in turn is picked up by mass media. And the two come to inform one another: a mass to social media spectrum now exists, in which mass media make use of enhanced means of communication.

Social tools do more than capture individual participation — they reflect it back to their users, in new contexts and with the presence and participation of others included. In this way each social technology employs unique ways of representing people to themselves and to others, blending their efforts with social contexts in which they are relevant.

Use of social tools by individuals is aggregated to furnish richly connected content. These connections not only relate information but also people. New practices of the social self then develop, including:

following, liking, building reputations, sharing, and so on. They also include the many things social tools do uniquely, such as counting, tracking, measuring, comparing, ranking, finding, relating. There are those tools and experiences that populate the more personal, perhaps individual and private end of the spectrum. For example, social bookmarking, or starring and liking items in an RSS Reader. And there are the experiences that are public and which may even have professional worth — twitter accounts, Youtube channels, band pages on Facebook.

All social media services produce content with a **bias**. This bias is introduced whenever users leave content behind for consumption by others. It is commonly noted that only 5% to 10% of a social site's users actually contribute content and participate actively. These users are active for their own reasons and motives; much of the content they create communicates to other users on the service. Yelp reviews, for example, are highly subjective for the reason that users profile themselves as much as they do the restaurant or service being reviewed. Reviews allow users to describe who they and what they are like, in the context of what they like to do. This bias can be amplified or muted on social sites by channeling inter-personal and social interaction into or away from content creation.

Media permit the production, capture, storage, and distribution of communication. Electronic and digital media provide distribution by electronic means — be this wireless, broadcast, cable, internet, or what have you. Online, content is created and consumed in one and the same place, or using a common medium. This represents an upset of traditional physical media manufacture, and is one reason for the medium's disruptiveness. Prior to digital distribution, content has been produced at a remove from the means of distribution and consumption. But when the mode of transportation is no longer physical, the distance between content manufacturing and consumption collapses. Communication can now occur alongside the manufacture and production of content — be it information, trading, entertainment, social networking, etc. The social media age represents a dramatic implosion of the distance between manufacture and consumption of content, and simultaneously, of social relations.

The medium is produced, and reproduced, by many individual acts of communication. Content may be created privately but end up within very public contexts. Individuals may represent big brands and companies. Small groups may lead to trending traffic and memes. The capture and storage of these acts of communication then produces

more communication — as the outcomes of conversations and exchanges leave behind content for discovery and use by others later and elsewhere.

> **Social systems reproduce themselves even when they are dysfunctional — functionality is no longer a design requirement.**

Mode of production

Social interaction design considerations begin with a grasp of the medium's role in transforming content production by people. The content, its relevance and meaning, as well as relationships are *produced*. People can interact around content, or directly with one another — or they can engage with the social context that develops around practices.

Social media are talk technologies

- Connectivity technologies transform people's sense of proximity to one another. This sense of presence, closeness, availability, and access to others now defines a new kind of proximity — not place or distance.
- Social media can all be described as "talk technologies." Talk is made visible: is separated from the speaker so that it can be captured, distributed and displayed digitally.
- Social media combine, structure, organize, and arrange user contributions by means of basic formats of presentation, types of navigation, and features enabling actions and their functionality.
- Because social media are internet-enabled digital media, their formats of content presentation include text, images, video, and audio. These can all be created, played, consumed, and distributed within social media.
- Media used in communication create new possibilities for interaction and "talk." So, as media accommodate changes to embedded presentation formats (e.g. video, animation, games), they also enable new forms of talk. Youtube video replies, turntable.fm, Google+ hangouts, and twitter are some examples.
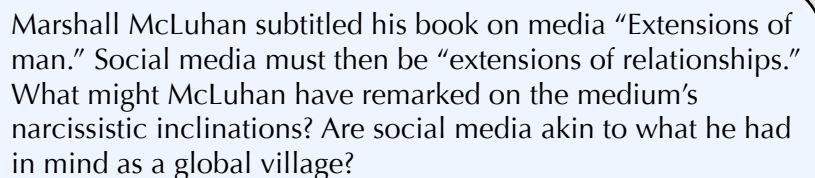
Social media are means of production

- Social media reproduce themselves through the efforts and participation of their users. These efforts result in the means of production: of content, which is communicated; and of communication, which uses mediating forms of content.
- Technical design and functionalities constrain and enable production and consumption of social media.

- Social interaction deals not just with the on-screen experience, but should be understood as user practices sustained over time.
- As means of production, social media shape and inform the user experiences of:
  - Communication and interaction with others
  - Identities and self images formed by users and represented online
  - Crowds and audiences collected and assembled by social media
  - Interpersonal relationships, group relationships, and new modes of interaction in front of a public or publics
  - Stories and narratives, used as personal biographical frames, and as modes of interaction
  - Social interactions mediated by sites, services, and applications
  - Information and knowledge captured and made available to social media audiences
  - Commerce, and to some degree commercial relationships in customer service, branding, and sales
- Globally, social media are means of production in domains they are deployed: knowledge, news, culture, social relations, work, and more.

Ambiguity of meaning

If social media are a means of production of communication as

> Marshall McLuhan subtitled his book on media "Extensions of man." Social media must then be "extensions of relationships." What might McLuhan have remarked on the medium's narcissistic inclinations? Are social media akin to what he had in mind as a global village?

content, they are then also a mode of production for relationships. In this way they differ fundamentally from broadcast media. The content of social media is communicated by and contributed to people. It's not just data, not just information. Information communicated, even if posted to a page in the hopes that it is read, is an act of communication. Its value is neither objective nor objectively measured. Rather, it is subjective: intended to communicate, and valued by the person who interprets it. This constitutes a paradigm shift in the production of cultural knowledge and practices.

Media use narrative forms of presentation — stories, in short. They shape the way in which content is told, and how it is received and interpreted. Through experience, many people have the media literacy to tell the difference between, say, news and entertainment, documentary and fiction, game show and serious talk show. Indeed, many social tools reference if not repurpose common mass media production formats. This has been true since the web began, using design references from page and print.
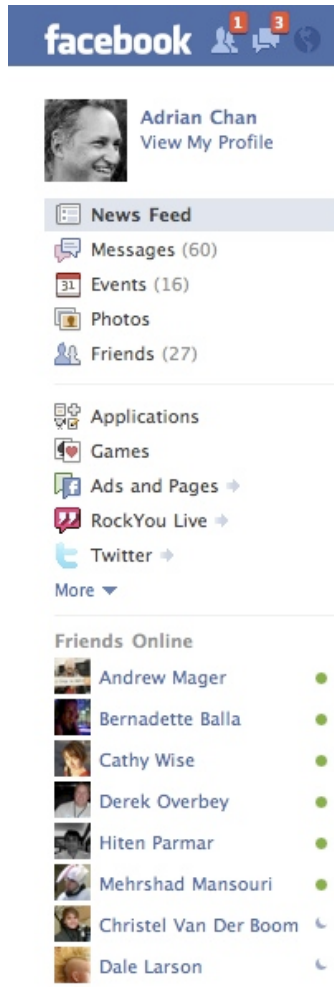
Because the content and activity on social media is intended for others (real or imagined) it has dimensions of meaning not common to broadcast. Content and communication are meant for audiences. Content on social media reflects personal relationships. Whether the audience is a private audience of one, a social audience of many, or the public, affects how people talk. It affects what people talk about, and how.

Just as users are aware of their audiences and publics on social media, social media are designed with audiences in mind. In fact social tools *create* audiences. They do this because they are first *systems of observation*. All media are observer systems: they observe a reality (or fiction) and produce a construction or representation of it for reproduction and distribution.

The realities and experiences that they produce are mediated — they are not immediate, but mediate(d). That is, action, affect, communication, and so on, all involve the screen, the image, and sound. The reality of experience online is part construction, part interpretation — resulting from the medium's observation of use by users, and by the observations of users of its use. One might call it a social system.

The constructed realities of social media in a sense "double" up social realities. Profiles, tweets, videos and suchlike double up individual presence in the world through reflections, images, and projections. Mediated realities are flexible; they bend, distort, twist both truths and falsehoods. The funhouse of social media does on occasion take visitors by surprise. Strange and unsettling, it produces moments of psychological, social, and cultural parallax and occasionally has disturbing and lasting impact, from unwitting

privacy violations to uncanny moments of serendipity and discovery. The abusive and harmful behaviors amplified online are no secret.

Implications then for the social interaction designer are that the user experience may center on what the user is doing at the level of the UI — in terms of using the site, service, or application — or may be better explained by his or her engagement with interpersonal and social relationships through social media. Both axes, medium as media and means of distribution (content), and medium of communication and interaction (action), matter to designing the social.

Systems of observation are second-order systems. First order systems are un-mediated. User experience on social media can be divided into first and second order experiences. First order experiences are those directly related to the user interface: selections, entering text, navigating, and so on. Second order experiences are those in which the user is engaged in a mediated social experience. This could be any of the phenomena and practices mentioned so far. Any kind of activity in which a user, consciously or unconsciously, addresses his or her Self, image, others, relationships, activities, or even representations of Self (a Klout score) is second order. For these second order experiences involve the context of social that is constructed with help of social tools and their design. One can see, then, how easily social systems result in feedbacks between user observations and mediation.

Mass media disrupt social media.

This distinction between first and second order media, and first and second order user experiences, has two consequences. The first concerns the challenge of distinguishing between the two: when is a user action really just a first order activity? (When the interface makes itself the primary focus of attention, for better or worse? When the interface successfully creates an illusion?) The second consequence is that a the meaning of social media content is subject to a high degree of ambiguity. The medium distorts, because it must render talk into mediating formats. And the medium amplifies, because the activities of users are of second order meanings — what begins as a small gesture can be reproduced ad infinitum (the Like button). Part of social interaction design involves making use of these second order
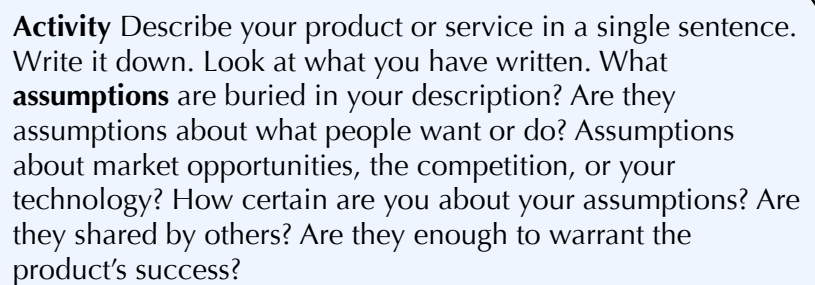
distortions and amplifications. To do that, one must design through and beyond the interface.

The logics of mediated experiences

This is the age of communication. Social technologies are at the frontier of communication technologies. Communication technology has replaced information technologies, which replaced industrial technologies, and so on.

The task of social interaction design is to learn ever more about how people use these social tools, in order to better design the ones that are yet to come. The medium has shifted emphasis from the mass media, one-to-many broadcast model. But have the professionals engaged in media grasped the implications this shift to social has for their efforts?

Upon their arrival, social media threatened to disrupt the traditional practices of mass media. And in some high-profile industries, they

Activity Describe your product or service in a single sentence. Write it down. Look at what you have written. What **assumptions** are buried in your description? Are they assumptions about what people want or do? Assumptions about market opportunities, the competition, or your technology? How certain are you about your assumptions? Are they shared by others? Are they enough to warrant the product's success?

certainly have. But as mass media have had time to accommodate social media, they too are now disruptive. Mass media are disruptive of social media. The two media forms now shape each other, with the result that innovation can be expected for years to come. This innovation has both rhyme and reason. It works when unsolved, or unnoticed problems are given elegant solutions. It works when new opportunities are exploited with ease, effectiveness, and efficiency. In the case of social tools, this suggests something else too: accurate and timely anticipation of what people will do with their social tools. The case for logic is the case for design, and for decisions based on educated choices, over whim and caprice.

Innovation is part invention and part timing. The timing of innovation is a matter of getting it right: timing a new product for when it is needed. Spotting this moment rests on perceiving market opportunity. When it comes to social, that means not just technical, but social interest also. There's a logic to this, in fact a socio-logical logic. For the best innovations are those that leverage and connect several bold strokes to an audience that is ready and asking. With the logic then of technical design requirements, the logics of social practices.

In the past month, your **Amplification** ⍰ decreased by 3 points
Your influence on Google+ decreased recently
tweet • share

Your Amplification:
29
Tweet   Share
Amplification indicates how much you influence people.

If social media differ from mass media by their interactivity, they require that audiences learn how to use them. And indeed, this means acquiring skills and reaching a comfort level with what these services mean individually, culturally, and socially. The value or reason for a geo-local checkin is not obvious, and certainly not to people who don't have friends on Foursquare. Social tools succeed when they have become individual practices for people with friends, family, and peers. That is, when their use is simply a matter of habit.

At this point, social media are in effect "transparent" as technologies. People pay little attention to the interface, and are not stymied by the need to master it. But for every hard-core fanatic there is a newbie. And a designer. So before proceeding with a look at the design of these experiences, a quick tour of the transformational logics of social tools is in order.

Logic of the self

The logic of the self is a psychological logic. It is one in which inner

Question and Answer services include Mahalo, Yahoo! Answers, and Aardvark. What they have in common is a two-user problem: Q/A services must satisfy the user interests of both asker and answerer. The asker has a pressing question. But the answerer may need an incentive.

experience and personal interests and motives become implicated in a world that is externally represented. But which is a means to real interactions and relationships, albeit through a medium. It is an

extremely powerful logic, a transformation of experience compelling enough that some of us may admit to compulsive online habits bordering on addiction. By the medium's logic of the self, an individual may experience a transformation of self beginning with with externalization of the Self. Self is projected into social media, as image and other formats, but abstractly, too. The self is eternalized in a way that's not only digitally captured, but also made ineffably accessible and available. The self has presence not just "here and now" but anywhere and any-when. People become aware of this, to the degree that it's hard for many to turn off mobile phones for the sensation that they are now cut off and unreachable.

The reverse of externalization and extension is also the case. Others can be projected onto, as their actions and behaviors (including their communication of course) can be internalized. This may not mean that a person presumes to know where and when somebody else is, simply because they're "connected." But it often means that people *believe* others are paying attention to them, have noticed them, or are at least aware of them. Even and possibly because of the medium that stands in between.

Score Analysis
You create content that is spread throughout your network and drives discussions

Your Klout Score:

55.89

Tweet   Share

The Klout Score measures influence on a scale of 1 to 100. Learn more

The distorting effects of the medium, noted above, are thus picked up and given some psychological investments. People personalize what is abstract and generic. People come to assume that "it's about me" or "it's for me" or "it's because of me." This is 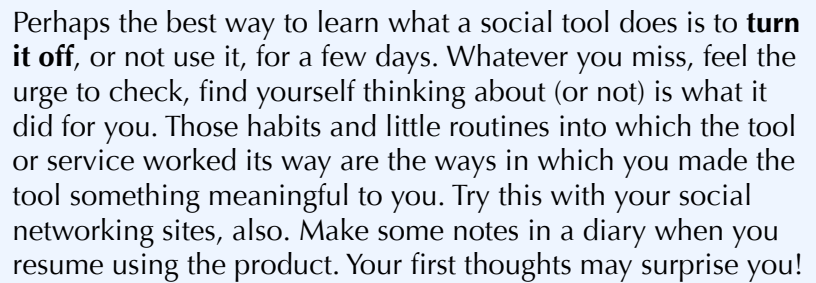normal, and may belong to a reasonable set of psycho-social responses triggered in cases where context is missing from the personal and social behaviors of others. So people will come to assume that an audience, even though it is not visible, is *more or less* there and paying attention.

In addition to this internalization of the outside (mediated) world of activity and people, is the projection onto the outside world of availabilities and relationships. People may feel that the world is there; that an audience is there; that friends are there. Mediated proximity and immediacy, too, may be a reasonable response to the invisibilities of the medium. These projections (of a person's notions and assumptions onto the medium and its users) are meaningful, even if sometimes false.

The logic of the self also produces a doubling of the self. The self is doubled in the form of a digital double: saved digital representations of users' communications and activities. The self can be found "out there" online. It is there regardless of where a person is in actual physical time and space. There is no getting past the fact that online activity leaves behind digital traces, a person is likely to feel extended and enhanced by their online

Perhaps the best way to learn what a social tool does is to **turn it off**, or not use it, for a few days. Whatever you miss, feel the urge to check, find yourself thinking about (or not) is what it did for you. Those habits and little routines into which the tool or service worked its way are the ways in which you made the tool something meaningful to you. Try this with your social networking sites, also. Make some notes in a diary when you resume using the product. Your first thoughts may surprise you!

presence. (Enhanced, not necessarily improved.) It could be argued that some individuals become overly obsessed with how they (think they) appear online. This mental relationship, for that is all it is, may grow to exceed or sometimes substitute for a person's grounded and present sense of self. The screen becomes a mirror, and reflects the user back to him or herself. In this mirroring, may be some smoke.

All manner of relationships, from the "good and rewarding" to the "bad and compulsive" can be wagered and debated. As many kinds of relationships are possible as are possible between a person and his or her sense of self, self image, and perception of what others think.

This mirroring produces a visible double of the self, a self represented within the medium. Self *image*, as it were, is better preserved online than it is in the passage of daily activity. Note emphasis on image.

One need not to be a psychologist to see the appeal social media might have for people. Not only does the medium offer the possibilities of investing in a better-looking, more successful, more popular self image online. It provides the possibility of experiences that are externalized, projected into a social world, and yet separate from the limitations of interactions in the physical world, here and now. Experientially, one may project into the world one's fantasies, expectations, and hopes, in ways distracted enough that they rarely become front of mind.

The very DNA of social media enhances this relational dynamic because the screening out of reality — the medium's very *mediation* — combines with its power to amplify (the Network). The screen on which social interactions play out is powerful indeed. It is part mirror, window, and surface. These psychological interests and attachments challenge the designer to look more deeply.

Logic of the self and self image

> **Sociability of customers, brand, and product** will be better understood by brands and organizations in a socialized commercial world. Brands will learn what interests their customers, and how they share those interests with friends and peers. The emphasis of brand managers will increasingly shift from brand-centric messaging to interactions among customers and those they influence. Brands will want applications that allow them to tastefully engage with customers around these interests.

- Self image is externalized and entered into mediated social intercourse
- Image, as representations and digital artifacts, presents the self to others; self-presentation takes mediated forms
- Narratives, stories, and other textual artifacts tell the self to others
- With the production of a separate and external digital self image, ideas and concepts (observations) may substitute for direct experience and action
- People become involved in the idea of themselves, the idea of others, and the idea of social interaction and community
- One's self-image becomes an artifact (object) for circulation, reference, and reflection
- People take up mediated relationships to their self image, especially when it is referred to and distributed by others online

Logic of temporality

Any medium that stores and re-presents content over time engages temporal logics. Social media involve a logic that transforms time and temporality. Media lift time out of space, creating the possibility for a mediated "presence" suspended, so to speak, in time. Events, including all the many contributions and actions of users, are captured and preserved in time. This lends them a temporality that endures beyond the moment of their production. Clearly, this has a deep impact on talk, and on the experience of interacting over media. One's involvement with social tools falls out of time, or synch, with others using the medium. One's presence online falls out of synch with life itself. Of course, this has now become second

nature to most people who interact using social tools. But some residual experience of the dislocation of presence from now, and of interaction from the shared sense of time that grounds face to face encounters, surely remains. Some amount of communication online must deal with the side effect of temporal dislocation, and with the timing of interaction.
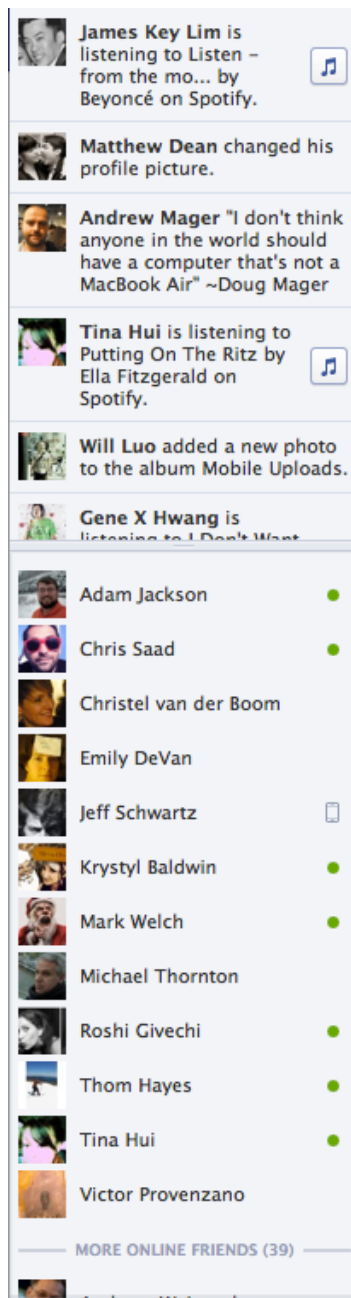
Much is made out of multi-tasking, and the ways in which attention is subject to distractions. Ironically, some of the pressures on attention are exacerbated by the very tools designed to help. Take, for example, realtime media and activity streams (news and activity feeds, status updates). Their acceleration of content and communication may speed up distribution and solve some of the latency and asynchronous issues of online interactions. But they also create demands on attention, and lead to expectations on users' presence and availability. These social tools compress social media involvement into an ever-present stream of now. But a now that is not quite live enough to resolve dislocations, of the presence of one user in a stream is no guarantee that others he or she is interacting with are also present at the same time. The realtime solution works well when participant are on board. Otherwise it simply accelerates content distribution without actually binding communication among participants any more tightly. Realtime feeds cannot secure realtime attention, and may in fact lead to the opposite: feed fatigue.

Perhaps even more salient is the manner in which social media construct temporality over time. This is where the transformational logic is most powerful, for it directly shapes and influences the experience of time. If social media permit communication across space, they do so by means of preserving the past, and by embedding activity in a discontinuous and fragmented (interrupted) strip of present and future.

The logic that transforms time dislocates being-in-the-present from being-present. Presence, in social media, lacks the immediacy of the present. Mediated presence, then is captured as a second strip of time. This strip of time itself can be

spun forward and backward. Online content can be re-arranged into any temporal order a user chooses. A bias in favor of news and new information governs much online content and communication. But users select what they "consume" and engage with according to temporal interests of their own. They are then burdened with the challenge of finding and sorting by relevance

> Customers show loyalty and interest in **brands** for a number of reasons. Brands tend to think these are about the brand — a reflection of what brands think of themselves. Not so. Customers may relate to a brand for its values, its quality, its social status, pricing, utility, history, and much more. All of these reasons belong to the customer (user). Don't try to change the customer's mind.

— which may be "newest" or some other criterion. The temporal connections between content and communication are often not preserved with content itself, and so content must be re-ordered by means of data selection and presentation and navigation interface solutions. What has value for being relevant as news loses that value when it is preserved. Thanks to search and find-ability, it can accrue new value at a later date as it is reused. All past actions that have been stored are to some degree still available, and in that sense, re-present-able. And all current activities are held open, for future re-presentation and re-use (communication and social interaction that repurposes existing content).

Social interactions are profoundly transformed by the logic of time. Physical social interactions are bracketed by opening and closing moves; interactions last as long as people are together. Social encounters in daily life are episodic: strips of experience of presence with another through *time* spent together. The transformative logic of online time erases these brackets, so that interactions lose their episodic nature. They can be re-animated, if you will, by search. Just as they may be suddenly terminated by the disappearance of a participant. The continuity of time spent in everyday, physical co-presence, becomes a discontinuity when interaction is mediated. The open-endedness of online interaction lends it an inclination to the future. Interactions and participation are, in some sense, never finished. Communication is made often for its

future. To some degree, the ambiguities that result from dislocated and preserved interactions sustain interest in social media engagement. Because communication wants to be seen and acknowledged.

There is an additional aspect of realtime social media. Realtime tools allow users to bring others into their own experience — into their own temporality. Realtime just refers to the speed of delivery, which is, almost immediate. A tweet is posted as soon as it is authored. But this only results in realtime for those paying attention at the same time. The "now" of an author's tweet is a different "now" when it is read later by a follower. So the realtime benefit of media does nothing to solve the attention economy problem. Co-present interactions, which are experienced as a "being together" and of sharing time with others (being in the moment) is impossible. A different and mediated kind of social adjacency or proximity by proxy takes the place of being together in time for a shared span of social interaction.

Logic of temporality, realtime, and the present
- The temporality of direct experience is duration — and in social occasions emerges as a shared experience
- Presence in social media is not present — is not in the present with others, and not experienced with shared physical immediacy but rather a proximity by proxy
- In social media, time is discontinuous, and each user participates in his or her own time; there are many times, not one shared time
- Deferral, delay, and interruption characterize mediated time and temporality dislocated from place
- Synchronization is possible only by stepping and sequencing actions, but not on the basis of shared (spontaneous) time
- The shared temporality of face-to-face social encounters is stripped; temporality is suspended and interactions are mediated by the production of artifacts, representations, and perceptual separation and distance

Logic of expression

All human expression ultimately refers to the face and to embodied affective disclosures: a show of emotions and a facial expressions which indicate states. Embodied communication avails people of facial expressions, gestures, and body language. It's possible to say one thing while hinting at something else. And this can be done while indicating how one feels — not necessarily in a deep sense but simply about how things are going. This implicit, sometimes known as meta, communication, facilitates the coordination of action by means of communication. Non-verbal cues

What if Google+ Circles were shareable? What if users could direct posts to shared circles created to support topical conversations? Would these Circles be invite only? Could algorithms be written to sort and order content posted to shared Circles so that quality rose to the top? Would commentary collected on content shared from these Circles be collected back to the group Circle? Shared Circles would take some of the pressure off users to reciprocate adding users to Circles. And might lead to more topical streams of posts.

sustain interactions. Social media by nature bracket out embodied interactions, substituting instead recorded and artifacted communication and interaction (text, images, etc).

As noted earlier, social media use entails a kind of media literacy. This is a subjective skill. When it concerns interactions with others, it's an inter-subjective skill: understanding what people mean to say, and how, if, to respond appropriately. Users become competent at using and interpreting interface elements, as well as the many forms of text, messages, posts, comments, gestures, and other system features. There is always face in these mediated communications; but there is also masking. Social media translate face and mediate expressions. But the medium is itself also expressive: it's visual, appears on a screen, and comprises of elements that are designed to communicate visually.

Mediation, of communication and by means of a medium, transforms human expression into a kind of objective form. The pure subjectivity of expression by means of speech, face, and body becomes objectivated. Objects serve as substitutes and proxies for communicated intents. Likes, retweets, votes, and so on all look the same in form. The competencies of users then account for interpreting both the objective form and assessing subjective

intentions and meanings. For example, what does a Like button look like and what does it normally mean, but also what does this Like in particular mean (and to the person who Liked).

Logic of expression and self-presentation
- Presence in social media is not present but is re-presented
- Nothing online is communicable unless it is represented in digital form (artifact), then published or posted
- There is a duality of form and content in any medium of human expression — presentation and intention being distinct
- Subjective meanings are lost as they assume the form of objective gestures and other mediating elements
- The individual can take up a relation to the artifact itself, or to his or her imagined image and idea of the other
- Expression is thus robbed of its immediacy, and interaction robbed of its touch.

Logic of events

All of social life is subject to events, and social media practically turn on events. Personal news, social news, local and global news — social media tell the tales, relevant or not. Everyday life, from the banal to the celebrated, is in ways but a series of events. In their simplest form, events are just occurrences that happen for no particular reason or cause. So from the events

> **Perhaps the greatest design challenge in social is designing time.**

that make up the passing of days, are selected those worth noting. Notable events, events worth sharing and telling. Events that grow in stature as become known to ever greater number of people. If traditional cultures recycled events and sustained many in the form of rituals and ceremonies, modern culture excels at the banal, the trivial, and the new. The very orientation of events told by the media today seems to suggest that it is no longer the past, and binding social traditions, but rather the future, that compels events. Tea leaves, perhaps, and ever fresh. Stories, sometimes, but because they become popular, not because they are age-worn.

Events first rise to the surface as breaking news, attracting coverage and then sustaining interest until commencing a decline, to finally

fade when no longer relevant. This is where the logic of events makes its difference. For in the real world, events *do happen*. In the world of social media, events are merely the reproduction and circulation of observation.

Insofar as all online expression and communication is re-presented, social media comprise of non-events. Social media content is observation — by a person, or by a system function — and so has no "original" event content of its own. It is all constructed and added to the system; nothing just "simply happens." (Even individual activities online are "observations" — thoughts and expressions captured as users observe and reflect on themselves. Or system messages such as "Username has tagged a photo," which the user did do, but did not write about).

In that social life needs its events, or rather, can neither prevent nor escape its events, social media "culture" is intrinsically oriented towards recuperating the experience of naturally occurring and unanticipated events. So when news and trends do break, the "echo chamber" of social media rapidly produces second-order observations and commentary.

Buzz characterizes the event horizon of a medium devoid of its own physical reality. The only way in which "events" happen online is by dint of rapid and widespread distribution. Memes mime the real; proxies and substitutes serve the need and ends of a second order system. Substitutes serve the purposes of social media's observed and constructed realities because they are more readily transformed into the conversational and communicable forms that social media uses for redistribution.

Share
Comments (3 comments)
Permalink

Tweet 63
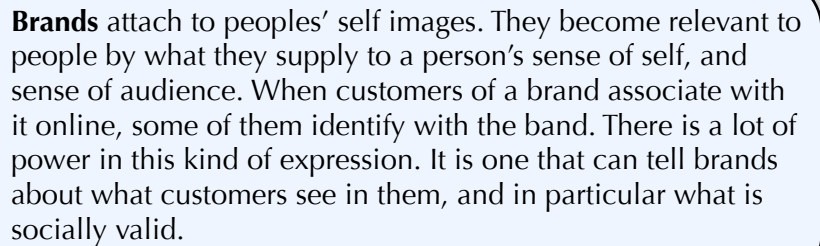
Logic of events and reality of media
- Social media transform the event into the record or document: a share-able telling of the observation
- System observations create events by communicating on behalf of users (users do not author Facebook news feed items about photo uploads, that's a social event originating with the activity news feed post)
- Where in daily experience, social events happen (and pass), in social media they persist and endure

- Where in face-to-face encounters, events are perceived, in social media events communicate
- Communications, as records, documents, and artifacts capturing observations, connect to other communications
- In the everyday world, events pass by virtue of their temporality. In social media, events can be made to endure and grow (through connections)
- The more events a social media system captures and displays, the more information can be communicated
- Simple updates can become news — news communicated and referred to (linked to) becomes self-perpetuating

Logic of action

When action is mediated, it is separated from its effects. An action taken on social media doesn't so much cause an effect. Rather a second action refers to the first action. There is no physical reality online, and so there is no direct causation. Everything occurs by means of user activity and code.
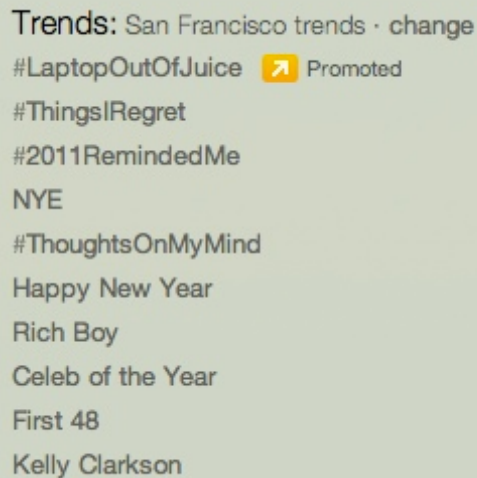
> **Brands** attach to peoples' self images. They become relevant to people by what they supply to a person's sense of self, and sense of audience. When customers of a brand associate with it online, some of them identify with the band. There is a lot of power in this kind of expression. It is one that can tell brands about what customers see in them, and in particular what is socially valid.

And yet action is of course real. People do things on social media by acting. People contribute content by action actions: typing, submitting, linking, tweeting.

Individual actions become activities when the become recognizable as actions belonging to an activity. Pardon the circularity, but there is no way around it. People recognize behaviors as meaning something in particular only when that particular something has become established as a behavioral practice.

Online activities, such as #followfriday hashtagging on twitter, become so only because they are social. Unlike the world of web 1.0, which of course was interactive, the social web is defined by social interaction. So each individual #followfriday tweet communicates to those it mentions what #followfriday is, thus rapidly spreading itself as an activity through the action that makes it an

activity. What distinguishes social action from actions on objects and so on is that social actions are intended to have individual or social outcomes. The target of the action, if you will, implies at least some degree of social engagement (passive to active).

Trends: San Francisco trends · change
#LaptopOutOfJuice ↗ Promoted
#ThingsIRegret
#2011RemindedMe
NYE
#ThoughtsOnMyMind
Happy New Year
Rich Boy
Celeb of the Year
First 48
Kelly Clarkson

Nevertheless, the logic of transformation of action takes shape as the separation of activity from "real" outcomes and effects. Activity is represented, observed, and like the event, constructed. This makes it no less meaningful or real — just differently so. Social actions concern social facts. Social facts are subjective, subject to interpretation, and brought to "existence" by being communicated. This means that social actions are more than the action taken by a user on an application. They are the observation and recognition, usually communicated (e.g. Shared) of the action. It is not the "act" of checking in to Starbucks, but the meaning of checking in on Foursquare, at Starbucks, as possibly shared to followers, twitter, and so on. So in a sense, the social context that adds value to a simple action like checking in (two screens, two buttons) is equivalent to social relevance. When a Foursquare checkin no longer has social relevance, the act of checking in is only as meaningful as the act of checking in is to the person who does it. It becomes an action taken, but a socially inconsequential one: unlikely to be noticed, incapable of becoming social through its communication.

Action must be related to meaningful outcomes by those who design systems for social interaction. This can be simplified by distinguishing between first order and second order actions and outcomes. First order action is directed at the interface layer and satisfied by interface-level outcomes. First order actions are coupled with effects that are predictable, because they are standard (constrained by software, technology, application). These actions succeed or fail according to functional requirements and expectations.

Second order action is social action implicitly addressed to audiences and intended to communicate. Some social actions are social even though they are perceived or are relevant only to their authors. People have in mind a sense of audience or of presence —

in fact many social actions concern self observation and self reflection. The action needs to be grasped as a social one because it has no meaning without the sense of sociality that its author gives it. It is otherwise just a click, a page refresh, a post.

> **Occasions, rituals, and pastimes** provide regular opportunities for use of social media for familiar purposes. Think about how the product or service helps users to coordinate real world needs and activities, be these events, get togethers, obtaining and making recommendations, travel, shopping, and more. What particular factors shape how people use social media on these occasions?

Most social actions, however, solicit social acknowledgment, if not also responses. These social actions communicate, by how they are represented and/or by what they say. Actions that use symbolically-mediated forms, such as interface elements, signify what they mean. They may use consistent and familiar forms, but have meaning according to how they are used, by whom, and in what context. Actions that communicate directly, using language and text, audio, video, or other modality, can be satisfied only by the participation of other people.

The implications of the logic of action can be profound. The separation of action from immediate consequences in the real world at the same time opens up possibilities for actions in a symbolic world. The popularity of social games has already shown how rich and compelling some social activity can be — even when its reality is online only. Perhaps one reason for their popularity is, in fact, that these social actions address real friendships and social relationships.

TeamFollowWack #TeamFollowBack
〔RETWEET〕 #TeamFollowBack #InstantFollowBack
#AutoFollowBack #FollowMe #TFB #F4F #TAF #1000ADAY
#FollowFriday #FF 〔+300 FOLLOWERS〕
27 Dec ☆ Favorite ↻ Retweet ↩ Reply
🔁 Retweeted 100+ times

There is another point to make here about action. In spite of the design, architecture, features, and other hard elements of social media services and applications, social action is fundamentally a user-to-user affair. Action and interaction are not, as in conventional software design, a matter of user-software interaction. Social interaction design focuses not just on the first order interaction between user and application, but on second order social practices and outcomes, too. Social actions cannot be directly controlled, nor can social practices be truly "designed." But because

they depend on user participation for their success, they can be understood, and their outcomes anticipated.

Logic of action and social activity

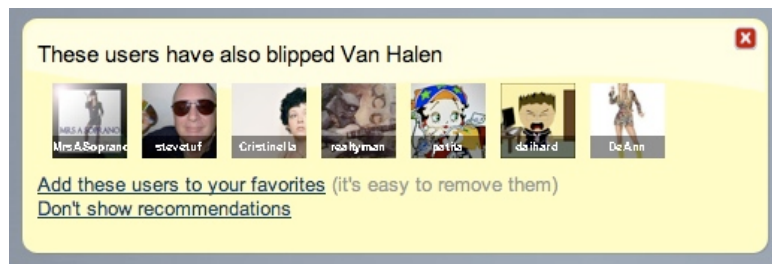- The content of social media is produced by the actions of its users

> Foursquare uses points as incentives for user location checkins. Badges awarded for checkins contribute personality and differentiate users for their offline activities and checkin habits. But is participation in a game of points earned for heavy use a durable and lasting model? Will it keep users committed to the service? Or can Foursquare add value to location checkins?

- Users interact with others — and thus their actions are intended to be social
- Social actions, even when using interface elements, should be designed for social meanings over conventional needs and uses
- First order user action refers to the features and interface elements used to engage in the system; second order practices and outcomes supply the social meaning to these actions
- In conventional software the user experience is regarded as a direct product of the system's UI and navigation
- In social media, the users have experiences with other users, individually and collectively
- Some social actions can be "met" and "satisfied" only with the participation of others
- The social interaction designer can steer social practices and guide users to engage in social activities
- The contributions of social activities to system outcomes may be anticipated, if not controlled
- What constitutes action on a social media system depends on that system's design, and it is up to a system's designers to select the actions they wish to capture and represent, as well as the kind of meanings those actions should have for others

Logic of communication

Communication is not just how people express themselves, and what they say. It becomes social action when it is taken up. Successful social action depends on adequate mutual understanding among people. Say, for the purpose of doing something together. So communication is not just self expression; it's also a means of

obtaining mutual understanding. Sometimes this is in the context of a lasting relationship.

These users have also blipped Van Halen

Add these users to your favorites (it's easy to remove them)
Don't show recommendations

Social relationships — interpersonal but institutional also — can form around mutual and reciprocated interests. Sometimes this involves a mutual understanding and appreciation, as is usually the case when good friends interact. When communication is oriented to reaching understanding between people in an interaction, it becomes a unique form of action — action that does something in saying something.

But interests among individuals are of course only occasionally mutually held. Values need not be shared. In fact communication can be used to accomplish things with other people without reaching mutual understanding. Advertising is an example of this — a form of communication that deliberately falsified in order to sell. Strategic action is a type of social action, but one that works because it is effective. Much of the time it may fail. In this type of action, communication does something by achieving results and outcomes. This is done not by arriving at agreement, consensus, or shared perspectives. It is done by persuasion — a kind of persuasion that has no interest in a mutually-reciprocated relationship.
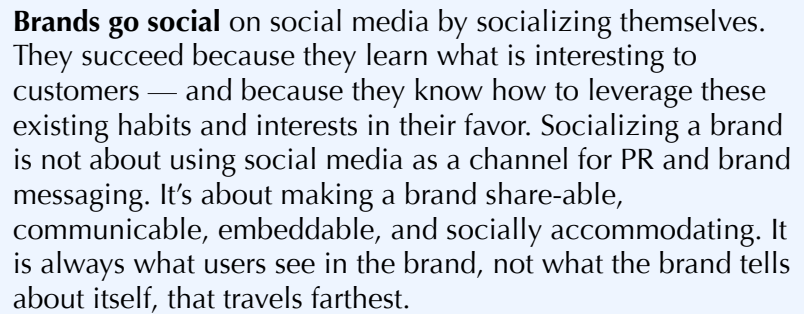
Where the reciprocity and mutuality of human interests is concerned, it is possible to speak of relationships of trust, affection, compassion, and intimacy. In these kinds of relationships, communication articulates on two axes. Communication says something — that is, it makes linguistic claims by use of language and utterances. And communication does something — acts of communication maintain relationships real and sincere. It accomplishes this because both or all participants take each other into account when communicating. Mutuality depends upon this demonstration of subjective interest: interest in the other person's relationship to oneself, as well as interest in what is being said.

Communication intended towards mutual interest and understanding by definition solicits acknowledgment. For it accomplishes nothing if the reciprocity of the other, the mutual interest shown by the other,

isn't taken up. This solicitation is implicit in what is said as well as tacit in how it is said. And it is so common, that people do it in the majority of their personal interactions without thinking about it. (Professional interactions, and those involving professional duties especially, may be strategic but often still seek a consensual kind of transaction.)

This tendency becomes more apparent, and is even a feature of many social media, when certain kinds of communication are handled

> **Brands go social** on social media by socializing themselves. They succeed because they learn what is interesting to customers — and because they know how to leverage these existing habits and interests in their favor. Socializing a brand is not about using social media as a channel for PR and brand messaging. It's about making a brand share-able, communicable, embeddable, and socially accommodating. It is always what users see in the brand, not what the brand tells about itself, that travels farthest.

ritually. The follow/follow-back ritual, for example, is a communication performed by means of a technical feature: follow. But as social action, following is a gesture of interest if not also an initiation of communication. One-sided following is so effective because it stands in for messaging. This makes it faster, and more stable (the follow button and notification is generic). Being more stable, it is faster and easier to deal with. And rejection (no follow back) means and bothers less. A simple button thus facilitates one of the most central features of the internet: connection.

Nuance and subtlety escape capture and representation by technical means. Thus lacking in tone, inflection, emphasis, and other expressive qualities, mediated forms of talk can leave a lot to be resolved and handled. Indeed, short form messages and updates such as the activity stream formats popularized by twitter and Facebook can differ substantially from blogs, comments, emails, and other forms of communication. They differ in their forms, in writing convention and styles, in how and to whom they are addressed, and in their implicit conversationality (interest in dialog). All of these stylistic differences are in fact about helping communication communicate. Conventions of writing and expression, as of reading, interpretation, and response, develop to reduce ambiguity around intentions, meanings, and expectations, however imperfectly.

There is another feature of the medium that makes online communication unique. It's the factor behind the attention economy,

and the reason that some people may become interested in their online social "status." The representation of attention by means of symbolic tokens, gestures, numbers, etc preserves attention. Attention becomes object, and to some may seem real and tangible. And a person can then begin to invest in this personally. The proxy for attention from people may even become more compelling to a person than direct human attention itself; like a car looked at and admired but not driven. The medium excels at the production and circulation of these proxies, substitutes, and signs.
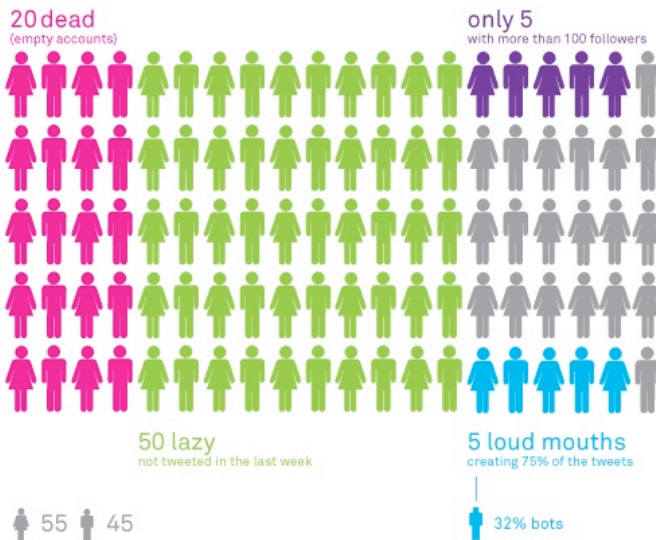
If the Twitter community were 100 people

These signs taken on a life of their own and accrue new social meanings according to contexts in which they are common. Measures of influence, like Klout, might mean expertise. Views to pages and followers essentially mean popularity. Actions may be taken on these signs, further propagating them and amplifying visibility. Some people may reference signs with genuine interest and appreciation. But knowing how social rituals work online, others make references in the hopes of being paid attention in return. Here communication is not oriented to achieving mutual understanding. Rather it is strategic; it wants success. And its strategies and tactics will be disingenuous, facile, false, or contingent: on reciprocation, karmic exchange and so on. In many cases this is raised to a cultural norm and social practice in itself: follow me and I will follow you back (no matter who you are). People are capable of playing being genuine, and social media are happy to oblige in the game.

Logic of communication
- All communication is structured around the statement-response couplet. Anything that might be taken as a meaningful act or expression can be the basis for a response
- Social media systems create new languages and modes of expression

- When communication communicates, and when a communication is responded to, this response is an action. (i.e. A user action may be a response to a "call to action.")
- Much communication online is only observed, less is responded to, and much may be "lost" altogether
- Social media provide many people with the impression that their communication is paid attention to
- The effect of communication, which is usually clear in face-to-face interaction, is not given immediately, if at all
- Social media make it easy to repeat communication: by posting, sharing/forwarding, embedding, linking, and so on
- Interface elements for use in voting, rating and ranking, sharing, and more have expanded the kinds of communication and forms of interaction that social media systems can use

Logic of relation

The logic of relation(s) is perhaps the most important logic of all in social media. A distinction between two kinds of relation is needed. First, is the objective relation and relation among objects, or data elements. Second, is the subjective relation, and relation among subjects (people). Clearly, these are different kinds of relation. But social media bring subjective and objective relations into relation with each other. Social media *subjectivizes* the web's objectivity. And social media *objectivizes* inter-subjective (social) interactions. Both are captured and many are saved as data.

Specialization of social products will continue as services are forced to target niche markets. Whether these are enterprise and professional industries, regional local markets, of thematic and topical niches, designers will be called on to think about a variety of use cases. The one-size fits all model for many social tools may give way to more customized development approaches.

The logic of relational transformation in social media involves both objective and subjective relations. Objective relations become more subjective, as social media use leaves behind a trail of personal opinions, subjective choices, relationship and other social data. And in the process of using social media, subjective worlds are extended objectively — through objects and objective relations that exist online. The medium objectivizes people by means of substitute

objects and proxy objective relations. Data is not as soft as subjective meaning, and objective relations are more formal than subjective inclinations.

These two distinct but mutually-informing worlds result in something unique. People are engaged in practices through which their presence and availability accrues some of the durability and

> **What if Klout** offered users ways to qualify and accredit Klout users in relevant content contexts? Is the value of Klout diminished by the feature that allows users to give Klout to each other? Does reciprocity take over, as an action system, making Klout secondary to a social interaction? What if Klout were like a Like button, but available on commentary by users on content sites?

extension of the world of information. These objective relations are internalized; people really relate the online world and to their presence on it, even though it's experienced on a screen — often a very small one. By the same token, and in reverse, the objective world of data absorbs and codifies subjective selections and choices, storing user actions and activities for the purpose of creating more subjective ways of browsing and navigating social web content. Social values, tastes, and preferences take on forms, representations, and content. Objects and information become more social, reflecting the very-same social tastes and preferences.

Relations are dynamic. They have directionality and inclinations. Take attraction, admiration, or affection, for example. Relations of this kind are often one-sided and unreciprocated. They may be resisted, or even resented. Mutual friends are rarely friends for the same reason, in the same way, or to the same degree. Relationships are subject to the inequalities with which people experience and pursue their interests in one another. This is always dynamic.

> **The solutions to social issues are never technical.**

Any relation always involves people, as subjects, who internalize and make sense of one another. By means of relating, people feel near, far, close, or distant from one another. This is a force, and one's ability to relate, and to perceive the

relation returning, is the connection that distinguishes the world of people from the world of things. Things may be causes. But people move others and are moved by others. Relations are, in short, contingent.

The online world is biased in favor of positive and affirmative relations. It can only capture what has been actively selected. It cannot recognize what users gloss over, or don't select. Data is thus biased in favor of active choices over disinterest, dislike, disagreement, and so on.

On the social web, information is communication.

The field of social relations contains distinctions relevant to different practices, and these can be of help in socializing relationships among users. Trust, respect, credibility, reputation, and expertise are just some of the types of relations that might be extracted from social relationships for the purposes of better social meta data. Conversational exchanges and relations might aid in this especially. For there are not naturally occurring relations in the online world — no cause and effect, no events, no affects. Relations must all be constructed — out of symmetry or asymmetry, identity, differences of type, quantitative degree, and more. These relations are extrinsic to data in the digital world. Subjective selections both enrich the data set and increase the relevance of what it contains.

Logic of relation

Influence is not an attribute it's a relation.

- Online media do not recognize the absence of a relation. The link is inclusive and affirmative.
- Relations captured or constructed among online objects also permit navigation
- Links are connective relations: non-causal associations used to make online facts searchable, accessible, and available
- In everyday life, social relations constrain behavior and social action. In social media, these relations are abstractly social, and qualify the world of information by supplying a layer of subjective taste and preference

- Social media capture individual user and social, or community, interests
- The value to markets and economies, including news and cultural systems, is realized as social relations articulate value within a data set
- These relations are represented through quantities which can be counted, measured, and tracked
- Relations are often associated with interests and preferences. In this manner they communicate values.
- Common values include ratings, position (on lists), and trends (increasing/decreasing).
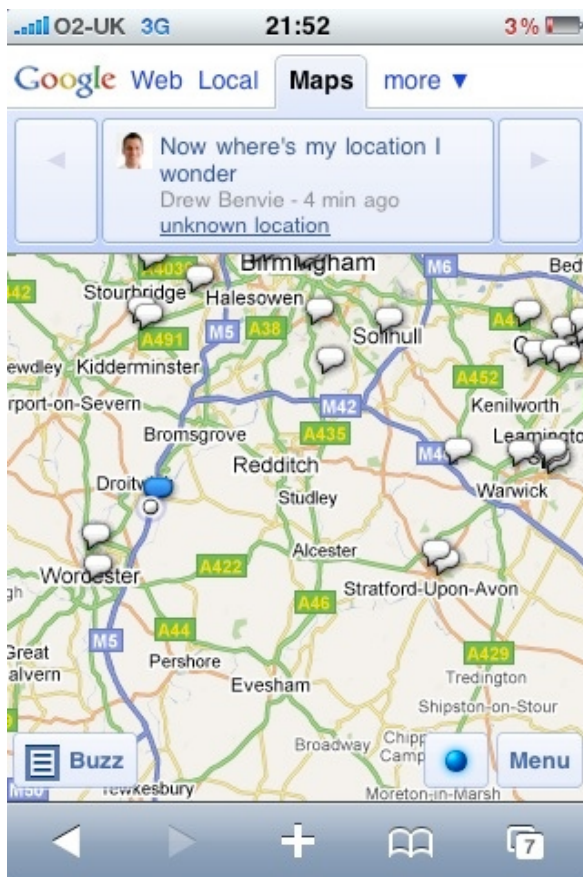
Design

Social interaction design and frames

Design of social products and services presents some unusual challenges. As should be clear from the preceding discussions, social media involve more than a conventional approach to the user experience. Psychology, social interactions, temporality, and so on — these complicate the user experience issues handled by designers. But it should also be clear that social interaction design addresses more than the conventional user experience. And the greater and richer the design vision and concepts a designer brings to a project, the more that is possible.

Neither design nor its designers control the user experience. Designers are responsible for architecture, look and feel, and content organization as always — but none of these are the sum total of the user experience. Users must develop and pursue their own habits, uses, and pastimes. They must personalize and socialize experience. These are not practices that the designer can shape and influence directly, but are factors to be accounted for, and outcomes to be anticipated. The social interaction designer takes interest in more of the user experience than that which engages the screen. Use architecture, but think urban planning.

This orientation to the user, to user experiences, and to social practices, is important. Design is easy when it centers on the abstract: a set of wireframes, content strategy, page layouts, navigation, and interface elements. These are manipulable and controllable. And necessary. But if design focuses on elements the designer him or

herself can become personally invested in the design at hand. Design becomes the designer's work; the designer's attachment to it may displace his or her commitment to supporting users. In other words, designs become the designer's comfort zone. Social interaction design, in particular, seeks to augment design practices with approaches to the systems and dynamics that develop in online social environments. Design needs to pay more attention to the signs of social and population dynamics, to evidence of cultural forces and factors, to emerging social practices — in short, signs of what's going on, and how well it's working.

Design is a frame of mind and a mind for framing. Design exercises control by definition; it operates by its very nature with abstractions, models, blueprints, maps, and so on. Design is the application of a particular way of thinking, and can do what it does only if it can abstract the realities with which it works. Perhaps because it works in abstractions, perhaps also because designers tend to prefer clean to messy, design seeks efficiency and effectiveness. Things are designed to work, and to work well. But where conventional design seeks efficiency, social software design can benefit from the lack of it. As shown earlier, interaction and communication are not discrete transactions. They cannot be measured for their effectiveness and success, nor for that matter their efficiency. Social gets messy — and with social tools, becomes even moreso. The transactions that move interactions and communication forward are open and ongoing. They are embedded in practices and habits, not in architectures and designs. So the designer needs to be able to distinguish between design and use. What is the design intended to do (as a platform, application, brand experience etc); and what are users doing. This entails thinking form the user experience. Because people don't use a platform with the designer's interests in mind. And some of the most compelling interactions people have with each other online are those that are the least efficient, effective, or successful in conventional terms. Consequently, the social interaction designer must think differently about what constitutes success. This applies, too, to the designer's goals and objectives.

Perhaps this can help. Social media is not a noun, it's a verb. There's no "it," really. Social media only "exists" in the many experiences of those who use it. But talking about social media as an "it" is to give it the qualities of a thing. Soon one is saying that "this platform is for X," when in fact there's no such thing. There are only people who might do X using the platform. Social media are the social

applications that facilitate online interactions, but they are brought to life by people.
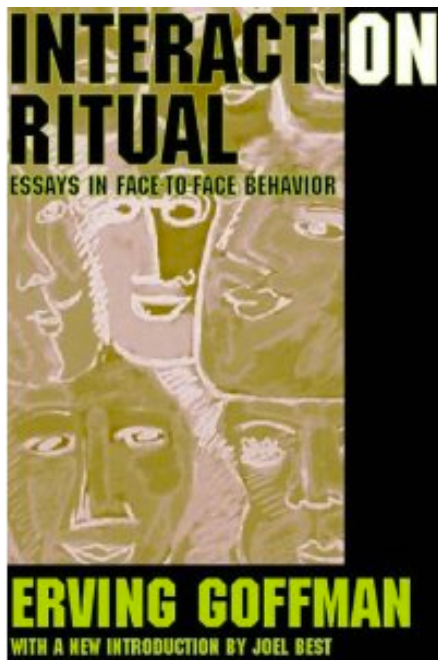
Design often talk about context. Context of use, context as use case, context as scenario, and even as application (mobile vs web context). There is another concept similar to context but better suited to the needs of social interactions: *frames*. So, frames of experience and interaction instead of contexts of use. The concept of frames is borrowed from Erving Goffman's analysis of face-to-face social interactions. In brief, frames are how people know *What's going on in* any social engagement, and consequently, *How* to proceed. In Goffman's analysis, frames permit people a vast number of opportunities to adjust and sustain participation in social encounters — what he also calls "doings" — using frame elements. These elements include keyings, reframings, cues, footing changes, and more. Details are less important here. The advantage of frames over context is that frames are more flexible. Their meaning is not set in a shared "context," or an interpretation that makes its meaning known to everyone involved. Rather, frames are flexible in time and as schema for interpretation — of the actions and behaviors of people. Frames can be embedded in frames, and shifted quickly. They handle and organize social interpretation and action in ways that furnish competent participants with moves and signals for use in sustaining the changes an interaction may go through. In other words, frames, better than context, explain that occurs during interactions over time.

Interactions are framed, and use of familiar social and cultural references is framing. Frames bracket the opening, middle, and closing of a social encounter, within which people know how to act and what to say. Frames thus organize shared experiences during interactions without having to be referred to. Frames can be embedded within other frames. It's by means of frames that a comedian can tell a joke about a World War II ace telling a joke about a dogfight involving not a Messershchmitt but a Fokker. And nobody has to say "this is a comedy club" for it to make sense. Framing, not context, explains why this author was able to retell that

telling as described in a book about telling by Erving Goffman, and you get what I'm saying.

Social media may be characterized by a loss of contexts. The context of authoring is separated from the context of distribution.

> Yelp allows users to create profiles for themselves using reviews they contribute to places they like and dislike. Instead of talking directly about themselves, as on dating sites, reviewers reveal their tastes and preferences by expressing their opinions. Resulting reviews are not objective, but are highly subjective.

Distribution means that any content authored may end up in many intended or unintended contexts. And in any of these contexts, those engaged in content consumption may or may not share context with the content's author. This is how the story is sometimes told. It's accurate as a functional description of social tools and some user experience. But it sustains the notion that there's a shared context to begin with, and that the meaning of an activity or interaction is *in* the context. It's not. There are only frames of interpretation and meaning, sometimes tightly and directly coupled as user experiences (say, a live video chat), and other times not. Frames offer a way around the "loss of context" problem. For loss of context suggests that one recover that context. Frames and framing suggest a different approach: focus on activities and not on design.

Frames permit another advantage. Users interacting with one another online may be said to share a context, but in fact they are each having their own experiences. It would be strange to call this a two-sided context. But it's not strange to talk about multiple frames. The concept of framing allows for this slippage, substitution, embedding, cutting, exiting, and breaking. Frames allow designers to split the interaction schema in two, from one-sided user-software interaction into user-to-user interaction. A single frame corresponding to the social interaction at hand can now be analyzed from each user's experience and perspectives. This double-sided interaction model is essential because the individual experience differs for each user, and also involves interpretation of the actions of others. As has already been discussed, competencies with use of

social media involve not only technical but also "social" competencies. These include the interpretation of other users' behaviors and actions together with a grasp of the mediating technical frame involved in online interaction. In order to abstract the kinds of interactions that may unfold over time, a two-sided setup is required.
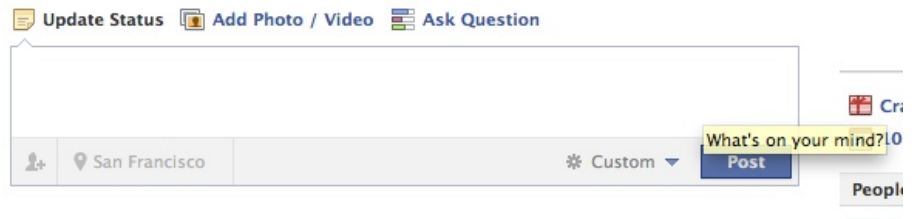
Proceeding then with frames in the place of context, it makes sense to return briefly to the distinction between first and second order systems. First order observations are immediate and direct, and actions correspond to what they do at the level of the interface. Second order observations are constructed out of aggregate user participation, and supply social experiences that no single user could attain without the operations performed by the social system. First and second order interaction gives us primary and secondary frames of experience. One can then use first order systems and actions as a primary frame of experience (e.g. Click submit button). Personal and social meanings are then layered in as secondary frames. Frames easily accommodate this multiplicity of meanings, both at the technical, mechanical, and functional level of interface and UI elements, as well as at the more interpretive and social engagement with activities and practices. In short, a submit button may do the same thing on a dating site as it does on a job site. But this identity is soon subordinate to other, more important distinctions.

> **The less "design" in a social system, the more social norms and practices organize interaction.**

Primary frames correspond to direct user experience and accommodate most conventional UI design concerns. The primary frame covers the technical frame. Action in the primary frame of user experience is first order "inter"action with the interface. (Really, it's action on, not interaction with, but for the sake of convention, either works.) They are what the user is doing most proximately and immediately. Motives for user behavior here include the conventional observations of use and intent, as well as user needs and objectives. UI design

patterns, application settings, form design, sequencing, and much of the rest of UI designer's palette is in play here. Valid usability concerns also apply, offering rich and necessary feedback around an application's efficacy from functional and use-based perspectives.

Secondary frames correspond to multi-user social interaction design interests. Secondary frames are necessary concepts because social media depend more on the user's practices than on technical competencies. Secondary frames describe social interactions and activities. They use second order actions and the activities and practices those actions become and refer to. Sociality emerges as a combination of mutually-reinforcing social dynamics involving practices of use, talk, social interaction, and culture. None of these can be explained or referred directly back to primary frame actions, for all depend on second order intervention of the social tool.

Drag people to your circles to follow and share

A social interaction designer's tools are a combination of navigation and content. Whether it is supplied by users, produced through the aggregation of traffic or meta data, feeds or what have you, content can be made interactive and navigable. But in social media, content is also communication. It has been contributed with the interest of communicating to somebody in particular, or to an audience in general, regardless of whether it succeeds in doing so. The social interaction designer thus wants to address both the primary frame needs of interaction with a social media service or application, and secondary frame outcomes of user activity. These social outcomes are constructed from aggregate user contributions and appear to users as social activity. As will be seen further on, secondary frames involve both social media design conventions as well as practices. Leaderboards, presence signals, following, liking, and so on are design conventions which make sense only in the secondary frame. So too, are the social practices that emerge (making the popular page on Instagram.)

First and second order

- First order presentation layer might be described as user interface, and the second order as the social interface
- Interactions between the user and the application are first order activities
- Second order interactions emerge when users develop conventions, etiquette, and other individual and social practices
- At the second order, where users engage others through the system's interface, interactions become habitual and self-reinforcing
- Social tools develop use practices that are informed by the tool's technical uses and by its social and cultural references
- Talk practices are informed by the tool's structured (Facebook) or open (twitter) organization and representation of talk. This includes capturing an audience, chronological and asynchronous discontinuous temporal ordering of talk, visibility and availability settings, and more.
- Social practices are informed with the help of symbolic languages and media forms (including video, games, etc)
- Rich media may be considered a technical and content reframing of other content forms, thus permitting new social practices and interactions (a youtube video that's a message)

> Pay attention to **how you describe your product** or service to other people. Are you sure of everything you tell them? What, if anything, are you uncertain about? Are you trying to prove anything, and if so, to whom? What kinds of users do you have in mind when you describe what people do with your product? What do you think they find interesting about it? Question your assumptions and think about what you need to understand better or more completely. How we describe what we do, design, build, or use reveals a lot about our relationship to it.

- Cultural practices emerge as contextually-specific games, habits, and pastimes: the same application element means different things in different services

Primary and secondary frames

Primary and secondary frame approaches include:

- Navigation systems and information architecture designed to produce a sense of social involvement.
- Symbolic, gestural, and sign systems: compliments, gestures, buttons, icons, and other graphics that have social, economic and cultural significance and which communicate

- Lists of items and users ordered to show popularity, recency, importance, rating and rank, and so on
- Data about users and about a system's use overall, including activity, page views, navigation, tags, posts, ratings, and comments
- Boundaries and constraints on the availability and visibility of private, semi-public, and public forums
- Forms of writing and posting, including comments and mentions (tweets, backlinks, bookmarking)
- Conversation threading and short message and status update delivery and presentation
- Realtime search and feeds
- Profiles and personal profile resources, specific to a network or imported from other sites
- Use of views of social participation for the purpose of differentiating membership and allowing users to stand out for their activity
- Group formation and member participation, including privacy settings, moderation, and member participation features
- Distribution and federation of content to multiple devices and connected services, including phones and other handhelds
- Use of incentives and game mechanics for the purpose of rewarding users for participation, and to structure game-like experiences
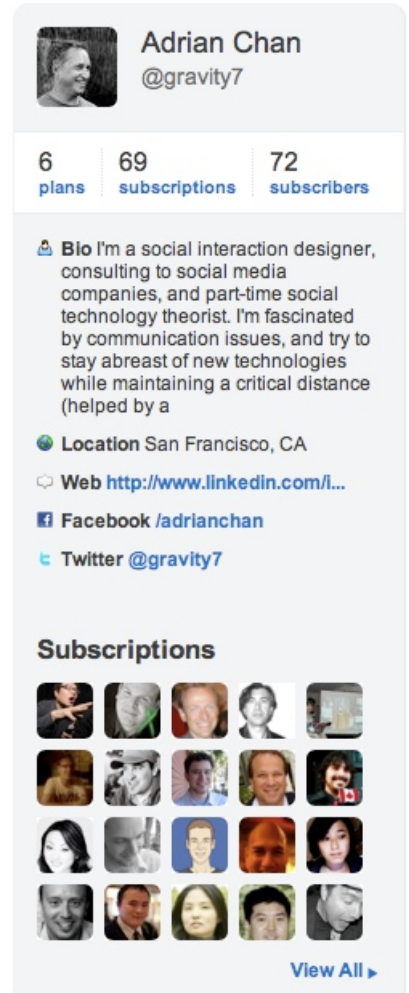
Users

Social media content is contributed to by people engaged with others. Social interaction design at best facilitates this, selecting among features and designs that enrich experiences and interactions, while also anticipating emerging practices over time. Social interaction design becomes implicated

> **Social technologies offer the false promise of control.**

in the user's habits and pastimes. For example, it plays a part in how a user creates and maintains his or her online presence and personality. This might involve a reputation, group commitments, a sense of obligation. It matters little, as long as the designer understands that users engage with themselves — rather self image and sense of self — as well as with other users and whatever application makes it all possible. For design can shape how an experience is conveyed, communicated, safeguarded, and of course encouraged. It can influence how users attract the attention and interest of their peers, and condition the experience of users who simply want to enjoy the byproducts of those peer interactions.

Clearly one design cannot suit all. And yet it's not possible to deliver personalized experiences according to individual interests, either. A museum may hold personal surprises for many, but all enter the same museum. Users differ in their likes and interests, in how they become interested, in who interests them, and in how they express and communicate their interests. Designers, too, are users. But the designer's experience as a user is rarely representative of a new user's. And even if it were, design methods are not based on the user experience of one, but on the successful accommodation of many

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Bio I'm a social interaction designer, consulting to social media companies, and part-time social technology theorist. I'm fascinated by communication issues, and try to stay abreast of new technologies while maintaining a critical distance (helped by a

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different users. Social interaction design, more than conventional software design, must accommodate different kinds of users. Not only to meet their interests, but to facilitate and leverage the interactions that these kinds of users may tend to have.

Users thus are actual people, but can only be thought of in the abstract. Individuals must be generalized into generic individuals. Actions common to some kinds of individuals must be generalized into generic interactions. By generic, one means "generalized," and thus not specific to a particular person. In short, there is no avoiding speaking of users in abstract terms, and by means of generalized behaviors and actions. So, then, if design is to work from *ideas* of users it might as well fashion these ideas as close to reality as possible. Given that the issue is the design of social tools, this reality involves what users take an interest in, and what social outcomes occur when many users do so. The individual shapes the social, which in turn interests the individual — and so on, over time, and at scale.

The interplay of individual differences expressed in styles of social participation means that social interaction design is more acutely user-oriented than many other design methodologies. User centricity generally means attending to user needs and designing for their satisfaction. Obviously, social tools depend completely on the tacit cooperation and participation of self-involved and self-motivated users. This accounts for the degree to which social interaction design must be centered on the social nature of user experiences. Success of any social tool is contingent on engaging the interests of a diversity of user interests, in themselves and each other.
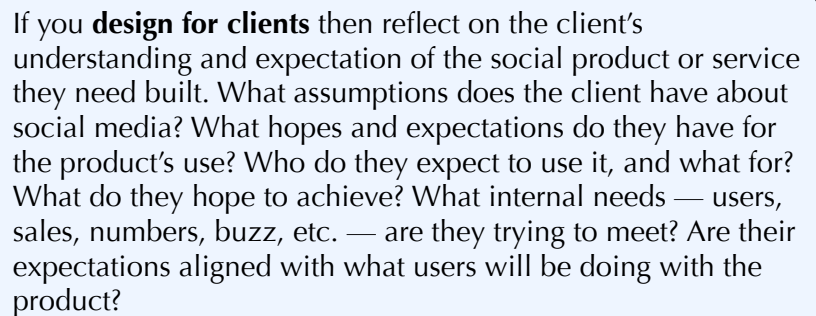
The user experience on social media includes first and second order interactions, and first and secondary frames. The importance of secondary frames experiences can create complications for the design of satisfying experiences. One such design concern is temporality. Temporality figures in designing realtime social media, such as status update tools, news and realtime activity feeds, realtime search, mobile communications, notifications, presence-based
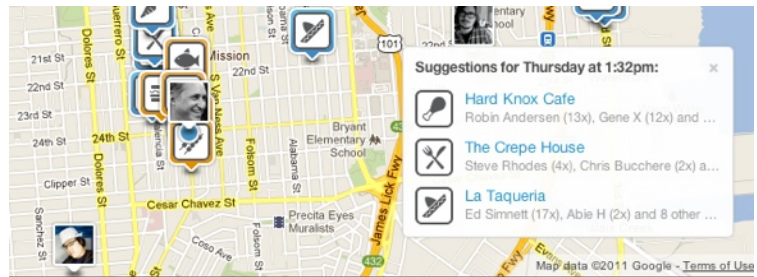
experiences like chat, webchat, live video chat, and so on. The design challenge is less in structuring or architecting time, but in capturing and sustaining user attention. These live and "realtime" experiences produce a shared temporal experience for users only insofar as they sustain participation — a matter not strictly of design but certainly of experience.

The industry's tendency to improve speed of delivery in realtime web tools has its consequences Not everyone can afford to be in the stream for great

> If you **design for clients** then reflect on the client's understanding and expectation of the social product or service they need built. What assumptions does the client have about social media? What hopes and expectations do they have for the product's use? Who do they expect to use it, and what for? What do they hope to achieve? What internal needs — users, sales, numbers, buzz, etc. — are they trying to meet? Are their expectations aligned with what users will be doing with the product?

stretches of time, and many complain of being overwhelmed by realtime content feeds. Some people experience this form of communication as an expectation or demand placed on their attention: if not as a constant distraction, then as a call to participate. Similarly, notifications of realtime requests creates substantial redundancy across social networks. Some of these incremental system and design choices may improve individual services, but at some cost to user experiences in the aggregate. The first order improvement achieved with realtime notifications results in secondary effects and second order consequences at scale. Users pay for these incremental improvements with their attention. In reaction to the increased demands on the aggregate attention of many, a small number of users may contribute even more. The result is an imbalance of participants in which small numbers of active users "over-share" because the audience at large is paying less attention. These users then interact increasingly with those engaged in the same thing — again leading to an imbalance of activity. (Filters and algorithms provide some correction, as on Facebook. And this is a perfect example of design's new challenges.) And so, design choices intended to improve the user experience may ultimately perpetuate, if not exacerbate, the very problems they were supposed to fix.

All of this should serve as an example of the utility of a frame-centric orientation. Primary frames, and first order design choices, must be complemented with consideration for secondary frame, and second

> Try using your product or service **as if you were a different user**. If it helps, pretend that you are a colleague or friend. How would they use the tool? What would they be using it for? Why would they use it? What would they do? Always try to think about social products from positions outside your own personal experience.
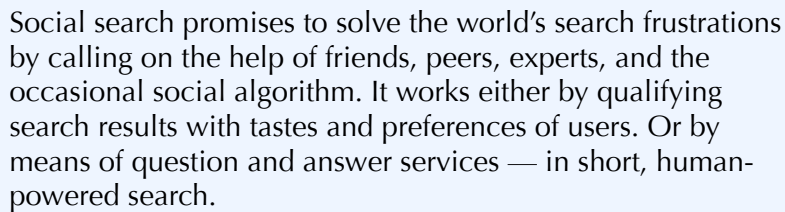
order consequences. These second order consequences can be understood and anticipated only by means of a commitment to user centricity, and subsequence social practices.

People are the content

- People are the content of social media
- The content of social media is what users contribute as communication: social media systems are made of the contributions of contributors
- Because contributions are often navigable, users themselves are navigation
- Users can find their way to content through one another: contributors connect to contributions
- Users can find their way to others through content: contributions connect to contributors
- Primary order interface features and functionality have secondary effects that may lead to self-reinforcing social outcomes
- Improvements and enhancements of first order user experience should take second order consequences into account
- Users relate not to social media products but to communication and social activities of others
- Users interpret activity on social tools and draw their own conclusions about what's going on
- The better users can understand and relate to social activity on a system, the more comfortable they will be participating
- Users differ in their social interests, online social skills, and competencies with social interaction
- Users must feel able to show their interest in others in ways that are free of personal risk of embarrassment
- Users' availability for communication and interaction with others leads to further appeals to interaction — communication among users is a type of activity that is intrinsically self-sustaining
- Users manage and maintain their presence on social media not only for their own sake but to suggest and provide cues to other users

- Social engagements provide value to the user experience that is neither utilitarian nor informative, in conventional terms

> Social search promises to solve the world's search frustrations by calling on the help of friends, peers, experts, and the occasional social algorithm. It works either by qualifying search results with tastes and preferences of users. Or by means of question and answer services — in short, human-powered search.

Designing user engagement

Social interaction design takes an empathetic view of users. Users' experiences come first, and should be front and center in the designer's mind. Designers need to think *as if* they were users, and not just the kinds of users they themselves would be. Designers cede control over design as influence and embrace instead the perspectives of multiple users, and of frames of experience. Thankfully, acquiescing in the face of user interests benefits the product. In letting go of control over use cases designers can learn to anticipate a greater number of user experiences and outcomes. For design can focus on the social dynamics that may be leveraged amongst a product's population. In taking a strong position on the side of user experiences, one difficulty becomes immediately clear. Which user, and whose experience? Social media don't have "ideal" users. Social practices develop only when a sufficient number of users gets involved. If social practices are organic and self-reinforcing, which social practices matter more to a particular social application? For all practices are not equal, and all are not equally interesting to all users. The users and practices that work for a social tool, and which make them work, are specific to a product, application, or service. There are no global answers, just a range of more-or-less educated guesses.

Self-Other-Relational Medium?

The actual user experiences of social media users are of course personal and private. So the designer needs a kind of personas 2.0 with which to organize different users in the abstract. There's no avoiding a conceptual abstraction. One possibility, then, would be to group users according to communication and interaction styles. This should align design thinking most closely to the motives and interests of users. After all, users have an interest in social media, and take up their interests with other users. Interests, not needs, are the proper

way to frame user engagement (it's social media, after all, and so entirely voluntary!) Personal, inter-personal, and social interests can be grouped into three types: Self-interested, Other-interested, and Relationally-interested. These are self and social orientations, manifest not just in how users relate to media but to themselves and to others. These types don't correspond directly to actual people. Rather, they are personality type distinctions useful for the purpose of thinking through different user experiences.

The Self-oriented user starts his or her social media habits from a position of the self. She or he is projected into the "space" and finds uses for it to extend self image and a sense of self. Other-oriented users start from the activity of another user, preferring perhaps not to talk about themselves but to respond to others. Relationally-oriented users become engaged through social interaction and group activity. Theirs is more an experience of social scenes and pastimes. A fourth category exists also, for users whose interest in social media is primarily as a medium for publication and content consumption. These users, often professionals or organizations, abstain from personal social uses and instead adopt social media for the purpose of distributing or consuming content.

Adopt multiple perspectives Designers need to excel at adopting the different perspectives represented in a healthy user population. What are they? Who are core users? What kinds of users are attracted to them and their activities? What kinds of interactions seem to fuel the most committed members? What kinds of content do "passers by" find interesting?

- White board blank user profiles. Flesh them out over time. What do these users do and enjoy? What do they communicate? What are their activity walls like?
- Identify and whiteboard key social dynamics. Does the product support the needs and interests of pundits? Celebrities? Experts? Socializers? What groups, cliques, and cultures have emerged? What are their most common practices? What are some ways to expand on them?

These user types need one another. Experts and pundits need their fans and followers. Fans need their experts and pundits. Socializers need their friends. Event publishers need their attendees, among them particularly the socializers to talk up the event. Social dynamics like these appear when social media succeed in creating active and participating audiences. They operate on the basis of interests expressed and communicated by users motivated to seek the attention of, and pay attention to, one another. What, then, are these

interests? And how are the interests served and captured by social media specific to the medium?

Other users

Social action is action that has others in mind. The sociality of social

> **For many people, social media have simply become practices of the Self.**

media depends on the presence of others. This is at the core of each user's experience. Whether a user believe him or herself to be the focus of others' attention, or feels more like an observer, it is still this mental expectation that secures social on the medium. (In this sense a user can have a social experience without directly communicating with others.)

Sociologists call this awareness of others an "Other consciousness." As discussed earlier, mediation of this experience of and with others involves experiences with mediating features and elements of interaction and communication. Gestures, system messages, following activity, and so on — these are proxies and substitutes for face to face interaction. Consciousness then, of the other, splits from grounded social interaction and takes on new forms. This means that different types of users become engaged in the mediated experience of others: be it an audience, a fan-base, a close-knit group, or a live chat. The tendencies and inclinations of any one user to interact and communicate in some ways more than others will attach to the ways in which the medium amplifies experiences. Self, other, and relational interests can be taken up in the features of online social interaction that amplify those interests. (A pundit secures and maintains a large twitter following.)

This other consciousness need not be front of mind to be a motive for behavior and participation. Sociologists and psychologists alike would simply ask: What would a person do on social media if there weren't others involved? The other "exists" as an orientation that shapes and influences behavior and activity even when first order actions are mostly non-social. It's possible to internalize others — specific people, as well as audiences. Obviously people sustain relationships with others when they are absent.

The degree to which a person is motivated by others, and aware of their social status or standing, inter-personally and socially, of course varies. Social media engage a user's ideas and beliefs about his or her own presence, appearance, value and interest to others (and of others). This means that systems need to involve users in themselves. Self awareness and other consciousness then are each important aspects of social engagement. The ways in which social tools engage a user's self, other, and relational interests shapes the kinds of interactions and practices that develop.

1 Who do you need? ▸ help

Handyman, Maid, or Plumber

2 When should they start? ▸ help
⦿ **I'm flexible**
next few days ⬍
◯ Within the hour (it's urgent!)
◯ At a specific date and time

3 Where do you need them? (zipcode) ▸ help

Enter zipcode

4 What do you need done? ▸ help

For better quotes, please answer some or a

📎 Attach photos or documents about this job

Self and other

- Users of social media become self-involved: they become involved in their self image and in how they are perceived by others
- These self-involvements are self-reflexive, that is, users are self aware without having to be mindful of their self awareness
- Users monitor their presence and actions among others with varying degrees of self-awareness
- Users' self awareness and self image are affected by awareness of others, or Other consciousness
- Social media trade in the kinds of interests and communication that facilitate online relationships among users
- Social media are an extension of a user's ways of participating in relationships through social activities, events, culture, professional activities, and so on
- Other consciousness may substitute for being with others
- User self engagement is sustained by the user him or herself. The user provides his or her own version of what's going on and becomes self-motivated.
- Users will tend to become involved in projects involving their projected and reflected self image and sense of self
- The user must often base his or her understanding of others on impressions gleaned from what the system makes available

- Some amount of play and imaginary engagement thus become unavoidable

Self engagements

People take interests in others both generally (social as audience in general), and particularly (another user in particular). One of the unique "special effects" of social media is its conflation of personal, social, and public "spaces." So, users can interact with each other directly, but also and at the same time "in front of" others. But not in the way that they might in a face to face situation (where they can see and react to others present). Rather, these direct interactions unfold in front of an expected, anticipated, and mentally projected audience of others. It is for this that some people will feel a different kind of self awareness when, say, retweeting a celebrity. The very act of naming a celebrity on a service like twitter can create the sense of having been present to them; similarly, of having been seen being present. This is a social mirage, of course, but is nonetheless significant if the designer is to appreciate social nuances produced by use of social tools. For these are forms of mediated, social Other consciousness.

On social media, just the *ideas* of others, and of activity and participation, can replace "actual" communication. And these ideas and impressions effectively substitute for the real thing. Indeed, the task of social interaction design is to capture and sustain user interest in real relationships as well as abstract and imaginary social interests.

That is, where, in which cases, and for what kinds of users, imaginary and projected audience relationships become motives for use. There would be no twitter if it weren't for the fact that users see their own tweets in the same feed as those of the people they follow. (And not, which would be more accurate, in the stream of people who will read their tweets: followers.)

Many dating services that offer video profiles still trade primarily in written profiles. It might be that videos are too real for many online dating fans. Or it might be that video personals make a lot of users self conscious. In activities that engage the imagination, less is sometimes more. Video might be more effective at determining mutual chemistry, but perhaps a bit of voyeurism, serendipity, and charmed messaging work better to get the juices flowing.

First order communication and direct interaction with other users is thus always combined with a degree of second order sociality. Direct interaction with a user will be interpreted within a secondary frame that situates and makes some specific sense of the interaction, from social (secondary frame) perspectives.

Interests of the self
Social and interpersonal interests may include:
- A scene or social activity
- Who's who and how to get recognition, generally
- User's own self image, internally experienced
- User's image and presentation, socially experienced
- Another user, internalized and experienced internally (imagined)
- The interest another user has in him or her, experienced internally
- Another user, known by his or her contributions online, and experienced by those acts of communication
- Another user's impressions and interests, experienced internally but interpreted from feelings and thoughts as expressed

Self-interested motives
Uses of social media motivated by a user's social interests may involve:

- collecting socially relevant items (including friends) for oneself
- accumulating socially relevant distinctions for oneself
- self promotion, brand promotion, site promotion, profile promotion (social capital) for oneself or others
- appealing to others through requests, posts (bog, video, audio), and comments, etc,
  - in order to be seen contributing
  - in order to respond to others
  - in order to be seen responding to others
- participating in collaboration (wiki, lists, tagging) for reasons of abstract social and common good
- avoiding risks, embarrassment, social faux pas, and failures (real or imagined)

Motives

- Motives are not stated explicitly, but may still be interpreted
- Social media thrive in the ambiguity of user intention: the fewer the determinations, the greater the range of possible interpretations
- Users communicate, or attempt to communicate, to resolve social ambiguities
- Where user intentions matter become compelling to users, they often fuel participation (e.g. online dating)
- Social media often excel at sustaining users' illusions, hopes, fantasies, and so on
- Status, rank, game level, and other game mechanics reflect on users and encourage sustained participation
- Ambiguities contained in communication, in use of symbolically-mediated actions, and in transactional systems like karmic or gift economies may be leveraged to engage user interest. Here the intent of another user's actions may be screened back or concealed — this too sustains interest.

> **Storyboard user experiences** from the perspectives of different kinds of users. Address how the product is used, by whom, and for what. See how many stories suit the product. Which stories are best served? Which are neglected? Explore the product's social utility from the perspectives of contrasting social use cases and narratives. Try to expand design options by focusing on user stories.

The user's inner experience

If a user's relation to and experience with him or herself is a unique feature of social media use, then what of the user's state of mind?

Mood and affect are difficult topics for designers — they would seem to lie entirely beyond the designer's control. And yet many commercial experiences take mood into account. Some, like the oxygenated environments of Vegas, the musical theme parks of family vacations, and so on anticipate and seek to influence people's moods. So, too, state of mind and inner experience should matter a great deal to the social interaction designer. Users might be good or bad at online interactions, for example, and their competencies online could easily ruin their experiences. Designs should avoid frustration and negative feedback (poorly phrased alerts, reminders).
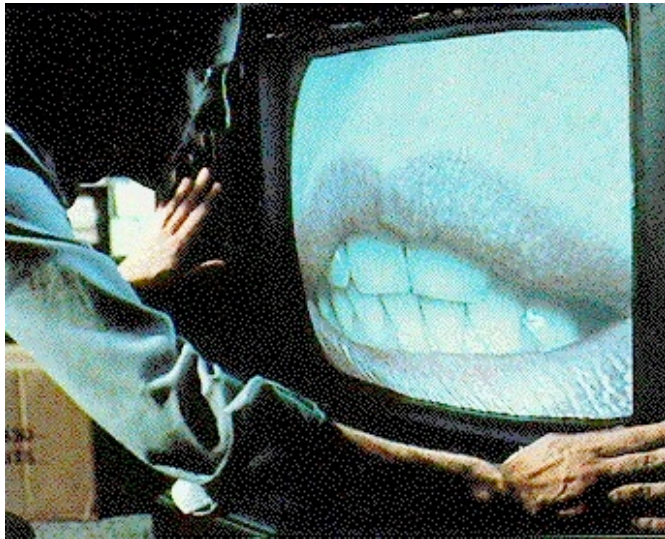
Social participation is affected by these "high touch" experiences. Distinctly social qualities like trust, risk, embarrassment, heckling and so on all affect social media. Good social media design tries to anticipate the social psychology of online socializing in general, and as much of the inner psychologies of diverse users in particular. Many social tools that cater to kinds of interaction and experience that are susceptible to the poor handling of feelings would benefit from better social interaction design. Examples include dating sites; many niche social networks; and fan sites. States of mind, moods, enthusiasm, involvement, and other aspects of user psychology are highly communicable on these kinds of sites. Even twitter has struggled to properly adapt its under-designed interface an features to the interests of a multi-faceted user base.

All online interactions require that users turn to past experiences to make meaning from communication, and to choose what to do. In some cases users can draw upon existing relationships and real world experiences. But not always. To some degree, then, a product's social architecture shapes affective experiences (those involving moods, feelings, and emotions). The user experiences of social media are strongly shaped by interpreted actions, internalized intentions, anticipated responses, and other gaps filled and silences sustained. It is hard to think of a product-oriented design discipline as contingent
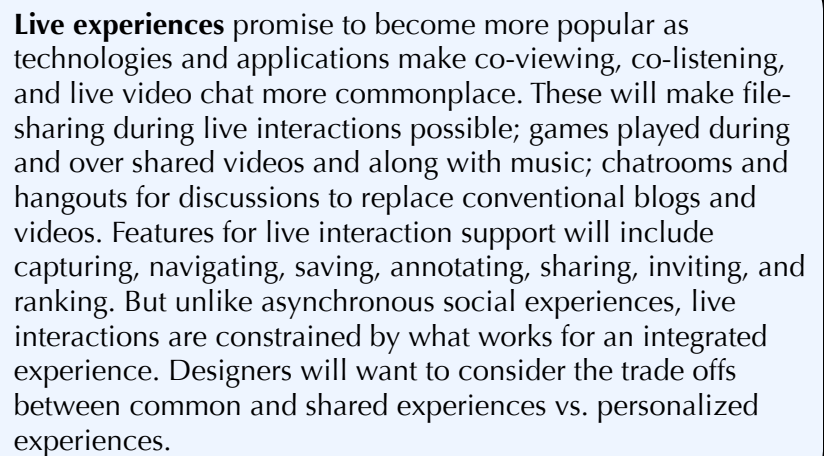
on the psychology of its customers, and as susceptible to the dynamics of their interactions with each other, as this one.

Trivial as they may seem, these inner experiences matter a great deal to the social interaction designer. They are, in fact, quite non-trivial, for the simplest interactions of all can be those filled with the most significance and meaning. They can also be the moments and experiences most vulnerable, most fragile, and most easily sundered by misinterpretation and misunderstanding. Inner experiences that are self-involvements with mediated relationships are those which may crack most easily.

> **Live experiences** promise to become more popular as technologies and applications make co-viewing, co-listening, and live video chat more commonplace. These will make file-sharing during live interactions possible; games played during and over shared videos and along with music; chatrooms and hangouts for discussions to replace conventional blogs and videos. Features for live interaction support will include capturing, navigating, saving, annotating, sharing, inviting, and ranking. But unlike asynchronous social experiences, live interactions are constrained by what works for an integrated experience. Designers will want to consider the trade offs between common and shared experiences vs. personalized experiences.

Inner experience

The user's inner experience involves a complex of intentions, interpretations, purposes, and distractions:

- Social media use can contribute to a user's sense of self, competency, social well-being, and more
- Users participate in social media to satisfy immediate interests as well as longer-term goals
- All user contributions are subject to interpretation, and in no case is the user's intention completely transparent to others
- In some cases the user's intention is not transparent to him or herself
- Self involvements and inner experiences are difficult to identify and separate
- Experiences with social media involve self reflection, internalized acts and communication of others, projection into gaps and silences, and more
- Lacking in facts, clues, and cues, users often project their own states and interests onto others

- Social media create new kinds of social "spaces"; interpersonal yet socially visible
- Social media create illusion of being seen — a sensibility sometimes accurate, sometimes not
- Inner experiences are not available to designers, who must use frames of social interaction to shape activities
- The user's inner experience, being inaccessible, is no less important or real

Internalized moods, feelings, and self-reinforcing emotions include:
- Alienation and isolation
- Pride, shame, and other aspects of self-esteem and self image
- Depression and dejectedness
- Enthusiasm, excitement, and zeal
- Over-confidence and gregariousness
- Exuberance and excitement
- Shame and self doubt

Indications of these states and dispositions can be found in user behavior and activity. Here are just a few examples:
- Acting out in comments and posts
- Flaming and reckless commenting
- Lurking and risk aversion
- Compulsive profile maintenance and updating
- Insincere or tactical friending, listing, and unfriending (following)
- Geosocial stalking and lurking
- Over-interpretation and dwelling on the meaning of others' messages
- Over-posting, commenting, and messaging
- Interest that fades when participation is unacknowledged and communication is unrequited
- Transference, misinterpretation, and misunderstanding
- Attention seeking behavior

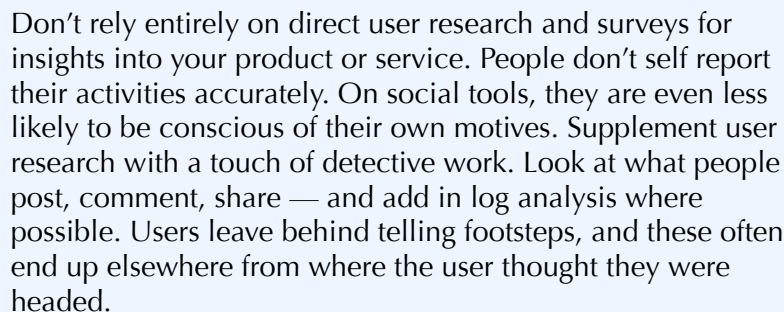> **The surplus of communication on social media creates demand for attention.**

Each of these may involve:
- Intensity of involvement with social scenes and circles
- Understanding of how the world works
- Sense of individual position in life

- Personal reasons and explanations for social occurrences
- Fantasies and imagined social relationships
- Inner monologues and recurring inner thoughts
- False or misguided explanations of others' behaviors
- Causes and intentions falsely ascribed to others
- Misperception of the social consequences of certain actions and responses
- Misinformed ideas of when, how, and to whom to respond
- Strategic plans and thinking
- Projection onto others of their intentions
- Internalized explanations of others' behaviors
- Mirroring of others' needs and interests

Clearly there is no designing the inner experience of users in general, nor of users in particular. But users on social media have affects. They experience moods. They may mistake what they see or read, may misunderstand intentions, misinterpret social interactions. Some social dynamics will naturally (that is, for social reasons) incline towards particular kinds of communication and interaction — it is up to the designer to anticipate the kinds of emotional content these may involve.

> Don't rely entirely on direct user research and surveys for insights into your product or service. People don't self report their activities accurately. On social tools, they are even less likely to be conscious of their own motives. Supplement user research with a touch of detective work. Look at what people post, comment, share — and add in log analysis where possible. Users leave behind telling footsteps, and these often end up elsewhere from where the user thought they were headed.

This section has avoided making any global and generic advice about the affective and inner experience of users, because these tend to be specific to the who and what of particular interactions. But while there's no global lesson to draw from this, inner experiences must be noted.

Designers do not so much design social media to satisfy particular user motives as fashion a social architecture that can channel them. Design works with the elements of social interaction that the screen reflects, deflects, and refracts, and with the power of what's not there, as with the transparency of what is.

Forms of action

All user activity must engage with and through an application interface. This is where the deeper meanings of communication and social interaction meet the functionalities and features of specific social tools. It is where the designer applies his or her work, and makes selections intended to further desired social practices. Social media design thus involves a presentation layer of onscreen forms and their contents, implied social practices, and cultural forms and references.

The social is no everyday

The presentation layer is built around familiar design and communication elements. Most of these were born out of the web, and so reference publishing, and news media in particular. But there are also e-commerce, search, video, audio, and game-oriented themes of presentation. Designers may mix and match as they wish, adhering to loose standards and conventions. Where best practices work as on-screen solutions, they make their way into social media. The impetus for use of common and familiar design conventions, if not best practices, owes to the fact that established designs are already known to users. Innovation always begins with the familiar.
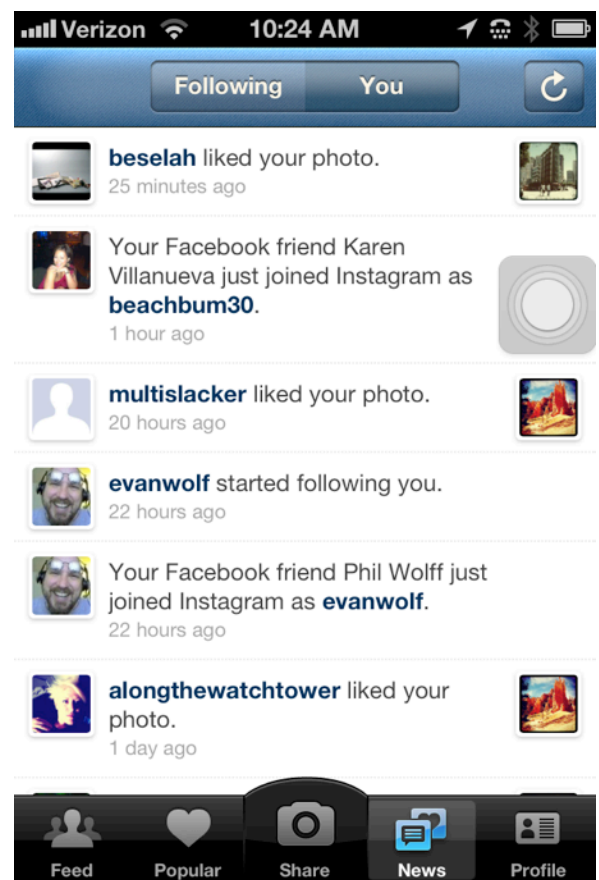
Interface design is rendered at what is often called the presentation layer. This is the layer of application interface presented to users. What was described earlier as the primary frame of user experience. Here, users "interact" with content, layouts, elements selections, buttons and so on. Social interaction, then, only becomes meaningful insofar as it is able to

make use of and appear through the presentation layer. Obviously, the presentation layer selects out the users and audiences any particular user comes into contact with. And the presentation layer is also where additional social attributes, such as presence signals, messaging, alerts, etc, are displayed. So the presentation layer in social tools plays its dual role: enable successful primary frame experiences, and convey secondary frame social practices.
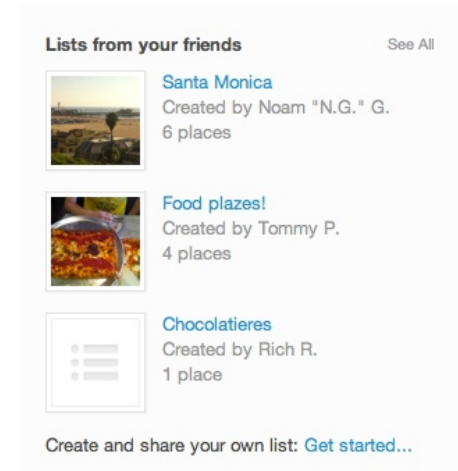
The presentation layer can be "read" or interpreted on either its primary or secondary order of meaning. What it does functionally, and what it means socially. Take, for example, the list. It has a presentation form, which is an arrangement of items (sometimes clickable), and a title. It is ordered. The type of list it is, say a top ten or a list of favorites, is in its content as well as the context in which the list appears. These list attributes are not defined by presentation but by the arrangement of information and content. If the site is social, list attributes include social attributes — for example, popularity, newest member, most points or highest rank. (Lists of people are a form of social order.) The context or packaging in which the list appears, in other words, tells the user as much about what the list is and what to do with it, as the list does itself.

Identify some of the most **common real world use cases** your product or service meets. Try to accomplish them using your product. If it is a geological application, go someplace new and give your product as if you were a new user. Reflect on the assumptions you made about the product and how people would use it to accomplish real world tasks or interests. What do you learn?

Publishing and presentation forms used in mass media appear also in online media. These forms include familiar formats of news, talk shows, game shows, and many other narrative and entertainment forms. They include also forms that drawn from print media, software design, and games. Designs of the social media screen may reference whatever forms are useful and sensible, as long as users know and understand their form of presentation and social uses. For example, top ten lists, ranked lists, trending lists — these all leverage formats familiar from their use in newspapers, magazines, radio, and television programming

(especially news and special interest shows). Limitations on design techniques are limited really only by their suitability for social interaction. (These lists *create* a view of social relevance by ordering most important/popular/active etc users. They are a second order observation of aggregate social activity, presented by means of a first order form.)

The presentation layer assembles disparate contributions into common forms. Individual user contributions and actions may be aggregated by the system, and then counted and arranged in some kind of order. And so aggregated activity can be used to provide the appearance of community participation, even when there is little.

> **Enterprise** use of social tools involves a unique set of social factors. Users are employees, and so have privacy and performance concerns. They may or may not welcome efforts to share and collaborate on projects, depending on the company's internal competitiveness. Employees may in cases even resist use of social tools to surface their informal relationships and interactions.
> - Design roles into social tools and uses to protect employee users from risk
> - Design these roles to provide social benefits to the company

Themes
Social interaction designers can use these forms more or less effectively to facilitate user engagement.
- Social activity is thematic in nature. First among design choices is communicating a system's theme: what it is, what it's about, and for.
- Themes might be movies, music, dating, jobs, or purely online social activities and practices like games, geolocal, etc
- Within each theme found in social media, conventions govern the presentation of relevant information, style, organization, and activity (interaction and communication)
- These themes are present in daily cultural practices and translate into social media systems by accommodating the user's own personal interests, stylistic choices, and preferences
- Conventions may also emerge around what users can add to the system
- UI specific forms include lists, communications, collections, and more
- Users contribute favorites and personal choices, share and communicate around common interests and tastes, connect

through shared items and interests (brands, products, authors, bands)

- Interface design elements arrange and order content of these social forms
- Navigation determines how users interact with them
- Communication tools and elements permit commentary on these elements

Content (text, images, video, navigable lists, etc) inherits meaning from the form in which it is presented. Interactions and codes that govern communication can also be associated with the appearance and form of content. For example, lists may be a common web UI element, but they accrue meaning from their secondary frame references. A list of newest members; a list of popular tags, a list of most viewed videos. The list is the design element; what it means depends on the social ordering it uses. This will usually be most to least, but of some ranking selection that is socially relevant and which provides a view of aggregate users or content. Lists are good for making social distinctions matter.

> Twitter is proof positive that designing the social is not a matter of user interface or feature richness alone. If anything, twitter demonstrate the rich social and cultural practices that will develop when audiences are assembled around unstructured, open, and free communication platforms. The less the design, the more the practices.

Forms

- Users might read what they see on a site for the meaning suggested by the form, or for its content (provided by another user)
- The contributions of users can only be rendered and presented by means of forms common to social media: writing, audio, image, and video
- Each of these forms may be read by others as corresponding to the author's or poster's personality, interest, goals, motives and so on
- Common forms include:
    - Lists
    - Friends
    - Collections
    - Pictures
    - Blog posts
    - Comments

- Shout outs and messages
- Questions and answers
- Featured stories
- Gossip
- Testimonials
- Links
- Gestures and compliments
- Check-ins
- Status updates
- Tweets
- Social bookmarks
- Ratings

Primary and secondary frame forms

Social content is presented by means of first order actions and primary framing devices, but has secondary meaning references. A user interacts with a list by selecting (first order), to see who's on the list (second order). No experience of social, then, is possible without use of a conventional and technically available first order framing and presentation device.

At the first order of design, the two can easily blend together, as when content is selectable or navigable. The list, to use it as an example again, is a common means of displaying content arranged by a logic familiar to the user. Recognizing the order of arrangement of list items, and knowing what the list is about, users may read or navigate list items and know what to expect. The user often knows that clicking a list item navigates to a profile page, content page, item page, or what have you. This is first order action, the primary frame experience of list navigation being supplied by the design convention of the list as a type of content view.

At the second order of interaction and activity, where secondary frames of meaning serve as a better description of user experience, social meanings supplement those of the first order. The list mentioned above is now a social list: it is a view of popular, most active, or newest users. Or it is a list of users by social rank, points, or

number of followers. Now the meaning of interaction and the social activities related to use of this list refers to social and cultural themes and idioms.

Ease of use and user familiarity is one clear benefit of this wide applicability of common user interface elements and features. This extends into social

> **Un-design the interface** Strip the design, navigation, and other interface elements from screenshots of the product or service. Print or project these stripped down screens and review with a team. What is going on? Who is participating? What's being communicated? What kinds of relationships can be seen? What kinds of actions seem common? What kinds of responses are users soliciting, and are they occurring? Are there signs that communication, interaction, and relationship activity could be given better support? What redundancy and repetition can be seen that would indicate high levels of user interest?

practices, whose common designs and technical implementation again leverage user familiarity. Status updates on many social networking sites would be an example of this. One should be reminded that common interface designs, and even social practices, are subject to differences in cultural context. Cultures of use develop differently around the same social practices. (Linkedin status updates are not the same as tweets.)
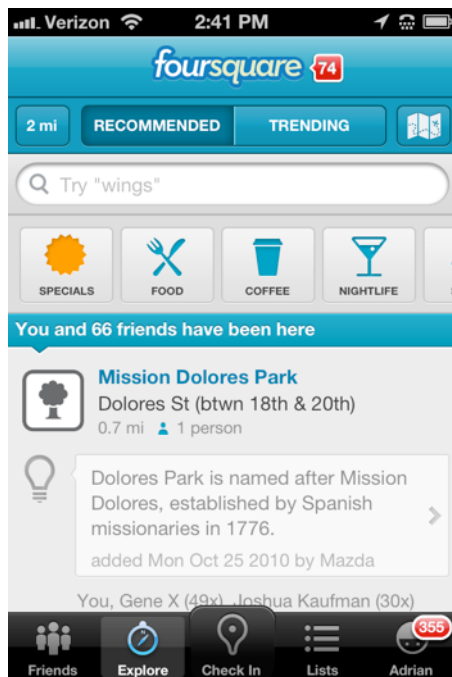
This might all seem excessively complicated. But the distinction between first and second order is salient indeed. It is an explanation of why in some cases, design aesthetics are less critical than social functionalities. Also, why some designs increase participation even when user engagement leaves much to be desired. Meaningful interactions can be tweaked and captured by means of first and second order factors — but the two cannot be experienced or presented independently. All social must take the form of a common set of design elements.
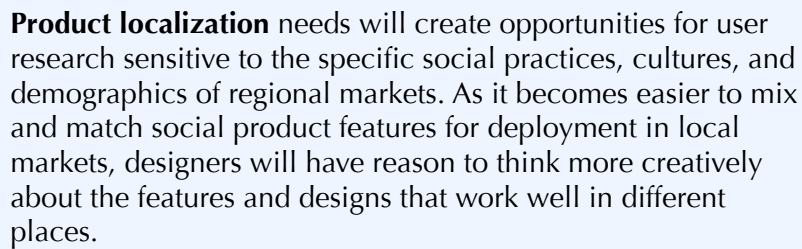
Primary and secondary frame actions and activities

If a first order user action could be understood through its primary frame meanings alone, social distinctions would be irrelevant to

design. So too, would the experience of social. Social meanings are not in the interface but are in secondary frame meanings. At the secondary frame of meanings, social activities add context to user actions even when user actions employ the same interface elements and appear to use the same social practices. The action of browsing listed members of a site is a different social activity on a dating site than it is, say, on a review site. The former may be private and "romantic," the latter social and competitive.

> **Product localization** needs will create opportunities for user research sensitive to the specific social practices, cultures, and demographics of regional markets. As it becomes easier to mix and match social product features for deployment in local markets, designers will have reason to think more creatively about the features and designs that work well in different places.

Friending is another such example of a common social practice that has different idiomatic meanings on twitter, Linkedin, and Facebook.

Idioms can also be common to different social themes. This means that at the level of secondary frame activities, actions have a social meaning specific to social context. This will involve the site or service's theme as well as its user population, culture, and subcultures. None of these is stable and all involve social dynamics out of the designer's immediate control.

The social interaction designer leverages first order elements for the purpose of achieving anticipated, second order social outcomes. Today, these tend to fall into common social practices helped along by the industry's habit of re-using best practices and copying existing successes and avoiding failures. Application features borrow from one another as a means of securing success and leveraging widespread practices. But the richness and diversity of social media will always be found in specific contexts and uses. Small differences can lead to significantly different outcomes at scale. Following is one example of a common practice; status updating is another. Geolocation check-ins are an emerging practice and as yet not sharply distinguished by the applications that use them. The better the designer can think about the interplay of first and second order experience, the more he or she can manage product development.

Social actions
Some further examples of social actions and related practices follow:

- Windows onto other users to drive connections among members

  > **Activity Role play** product interaction by acting out the parts of different types of users. Each participant acts out a personality and reasons for using the product. Participants might craft mock profiles, interests, habits, friendships, and professions. Act out the product (without computers!) and its uses. Capture interactions on white boards or on butcher paper. Use the role play to explore how the product is experienced by different kinds of users. Document what is learned, and discuss implications for features and design.

- Views of social activity overall are only possible with use of forms of representation
- Blurring of public and private to create compelling ambiguities
- Asymmetric friending eliminates the bottle neck of contingent reciprocity
- Relevant "traffic" and activity views can reinforce user participation
- Status updates drive increased realtime participation
- Question/Answer forums may surface content, create connections, and fuel the production of topical content associated with users
- Showing and hiding people and content, and using partial views of each, can create interest and guide navigation
- Content can be created and arranged according to common social orders:
  - Attractiveness
  - Popularity
  - Desirability
  - Status
  - Achievement/experience
  - Authority
  - Credibility/trustworthiness
  - Expertise
  - Role/position
  - Seniority
  - Recognition
  - Leadership
  - Scarcity
  - Expense/cost
  - Importance/relevance
  - Recency
- Content can be arranged for quick visual comparison
- Partial views of content and people may inspire curiosity and intrigue

- Votes can popularize content and spawn trends
- Ratings can be used to populate ordered lists
- Check-ins provide a quick incentive for use
- Gift economy exchanges socialize objects and content through new or existing social relationships

Groups, crowds, and audiences

The audiences that take shape around social media are what makes a service or application successful. The challenge for the social interaction designer, then, is how to organize and structure an audience — for purposes of engendering richer, deeper, and sustained interaction and participation.
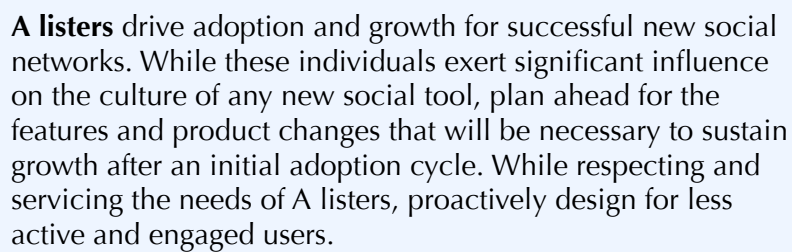
Audiences are capable of doing things, of building up and perpetuating their own practices. They form as communities that contribute, write, post, upload, share, review, comment, play, and communicate. How much of this is a reflection of design; how much of it is a byproduct of the acts of individual members? Of course, audiences are not the direct product of design. They are a product of interactions between their members. But insofar as media organize content and both constrain and enable interactions, their particular "personality" or character does reflect design choices. Close-knit audiences assembled by niche networks may seem more like a group or community. Audiences on open tools like twitter may seem more like a public.

Until quite recently, most social media functioned like "walled fortresses." That is, one had to join a system to interact with its users. This offered communities some protection from the public at large, and gave designers control, real and imaginary. Audiences on these social networks were more literally assembled; and user participation centered on membership within a service. More recently, however, the trend has been in favor of distributed, open, and interconnected services. Activities are shared across networks and services. They are shared across devices, too, and in front of audiences assembled not as communities on walled-garden networks but much more dynamically — selected by rules and settings that protect privacy,

connect to friends, and publish to the public. Activity badges and widgets, as means of porting content to blogs and other social media systems, help to distribute and personalize user activities. Music collected on one site can be listed and even played from others. Photos, bookmarks, links, posts, and comments can be fed and imported into multiple networks and services. Today, audiences are not only assembled by social media, but disaggregated and re-aggregated by them also.

It is common to think of audiences as viewers assembled around a context, be this a community, relationships, a branded site or service, etc. But audiences are also assembled around dynamically selected interests, such as realtime searches, hashtags, most-talked about stories, and so on. Any common and shared form of identity

> **A listers** drive adoption and growth for successful new social networks. While these individuals exert significant influence on the culture of any new social tool, plan ahead for the features and product changes that will be necessary to sustain growth after an initial adoption cycle. While respecting and servicing the needs of A listers, proactively design for less active and engaged users.

used to collect an audience, even if for a stretch of time, may be described as an audience. These temporary audiences may have few internal relationships — as with an audience following a piece of news or following an event on twitter — but they are referred to as audiences nonetheless. Their attention to a topic may in fact be higher, and thus more valuable to advertisers and marketers, precisely because it is episodic, temporary, and passionate.

Disaggregation of the social web has exploded the number of contexts in which content can be captured, displayed, and redistributed. Content is forever re-contextualized as it is redistributed among connected sites and services, and current trends point towards even greater sharing and connectedness. This applies not only to "static" profile resources and identity information, but also dynamic and passing contributions like social bookmarks, comments, status updates, tweets, geolocation updates, and check-ins.
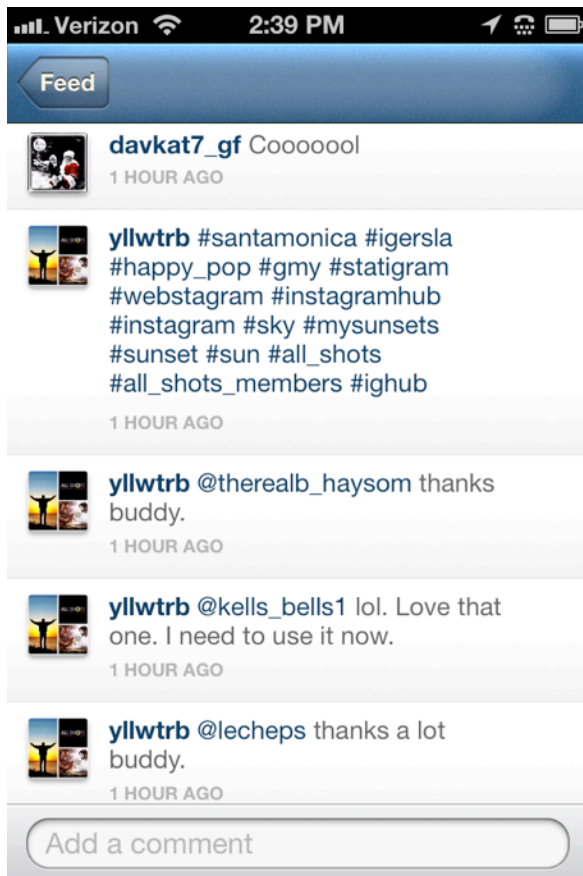
Relationships and relations

The loss of context in social interaction online is as much a concern for designers as it is for users. Designers cannot control secondary frame outcomes. They can shape first order framing. In social tool use, it is often personal and social relationships that shape and inform secondary frame experiences.

Social relations and relationships are a kind of context — but not in the sense that onscreen design and feature functionality might reflect directly. They furnish a kind of context in the interpretation of behaviors, activities, and meanings. And they do this principally where communication and social action are involved. It is for this reason that the low design context and rudimentary social groups and identities built into a tool like twitter can still supply many users with a high degree of socially relevant interaction. When people know each other well, the passing comment or message needs far less context or packaging. For relationships can help to unpack the meanings of conversation. In passing interactions with strangers, etiquette and conduct offer guidance for what is expected or possible next. (And the ease of use of many social contact features — like following — contributes to many false expectations.)

Audiences captured and assembled by social media have a particular identity and are represented by the medium in ways that create and construct something that exists nowhere else. There are, for example, promoters on twitter whose follow/follow back rituals are strategic –- and to those involved, self-evident even if they are not mainstream. There are commenting cultures on flickr that make sense only to insiders. And numerous other examples of the specific and unique cultural practices possible only because social relations amongst group members serve as vehicles for marginal and coded communication. What social media add to these relations are form

and appearance, history and back catalog, and to varying degrees, social and public contexts of presence and use.

These are social collectivities of a sort whose relations are *socio-logical*. They have social form and function, some degree of common identity, shared purpose, coded or specialized language, gesture, and signaling. They may proscribe roles, positions, as well as articulate other kinds of social differentiation. They are in every sense of the term "cultures" — only that their practices take place online.

Cultures (and subcultures) not only become specific in what they do and how they identify, but in what they observe, track, follow, capture, save, re-use, and create. They have the power to communicate very specifically. And in certain circumstances, members of a culture move together and with a shared purpose. Popular examples of this have included fan sites, flash mobs, and social activism, to name but a few.

The cultures and cultural practices on social media at present may be coarse and restricted in what they can do. But this is only likely to change in favor of more dense and tightly-knit communities, as well as more specialized activities and practices. It makes sense to describe some ephemeral and realtime audiences as cultures — by dint of shared interests, common identity, interaction, and communication practices. Any shared characteristic or attribute, if it can be identified and used to target messaging (advertising), will qualify as a relevant cultural trait to those who identify and segment audiences by profession. (Those of who segment audiences by cultural traits and practices may have a leg up on those who still use statistics and data alone. Marketing of the future will market through communication and interaction practices, not just audience attributes, or segmentation, alone.)

Social differentiation
Some of the ways in which cultures online structure and organize relations and activities include:
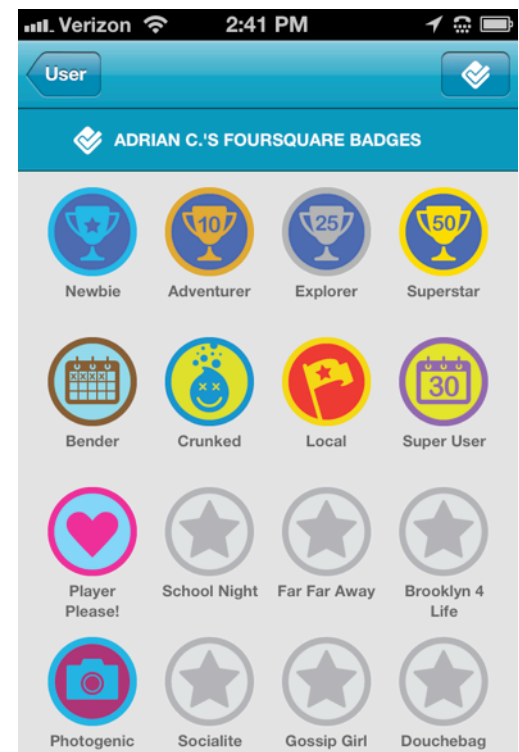
- Selection and use of symbols, icons, graphics, and other items for symbolically-mediated interactions. These are interactions in which the item selected conveys a stable meaning. Outside the culture of practice, use of the item is more ambiguous, contingent on who uses it, and for what relationship purposes.
- Roles, positions, status, and social rank make social distinctions among members of a culture
- Routines can contribute significantly to synching users up with one another, resulting in a deeper sense of being together
- Shared norms facilitate communication and interaction, making it easier to express and interpret intent
- Social distinctions can be made according to members' appearance, reputation, credibility, expertise, achievement, popularity, and more
- Badges, icons, avatars, names, points, levels, etc codify and formalize these distinctions.
- Distinctions can be taken up in social games — as when badges and achievements are object of a game
- Social and cultural differentiators may correspond to actual participation or to perceived distinctions, earned privileges, and so on.
- Etiquette, norms, conventions and other aspects of social belonging can imbue communities and cultures with a sense of mutual respect
- Different kinds of social transactions comprise economies

> **The user interface only gives the social interface a face to look at.**

- Economies establish social and cultural conventions — practices that help to stabilize and organize interactions, as well as make distinctions among participants
- Economic practices include distribution and circulation of items, conventions of gifting, reciprocity, indebtedness, and more
- Social commerce and use of social capital and currency produces and organizes cultural activities
- Transactable items of any kind are valued (have meaning) according to the particular cultural economy in which they are used
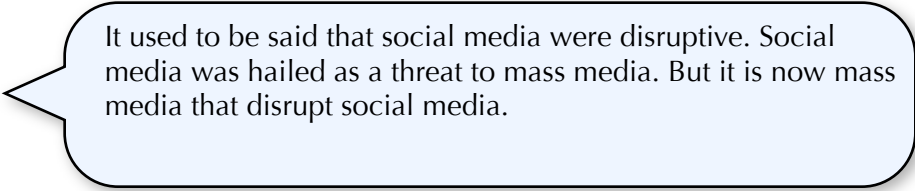
Designing social relations

Social interaction design is aimed at improving user experiences on social tools. Obviously, it is intended to improve the tools, sites, and services themselves. In order to accomplish both, it has to account not only for a diversity of user experiences, and for the development of a social tool over time. It must account for the social dynamics which emerge around a tool or service as it grows and succeeds. And consequently, anticipate a forward-looking development path.

Cultivating and growing community and audiences around social media is one of the more tricky and unpredictable of the social interaction designer's contributions. It is possible to seed a service with individual users in order to attract particular kinds of users. A service might then develop desired social practices more quickly. Community moderation and management play a role here. But much also depends on factors beyond anyone's control. It's for this that social interaction designers want to at least anticipate possibilities, and distinguish probabilities.

It used to be said that social media were disruptive. Social media was hailed as a threat to mass media. But it is now mass media that disrupt social media.

It was mentioned earlier that people become involved in social media by also becoming involved in themselves: their self image, perception of how they are seen by others, their changing relationships and interests on various sites, and so on. Social media provide a kind of encounter with an externalized self and presence. Some even make their online presence a project unto itself. Unavoidably, then, people reflect on their online experiences. This is a normal part of the user experience on social media. People know, and can account for and explain, much of what they do online, and why. The medium engenders reflexive actions and involvements — this means that its sociality includes a strong degree of awareness by people about the social experiences they have on social media. Design needs to anticipate this. For social media are a reflection on their users.

Self reflection is a relation, of oneself to oneself. The reflective moment is an impression formed, a judgment, a doubt, or a passion. Social media are well suited to initiating these moments of reflection. Media serve as mirrors onto one's self, and windows onto others. All by means of representations which appear on the medium's surface

— thus acquiring a kind of social reality. Even self reflection, then, becomes a social reflection. This might include reflection on one's appearance, social status, performance, or attention. Interactions with friends, peers, strangers and even an "imagined" audience of followers may all contribute to these reflections. They comprise of psychological relations.
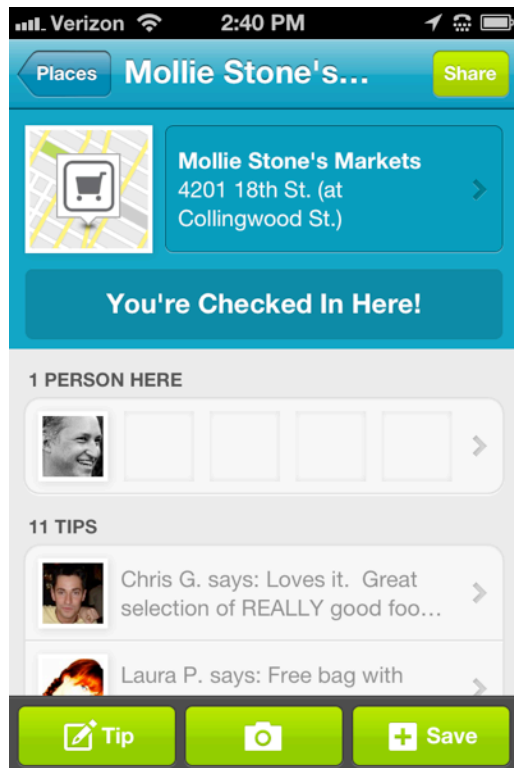
This kind of reflection, by means of a relation, involves the process of identifying. An abstraction combines with an interest, a value with a judgment, an image with a desire. It is through interests that people identify with the world around and outside them. Interests take shape and form in the relations people take up to things, to people, to ideas, values, judgments, desires, and more. Social media furnish a great many opportunities to relate and so to identify with and through the world. When an interest is taken up in something and shared or communicated, not only might it find an audience of one or many people, it becomes a reflection on that person. It becomes, to some extent, attached to their identity. In this way people express, choose, create, discover, and communicate their identities online. Always selecting, becoming interested (mildly or deeply, personally or for the sake of sharing), and making an attachment. Posts, shares, likes, comments, images — all become aspects of a person's identity, both as they themselves reflect on it, as well as how others encounter it.

Participation in this process can solicit and obtain attention. People will find that some of the banal and trivial things they do online get more attention than those that are more important. They may be surprised by what others pay attention to. They may change their behaviors and habits based on their experiences. Interaction not only calls a person into the world encountered online, it provides new experiences on which to reflect, take new interests, and with which to identify (or not). In short, the user, and his or her experiences online, are as dynamic as are social interactions. Identity online is not just a fixed image.

In the course of making habits out of social media use, people encounter cultural figures and references on the tools they use. Popular figures, celebrities included, mediate relationships to interests, sparking admiration and tool-specific practices like following. These practices can themselves become cultural references — as when twitter users follow celebrities, whose relationships to their followers are then covered by mass media.

Some online communities may develop around a core set of ideals and values, passions, interests, or

> **What if instagram** use plateaus because users tire of posting pictures for the purpose of getting likes and followers? What other action models could instagram turn to? How might instagram organize content so that it could be browsed for quality?

practices. Some realtime services may for the most part extend individual habits of use, delivering connections and conversation in passing (common to twitter). Mobile check-ins might provide some users with immediate gratification, while others count points and achievements over time. Each is a different type of practice, and connects users to online activity and content in ways that involve personal interest and social participation uniquely. The social interaction designer's challenge is to identify the core practices that might lead to successful adoption and sustainable growth for any given product or service — while not simplifying or reducing activity to practices of only limited potential and interest.

Many social applications could be improved in ways that might appeal to a more diverse set of users. Geolocation applications like Foursquare, for example, want to diversify activity beyond check-ins and badges so that the location-based experience captures users not interested in collecting points or becoming mayor. Twitter, realizing that social audiences need grouping or listing ability, rolled out lists to satisfy some of the requirements of social differentiation and to enhance individual utility. LinkedIn has updates to increase interaction on a system that was otherwise a social resume site. And there are numerous additional examples. This is simply part-and-parcel of the development cycle for many social products, whose designers may wish to protect what works, and defer changes unless absolutely necessary.

Relations are connections among the data behind the social web and are diverse in what they connect. The relations selected by users to content that reflects their interests, for example, are but one means by which connections are made on this increasingly social internet. Relations are reflected in the links, the navigation, and the views of social content that structure and organize social experiences. Relations might connect an individual and a goal, in which case the relation is mental. They might connect two users on twitter, in which case the relation creates navigation, is a content filter, and also leads to users paying some attention to each other. Friending is a relation that may, but doesn't have to, result in communication. But when it does, communication too creates relations — between what users say and to whom, where, when, and how often. Relations organize people as they also organize content. And users can then relate to themselves (say, as curators) in new ways. Clearly, this can be very motivating. Indeed, many users on points or incentives-based social media relate to their own progress and rank by means of dynamic social status tracking.

> **Connectedness on social networks results in experiences of "coincidensity."**

Relations are bidirectional and asymmetric. Friendship is not felt or experienced by each person equally, or in the same way. Friends are friends for their own reasons. Some people ask for and expect friendship; others offer and extend it. Some enjoy spending time as friends; others value the thought of friendship as much as time spent together. For some, friendship entails trust and obligations, regular communication, and loyalty. For others, friendship is a comfort in being together, shared interests and activities, and an ability to enjoy one another's company. So it is important not to think of relations as having a single meaning. They relate in two directions, are dynamic, and change.

User experiences with social media are relational. When particular practices emerge around a social service or application, their social and conventional meanings will take the shape of informed expectations and habits. These supply a great deal of meaning about the tool and may not be intended by its designers. This is worth bearing in mind, as any social tool may do — or be used for — a number of things. Twitter, in emphasizing the following/follower relation, has led to a cultural practice that values follower numbers as

a social differentiator. Foursquare, in emphasizing points and badges, has made itself game-like without in fact being a game. These are relational practices raised to the form of consistent, sustainable, and recognizable social practices.

Relations

The social interaction designer can emphasize some of the following relations:

- The idea of an audience is enough to inform or shape a user's individual posts and participation. Audiences are represented in the form of statistics, page views, posts, comments, and other types of accounting.
- Users take different degrees of interest in seeking and paying attention to "status" online
- The manner in which audiences pay attention, and in which systems capture and represent that attention, will affect how it motivates users (and which ones)
- They may seem thin, but online relationships can be very durable. Some of what they lose in immediacy and intensity they gain in persistence.
- Social media audiences assemble around information provided by users: shared interests, location, common friends and colleagues, pastimes and activities, and so on
- Relational references organize individual members around shared and common identities and interests
- Audience participation leaves behind navigation (clickable contributions) through social media content using links. Links are relational: associations established between objects or people.
- Connections established by links are involved in relations among members of any audience
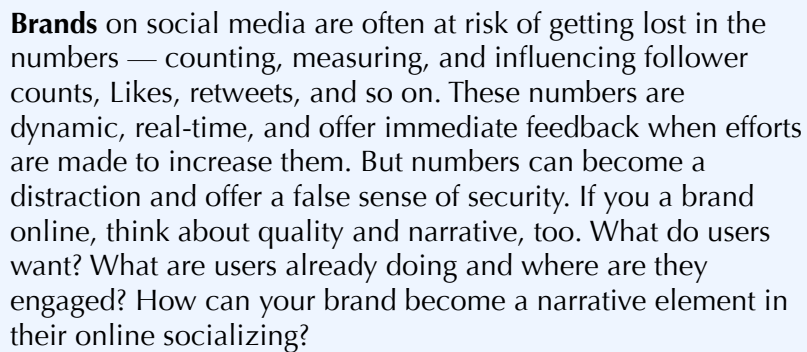- Connections beget connections, and for that make a user all the more visible and find-able
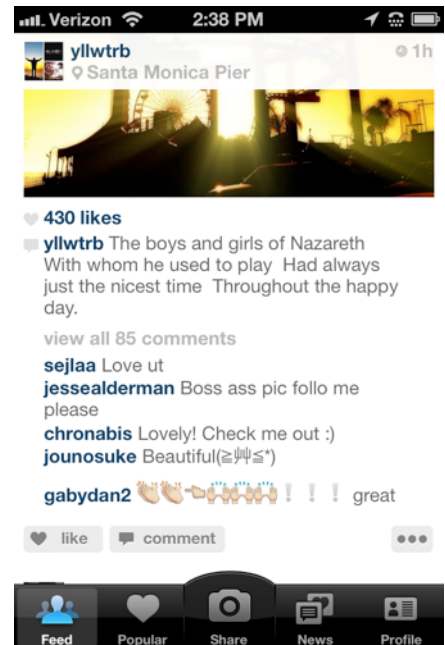
Designing social values

Social media represent a world of relations, not just of links, established as users engage and communicate. These relations are meaningful (socially) as well as informational. People share their

subjective choices, personal interests and preferences, tastes and values, contributing real and meaningful value to the content stored and distributed online. This value add comes from mediated conversation and talk in the many forms specific to the medium. Some of it is formalized in votes, ratings, favorites, and other kinds of selections. But much of it simply serves as the flow of communication and interaction that makes much of the social web the realtime experience that it is. The very dynamic and unstable nature of relations makes them an ideal impetus for engagement on social media.

> **Brands** on social media are often at risk of getting lost in the numbers — counting, measuring, and influencing follower counts, Likes, retweets, and so on. These numbers are dynamic, real-time, and offer immediate feedback when efforts are made to increase them. But numbers can become a distraction and offer a false sense of security. If you a brand online, think about quality and narrative, too. What do users want? What are users already doing and where are they engaged? How can your brand become a narrative element in their online socializing?

Value "created" on social media is relational value. That is, it doesn't exist objectively, but has a subjective value (to whomever "consumes" it). Social media systems are intended to produce value. That value might be in relationships and connections among users, as in user-generated content and contributions. By aggregating user selections and activity, value may be captured and represented. This can then improve the user experience of it — efficiencies and effectiveness being common metrics of success. This means that the system has to arrange content according to value hierarchies imposed by the system's calculations and design. How this value is captured, assigned, stored, and then used is central to the design of social media.

Every selection of content, every friend or follower, every link, retweet, and bookmark creates a connection — a connection that provides a relation and which enables further and later connections. These connections add value to content, context, and of course the user experience. Much of the value added takes the most simple form possible: liking. Saved and shared content is presumed to be content liked by the user who saves and shares it. And indeed, *likes* are a common social media selection feature. But value can be assigned for other reasons, also. For example, votes up and down, ratings (numerical value), and favorites. These suggest that there are degrees

of liking. Double-sided friending, too, suggests mutual liking (whereas following may be a unilateral like, or just a strategic and self-serving act). The future social web will

> Many technologies are designed to provide **imaginary solutions to imaginary problems**. Reflect on whether this is the case for your view of a product's core value propositions. In the case of social tools, the product or service may address social needs. What makes these real? If the product doesn't address real problems, but provides users with experiences that are perceptual, psychological, or are entertaining, then are you clear about how these motives work?

likely see other kinds of value selections, more granularity, and represented by new and different means.

One of the challenges faced by social media system designers is in producing value on the basis of process. Process governs user selections, contributions, navigation, and more, and structures participation. What's put on the screen is used over time and often reflects its own use. Think here of tag cultures, in which some tags become more popular than others through a process of self-perpetuating reinforcement. Popular selections, being bigger, more frequent and widely used, become more noticeable. In this way the values that matter to an audience become cultural values as well as common practices.

Value

- Prior to its use in social media, content is socially "value free"
- Social systems may be designed to produce or extract certain kinds of value
- It is then necessary for system users and participants to select content, act on it, interact and communicate with others in ways that produce this value
- Content accrues value through use by users, as use is the means by which value is attributed to content
- Systems may recognize:
  - Popularity
  - Expertise
  - Credibility
  - Authenticity
  - Intimacy

Popular Stories on Mixx

24	Craigslist dropping 'erotic services' ads ▸ view story
47	New York Assembly Passes Gay Marriage Bill ▸ view story
45	Google unveils new search tools ▸ view story
42	The English Grill in The Brown Hotel: elegant dating spot ▸ view story
36	Ten arrested in anti-terrorism raids 'linked to al-Qaeda planning' ▸ view story

▸ View more

- Attractiveness
- Value can be represented as quantity or quality:
    - Ratings, rankings, points, and so on are quantitative and are perhaps most useful in comparing objects or people
    - Qualitative descriptions, from tags (which organize) to comments and reviews, can be more meaningful, but also more susceptible to individual interpretation and more difficult to codify
- Some values may be conceptually incompatible with one another
- Values pertaining to intention may be put on a spectrum from sincere to insincere

> **Notifications** can be written with a personal touch, with an informative bent, or with little touch at all. Notifications provided on screen, in notifications sections of a site, and sent by email serve to sustain user engagement and re-engage those tho may have slipped out of use. Presentation, writing style, and content relevance make a difference. Many users receive overwhelming amounts of communication. Notifications — used respectfully — are a chance to be creative and compelling.

- Values pertaining to objective descriptions can be quantified
- Values pertaining to participation can be measured
- Values are taken up and reinforced according to how the system structures content by them, embeds them in navigation and other interaction elements, and solicits user input based on them
- It is easier to design confirmation of a value-based offering than to capture rejection
- Social media are biased in favor of selective affirmations — likes and positive choices. Dislikes, rejection, and passive disliking are more difficult to capture.
- Common forms of simple choices are:
    - Yes/no
    - Like/dislike
    - Agree/disagree
    - Useful/funny/cool
    - This/that
    - This/all the rest
    - Numerical order: 1, 2, 3, 4...
    - More meaningful (semantically speaking) choices are:
        - Name it
        - Add to group or category
        - Describe (hot, must see, live, captured)
   - Date

- Assign similar
- Assign identical
- Assign next one (higher or lower, previous or next in value series)
- Group by shared or similar characteristics (e.g. comedy, drama, family)

Socio-logical operations

If social media are about extracting value from user participation, they must have a means for attaching value to content contributions and contributors. User actions need to be translated into the data formats and relations in which they are stored. This permits them to be easily recontextualized and reused. The work of translation requires the use of operations. These operations relate captured user actions to data elements, assign values based on user selections, and perform some kind of transformation that can be rendered on the screen as valuable and meaningful representation. Operations translate our subjective interests, as users, into relations constructed in the objective domain of stored objects and data models. But these operations are more than technical feats. They serve a socio-logical function. Indeed, it is by means of logical operations that individual user selections can be aggregated and calculated to express social tastes and preferences.

The world of the web is built on data that has neither fixed position nor place, which is accessible as long as something links to it. Thus all relations are constructed and subject to modification as those relations themselves develop (or lose) connections. The online world is a never-ending proliferation of references (links) whose value depends not on intrinsic value but on their visibility, because their visibility is the condition of their existence, use, and relevance. Participation in this world is always a construction of the world at the same time.
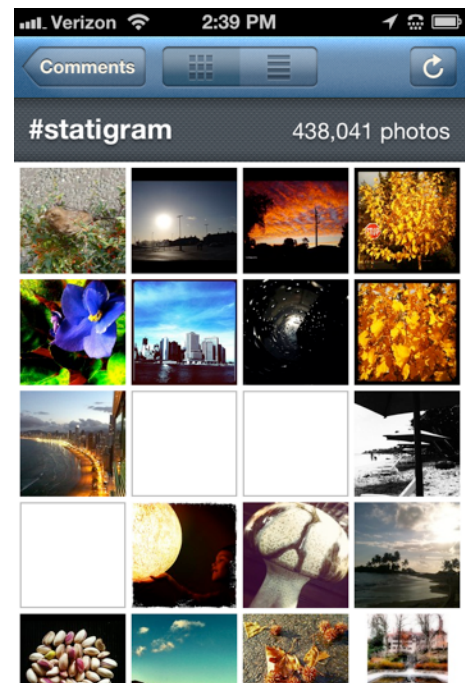
BADGES

Operations capture relations

Social media systems, like any computer-based application, perform a variety of functions. These include database queries, filtering results, and then sorting for some kind of ordered display on the page. Functions may connect, divide, add to, or extend items of data. They are presented by means of UI elements such as menu items, buttons, and so on. These operations that connect interface elements to meaningful social interests are neither simply mathematical, nor purely quantitative. The term *operation* refers to the manipulation of data. The operation, then, is the transformation of meaning from subjective to quantitative (objective) meaning, and back again.

It might help to think about operations as a necessary means of producing web-based information and content. Take, for example, one of the earliest operations unique to the web: the link. The link is an associative operation, by which text is enabled for navigation through an associative reference. These associations make it possible for one piece of content to lead to another. By means of these associative connections, all content can be found (in the end), and cross-references can accrue to content of higher popularity or relevance. Google's pagerank was built on this model, using inbound links to qualify pages having higher reputation value.

With the arrival of social media, the operation that originally affixed a single document (relation) to another is now more flexible. Social navigation not only builds its pointers dynamically, but records its own use.

Dynamic social navigation may change where or who it leads to, depending on how it has been used, in what context, and by whom. And what it points to can change according to what it represents: a tag titled "new movies," for example, points to new movies, and gains in popularity the more it is used. The tag "new movies" does not mean that currently playing new movies are the most popular movies — but that interest in navigating to new movies is high.

Votes, ratings, and other selections and expressions of user tastes require operations also. Dynamic and changing content delivery and presentation is possible only by means of operations that use dynamic links in turn capable of reflecting back social use. Functionality can remain fixed and determined, while data and elements operate on change. Operations not only operate on data elements, but translate user selections in ways that construct value.

Hunch is a social service that promises to help users make the right decision with a unique sequenced decision-making logic and a bit of secret algorithmic magic. It's a kind of automated and non-social social search solution, using recommendations instead of search results. An early entrant in the space of "collective action," hunch is designed to escape some of the bias that often creeps into social discovery solutions.

If value is an attribute, it needs to be attached to something to have specific meaning. Generic or generalizable values can be associated with elements to become specific representations. Content selection by the user can be used to assign a value to that element (as in a rating, a vote, a tag, and so on). And of course, values assigned by user selections can be related to other values, producing connections with richer meanings and utility.

Many online activities use just basic operations. The link, for example, uses a basic conjunctive operation: an associative coupling of two items, adding no extraneous value besides the conjunctive "and." This *and* that are linked, in one direction or in both directions. The coupling operation relates items without having to establish a logical relation between the names of items. The link itself may have its own title, this having a meaningful relation to the items, to the association, or to neither. This associative coupling simply connects. It is basic, but fundamentally necessary, and akin to the requirement that language first have nouns before learning how to speak.

Sometimes a linked pair remains just a pair, but a pair can be extended. Extended pairs use conjunctions to form a series. The series is formed out of a chain of "ands" and is a conjunctive series. It connects one item to the next. The operation of this conjunctive series is next, and next, and next. In a series A, B, C, D, one can get to D only through B and then C. Conjunctive series are not causal (A does not cause B); and are not claims of identity (A does not = B). They simply connect.

A series of joined things might be grouped into a set, and that set then tagged or categorized and given additional value: the items belonging to the set inherit the attributes of the set, thus accruing value as defined at the meta level. The set is more than a series, for it has a designation applying to each element in the series. And for this, the elements in the series need not be navigated by next, next, next, but may be shown in any order.

One interesting feature of the relational foundation of the web is that the conjunctive "and" is genetically encoded, so to speak. The system is fundamentally affirmative. User actions can only be captured by means of affirmative selections. Passive activity, say that of passing over a link, or skipping over content, is not captured. Passive activities leave no trace and make no selection. Interaction with web content is fundamentally affirmative, and can only grow in size and connections. It grows through selecting actions, conjunctive associations, and by the creation of new data. Subtraction has no place. (The online world is not a real world.)

How often do you watch…	Never	Sometimes	Often		
Moods					
Campy	◌	◌	◌		Need some examples?
Cerebral	◌	●	◌	Sometimes	Need some examples?
Controversial	◌	◌	◌		Need some examples?
Dark	◌	◌	◌		Need some examples?
Emotional	◌	◌	◌		Need some examples?
Exciting	◌	◌	◌		Need some examples?

Operations take form
There is a logic to the forms in which these operations are presented as information, communication included. This logic expresses the intrinsic arrangement of conceptual relations among the individual elements of a pair, series, or set. The most common is magnitude, or quantity, and it covers operations and relations involving greater or lesser quantities. Ranking and rating, ordered lists (top tens), and so on, would be examples of values arranged by magnitude. Magnitude might apply to popularity, activity, or views of activity — any identity or idea whose social meaning is familiar and communicates.
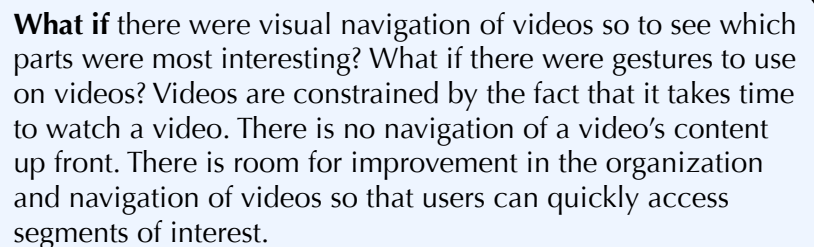
(Philosophically speaking, magnitude is interesting. It has no upper limit. If it did, it would simply be a number. And with the increase in magnitude, so too the least, or smallest increment, becomes smaller.

Even though magnitude is a series that can always grow larger, and which grows by simple addition (conjunctive association of the "and"), it means something more than the conjunctive series. A whole that is greater than the sum of the parts, where the whole includes the possibility of more.)

Operations are often presented as a call to action, and are used to help translate individual user selections into social practices. Common social media features transform these operations into social functionalities. These will always incline to pairs, series and chains, associative sets, and orders of magnitude. Associations among data elements in the online world will also always privilege and increase of connections over decrease, and addition over subtraction.

Before proceeding with the form in which these operations render on screen and become useable, it is worth noting that there are other kinds of conceptual associations possible. There are, for example, symbolic and signifying orders in which one thing stands in for another. Analogies and metaphor also produce relations that establish a logical relation without reducing that relation to identity. And in social organization, triangulation permits the selection of one thing for the purpose of some other relation.

> **What if** there were visual navigation of videos so to see which parts were most interesting? What if there were gestures to use on videos? Videos are constrained by the fact that it takes time to watch a video. There is no navigation of a video's content up front. There is room for improvement in the organization and navigation of videos so that users can quickly access segments of interest.

In relational terms, triangulation is shown as a relation between A, B, and C such that events involving A and B have an effect on the relation B and C and A and C. Triangulation is a fundamental feature of social organization, allowing for indirect relationships and actions. Human relationships are the subject of a great deal of this indirect, triangulated interaction, and while pairs, or dyads, are the basis of a meaningful exchange, it can be argued that it is the triad, not direct couples, that forms the basis of groups and social networks. But indirect action is difficult to represent in a medium whose basic operation is coupling (linking). The common link has only one reference, not two. This said, triangulating communication and action can be attempted with a series of two or more connections. If action A causes action B which leads to C, for example, a series might

appear as triangulation. Gifting and pass-along transactions in many social media systems that illustrate this kind of activity.

> **Where conventional software design seeks efficiency, social software design can benefit from the lack of it.**

Future innovations may give rise to more complex and differentiated operations than are available today. Perhaps the link is just the beginning — the first and necessary means of populating the world with named objects and identities. A basis on which connections are built, so that more complex, subjective, and qualitative associations can be produced later. If this is the case, future navigational systems for social media might reflect more personal and individual preferences, accounting for user activity history, and provided in the form of views of social activity that can be telescoped and extended to focus on relevant social content.

To reiterate, then, basic operations are built on conjunctive associations: associations of "and."

Basic operations
- Symmetrical pair: A - B (such as mutual friending)
- Asymmetrical pair: A > B, or B > A (such as following)
- Repetition: A repeating series may involve one thing repeated, a repeating couple, or a repeating series. A, A, A; AB, AB, AB; ABCD, ABCD, ABCD (such as refresh/reload; reload and display; update page and perform operations)
- Join: A+B (such as a tag, which joins an attribute to a thing)
- Chain: A-B-C-D (such as pagination, a list)
- Copy/duplicate: A-A (such as an item accessible from multiple sources)

Elements used by operations
The operations just discussed apply to user selections and actions. These use common interface elements, some of which are included here:
- Submit
- Post
- Confirm/Accept
- Add
- Select
- Checkbox

- Radio button
- List box
- Rate
- Vote
- Tag
- Favorite
- Save
- Star
- Like

Applied orders of magnitude

These examples belong to orders of magnitude, and bracket the scale while preserving its ability to change in number (total quantity). I list them here simply because they are common ways of articulating an order of magnitude. Each is essentially the same conceptual relation.

- Greater or lesser
- Previous and next
- Newer and older
- First and last
- Top and bottom
- Most and least

Types of operations

Operations based on user selections are of course more complex than simple series. Complexity is hidden from the user, as it is performed against data sets and elements in the background. Nonetheless, operational logic is fairly straightforward. Not until users begin to supplement their selections with social action, and use of language, do meanings exceed the scope of this basic logic. Not, in other words, until action is symbolic, signifying, interpersonal, and communicative.

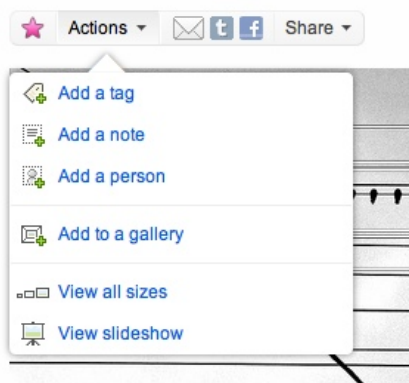**Operations**

- *Limiting operation*: this operation limits elements (people, posts, objects) displayed. Although the limit has no value other than its number (say a Top Ten list), it can have social significance (most popular). Note that nothing changes about the item, no relationships are created among items in the limit set, and no semantic assignations accrue to items in the limit set. Limit

operations are good when a social or cultural form is needed and when it can be created by subjecting membership to scarcity and competition.

- *Extensive operation*: this operation takes an object, element, term, label, person and extends it. Tags are extended when they are applied to objects. People are extended when they are added as friends. An extensive operation creates connections that extend an identity.
- *Proliferation operation*: this operation, through actual copies of digital files, through embedded players and reference, or through links and messages, proliferates an object or element. Proliferation here is different from circulation. In the digital kingdom, scarcity exists in the user's attention and time, and on the display (screen) itself, but not in the world of data, files, and links. Proliferation operations circulate an object, image, person, link, or other element, increasing its visibility and presence. Viral operations are proliferations.
- *Increase (additive) operation*: operations that increase a stock of anything by creating more of it are basic increase operations. This operation has a value for reproduction, and though it doesn't create significations itself (addition of the same to the same has no meaning) many have a cultural bias towards accumulation. Adding friends doesn't change the nature of the term friend, doesn't change the friends themselves, but does signify popularity (and for no reason other than a socio-cultural one). Whether or not the number itself (of elements) matters depends on whether the operation constructs a number or a series. If it constructs a number, the total may matter (either by signifying or by tending towards a limit). If it constructs a series, then the operation functions across time and is for all intents and purposes unlimited.
- *Series operation*: this operation creates a series out of steps. Series are not sequenced, and have no intrinsic order. In other words, nothing changes in the going from one to the next, logically or conceptually. The arrangement is simply a series of connections and serves purposes of navigation.
- *Pass along*: this operation simply involves passing an item along. It is useful for circulation where proliferation (which involves duplication or linked reference) is not desired.
- *Scale operation*: there are two operations that involve scale, one in which scaling changes the thing (non-linear), and one in which it doesn't (linear). Most social psychological factors change as scale increases (a group of five, ten, 25, 50, 500, 5,000...).

- *Bifurcation (either/or)*: this operation is used in voting and in exclusive choices. It is one of the few operations in which exclusive connections are made. It is worth noting that exclusion is not visible, though quantities can show the balance of yes/no or accept/reject selections in toto.
- *Combinative operation*: operations that combine and/or join items are commonplace and are necessary to cementing connections between things that are alike, similar, or related in other ways (price, location, etc).
- *Semantic assignation operation*: operations that assign semantic meaning, such as categories, labels, tags, priorities, and so on, are critical for the production of meta data. Search engines wouldn't work without this operation. Indeed, the difficulty of merging socially-constructed meanings (folksonomies, tags) and taxonomic (hierarchical taxonomies) meanings will continue to confound designers.
- *Move operation*: this operation repositions an element, on the page or across pages, or among domains. Moving elements is a bit strange in that it the online world cares little "where" something "is" (how to get to it matters more).
- *Self-reflexive operation*: Social media capture user input and display the results. Thus some links change what they point to according to use. Because their referent or value changes based on how many times they are clicked relative to other links, they will have changing destinations or referents. (A "most viewed member" link will point to the most viewed member, whoever that is at the time).

Views of operations
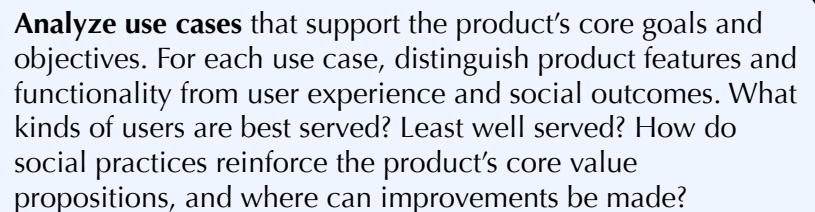
In addition to capturing user selections, operations are applied to the construction of views. These views render individual activity or aggregate social activity and are essential to the social media experience. Views are limited, to some degree, by the actions captured and value added by user selections. But creative uses of the presentation layer for displays and representations (think social games) make the possibilities for viewing activity nearly limitless. Simply consider the importance of views in shaping audience behaviors: the follower count on one's twitter profile is but one view of one number.

Views

- The world of social media is a highly-coded and limited view of elements whose relations can be assembled and disassembled repeatedly
- If operations do their work when data is added to a (social) software system, it is only when those operations are rendered on the screen that they become meaningful and useable to a community or audience
- What goes on the screen is the product of additional operations, which become recognizable representations through coding and presentation. The view of the "thing," not the thing itself, is often combined with navigation, sometimes also the option of communication, and some additional interaction (rating, adding to lists, etc.).
- All views apply a perspective to data and arrange or order it by law of necessity. Thus they may seem more stable or permanent than their contents.

> **Analyze use cases** that support the product's core goals and objectives. For each use case, distinguish product features and functionality from user experience and social outcomes. What kinds of users are best served? Least well served? How do social practices reinforce the product's core value propositions, and where can improvements be made?

- The screen must create the arrangement, data order, actions, with presentation, and calls to action, that suit local or global (social) practices. Views onto data vary in the degree to which they reflect familiar social practices.
- Views inherit order from forms (as described above), as well as from the operations that produce their content
- Views use and manifest social orders and arrangements based on predetermined value criteria, and associated measurements, calculations, and operations
- Views may manifest popular taste and use feedback by reflecting their own click-throughs. These views are self-reproducing.
- Views that capture their own use are well-suited to ongoing social practices, because their contents can become the topic of interest. (Such is the case with top tens, best of lists, and other folksonomic elements.)
- The elements to which views point may change while the view itself does not

- The view itself may change, while the elements to which it points do not
- Social and cultural forms often involve an ordering of taste and preference
- Taste making and trend watching are common and popular media forms also. They require counting and measuring, as well as tracking.
- These forms are easily implemented on social media systems and have the benefit of describing a community of users at the same time (by making their tastes manifest)
- Common views require a social arrangement and sorting order (highest, lowest, range) that justifies the display of a limited selection of a body of data:
    - Best of
    - Favorite
    - Top
    - Most (expensive, viewed, friends)
- A distributive operation, though it involves an operation on an element that may pass it from member to member, is not in itself a view (though it may furnish information for views)
- System speak is produced by system operations and serves the purpose of presenting user activities and aggregated activity (resulting from filtering and counting calculations) as actions and events. These updates create the appearance of intentional action and may provide new navigation (to an updated member profile picture, to a message).
- A sequenced view presents results from first to last, or in order of previous and next (when this is not sorted by best/first/most it will likely be newest or chronological). Paginated query results are an example.

Developers and designers improve their skills by adopting user perspectives. The key is to think through the user experience from perspectives other than their own. And just as there may be many different kinds of user experience valid and worth protecting on a site, there will also be different social dynamics. Designers and developers are encouraged to see the importance of these dynamics to product success — and use these dynamics to grow user adoption.

These common forms are tropes, idioms, or genres. They work through operations that acquire social and cultural meanings which can be found among social and cultural practices. Online profiles, social networks, invitations, recommendations and reviews use and

How often do you watch…	Never	Sometimes	Often		
Moods					
Campy	◯	◯	◯		Need some examples?
Cerebral	◯	●	◯	Sometimes	Need some examples?
Controversial	◯	◯	◯		Need some examples?
Dark	◯	◯	◯		Need some examples?
Emotional	◯	◯	◯		Need some examples?
Exciting	◯	◯	◯		Need some examples?

involve tropes. Mass media and social media inform one another, and so there are tropes built on the practices of celebrities, fame, fortune, popularity, achievement, expertise, experience, attractiveness, etc. Tropes exist for news (breaking news, emergency alerts, scandals, rumor, events) and for top ten lists (best of, funniest, favorite, trends, voted). Tropes, idioms, and genres are but ways in which cultural traditions inform the manner in which socially meaningful representations can be designed.

Social ordering

Some views of content arranged by social ordering:
- A view of a set, such as a view of items that share the same tag or category
- A view of a list arranged (like a sequenced view) top to bottom, first to last, best of, most of
- A view of an increasing (or decreasing) number of the same thing that focuses on the number
- A view of an increasing (or decreasing) number of the same thing that focuses on the thing
- A view of an increasing number of things given the same attribute that focuses on the relative importance of the attribute (or thematic organization)
- A view of the latest items in a group (or users)
- A view of the latest user to add items to a group (items or users)
- A view of the latest user to affirm the identity or to increase the number of a group (items or users)

Content can only be shown according to presentation structure built into the page, and navigation is possible only by means of links passed from one piece of data to the next. User actions, too, can be captured and measured only insofar as the system recognizes them. Systems cannot capture intent, but only actions. Actions captured over time can appear to mean something, be it a user's tastes, preferences, interests, purpose, goals, or objectives.

Action systems

- Self-reproducing and automated actions that, once selected and set, continue on the basis of saved preferences and automated operations or functions (such as filters, saved searches, and notifications)
- Cumulative actions that seem to provide a picture of the user's interests and activities (such as news and activity feed updates)
- Additive series of actions that reinforce, by their repetition, a user's choice (such as check-ins)
- Personal statements that express, linguistically, user personality, style, interests, and so on (such as status updates and tweets)
- Codified statements and gestures supplied by the system from which a user's interests and habits (such as game participation, sharing, liking) can be inferred

User moves

Mediated actions occur only with the help of a medium. They are disembodied, decontextualized, and made visible to others only by virtue of a representational form. A button clicked "submit" instantiates a system operation that can then be rendered on the screen as a message, a file posted, a vote captured, or what have you. The action is thoroughly mediated and in that mediation intention, feeling, and user interest is bracketed out of the action itself. Ten votes by ten users all appear as the same action.

Because many of these actions have social interest — they are intended to be meaningful to others — they can be construed as moves. This brackets out the matter of intention, mood or affect, and so on. Moves comprise of the primary order selection or action by a user, as well as their second order meanings. As in chess, it is not the action itself that counts, but the frame in which it is taken. (The act of picking up a chess piece is not a chess move.) There's another reason

to use the term "move," and it is that moves need not have any linguistic content. Not all moves are statements or expressions.

An action is a move in that it is more than the primary order action itself. It has second order consequences and secondary frame meanings: linguistic meanings, symbolic meanings, and social meanings. In this way, the action involved in submitting a blog post comment is more than the action of submitting a comment — but is also commenting as a social activity, writing as a user action, and interacting with the interface elements required to submit the comment.

Moves are actions

Moves are actions involving both a user selection and a corresponding system event. So they are actions taken by a user on the interface, captured as data, and represented by the system for further interaction.

- Moves are a user selection or choice
- They are captured as data and used to create connections with other data
- Moves usually form a series of moves, and so may initiate or continue series
- Moves can be associated with meta data to make them socially meaningful
- Individual moves can be aggregated, grouped, listed, arranged, hidden or shown, completely or in part

Moves do something

Moves typically perform a system action.

- Moves indicate an action, event, or occurrence according to the item or content involved
- Moves refer and link to content elements elsewhere
- Moves trigger or commit an operation or function

Moves have meaning

Moves are meaningful as social interaction for the opportunities they create for additional actions (moves) by others.

- Moves create possibilities for interpretation based on interpretations of the user's intent, on local or system context, on social context, and cultural practices

> Symbolically mediated moves are nothing unique to social media, nor even to the digital age. They trace their origins to earliest forms of cultural exchange. Now that virtual goods and currency have real financial value, however, some symbolically-mediated transactions have real money value. Are similarities with the history of cultural exchange and money more than a coincidence?

- Moves may express intent and suggest valid responses (be expressive, in design terms, and have expressive uses, in social terms)
- Moves are meaningful according to the secondary frame interpretations of other users

The diversity of moves

The functional operations of moves are constrained by technical limitations, which center on the possibilities of manipulating data. The most common of these is an additive operation, and results in a chain of moves.

- Additive moves: moves that add items to a series or to a set:
    - Repeat same choice: moves that perform the same function repeatedly
    - Copy object (duplicate): moves that distribute content by embedding, uploading, or otherwise "creating" a copy
    - Filter, sort, and display: moves that apply to content such as one-time or persistent search results
    - Add one towards a magnitude, or unlimited number: moves that add one to an unlimited number, such as following on twitter
    - Add one in a series: moves that add one to a series or chain, such as a comment
    - Add one and change the ordering: moves that by adding to a set, change the set, such as a ranking
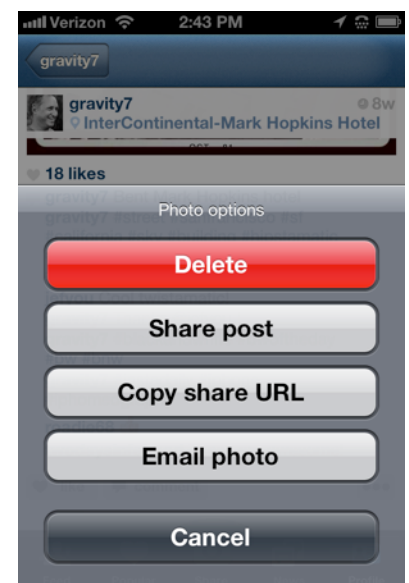
Moves and conventions

By themselves, a user's moves will have little social value or meaning. But aggregated, and contextualized, they become activity associated with a particular product or service. In this way products and services that share similar features — say, feeds and notifications — each develop their own social practices. Products accomplish this identity by reinforcing the unique attributes of their application's use.
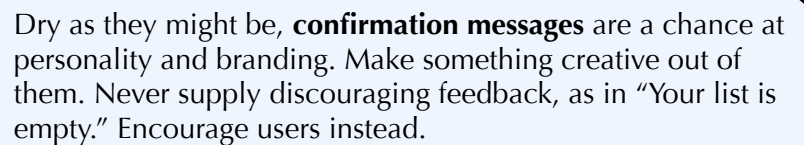
System action

These moves involve UI elements that have general purpose functions. Their meaning is context dependent, but their first order functionality defines what they are and what they do.

Moves and system actions

These moves perform system actions
- Post
- Submit
- Copy
- Add to a list
- Subscribe
- Remove/delete
- Save
- Continue/next
- Link

> Dry as they might be, **confirmation messages** are a chance at personality and branding. Make something creative out of them. Never supply discouraging feedback, as in "Your list is empty." Encourage users instead.

Symbolically-mediated moves

These moves use an icon, graphic, emoticon or some other kind of representation and are symbolically mediated. The mediating symbols generally represent something visually, such as virtual gifts. Symbolically mediated moves, such as liking, favoriting, voting, gifting, and so on thus offer users a quick non-verbal system of signs and symbols. Systems can easily capture and record exchanges that use symbolic media. These moves can be easily collected and shown by total, recent, most active numbers and lists. They also provide navigation to users or content, sorting and viewing content to reflect its use.

Moves and conventions

These moves have meanings cemented through convention and use.
- Moves that make use of Icons, pictures, graphics and other rich media sources
- Moves understood as declarations, expressions, and gestures: votes, ratings, likes, favorites

Choose your Compliment Type:

○ ● Thank You ○ Cute Pic ○ Good Writer
○ Hot Stuff ○ Just a Note ○ Like Your Profile
○ Write More ○ You're Cool ○ Great Photo
○ Great Lists ○ You're Funny

At first I was afraid, I was petrified. Kept thinking I could never live without Yelp by my side. And then I found your reviews, they gave me strength to step out the door, and now I'm calling all my friends and hitting the dance floor.

ABC Status: Ready   Cancel Send

Statements

When moves involve use of language, they are statement moves. They include all forms of written communication, and thus provide meaning according to what they say. Their meaning is not clear, however, by user intention alone, for users may have reasons for saying what they say that are not evident or explicit in the statement itself. Some linguistic conventions form in social media that may facilitate interpretation, but conventions cannot account for have a statement's full set of possible meanings.

Some statements are in fact system messages about user activity, and so may refer to user intentions without being a direct user expression or communication. (As when Facebook publishes user activity updates, such as when a user uploads a picture.)

Combinations

Systems often supplement an individual user contribution with social functionalities to enable and encourage further participation. As many moves are posts of content and communication, they are coupled with moves users may take on them. In this way series, chains, and other orderings of grouped moves become recognizable social media activities. Used here, a "post" might mean any contribution of text, picture, audio or video. Posts may be blog posts, comments, status updates, etc. — forms that contain text.

> **Identify real world use cases** for the product or service. Identify the goals and objectives, tasks, and desired outcomes for each use case. Develop story boards or descriptions that detail how people accomplish these objectives in the real world. Now identify how the product or service facilitates negotiating these tasks. Does it make them easier; more efficient; better informed; cheaper; etc. What are the product's core individual and social value propositions?

- Post > rate this
- Post > comment on this
- Post > add to favorites > share
- Post > tag this

- Post > vote > system activity update "user voted on X"
- Post > display with other posts
- Post > add to group > group notification message "X posted by user A"
- Post > added to a contest > rate and/or vote and/or comment

Interface elements: linguistic

Moves that require text, and so are statement moves, are often structured as forms. Context and use then provide added value statements so that users know what they refer to.

- Title
- Subject
- Summary
- Description
- Comment
- Question
- Answer
- Reply
- Invitation
- Greeting
- Category
- Tag
- Label
- DM
- Gesture (using icon and statement)

Display

Moves are presented on the screen according to the social activity they belong to. In this way, many different kinds of activity and interaction are supported by means of basic operations. Generally, these activities enable further moves

- Static presentation of moves
- Dynamic presentation arranged by data relations
- Dynamic presentation arranged by clickthroughs
- Dynamic presentation arranged by algorithm and/or calculation
- Semantic relation between statement moves
- Visual relation between moves
- Chronological ordering of moves
- Numerical ordering of moves

- Prioritization and ranking of moves
- With call to action: add to personal collection/list/favorites, etc.
- With call to action: qualification by vote, rating, taste, like, etc.
- With call to action: assign semantic meaning, tag, label, category

Types of display
The ordering and organization of moves depends on both the nature or types of moves, and the activity they belong to

- Groups
- Lists
- Ordered
- Unordered
- Comparisons
- Partial views
- Leading headlines
- Key-worded results
- Tags
- With or without author
- Constrained by relationship/privileges
- Chronological
- By importance
- Personal relevance (personalized)
- Dynamic views

> **For whom does the user do what they do?** Users get engaged on social tools in part because they believe that they are doing something for somebody. This could be indirect — as in doing something to get attention from somebody. Learn as much as possible about how other people become are motivating to users. This will reveal some of the most powerful aspects of your product or service.

Moves and system reproduction

When they are taken up by multiple users and copied or repeated, moves can become social practices. The meanings of moves accrue as user activities become self-reinforcing and self-referential. As long as moves are recognizable as user choices and selections, they produce and reproduce online social activities and practices. They may have meaning that falls within convention,

> **Algorithms cannot solve problems of ambiguity — only communication can.**

belongs to a series, chain, or a sequence of ongoing moves. These systems are durable, involve numerous and redundant connections and associations (links), and because they both survive and transcend physical presence, create a quasi-objective description of social facts and events, even though they are the product of social action.

Scott Beale - 3:10 PM - Public

Samoa to Skip Friday and Switch Time Zones
The shift across the international date line is intended to align Samoa with its Asian trading partners, making it easier to do business with Australia and New Zealand.

+1 - Comment - Hang out - Share

+2

Activities that use the moves covered above combine to produce practices common to a social media site or service. Some become common practices on social media. In some cases, cultures develop among users of a particular site or service. Tacit and unwritten codes of conduct and behavior may then govern what users do, as well as what others interpret moves to mean.

For moves to create cultural and social effects, they must become organized. Online, this organization is not fixed in space. It is distributive and connective. So choices and selections build and become networks of users and content. When the social media application is small and offers only a limited range of moves, activities tend to be well-defined. When the application covers a greater range of moves, imports content and activity from other contexts, or distributes content across external contexts, its moves and practices may suffer from higher degrees of user confusion.

Regardless of how small or big a social media application is, it nonetheless relies on adoption by users and sustained use over time. Participation in the moves it supports lead to activities and practices. These practices become self-reinforcing. A social media application makes features available; users participate, content and activity is captured, and this reinforces to users what the service is for and how to use it.

Narratives not stories promise to become common design approaches for social tools. While stories are contained and structured forms of content, narratives emphasize the act of telling over content. This includes for whom users tell a story, or create narratives. And how those narratives can be designed to capture participation from audiences. Brands, especially, are likely to explore brand narrative possibilities.

It is possible to identify some of the self-reinforcing systems commonplace in social media of different kinds. Note that the examples below cover just the moves and activities, not the cultures or meanings, of these practices. The particular display and

organization of any of the following examples varies by the system in which it is shown.

Common moves
- Identification with, approval or confirmation: extend the associations made from or with an identity
- Copying and duplication: add to and increase number of the same
- Sending, forwarding, sharing: circulate, proliferate elements
- Quoting, sampling, citing, referencing: increase associations with which selections are associated
- Linking, bookmarking: extend visibility and reach of elements
- Qualifying tags, labels: increase meanings and create connections and relations
- Check-ins using mobile geolocation services that indicate a user's location
- Points awarded to individual user moves, be these a check-in, purchase, game level reached, or other
- Achievements awarded for activity, including point number or scores
- Re-posting posts by use of twitter, ShareThis, StumbleUpon or other social service
- Notifications of recent comments and responses to user contributed content or communication
- Notifications of users requests, questions, recommendations, or other site or service-specific social interactions
- Tagging pictures with people who appear in them
- Messaging (tweeting) song tracks currently being listened to
- Messaging (tweeting) livestreaming videos
- Messaging (tweeting) pictures just taken
- Subscribing to an event
- Sharing event attendance and event ticket purchases

Moves aggregate into social practices on particular social tools and services.
- For the move of tagging persons shown in pictures:
    - The individual user practice of visiting pictures in which one is tagged.
    - The social practice of commenting on tagged pictures
    - The cultural practice of pointing out embarrassing party moments

- For the move of tweeting a picture just taken

- The individual user practice of taking the picture in order to tweet it
- The social practice of tweeting an @reply to the user who has tweeted the picture
- The cultural practice of @replying to either user to show that one is paying attention, finds the picture, what it shows, or commentary around it interesting

- For the move of a mobile geolocation check-in
  - The individual user practice of checking in to accumulate points
  - The social practice of competing for mayorship
  - The cultural practice of tweeting a user who has checked in to a location nearby, thereby using a communication system to find out whether the user wants to meet

> **Beta testing and user feedback** will always be a requirement in social media design and development. However don't rely entirely on user testing. Firstly, results tend to confirm suspicions, and research tends to find what it's looking for. Secondly, a site's users rarely represent a proper cross-section of the potential audience. They have joined early, and if they are active, probably represent a skewed population.

User actions that select content, perform an action, are captured by a system and represented for their social reuse. Social interaction designers may work with a system of moves possible within their application. Moves that support the kinds of social practices an application seeks are the ones that matter most.

Moves can be recontextualized and repurposed, and may lose their original meaning and accrue new meanings. In fact, the re-use of content is perhaps where much of the cultural activity around social networking occurs. Because of the potential mismatch of user intention and social meaning with the practices

> **Symbolic gestures are interaction props.**

which emerge around it, a social service can be at odds with its builders. Features alone often fail to properly distinguish different social services. Differentiation owes instead to who uses them, how, with what kinds of friends, and to what social effect. Ever greater

emphasis would seem to rest not just on social practices, but on cultural practices, too.

If the moves alone do not explain their social uses, and if a great number of social interactions depend on cultural codes of behavior, then an understanding of these factors is increasingly important to social media designers and developers. For example, it might be acceptable in certain social contexts to request or suggest meeting up with another user based on geolocation information. At events, for example, where the event provides a context, and where meeting informally is a common practice at events.

Circuits: psychology of relations

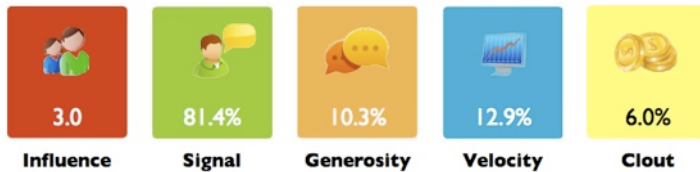People use social media with habits and pastimes that are psychologically consistent with their personalities. Their ways of using social media will also reflect their communication and interaction competencies and styles, as well as of course their technical competencies. To some degree, people reveal their interests, topical, activity, and social as well. People do not use social tools randomly and arbitrarily.
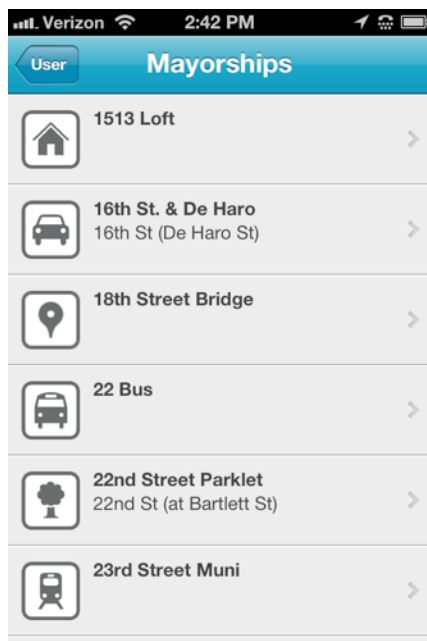
Whether these aspects of personality can be observed or not probably depends more on what can and cannot be captured as user activity data. Even where personality might be evident from patterns of use captured in user data, numerous factors complicate the delineation and identification of personality patterns. For example, data alone would not distinguish a late-night chatter from a user who kills time chatting through the night shift. Over time, and with increasing access to both social data and granularity in tracking models, of course, patterns are likely to become both identifiable and useful. There would be no shortage of commercial interest in targeting users on the basis of their strongest habits of online use.

In the absence of existing terminology for the pattens of individual social media use, one might describe the habits of social media use as formed around "circuits." These circuits are mental relations people take to their own online activities. For example, a circuit may involve a sense of self that is bolstered by increasing follower numbers on twitter. Such a circuit would involve self-esteem, vanity, visibility in media, popularity, and an interest in achieving increasing follower numbers (magnitude). The circuit would be maintained by accruing followers. It might also be broken, or short-circuited, such as when a person finds something else to do. What was once compelling is no longer habitual. But should a person then move to a different social tool, and engage in a similar kind of activity (capturing followers), the circuit re-emerges, providing the person with personal satisfaction in a familiar practice.

These circuits are fundamentally relational. They involve mental relations that include ideas and abstractions of what people do online. They are constructed over time as users gain experience and build competencies. They include real relationships as well as imagined ones, such as anonymous connections and passing conversations held with fans or followers. Because these experiences are mediated, and lack the full range of expression and communication possible in face-to-face situations, it is common for distortions, misinterpretations, and misunderstandings to color them. Psychology comes into play where and when these relations involve the user's own psychology in ways that reinforce individual tendencies, inclinations, habits and routines. The circuits, in other words, form around personal interpretations of online experiences. They are habituated by culture and social practices common to social media, but personalized in their meanings.

3.0	81.4%	10.3%	12.9%	6.0%
Influence	Signal	Generosity	Velocity	Clout

A user who uses twitter primarily to stay in touch with friends, for example, is aware that an audience in effect overhears what he or she tweets. A user who tags pictures of friends, because he or she has taken the pictures and wants to share them online, may also be interested in getting attention within a social circle — contributing pictures then serves as a proxy for achieving social status. The same kind of circuit may apply to a user who follows celebrities on twitter for how it feels, knowing that posting @replies to celebrities is meant less to get their attention and more to be seen doing so by followers.

Activity Users need and depend on other users for good experiences on social media. While it varies from product to product, some pairings of user types are both common and valuable. Pundits need their audiences, celebrities their fans, critics their readers, socialites their friends. Select a social media product or service. what kinds of user types keep activity interesting and engaging? Which user types are most important for growth and expansion of the user base after launch? Which are most important to hold on to? What kinds of user types and behavioral dynamics need to be avoided?

Anything that communicates does so with a gap, a gap that can be taken to mean something, or not. The gap is greater in mediated

communication because interactions lack face-to-face immediacy. People fill in these gaps according to their understanding of social media — which is to say, by means of their personalities and character. Circuits leverage pre-existing competencies, connecting to the online phenomena that are most meaningful for a person.

Self image

Aspects of some of these circuits may be recognizable in experiences such as the following:

- Checking state or status of one's own activity and communication
- A sense of connectedness to an online social scene or social world.
- Seeking out acknowledgment, validation, and responses, from an audience, from peers, and friends
- Looking for acceptance by peers, or membership within a social group, and interpreting group activity for its inclusiveness or exclusiveness
- Showing personal interest in others and their activity, motivated in part to initiate or build a relationship of some kind
- Feeling perceived obligations or expectations — of presence, of contributing, of communicating
- Developing expectations of the behavior of others based only on mediated interactions

Self, Other, and Image

Self image and sense of self are deeply involved and implicated in participation on social media. The medium produces many

Meta data use of social data will increase as companies learn to mine online social activity for telling signs of what interests users, how, and why. There will be many new interaction opportunities around use of this data, which can be fed into social experiences and then refined according to how users engage with it. Every new level of data, as an observation of activity, also produces new material for interactions.

representations that "stand in" for people, contributing to how they see and feel about themselves. These are not strictly visual images, but include the communication and contributions make online. This externalization of Self fashions a rich set of reflections.

As the self is represented on the medium, so too people become self involved. The medium serves as a mirror, reflecting appearances as well as projections. People see what they recognize — that is, what they hope to see. Mirroring is a circuit, of self to self image, by means of self reflection. The story of Narcissus then offers a parallel: false love of self by means of a reflected image. But while there may be narcissists on social media, and while narcissism may be well served by social media, all circuits of self image are not narcissism. The medium is not water. Any mirroring on the screen of social media also implies some kind of audience (other consciousness).
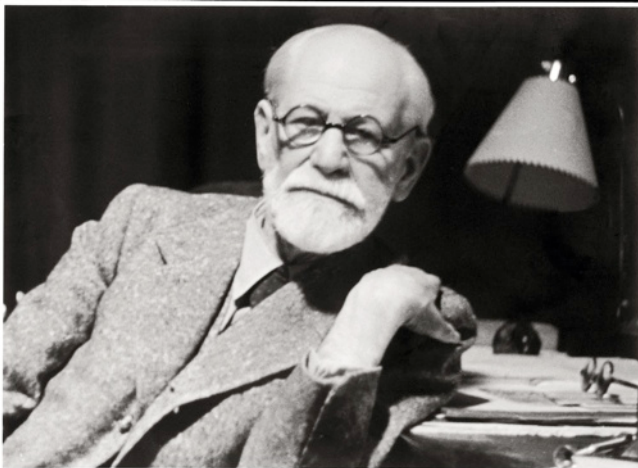
Mediated self reflection also entails a doubling of self, because the medium extends one's social presence. One can act directly and "simply," or act on one's double. Acting on the double, that is the represented self, one takes up a reflexive (reflected) relational interest in one's represented activities. This can foster ulterior motives, or habits and strategies that make sense only in terms of online presence. Users do things out of a simple and direct interest, or for how it appears.

By creating a represented presence online, the medium not only doubles the self but also doubles possibilities for interaction, communication, relationships, and more. Of course, this raises the relational complexity of reflected actions and of self-reflexive activities. Users take interest in how they appear to themselves, in how they appear to others, and to how they appear in the context of a perceived social audience. Users do not have to be aware of this in order to trace out psychological circuits. Insofar as this engages motives, it belongs to the user experience.

When people become interested in how they appear to others online, this reflection involves not only an image of self but an audience also. The audience is not represented, but rather internalized, for what matters now is not how the audience appears, but how one appears to the audience. This is a social triangulation (mediation) of both self image and self relation, for one's relation to oneself is mediated by an idea about how this looks. Given the new ways in

which a person can encounter him or herself online, with the myriad of communication and interaction possibilities this entails, it should come as no surprise that online user experiences involve compelling reflections and doublings of the Self.

Online, the Self is
* Seen by Self
* Seen being seen by others
* Heard by others
* Read by oneself
* Read by others
* Seen read by others
* Spoken to by others
* Seen spoken to, replied to
* Seen quoted, referenced, linked to
* Seen in the "presence" of mentor figures, celebrities, etc
* Seen followed by and referenced by fans, etc
* Extended and popularized by online connections, audiences, etc.
* Seen attached to a status metric or measurement

Logic of the circuit
Circuits become habits by repetition. When people come upon the circuits that make sense for them online, and on particular tools or services, repetition provides both familiarity and success. The technical and the social come together: a user may set up on twitter, follow others, follow back, and easily succeed with a circuit of *popularity by followers*. If the user sees his or twitter activity more professionally, this circuit might then be *importance by followers*. The circuit covers both what to do and what it means. To extend the twitter example, this user might retweet others to maintain the circuit and solicit attention from desired peers, mentors, influential twitter users, and so on. The circuit successfully combines a valid (for that person) psychological interest with an available online social practice. Outcomes of maintaining this circuit satisfy both the needs of the social tool (in attracting users) and the interests of the user.

Circuits, whether "real" or not, are a part of how people make sense of what works and doesn't, and why, in social media. Any description of what social media is, how to use it, how to achieve success on it, and so on, is just an accounting of the behavior and interactions of its users.

Circuits are taken up into social practices. They transform the "moves" defined earlier into meaningful activities by supplying the second order meanings. First order moves become meaningful (and successful) through second order psychological and social value add. It is possible that a core set of circuits underlies many of the social practices that work on social tools. Presumably, these morph and change as technologies and audiences do. Circuits have consistency on social media because they relate individual user actions to technical and social outcomes that are more meaningful. They are how the medium works — similar in ways to how advertising works, how entertainment works, and so on. The difference is simply that in social media, each user must successfully connect personal interests to interpersonal and social interactions. Interactivity distinguishes the medium; circuits serve as social loops.

Elements of a circuit
- A user
    - Who relates as a self
- Interests
    - Which take interest in something, be this an idea, person, action, statement, goal, outcome, etc
- Representations, objects
    - Which include anything that can be represented onscreen with recognizable form: from text to users in Second Life
    - The representation, or object, simply captures interest. It is what a user is interested in.
- Audience

- Which not only acts but which is internalized
- Interpretive schema
    - Which provide reasons that can be attached to expectations, used as explanations of behaviors, results, social outcomes, and more
    - Interpretive schema leverage cultural understandings and references easily communicated to an audience

Logic of the Circuit

The logic of the circuit is built around the Self and its relation to mediating objects (of which its own self image is one), and reflection by a perceived or real audience.

Self > Object : Audience

Self (interest) mediated by [(actual **object** or mental **object/concept**)] reflected by [(**audience** projected or **audience** internalized]

- The relationship of Self to mediated object is based on an interest
- The object is an object of interest, and may be a "real" object, or activity, or an "ulterior" motive, as in a goal
- Self may take up an interest in mediated activity, in which case the object is object of activity, or activity is object of interest
- The audience may be a "real" audience o may be an imagined, sensed, hoped for, and anticipated audience
- The "real" audience would then supply real validation, response, reaction, communication, and so on
- The imaginary audience serves a social purpose without having to provide real results

Circuits: simple, doubled, complex

> **The new media screen has three modes: mirror, surface, and window.**

In mediated relations and activities, where users become involved sometimes in a reflected sense of self, and sometimes through an internalized sense of "audience," circuits can form around complex inter-connections. At a remove, for example, a user may become invested in a mediated presence: say his or her online "profile." Assuming that it appears to be a "popular" one, this profile is "seen"

by an internalized audience. The user, in other words, maintains two fictions: a (projected) Self in front of an (internalized) Audience. It's easy for this user then to expect that online activity is seen by the audience. And to believe that the audience is paying attention. Also, that the audience "knows him or her" by online presence, not for the person he or she actually is. Circuitous relationships that involve a projected Self and an internalized audience are complex: the relations connect two fictions, and interaction between those two (projected Self and internalized audience) is fictional also.

Simple and complex circuits

- A simple action (first order, unreflected)
- Reflection on how the action appears (second order, reflected)
- Reflection on what others might think about how the action appears (second order, *doubled, as* doubling of the Self, as Self reflects on reflected Self)
- Reflection on activity by members of the audience on the action (second order, *doubled*, as doubling of the Self as Self reflects on any social implications, expectations, and consequences of audience response)
- Reflection on the audience and how one's actions may have been taken (second order, *complex*, as doubling of Self occurs with Self reflection on appearance of the doubled Self to an audience that is represented to the Self mentally)
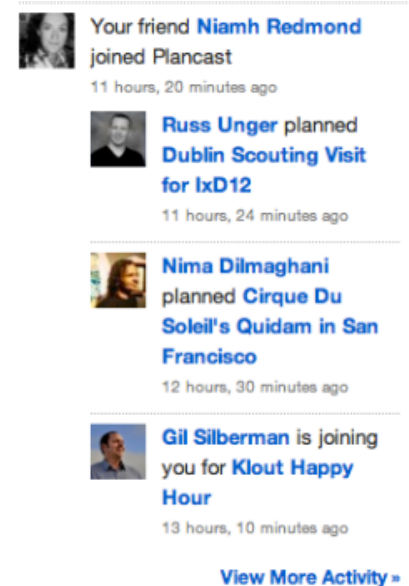
Social media, by means of their reflective properties, engage users in activities that need to be interpreted. These interpretations necessarily involve a user's sense of self, perception of others, and understanding of how one's Self and Others *are* online.

Simple relational circuit: Unreflected
In these moves the user simply makes selections without concern for what they might mean (socially). No mediating relation is involved, other than use of a social technology to interact with content and to communicate. An unreflected move may be followed later by reflected moves. Direct messaging is unreflected insofar as it already addresses its recipient. Messages sent by users to their fiends are not "socially reflected" but are straightforward messaging.

- Direct communication
- Some sharing actions (the user shares but has no interest in social consequences)
- Observation and "consumption" of user activity on social tools
- Observation and "consumption" of user content on social tools
- Actions such as search and browse, which are not captured by a tool, or "seen" by others

Doubled relational circuit: doubled Self image, Other image

In these moves the user may be preoccupied or involved in a reflected image of him or herself or the other. The doubled Self accrues value and attachments as the user becomes invested in making appearances online. Some amount of imagination and perception supplies meaning to reasons and choices.

- Use of social tools for publishing: blogs, updates, twitter, etc used to sustain a presence
- Content curation for the purpose of maintaining a reputation
- Interest in Klout and other online influence metrics
- Interest taken in follower numbers, retweets, @names and other kinds of audience activities
  where the user is more interested in their meaning for him/her than in their meaning for the other user

Complex relational circuit: Perceived self image in relation to imagined other

In these moves the user becomes involved in the social implications of an action and concerned with his or her self-image and its consequences. The individual makes a complicated mental relationship between the doubled self and the internalized audience, or the sense of self and perception/sense of the audience. Each involves a degree of fiction; neither is actually and directly causal. These relations are entirely mental. (User thinks she has lost Klout because she is not getting enough retweets. So she retweets "influential" twitter users in the belief that they might reciprocate.)

These common features of social media contribute to doubled and complex second order user experiences. They are designed not only to represent a user, but to place users in ranked social formats. Social status online requires constructing both the user's presence and the audience's representation. By ranking people by their online activity, social media "construct" the doubled identity, or self, of users. And social media construct and make relevant the social relevance of the

audience. Neither of these will matter to a user unless he or she has bought into this world.

Circuits and actions

In each of these examples of mediated psychological relations, relations graduate from direct to reflected to complex. A similar logic applies to actions. Or rather, actions take up relational circuits; actions activate and actualize circuits. As with the circuits, action is more-or-less complex. It, too, then, may be viewed in this way: direct action, reflexive action, and triangulating or mediated action.

> **Foursquare** can be used a number of ways, and is not "one thing to all users." User experiences include the social game aspect of collecting badges and competing for mayorships and leaderboard ranking. Users can also see where friends are in realtime. Users can obtain tips on places they are checked into, and sometimes deals, also. Lists make it easy to collect favorite places into a shareable format.

First order action may do something on the interface, but it has no consequence for social interaction until it has second order meanings. Actions thus need to express social intentions. As these intentions may be entirely self-reflexive (a user hopes to get noticed) the object of action may be internal. So action may have internal objectives and external objects: intentions and representations. Actions attach to these intentions and representations by means of circuits. Actions may have a real interest in social relationships, but have inner objects of focus. Actions may have a real interest in social relationships but be oriented to an internalized audience and its "perceptions." In other words, actions on social media are not what they seem; they simply can't be. There are too many reasons, internal and external, by which to orient mediated activity. The doubled self and internalized audience, then, form the possibility of actions that make sense, and which are rational, but which are oriented to complex psychological and socio-technical circuits.

If relations describe structures, it is action that makes these systems. Social practices are a combination — of organized interaction and reproduction over time. Circuits that characterize most experiences of social media combine the relations of Self and audience, including simple, doubled, and complex relations, with actions. Actions reproduce these circuits by orienting user activity to an internal or external objective or object. Through the actions of participants,

circuits repeat and recur, reproducing a population of users who pay attention to these circuits in different ways and for their own reasons — none of whom individually or singly can upset the system.

Social practices thus involve a moment of observation and a moment of action. Perceptions (accurate or not) govern the former; intentions and expectations govern the latter. Nothing says that the circuits that relate observations and actions to these online social practices must be good, right, or true. They can satisfy the rational and irrational reasons of people, acting out of their own observations and interpretations, without upsetting the experiences of others. Circuits provide both individually motivating reasons, and social stability (as many different users engage in a practice for their own reasons).

These active circuits explain the great differences among users of online media, and the wide range of experiences that social interaction design must account for. They explain, too, the manner in which social practices become so easily communicable and meaningful. Through the social practices that develop around circuits, actions reproduce social relations by means of recognizable forms and outcomes. Social relations can be real or fictional, involving a Self or a perceived audience.

Common social practices on social media survive because different users see in them the social reasons most relevant to them. These practices, then, are stable enough to satisfy multiple reasons and become objects of different actions. And stable enough to survive the arrival and departure of many ongoing participants.

Common circuits

Social media fashion a different kind of self image for users. This self image becomes an investment, takes on imagined and desired attributes projected on to it, and slips from reality towards a more invested combination of real and fictional.

How this self image appears to a person differs of course to how others see him or her. Not to mention, how others might see that person's self image. In the absence of the activity of others directly about oneself, people project and internalize. Relational circuits help to bind these activities and to make success more probable. For the more recognizable activities are online, the more likely they engage people.

Circuits use first order interface and design elements that accrue second order meanings.

Noise is just the excess of signal.

These second order meanings are provided by users and by social practices. This means that a particular activity on a social tool may have several meanings, according to the social circuits and practices involved. Generally speaking, circuits are made out of idiomatic meanings and sensibilities: the different kinds of action, expression, interpretation, and signaling available using a tool and its features. It is these differences in sensibility that make it possible for people to tell self-promotional from effectively promotional activity. As well as which explain people's ability to clearly delineate their "real" from online "popularity;" or likewise, get lost in the slippage between the two.

Vanity

Call this circuit by any name that suits it; it's a circuit centered on the Self's favorite object: itself. There's little doubt that social media can be good for sense of self and self-image; and that social media is rife with popularity contests. In the vanity circuit, a person becomes invested in his or her external self. This external self takes form by means of representations. These online representations may attract action and communication, directly as well as indirectly. And so the person can then become invested in their image and appearance.

The vanity circuit involves attracting the attention, real and imagined, of online audiences. Socially, it involves seeking and sustaining status

amongst a peer group of similarly competitive (vain) individuals. It also involves competition with their reputations — or public image. The circuit might be related to a positive sense of self, to low self esteem, to social acceptance, validation, recognition, or to many practices by which people seek and secure attention.

The online representation of self may take any socially communicable form: writing, messaging, comments, images, video. Audience engagement is captured by means of common formats: testimonials, ratings, votes, gifts, retweets, gifts of Klout, +1s, following, and so on. These are reliable, stable, and consistent means by which an audience furnishes a person with confirmations befitting vanity. (Not, of course, to say that this is intended by the audience. On the contrary, many audience members are themselves seeking attention.)

Relationally, the circuit passes from the user's interest in getting attention to his or her externalized online presence and representation. The vanity circuit never ends. There is never enough approval, enough interest, or enough validation. It is sought after because of a need for more. It's worth noting that activity alone, without communication, can do what vanity needs done. Furthermore, any cultural references that contribute to the image of vanity may be made use of. Social media make these easily available.
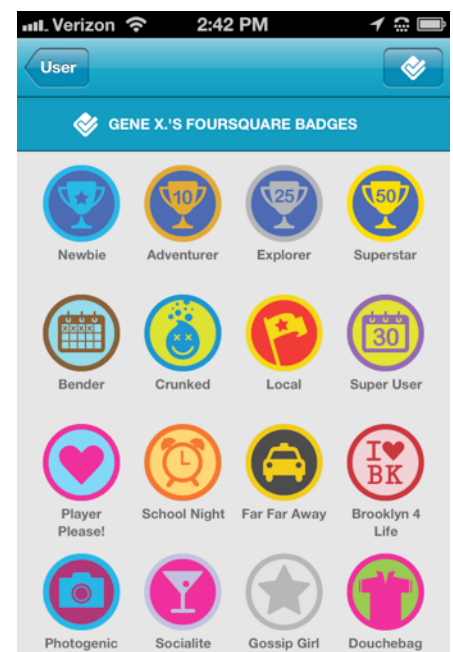
- Self-oriented relation
- Reflected self image
- Complex relations involve confirmation and validation
- Doubling of the self as self image may be pursued on a wide range of highly reflective social media
- Can be maintained by means of self involvements, or use of social media to sustain self image
- Can be motivated and satisfied by real or perceived validation by audiences
- Common symbolic and numerical qualities are attached to the doubled self image: numbers of fans, followers, views, and validating rankings
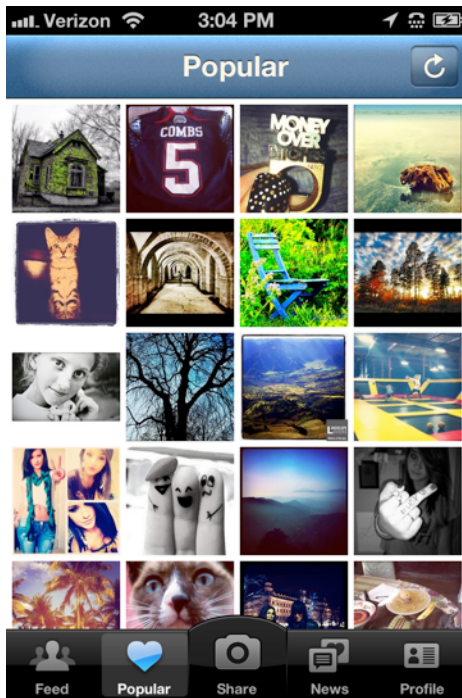
Credibility

This relational circuit takes shape as a social form in which the user's consistency (behaviorally speaking), integrity, and sincerity define his or presence. Credibility is produced through truthfulness. Statements by a credible user don't have to be right, but should be well-intentioned. The relation passes from the user's disposition to online audiences to his or her sense of genuine participation in an online social world. Actual audience recognition and acknowledgement of the user's genuine and sincere contributions and efforts is accompanied by imagined and anticipated recognition of ongoing efforts.

The circuit that favors credibility requires some interaction and support from an audience. It also needs the support of credible peers. For unlike vanity, credibility cannot claim its image for itself. It must be confirmed, and by those whose judgments are themselves credible and valid.

The circuit that validates does so by appealing to truth, honesty, integrity, accuracy, respect, and other attributes of credibility. These individuals seek to attach credibility to their public image. The image must have a greater reputation than the person can make for him or herself alone.

The individual who seeks to validate his or her credibility does so through connections. Connections must be established to credible online sources and individuals. Obtaining validation online is straightforward. Peers, publishers, networks and more exist to trade in the currency of expertise and opinion that supplies credibility.

Tactically, the circuit of credibility cannot over-indulge itself. Individuals who solicit signs of credibility from peers do so at the cost of their credibility. The workaround, then, is to offer validation to peers. Basic online etiquette will return some of the favor.

- Doubled and externalized self image

- Self image is an externalized proxy for individual's sense of self as truthful, genuine, and sincere
- Peers are required to validate the rightness, truth, correctness, and other attributes of credibility
- Complex relations take shape around the activities required to establish credibility, and their reflection on credibility
- May appreciate subtle and convincing tributes, but avoid cheap signs of influence
- Credibility attaches to a person, and so becomes a matter of character
- Credibility may be achieved or earned through topical expertise, but nonetheless is a personal attribute
- Credibility does not require objective achievements (such as demonstrations of expertise) but instead depends upon reputation

Expertise

This is a relational circuit that takes a social form in which the user's domain knowledge establishes and distinguishes him or her as an expert. Because expertise is a social distinction, this circuit is ideal in social systems that value talk, which are reproduced discursively, and which involve selections and choices among better or poorer answers. The relation passes from a sense of self invested in knowledge, insight, know how, and expertise validated by audience and peer recognition.
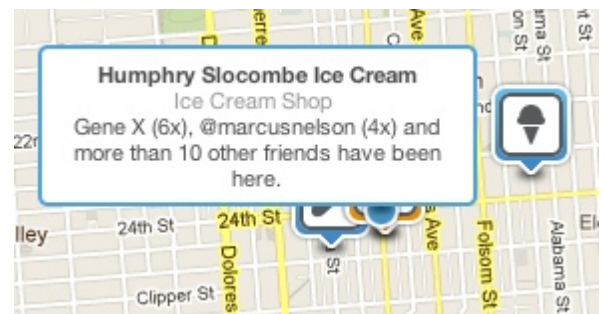
Where the expert differs from a person with credibility is in the personal character established by the expert. Experts are personally credible — possibly validated by peers, but certainly projected by the person him or herself. A person who is credible must have a credible reputation, as seen by others. A person who is an expert believes she or he is an expert, regardless of what their reputation is.

Actual social validation is accompanied by expectations of future social position maintained by sustained domain contributions. In contrast to credibility, expertise measures the content value of a user's statements.

The relational circuits in which experts are implicated include signs of expertise. However, unlike the signs that may qualify degrees of mastery, signs of expertise attach to the domain, not to individual performance. A person is an expert, or not ("almost an expert" is not quite; "almost a master" is nearly there).

- Un-reflected interest in a topic combines with the individual's reflected awareness of his or her reputation
- A mediated sense of self contingent to relational validation of an individual's status as expert; expertise applied in frameworks specific to the medium, such as online games, may provide important measures of success
- Complex relations may involve engagement with a field of peers, communication about areas of expertise in which opinion and fact are both brought to bear
- Expertise requires domain knowledge
- Expertise may not be credible; credibility may not be expert
- Expertise can be developed within a domain in which there are objective means to validating (and demonstrating) expertise
- An expert may have a reputation for expertise, but is not an expert for this reputation alone

BADGES

Mastery

Mastery is a relational circuit centered on know how. It combines personal experience, accumulated through effort and time spent doing something that increases in difficulty or complexity. Mastery may also be validated by others — by those capable and qualified (credible) to judge and assess mastery.

The personal experience of developing mastery is available to novices. It may be more of an attitude to the self than it is an actual and identifiable outcome. A pursuit of mastery, then, is helped along by social milieu.

The relational circuit passes through and picks up signs and symbols of mastery. Mastery may have more degrees, and more kinds, for it is more personal and individual than domain-centric proficiency.

- The pursuit of mastery fits tracking applications and services well
- Mastery is demonstrated with help of competitions

- Mastery may be challenged; a challenge among masters becomes a non-social event. Only the two masters and their performances matter (this is the duel).
- Mastery benefits from praise insofar as it involves a degree of personal and individual style and character
- In contrast to expertise, which involves a level of objective domain knowledge, mastery introduces individual character. Prizes befit mastery; recognition befits expertise.
- Mastery requires a topical domain in which activities increase in difficulty
- Much of mastery owes to experience (practice, time) and so not necessarily to opinions, knowledge, and judgments (expertise)
- Mastery doesn't need validation, but must be demonstrable
- Mastery need not be social, but when it is, often involves games
- Nothing in mastery requires that a person with mastery of a topic must be able to share, teach, or communicate it (expertise must be communicable)

Like-ability, popularity

Popularity is perhaps the most common and sought-after social attribute online. There may be reasons for this. Popularity is an attribute that requires less specific individual skill, talent, or domain knowledge and proficiency than other forms of social distinction. Popularity is the most rudimentary and essential of signs of social acceptance and membership. This provides many means for achieving it. People can become popular by social means.

What if something in a feed could be browsed in greater depth without a user leaving the feed? What if feed contents were deep as well? What if they could pull in comments, followers, likes, and more from elsewhere on the social web? And what if the most active items in feeds were suspended and recommended to users based on shared topics?

It is no coincidence that the social actions and activities that secure popularity are also the most common features of social media. Sharing features, such as the Like, Share, +1, and retweet, are all generic actions. They connect a user and content to distribution.

Any use of a social share feature is information to two audiences: that of the content's original author/contributor, and the sharer's audience.

The act of sharing, then, is the fundamental act of social mediation. It is at the basis of the image of popularity because it is simplest means of quantifying popularity. And it is the most commonly used feature, because it is generic and non-specific. Thirdly, it creates a reflection on the person who shares, while reflecting also on the owner of content shared.

All of this means that popularity is a type of social media reputation that tends to be topically non-specific. It is a simple social distinction. Signs of popularity are generally signs of approval, complimentary activities, positive communication, etc. These, too, attach easily to a person. Popularity belongs to the attention paid to a person's external image.

Trust does not exist. Trust is extended. It's a relation, not a property.

Because popularity is, in essence, a counting of people (qualified by their social relevance perhaps), popularity numbers can be accrued mathematically. In other words, growing the count can substitute for being popular. The appearance of being popular is an image of quantity.

Social media content facilitates the pursuit of popularity, for so much of it is connected that any sharing activities will solicit attention. Because the appearance of popularity is itself a form of popularity, actions that appear popular also contribute to the image of popularity. Actions like actions of popular people; actions involving popular content extend and reproduce the image of popularity.

An individual can seek popularity by any social means valid and appropriate within a particular social milieu. Therefore, an individual might be generous to others; be welcoming; be reciprocating; balance desirability with integrity; and so on. Popular culture is rife with examples of these finely-nuanced distinctions. On social media, anything that works, counts. The audience in which a person becomes "popular" then determines whether behaviors have been acceptable.

Because the circuit of popularity involves a doubled self and internalized audience, popularity varies in its degree of reality. Social media may confirm that a person is really popular. Or they may

provide a person with a sense of being popular. There is no difference as long as popularity furnishes motivation to the person involved.

When technologies fail, communication does the repair work.

It's worth noting that popularity is not a quality of a person. It's not an attribute owned and possessed. Popularity belongs to an audience — and the moment a person violates acceptable behavior, is removed from the individual. Stars rise and fall.

- Popular references are ready-made for use in pursuit of popularity
- A simple, generic and topically non-specific kind of social communication may confirm popularity: buzz
- Popularity accrues to itself, reinforces itself
- Likability and popularity are generally non-topical social achievements; they are a most common social distinction
- The boundaries of a social scene or audience in which a person may be popular are not constrained: they may be tight or wide open
- The object or focus of action is a social milieu: a social scene, however defined
- Popularity can be obtained by social actions: generosity, kindness, reciprocity, favors, and so on
- Popularity is easily preserved by avoiding direct personal or social putdowns and insults
- While inclusive and welcoming activities will appeal to members of a social scene, popularity can benefit from exclusiveness
- The perception of popularity might never attach to a genuinely likable person — for this, signs of popularity may be enough
- If popularity is perceived to be competitive, social actions may contradict genuine likability

Additional social circuits
- *The taste maker*: an individual whose tastes are respected. This individual has a reputation for his or her sense of taste. The taste maker can promote and share tastes personally, or with the help of followers. Tastemakers often combine some amount of expertise, experience, likability, and credibility

- *The pundit*: more than an expert, the pundit needs an attentive audience. Part of the pundit's circuit is procuring ongoing attention by means of real expertise, or fakery, or by mastery of the process by which one might appear as pundit. The pundit may use the credibility attached to various stages and authorities (sites, publications, etc) to sustain the appearance of punditry. Pundits do not need to be genuinely credible experts.
- *The professional networker*: Social milieu is professional, and so representations shift to professional images and values; actions shift to professional (work-related) actions. Social presence becomes an extension of an individual's sense of professional self, and connectedness substitutes for popularity. Doubled image of self accrues professional values: respect, credibility, skill, and trustworthiness. Activities and actions online may resemble or shadow work — individuals take them seriously and earnestly, devotedly, with commitment, and so on. Use of social tools may be referenced using professional attributions: access, effectiveness, performance, success, etc. Availability and responsiveness to communication substitutes for likability. Professional networks and groups become confirm professional status and standing. Qualities prized among social tool users and loosely related to work environments conflate, as social networking creates a technology-friendly language for itself. Note that cool, hip, nerd, and geek discourses dovetail to a degree with that of the professional networker.
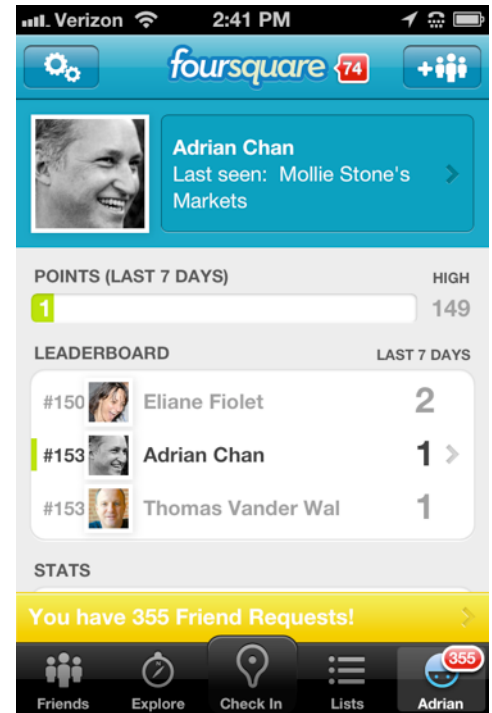
Circuits and mediated social action

Social media depend on communication among users. Much of this communication is textual, but some also uses elements of social media. Some of these elements may not seem like forms of communication: profile images, photo albums, status updates, and symbolically-mediated activities described earlier. They communicate when they are shared, they permit new ways of

communicating (and new expressions), and they permit new interpretations. How then do circuits use these new forms of communication? How do circuits create new ways of relating, and interacting, online?

What if Instagram was more than pictures? What if it were a service for liking and sharing any kind of object? What if pictures were statements? Could instagram be used to share Questions and Answers among experts and professionals? And if so, what actions other than **Likes** would be required to distinguish credible experts? What groupings of members would be necessary to make experts easy to find?

Communication is already relational. It is an exchange in which linguistic claims might be accepted or rejected by another person(s). Communication comprises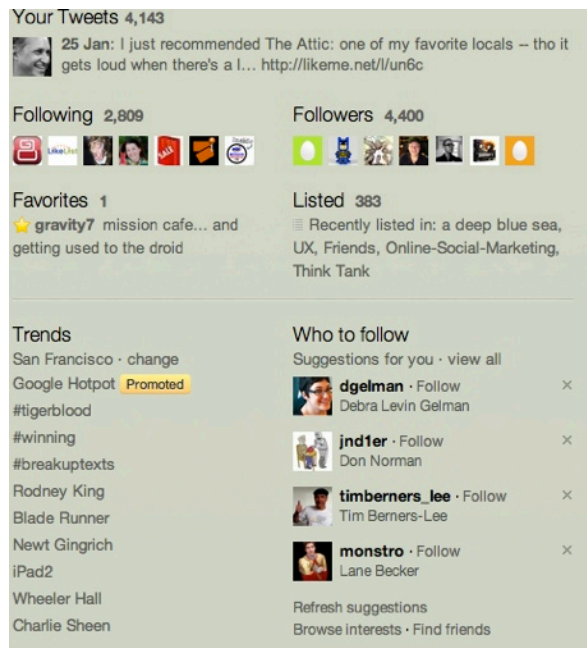 of both the relationship between people (and its degree of trust) and the relations established in the claims themselves (true, false, etc). Social media distribute some of this kind of communication, often mediated by or using rich media forms. But systems can also generate communication. System messages are communication; as are notifications. People share without intending to share to anyone in particular. And people respond to or comment on sharing, without having been addressed in the first place.

Systems, then, create communication by proxy. Ambiguity will reside in the intent of the communication, and in the etiquette of responses available. Proxy communications are created when a user action triggers a notification that is then sent to another user. The receiving user can take the notification as information, as a solicitation (to follow back), or as a request (to respond). Circuits develop around these kinds of proxies because proxies are multiple-purpose communications. They are not directly sent, and so can be interpreted with a wide range of "codes" of etiquette.

Communication on social media satisfies interests by proxy and substitutions. Some of it attaches to the self image. Some of it indicates audience responses. Some of it may reinforce perceptions, taking the shape of audience responses that enhance image and appearance.

What matters to the social interaction designer, then, is recognition of how circuits form around different types of relations, mediated and facilitated by onscreen content and features. These circuits are

anchored in strong psychological interests, taking form and shape through habits and routines involving social media, sustained with the help of system activity that reinforce relational circuits. Substitutes, content, system messages, and of course mediated communication all then play a role in maintaining social circuitry. Because the medium privileges affirmation over rejection, actions over inaction, there may be little to correct a person's misperceptions. Gains in social visibility and presence may be easily sustained by a person. There may be nobody there to provide a reality check.

Your Tweets 4,143

25 Jan: I just recommended The Attic: one of my favorite locals -- tho it gets loud when there's a l… http://likeme.net/l/un6c

Following 2,809

Followers 4,400

Favorites 1

gravity7 mission cafe... and getting used to the droid

Listed 383

Recently listed in: a deep blue sea, UX, Friends, Online-Social-Marketing, Think Tank

Trends

San Francisco · change
Google Hotpot Promoted
#tigerblood
#winning
#breakuptexts
Rodney King
Blade Runner
Newt Gingrich
iPad2
Wheeler Hall
Charlie Sheen

Who to follow

Suggestions for you · view all

dgelman · Follow ×
Debra Levin Gelman

jnd1er · Follow ×
Don Norman

timberners_lee · Follow ×
Tim Berners-Lee

monstro · Follow ×
Lane Becker

Refresh suggestions
Browse interests · Find friends

Substitution and proxy play a substantial role in the mediation of communication and action online. Substitution can also become involved in a circuit. Self reflection involving one's self image is already a form of substitution. People encounter and relate to their self-image by means of social media presence.

Substitutes are objects or media that may be taken up in relational circuits. Substitutes signify social meanings but are specific to the medium. In this way they may easily accommodate psychological interests. In addition to capturing personal and social value, substitutes help to mediate interactions and communication.

Substitutes exist for representations, and for actions. As symbols, they represent meanings as signs. As gestures, they offer stability and consistency for actions. A score, for example, captures a sign of social value. A Like captures an affirmative action. Profile pictures, comments, views, testimonials, followers, points — all of these substitute for the "real thing." All can become implicated in relational circuits that support sense of self and may become proxies for relationships to others.

Substitution becomes a motivating factor in social media use when users become relationally involved with and through the substitute in place of "real" social interaction. The substitute provides for proxy relational benefits. Substitutes are psychological objects. They may

have existence online (as a token, a gesture, etc) but their value is invested psychically. Scores and metrics, for example, create a perceived social status for those who internalize an online social world. As a substitute for people in face-to-face situations, these signs of social status are less risky than actual interactions; and easier to control. A Klout score stands in and substitutes for influence, and may be driven up by use of social tools. The score is in effect a psychological object, and it makes the online social world signify. High scores, of course, correspond to mastery, expertise, popularity and so on, depending on a user's view of both his or her self image, and of the social world.

What if OKCupid had games to lower the risk of rejection, and to help users find matches around shared interests and availability in realtime? Users of dating sites refrain from interacting for a number of common personal and social reasons. Structured and themed activities and interactions can be used to break the ice, improve matches around shared user chemistry, and remove some of the risk of first contact. Most relationships don't start with an explicit dating ritual, but occur more naturally. The dating challenge is not just the match, but initiating the relationship, which means contact.

The circuit in which such substitution then takes shape, and which involves proxy relations, can become very powerful (for better or worse). It might contribute to habits and routines that themselves border on compulsive use of social media. For example, users may become increasingly involved in social substitutes, with activities that use them, psychologically, and to the proxy social relationships they help to create. A Foursquare user may become more invested in checking in to numerous places, becoming mayor, attracting and accruing friends, and while doing so have little actual social interaction.

Relational circuits provide substitute and proxy means to obtain some of these psychological interests.

Relational circuits and psychological interests
- Approval
- Validation
- Admiration
- Desire
- Encouragement
- Attraction
- Respect

- Trust
- Success
- Consensus
- Avoidance
- Deception
- Inclusion
- Loyalty
- And more

> **What if twitter** had invitations that you could reply to? What if tweets had buttons allowing users to respond to the content of the tweet? And what if these "structured tweets" were useful — for sales and wanted ads, live event tickets and deals, invitations, checkins, and so on?

The design of social media of course has an effect on how users become relationally involved in them. This may be specific to content themes and to cultural practices. Furthermore, the degree to which a user takes up a relational circuit varies. And not only the degree, but directional inclination. A user may simply act, or may wish to attract or solicit responses. The relational circuit in the first case is completed more easily than in the second. (A Foursquare check in is a direct action and more easily satisfied than attracting retweets on twitter.) These examples, again, are not exhaustive.

Direct and indirect actions
- Direct action of the Self by the Self
- Direct action on the Self image by the Self
- Direct response to communication by Others about the Self image
- Indirect response to communication by Others about the Self image, using communication
- Indirect response to communication by Others about the Self image, using communication, using Self image signs
- Passive action intended to sustain visibility of the Self in a social scene
- Passive solicitation of communication (indirect) by Others about the Self image

Circuits and inclinations
Circuits can be initiated and sustained deliberately, consciously, passively, and unconsciously. Some may be put in play through other people, in which case they are triangulated.
- *Actively attractive* These socially desirable individuals project their sense of attractiveness and social position through contributions, statements, pictures, etc that refer to them. They re-distribute the things said about them. An individual's self-referential statements, and style of social media use become content for approval and admiration by others. Attractiveness is reflected back to the

individual by social commentary and acknowledgment. Affirmation may focus on content, or on a person's activity; both are captured and published online. Individuals who actively promote themselves solicit this kind of approval and confidently supply the kind of content that audiences use to reflect back their approval. Individuals like this, of course, need not be aware of their behavior or motives.

- *Passively attractive* The individual refers to him or herself by means of substitutes and proxy social activity to solicit confirmation of his or her attractiveness. Indirect appeals for social recognition and interest protect the individual against the risk of direct rejection and may seem unconfident, timid, and deceptively self-effacing. Social approval is often obtained with the aid of peers who participate in the "game" of providing mutual recognition and approval in front of shared social relations.

- *Actively uses substitutes* These socially desirable individuals keep the appearance of being desirable. They actively invest in their doubled Self identity and its mediation by objects, people, groups, projects, signs, and more. They obtain, project, and extend this sense of self in a manner that may appear genuine and valid, hence inspiring approval and admiration by audience members. But it is the substitute image of (doubled) Self that is being attended to. These individuals invest in their image. Substitutes provide social significance, value, status, and other socially recognizable attributes, which then attach to the individual's self-image. Whether these individuals associate with their Image strongly or not is a matter of character and personality. The medium provides ample opportunities for excelling at this, and permits relative newcomers to experience success with relative ease.

- *Passively aware of substitutes* This individual may passively identify with and internalize the attributes and social significations of communication, objects, people, and audiences. The substitutes provide an extended sense of presence and identity, and qualities and attributions supplied by interaction on social media bolster and augment the individual's inner experience of self. But in contrast to people who actively participate in their mediated self image, passive users make little investment in the social status of their online presence.

- *Actively competing for social rank* These individuals associate their sense of self with quantifiable measures of value and success, such as numbers, points, scores, and rankings. Rankings

and scores can stand in for social scene or milieu, by bounding a set of users as participants and members. This individual then focuses on the social competition of social status, rank, and position, and invests in and identifies with leaderboards etc as a substitute. Signs substitute for a sense of social position. In place of, or along with communication and interaction, the signs themselves provide motivation for sustained interest in social media.

- *Passively aware of social rank* These individuals measure and internalize the social value conferred on them by the same quantifiable metrics of social rank. Individuals might stay aware of signs and

What if Foursquare were to emphasize the knowledge and expertise of local area experts? Does the game orientation of Foursquare get in the way of this?

- Foursquare does not recommend tips by experts, but by friends
- It does not provide maps of trending locations
- It does not offer points based on tips made and liked by users
- It does not allow tips to be qualified by users, for a set of best tips
- It does not reward users for creating nuggets of insider knowledge
- It does not capitalize on opportunities for merchant customer ambassador programs
- It does not use notifications designed to provide realtime tips and recommendations
- It does not group users into sets based on the kinds of local knowledge they have
- It captures user interests in places, but has no way of capturing what users like about or inside places

measures of social position. But in contrast with those who actively invest in their social rank, these individuals are not "fooled" by signs of status. Some may actively comment on and undermine online scores, thus betraying the inherent conflict in maintaining a passive interest in one's own scored and ranked social status. Many of these individuals may resent scoring systems, believing them to be false; and many may resent those who actively engage in their scores, for the fact that it "cheapens" online rankings in general. Paradoxically, these individuals may have an even stronger belief in social influence than those who treat it as a metric to be gamed.

- *Dispassionately interested in contributing to common good* These individuals sustain an interest in community projects and shared values, expressing their affiliation through contributions that seek little personal gain or recognition. Not seeking direct recognition and public praise, they obtain a sense of satisfaction from knowingly and voluntarily assisting in a collaborative effort. This effort may or may not need direct interaction and communication, but in cases may be enjoyed for the independence and relative safety and security it grants these individuals, who can contribute from a distance. The value and reward of participation is experienced internally, and needs little in the way of external signs of social status and rank.

- *Passionately rating, reviewing and recommending* These individuals externalize and project their self image through opinions and interests expressed in reviews and recommendations. Reviews and recommendations allow the individual to express his or her personality, interests, and style through associations made with contents of reviews. As their preferences are associated with socially recognizable entities, these individuals express their identity without addressing it directly and personally — they show who they are without talking about themselves. Reviews and recommendations allow these individuals to express who they are by what they like, why, and how, rather than by talking about themselves directly.
- *Strategically building up reputation and personal brand* These individuals externalize their sense and image of self by means of a personal branding effort that benefits from the kinds of attributes attached to brands and communicated by mass media. They may view social media participation as a valuable professional practice, and take interest in the social rankings and signs of position as a view of overall social value. They may track and monitor these for an indication of what works and what doesn't,
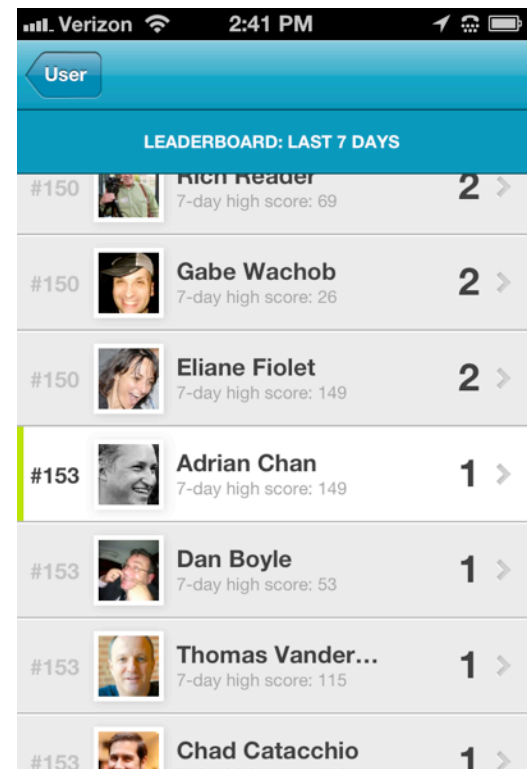
rather than rely on the feeling provided by immersion within the medium (and which usually involves a strong identification with the online Self image). These individuals exercise some degree of control over their brand, avoiding some risks inherent with active participation and interaction in online audiences — even those that value them.

> **Reflect critically** on your product or service. See if you can identify key assumptions you may have made about what it does and how it will be used, and by whom. Which of these are you certain about. What makes you certain? Ask others if they share your assumptions about what the product is for.

As brands, this distance may benefit them by raising their perceived status. Where those individuals who become actively involved in their own image as Self image, these individuals know that their brand is distinct and separate. They develop competency with the medium as a publishing medium.

- *Strategically following in order to be followed back* These individuals pursue followers, friends, and other types of relationships in order to accrue status. Rules of the game and common practices of reciprocation, karma, and other self-satisfying procedures appear to guarantee success while safeguarding against risk, failure, and personal exposure. A sense of self is augmented by quantitative successes (number of followers, etc.) and a sense of social partnership is obtained through the mutually-reciprocated participation of others willing to engage in the effort. Game rules and a belief in how it works substitute for personal and genuine interest and participation.

- *Avoidance of public interactions and commitments* These individuals avoid public interactions consistently or occasionally, preferring to observe social activity. Their avoidance of commitment to the medium, or of commitment to interaction and communication on social media may be matters of competency, of preconceptions of social media and its users, or may simply be extrinsic (lack of time, lack of
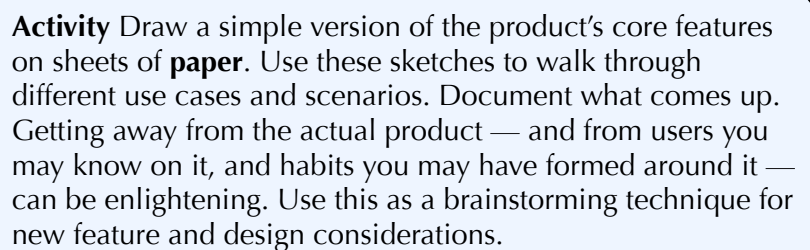
friends on social tools). For these individuals, social media may simply appear to be a low-grade distraction and waste of time.

Circuit dynamics

Circuit dynamics emerge as users engage in common online social practices. The more common the practice, the more likely it is to animate circuits that can use it. As users sustain their involvement, paying attention to their own activity and to that of others, they provide an ongoing resource: attention. This is tapped and put in circulation, and channeled through circuits as described in the examples above.

Below is a more granular breakdown of some of the interaction dynamics valuable to circuits. These dynamics may be thought of as small interaction loops: more-or-less reliable conventions, sometimes specific to a tool but often more general to social media overall. Many of these dynamics use recognizable and familiar social interactions. These distinctions are not exhaustive. They serve the purpose of illustrating the nuances possible in analysis of online social practices.

- *Approval* Direct or indirect confirmation of an individual's actions and choices; more likely to be conferred on an individual than on that individual's online presence (image, brand)

> **Activity** Draw a simple version of the product's core features on sheets of **paper**. Use these sketches to walk through different use cases and scenarios. Document what comes up. Getting away from the actual product — and from users you may know on it, and habits you may have formed around it — can be enlightening. Use this as a brainstorming technique for new feature and design considerations.

- *Validation* Direct or indirect acknowledgment and recognition of an individual's membership in a peer group; may be solicited but this may also compromise the outcome
- *Admiration* Primarily indirect approval of an individual, their reputation, online presence (image, brand), and activity; admiration requires a certain distance. Direct expression of admiration in the form of compliments is more common amongst peers and solicits reciprocation.
- *Desire* A relation of attraction that takes many forms. An individual may be desired personally, or for their online presence
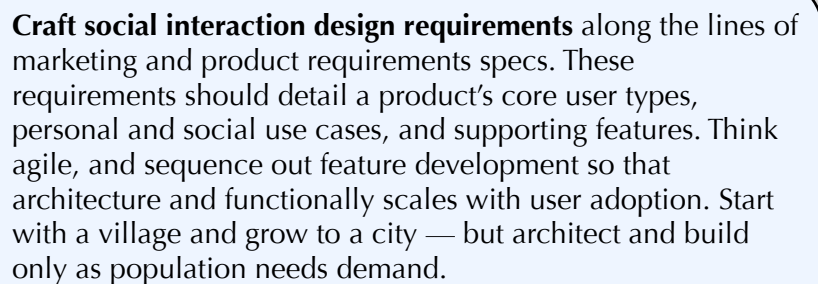
(image, brand). Mediated desire involves a kind of socialized, collective desire, in which people desire because others do too. Many demonstrations of desire relate as much to signs as to real people: signs and attributes may make a person (often their image, brand) desirable. Desire is increased by channeling activity around the images and signs that substitute for genuine presence, for this increases the distance and unavailability of the person in question.

- *Affinity* A shared interest between individuals important either because it reveals a commonality, or because it suggests relationships among the individuals.

  Craft social interaction design requirements along the lines of marketing and product requirements specs. These requirements should detail a product's core user types, personal and social use cases, and supporting features. Think agile, and sequence out feature development so that architecture and functionally scales with user adoption. Start with a village and grow to a city — but architect and build only as population needs demand.

- *Progress* Activity, tracking, statistics, achievements, and points that provide feedback on an individual's absolute or relative position on a scale. Progress tracking may become more meaningful to some users if it is incentivized or socialized. Incentivized progress tracking includes reminders and goal-oriented messaging. Socialized progress tracking makes use of leaderboards, and more, to compare users.
- *Gratitude* Positive and personal expressions of thanks demonstrate good will and are to a degree self-perpetuating as interactions. Messages of gratitude are expected in some interactions, and their absence may inspire doubt or worse. Gratitudes, like other complimentary expressions, are deeply relational forms of social action. Gestures may suffice, albeit with less personal impact.
- *Common wealth/good* The self-less contributions, collaborative efforts, and support of community projects by volunteers contribute to shared efforts. Whether as crowd sourcing or collective decision making, etc, these kinds of activities promise a greater whole than the sum of the parts. As group actions, they depend on strong individual commitments.
- *Offer* Offerings combine good will and intent, with an expression of trust and expectation of reciprocity. This kind of interaction can found social economies. Relationships become bound to

transactions, social well-being to goods and services. Offers, not prices, found social economies.

- *Reciprocation* Individuals recognize the value of reciprocation: personally and for interactions. As a type of action, reciprocation is generic and available for specific purposes. People will recognize it regardless of the activity in which it is shown. Acts of reciprocity both signal a personal interest as well as provide acknowledgment and approval of the other's initial gesture.

- *Norm or value validation* Group or community agreement, acknowledgment, and recognition of shared norms and values reinforce group identities. Group norms may be referred to explicitly, but are often communicated and acknowledged implicitly.
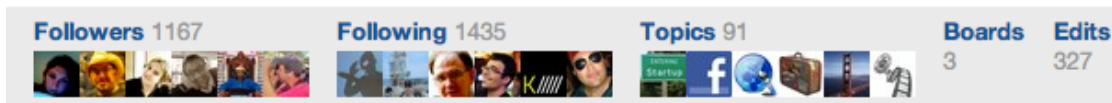
Design choices certainly do contribute to the relational circuits users may take up with a social media application. Certain kinds of representations, substitutes, symbolically-mediated interactions, and more, lend themselves to particular relational circuits.

Relational circuits may express an individual user's psychological interests in ways that typify social media's amplifications and distortions. The same distortions occur in the presentation and interaction with content on social media: follower numbers become disproportionately important; Diggs become corrupted for the ease with which they can be gamed; and so on.
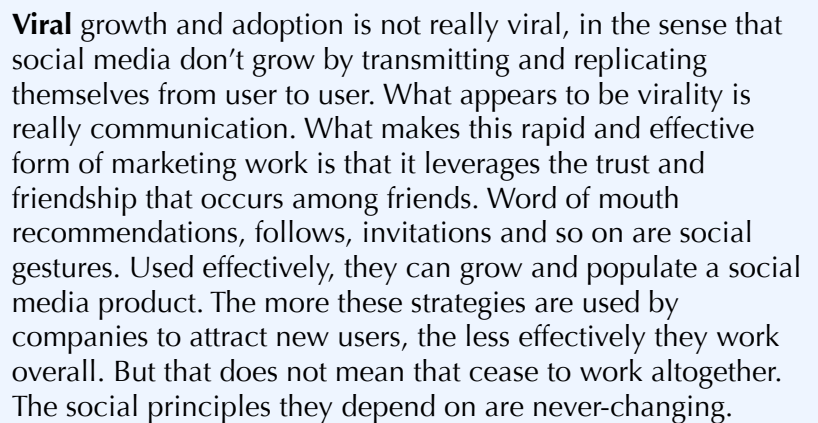
Social practices

Many different kinds of sociality develop around social media sites and services. Sites vary in their theme, topics, and content. They vary, too, in the social norms and conventions that seem to guide behavior on them. These differences may owe more to cultural practices — as in commenting on Youtube — while others may owe to design and feature choices. Are there correlations then between what some kinds of users naturally incline to, and the sites that they use? Are there correlations, for example, between fans and fan sites; between experts and twitter; between critics and Yelp, and so on, according to the ways in which these services provide views of activity, interaction systems, forms of content, symbolically-mediated actions, and thus support for particular circuits?

Viral growth and adoption is not really viral, in the sense that social media don't grow by transmitting and replicating themselves from user to user. What appears to be virality is really communication. What makes this rapid and effective form of marketing work is that it leverages the trust and friendship that occurs among friends. Word of mouth recommendations, follows, invitations and so on are social gestures. Used effectively, they can grow and populate a social media product. The more these strategies are used by companies to attract new users, the less effectively they work overall. But that does not mean that cease to work altogether. The social principles they depend on are never-changing.

The success of any social tool ultimately depends on its ability to support and engender social practices. These are the social interaction designer's equivalent of "use cases." They involve the tool's particular features and design, but emerge around the actual practices of users engaged for many of the reasons covered so far. These practices include actions, communication, interaction, and uses of the many kinds of content created and distributed through social media.

Design choices apply to features and interface elements that structure and organize content and first order interactions. The actions users take on social media are moves; moves connect first order actions with secondary frame meanings. Second order consequences occur when social practices begin to develop. As discussed already, user moves in themselves are inadequate to describe motives and experiences. For a description of deeper meanings and to capture the

broader spectrum of social interactions and communication, users act out relational circuits centered on an acting self in relation to others (individually and as an audience). Circuits satisfy individual and social interests, sometimes directly and at other times through mediating images and actions. Some of these interests self-satisfy through the reflective and mirroring representations of the medium. Some communicate, and others are taken up in social actions that pass among users in ways unique to social media. Relational circuitry can be recognized for its resemblance to many individual, cultural, and social forms. These forms help users identity what's going on, and what to do; and they secure some success for participants.

Social practices are difficult to define. They are both activities and relations among individuals. Practices are recognizable in general, but any practice is specific to who is involved and what is going on. In other words, social practices aren't just the rules or conventions that shape a particular social activity — they are the activity brought to life and sustained by acting participants. The distinction is an important one. For while it is possible to model practices in the abstract, they are always real to the people involved in them. Relational circuits have also shown that users can participate in the same social practice, for different reasons, and with individual experiences. It is possible to name and identify a practice, but not to account for all individual user experiences.

Social practices may be shared or may be common to several social media applications, but have their own contextual implementation and cultures of use. Status updating in Facebook and LinkedIn would be one such an example: updates in each service use very similar

technical approaches, and for all intents and purposes, share design similarities also. But they are used differently for reasons that have more to do with updating to friends vs professional colleagues, than to do with design. If the social practice is "status updating," then it is versioned within different contexts. Updates on Facebook, Linkedin, Myspace, Yahoo, etc share in and leverage a common social practice, but give it local flavor. User interface design, and features and functionalities describe part, but not all of what accounts for these differences. Those are explained by brand differentiation, user cultures, thematic differences, and so on.

> Ask to **watch** other people use your product or service. Watch users who already use the product; they might be friends or colleagues. What do you observe? What do they do differently? Ask why they use the product. Extrapolate how other people might use the product. Capture these observations in a product diary.

Example: Leaderboards

When a social tool accrues users, some social distinctions serve to make users visible and to lend the service identity. The most common are leaderboards. Leaderboards are actually much more complex than they might seem. They are not just a rank ordering of items from first to last. While ordering necessarily follows a numerical, or quantitive, sequence, selection of the items ordered can vary.
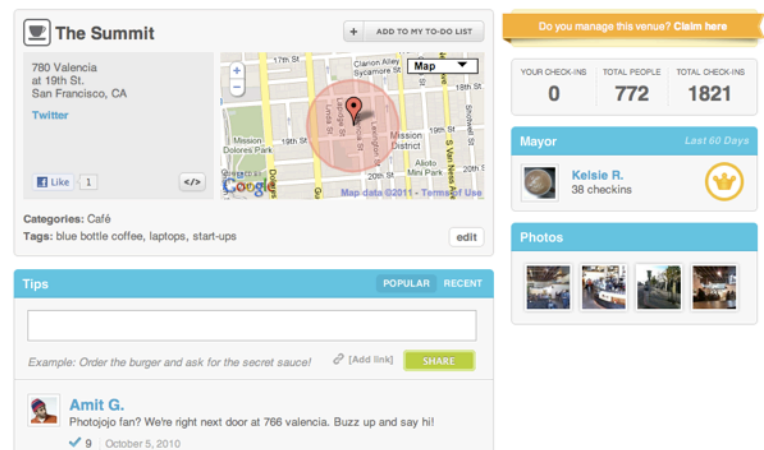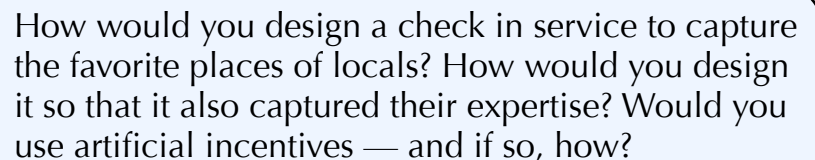
A leaderboard is just a rank ordering of content items, usually people. So the leaderboard may be designed to reward and feature users for their activities and achievements; or for their popularity. A leaderboard may show trends — who's rising and who's falling, for example. Or it may be a list of experts or celebrities competing for position. Relative position may matter to those listed on a leaderboard — or may not. A ranking close to peers might provoke increased activity; or a ranking among strangers, the opposite.

Leaderboards are also an example of use of meta social data. For the ranking of members is made according to relative position. Relative positions are possible only by knowing the positions of all. And those positions, in turn, are calculated from user activity and data considered meaningful to social rank.

Types of leaderboard
- Prestige: users want top position; is among peers; is recognized, validated; spotlighted
- Celebrity: has followers; has name recognition; is accompanied by content and rareness on the position; accompanied by news, etc. Perhaps has likes or votes.
- Contest: changes; position matters; reflects or shows change in position; has points, votes, etc. Close neighbors are contestants and are the ones that one has to beat. Position, not area, matters.
- Status: is of peers; close neighbors matter because they are at same level of status. Show user's number out of social number.
- Earned: shows points, reflects activity of its members
- Task: directly earned; positions change depending on tasks completed or progress to task; may work for many kinds of tasks

> How would you design a check in service to capture the favorite places of locals? How would you design it so that it also captured their expertise? Would you use artificial incentives — and if so, how?

- Praise/ gratitudes: unrelated to direct user action; an indirect reflection of position
- Trending: direction matters; is a measure of social interest; fast and dynamic

Social data and practices
There will be increasing quantities of social data available on users. Meta data about user activity is either social meta data or meta social data. The more and better technology becomes at manipulating this data, the more it can be made interesting to users. And there will be increasing ways of computing data relationships and meanings. The more the data is used in social media, the more it can be qualified and the more accurate it becomes.

Meta social data represents to users their activity and the activity of others. It is used to represent and differentiate social activity, given that only a system can capture and calculate aggregated social activity. Only a system can determine and publish a social audience's information about itself.

Any use of meta social data thus creates opportunities for new activities. Activities might be enabled on the meta social data itself. Or meta data might be used to structure and organize new kinds of interactions — around new kinds of ranking, sorting, ordering, etc.   Klout, for example, might launch content feeds so that users could rank one another within a feed of relevant contributions. And interaction on that feed content might then be used to qualify Klout scores. The "influence" of participating users would be calculated into the score. Users might be recommended other users, and this used to connect across topics, interests, social types, and so on.

For every practice that successfully engages a user for a period of time, two motives are satisfied. The user's internal motive, and the application's modeling of external motives. A user feels good about being at the top of a list; and the application successfully couples an action to the rank order of the list, making it socially visible and relevant also.

Every professional has a **blindspot** for some aspects of a product or service's use and users. Find your own. What's in your blindspot? How well do you know why users get engaged? What do they enjoy the most about your product? Who are they using your product with? What are their values, interests, habits, and how are these being engaged by use of your product? Learn to be aware of your blindspot, and find colleagues who can help to fill it in by conferring regularly with them.

As social tools evolve, less and less user activity will be committed to the core features of social networking, while more will be committed to interacting with meta social data. Many users now have their identities (accounts, sites, services, connections) and their profiles are well and complete. But social data, gathered from and across services can now be calculated and reinserted into the user experience. Done right, social systems can

engage users in the administration and interaction with meta social content. This is the case when some users attempt to game an influence metric, for example. Whether they use them or not, metrics are leaderboards.

Meta social data can be incredibly compelling to users. It is a type of content that no individual user has access to, nor perspective over. It takes calculations made on aggregate activity to produce meta social data. There's much to learn yet about what to measure and how make it relevant.

Any improvements in the addressing and targeting of shared social content and messaging, therefore, can raise the probability of it being interesting. Interesting to the author, for it is more likely to get a response; and interesting to the "recipients," because they have both relationships and shared topical interests with the author. (Assuming, in this case, that smarter algorithms will be used to route socially distributed content.)

This is worth noting again, here. For in the never-ending pursuit of social interestingness, social tools are increasingly capable of making interesting probable to not one, but several users. Interesting based on social and other interests: relationships, shared topical interests, activities, experience, location, and so on.

Examples: checkins to personal branding

Sharing is the core activity around which all social media are designed. This is for the simple reason that the medium is a medium of talk. Sharing is its mode of production and distribution. Users contribute, by posting and sharing as communication. Tools and services then present this content for consumption and interaction.

On some services, sharing is an explicit user action. On others, feeds and subscription models make it implicit (often by means of notifications that announce sharing activity). When sharing is explicit, the system drives activity around gestures, contributions, and

communication. When sharing is implicit, system messages accompany browsable content to alert users about activity.

The degree to which a tool channels communication depends on the level of participation it seeks. Most social tools, wanting traction and adoption, recognize and leverage the intrinsic benefits of realtime communication — to wit, the activity feed. Communication begets sharing, and social tools facilitate connections between users and around content by driving interaction.

ashton kutcher ✔

@aplusk Los Angeles, California
I make stuff, actually I make up stuff, stories mostly, collaborations of thoughts, dreams, and actions. Thats me.
http://www.facebook.com/Ashton

Practices emerge around different kinds of sharing. These might be described as genres or idioms. Foursquare checkins differ from instagram posts, differ from tweets, and so on. The practices of users on these services become recognizable to other users, thus permitting the nuances of practices to reinforce practices. Services that fail to aggregate user activity around practices quickly lose users — not because they are technically deficient, but because they are inactive.

The practices that govern social media design and around which usage forms are always historically specific. They are specific to a particular cultural moment, and to the techniques and technologies available. It may be difficult to imagine how Facebook, Google+, and twitter would work without realtime feeds. But that is only because the realtime feed is at the moment both the most familiar mode of interaction with users and content, and because applications and designs for feeds are widespread. There's no reason, from a practice perspective, that instagram couldn't be redesigned around albums, that Facebook posts might not permit zoom-in navigation to a user's social graph, or that email might not be transformed into a realtime commenting system. (In fact, Google's Wave and Buzz were attempts to redesign email around more social practices.) Innovation is constrained by the success and inertia of the familiarity of social practices at any given time.

Practices make relational circuits visible and social. They vary by the circuits that create core engagements for users.
• Numbers of followers, profile views, and ratings lend themselves easily to circuits of self image and of popularity and social status.

- Rankings, leader boards, scores, on the other hand, lend themselves more readily to gaming circuits, competitive and achievement-oriented circuits.
- Anonymous and impersonal content collaboration services like Wikipedia, in avoiding vanity circuits and in not disclosing visits and views, author pictures or bylines, satisfy more value-oriented circuits of collaboration, knowledge, cooperation, and integrity.

> Identify the **social interaction requirements of an MVP** — minimum viable product. What are thresholds of participation required of early users? Identify the core user experiences that contribute to good and engaging experiences. What kinds of users are these likely to be? Detail the kinds of benefits they will have for other users.

Practices, like user actions and moves, involve both first and second order designs and experiences. They combine the technical presentation of communication and actions users can take on those presentations. As seen already, actions taken make sense as first order user activities and as second order social practices.

Some elements of practices
- Speed of production
- User actions distributed among members of an audience
- User actions reported on by system messages and notifications
- Changes to user rankings
- Notifications of changes to user rankings
- System messages about user actions on user actions
- Presence signaling (online now)
- Coupling of actions and objects: loose or tight

The checkin

Checkins uniquely serve mobile geolocation apps and services. They are a presence declaration for users interested in sharing their location with friends, and social audiences. Checkins declare both a place in time and space, and are indeed captured and displayed on applications as places. They can be included in feeds also, since they have a specific time. Checkins have a third key axis: people. Geolocation apps may therefore design interaction, navigation, and content organization around place and location, time, or people.

In and of themselves, checkins are noise. There is little to a checkin that is relevant information to another person unless both share a pre-existing interest: namely, knowing where a person is. Otherwise, location is not an issue for communication. Checkin applications are only built around the checkin — they become engaging by other means. It's the layering of these social practices on top of the checkin that both offers compelling experiences and undermines the checkin. The core activity — checking in — is not valuable enough to become a social practice. Social practices established around checkins are secondary.

What if video hangouts about expert topics were available? The name "hangout" suggests an informal interaction. But video chats with multiple participants will provide compelling means of conducting instructional, educational, informational interaction formats. Designers will have opportunities to create interaction and navigation features for different types of video chats and formats, from games to moderated groups, to variations on turn-taking, question and answer sessions, presentations, and more.

Checkin applications primarily aim to connect the value a person may realize in a certain location, or at a particular place, with the inefficiency of information discovery and retrieval about places. They also aim to connect the high levels of trust assumed of social graph and peer networks in the practices of recommendations, reviews, question and answer, tips, and social commerce.

Games played around checkins, such as earning points and competing for mayorships, have limited social value as long as they are just empty games. When combined with real incentives and benefits, they become more relevant. The alternative approach to making checkins interesting, which is to use place as a means of sharing insights among friends, depends on the density of networks and connections among friends. Given the relatively under-whelming action of checking in at place using a mobile phone, this has proven to be a hurdle.

Geo-local apps need secondary practices to create relevance
- Show all user activity to expose more content, but at the cost of relevance
- Show only friends, but at the cost of low and limited participation levels

- Show users engaged in competition (for points, mayorships)
  - Realtime checkin
  - Direct message the author of the checkin
  - Recommendations, tips by friends
  - Recommendations, tips by users
- As a social game with friends
- As a social game with all users
- As a local loyalty rewards system
- As a review and local expert system
- As a mobile communication and messaging app
- As a local Q/A app

Variations

Because the checkin is interesting only for what users might do with it, design can be used to reinforce different kinds of checkin-based social practices. Examples would include:
- Encourage user to communicate with each other based on their location
- Encourage users to communicate with each other to request tips and recommendations
- Encourage users to share offers and promotions based on common checkins
- Encourage users to compete for offers by means of game features
- Encourage users to play a game by use of game features
- Encourage users to use the geolocation app to discover places of local interest
- Encourage users to use the geolocation app to collect and redeem offers
- Encourage users to use the geolocation app to collect and redeem points or credits earned

Fan sites

In ways somewhat unique to sports fan sites, features that support fan involvement either reproduce or refer to aspects of the game. Competition is the preferred mode of social interaction. Users can choose to identify with teams and/or players, and in the case of fantasy sports, create their own teams out of favorite players.

Game attributes like scores, games (events), and a season-long championship competition facilitate circuits involved with game play. Featured elements are points and point-scoring opportunities. Social differentiation among users occurs through points and scores.

James Key Lim is listening to Listen – from the mo… by Beyoncé on Spotify.

Matthew Dean changed his profile picture.

Andrew Mager "I don't think anyone in the world should have a computer that's not a MacBook Air" ~Doug Mager

Tina Hui is listening to Putting On The Ritz by Ella Fitzgerald on Spotify.

Will Luo added a new photo to the album Mobile Uploads.

Gene X Hwang is listening to I Don't Want

Adam Jackson ●
Chris Saad ●
Christel van der Boom
Emily DeVan
Jeff Schwartz
Krystyl Baldwin ●
Mark Welch ●
Michael Thornton
Roshi Givechi ●
Thom Hayes ●
Tina Hui ●
Victor Provenzano

MORE ONLINE FRIENDS (39)

Application-specific competitions structure these interactions. In most cases these use news information, performances and more from the sport itself — users don't have to supply their own content, but just their expertise.

The wager is a preferred mode of interaction among fan sites for its reference to gaming culture. Wagers do not necessarily imply gambling. They are simply a traditional way of becoming involved in outcomes in which two or more rivals face off in a rule-bound performance. The game has outcomes that lend themselves to the wager — and so the wager offers a compelling mode of interaction for many fans.

The wager is also a game unto itself. Interaction models for games are often games themselves — or refer to aspects of the game. To some degree each type of cultural practice on social media may use aspects of the mainstream form of practice that it refers to. Sites or applications used for personal branding may feature aspects of fame, popularity, and audience support that are common to celebrity culture. Sites or services geared towards domain experts may feature recommendations, ratings, and symbolic signs of rank (in contrast with the celebrity's use of image). And so on.

While fan sites are many and all are certainly not the same, they share some characteristics. The attributes listed here apply to sports fans and to sporting activities. One might substitute some of these for attributes of activities in which fans also play a role in the industry (bands do not play games, but do play shows).

Fan sites

These are not exhaustive:
- Users have a degree of commitment, passion, and interest in the sport, teams, players, and seasonal events
- Users follow regular news during the season of play: news that includes games played, scores, highlights, commentaries and

opinions, predictions, player news, team news, industry news, and more
- Users are interested in the type of sport — but not in all sports
- Users likely prefer one or several teams; and likely have opinions on players
- To varying degrees, users follow the current season of play
- Users have an interest in the competition that organizes play among teams over the course of season
- Users have an interest in the particular type of game and its game play — whether from the perspective of actual athletic performances, strategy, execution, star players, traditional rivalries, etc.

Relational circuits

The circuits that might apply to a fan should involve the game and game play to some degree, but can involve many other aspects of the sport also.
- Identification with star player: admiration
- Identification with local or team: loyalty; group membership
- Identification with team performance: numbers
- Tracking and monitoring seasonal stats: numbers
- Identification with team colors, insignia, jerseys, etc: attachment of socially signifying signs to oneself; loyalty; group membership
- Competitive play along (fantasy sports) or gambling: extension of game play through participation; expertise

Stage product messaging Try an activity in which participants act out and role play site users and interaction. Using blank profiles on the wall, blank activity walls and notifications, act out common exchanges. Have participants hand each other tweets, updates, and messages. Have them follow one another, act out friend requests, and join groups. What can be learned from role playing a site's interactions? What new perspectives does this offer onto user experiences and user motives?

Personal branding

Social media are uniquely suited for personal banding efforts. It comes as no surprise that many of the individuals practicing some form of personal branding are themselves social media professionals. These are individuals who contribute content to the medium, shape its use and help to define its social and cultural practices. Their efforts, wether intentionally or not, push at what the medium does well. Not coincidentally, sharing and broadcasting these efforts is itself an exercise in personal branding.

Two aspects of social media lend themselves well to personal banding efforts. First, is the medium's built-in use of metrics, tracking, and analytics of use and activity. Search engines, follower counts, and third party analytics make any kind of brand monitoring straightforward. (Again, it is not a coincidence that this, too, is in the social media professional's bailiwick.) Second, the medium is close to mass media in many ways, as discussed, and these facilitate the strategy and execution of branding campaigns. Social media professionals simply need apply what they know of the medium and of branding practices to themselves.

Personal branding online requires that individuals approach their own self image and sense of self with some critical and objective distance. Individuals must be capable of relating to their appearance online in a way that favors appearances and impressions; and yet which also avoids taking things too personally. Personal branding means being personal, but not personally. (Personal brand is an image of a person.) In other words, the medium's transformations and the logics of its circuits directly support the needs and inclinations of personal branding efforts.

Personal branding
- Users are competent and skilled at building reputations online
- Users enjoy using social media and have strong habits of using communication technologies
- Users know how to contribute content across social media sites and services, and their expertise lends itself well to online personal branding needs
- Users enjoy a certain amount of camaraderie and fellowship with other industry professionals in the space
- The personal branding efforts of users are enjoyed collectively, as they result in increased adoption, attention paid to social media, and more
- Professional users who have built successful personal brands practice what they preach, and learn from their efforts

Relational circuits
The circuits common to personal branding on social media include the industry camaraderie and community participation that characterizes social media professionals. The medium provides immediate feedback on progress and status, and demonstrating expertise in social media monitoring belongs to professional

practices and to expert domains. The circuits involved in personal branding somewhat uniquely include many of the kinds of circuits social media are best at facilitating.

- Monitoring or traffic and attention: number
- Fellowship with social media peers: inclusion
- Brand capital as social capital or social status: externalization
- Peer group competition: brand rank is a substitute for personal status
- Strategic uses of medium complicit with social media peers: competence and success
- Image crafted and designed using medium's branding techniques: image as substitute
- Social rank demonstrated through expertise in a domain of peers
- Controlled and crafted self image
- Strategic execution of planned personal band presence: control
- Controlled and crafted messaging in place of personal participation: substitutes
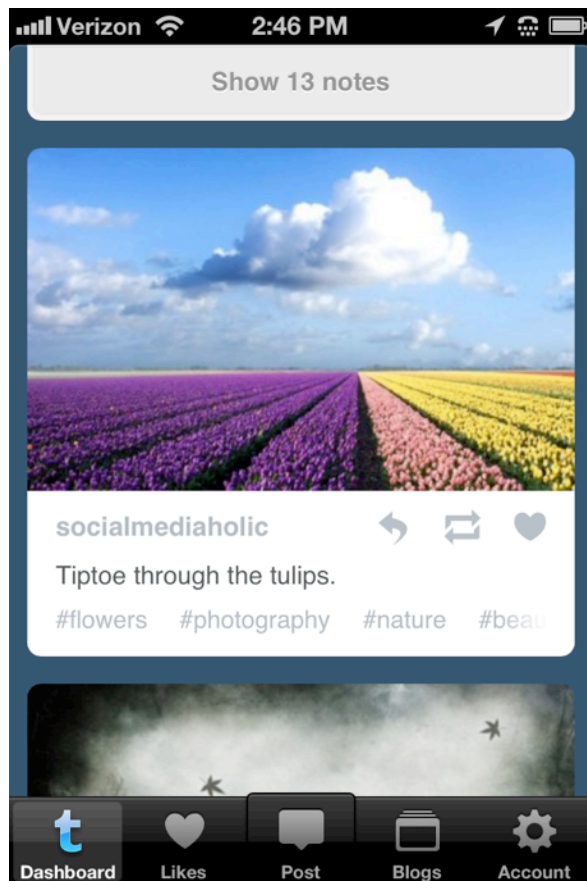
Constructing practices

The social interaction designer identifies the relational interests that animate a particular theme or activity. Recognizing that users must find something compelling in the activity, the designer identifies relational circuits that resonate with users. Corresponding online practices are then found and selected as interaction goals. These are sequenced over time, allowing for organic user adoption and population growth. Designers look at the habits users will form over time, and the site and service modifications that may be required to sustain engagement; create social differentiation; and provide incentives for use and sharing.

Content, technology, and features each contribute to social practices. The needs of circuits (images, distinctions, social action) must be rendered as common
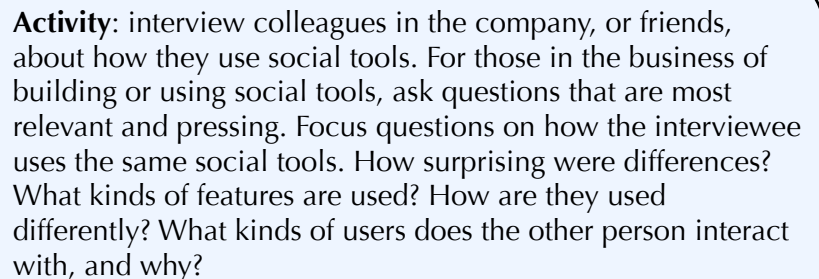
tool features and elements. Participation can be grounded in a variety of relational circuits associated with users whose participation is desired, constructive, and productive. Engagement can be steered by making sure that users find what interests and motivate them — this including the activities and views of one another. An agile approach to scaling up site or service features also helps, as a means of raising social complexity in step with user growth and social differentiation.

Users have their own practices: personal practices and habits. Try as they might, social products and services cannot engineer solutions that will cause users to adopt their latest features. Only validation of feature use, and social recognition and validation by means of feature, will reinforce its uses. Features are used when their use either serves a measurably useful purpose, or when it becomes socially relevant. Even popular features often owe a lot to the rewards they provide to a user's sense of self and self image.

The social practices that produce "sticky" and successful levels of user adoption are by definition self reinforcing. This can make any product innovation and pivoting tricky. Any substantial change in product definition is made at some cost to the product's users, in terms of satisfaction and loyalty. In many cases users have invested themselves personally and socially in a product; to users, dramatic change is unwelcome. Consider, for example, how instagram would change if it had a daily leaderboard. Or how Foursquare might be different if it had none. Social architecture and design choices reinforce behaviors of individuals with real consequences for products.

Activity: interview colleagues in the company, or friends, about how they use social tools. For those in the business of building or using social tools, ask questions that are most relevant and pressing. Focus questions on how the interviewee uses the same social tools. How surprising were differences? What kinds of features are used? How are they used differently? What kinds of users does the other person interact with, and why?

The Feed
Good social tools are constantly exploring ways to initiate user interests. As technologies evolve and as users become familiar with using them, new techniques become available. One example is the feed. The news and activity feed on Facebook underwent a redesign in 2011 that focused on aggregating individual activity into shared

stories. Stories were in effect created out of redundancy — confirmed by user likes and shares. The change is intended to create real estate for use by advertisers and commercial interests. Shared stories, after all, validate a social interest while *at the same time* creating a mechanism for distribution. System messages about the shared story *become* the shared story; no individual posting or addressing posts is required of the user. The interests supported are those of users — attached to or identified by the narrative context of the story.

What if Likes counted for less coming from users who Like a lot, and who like back? What if LIkes were structured, so that for a like action, there were a modifier: recommend, must see, favorite, hilarious, useful, etc? How much, if any, formal meaning can be added to Likes to make them less ambiguous and common? Would this be limited by interface implementation, by noise, or by limits of social practices and ease of use?

Content items provide a starting point for continued interaction and consumption (browsing). So feed item navigation, activity, and interaction can be provided vertically or horizontally. A user might drill down into the content element, might browse to its author, might engage with comments collected on the item. The page model in place today means that much of this activity navigates a user away from the feed. But feed elements could be made expandable, for example by means of overlays and new windows. Similarly, interaction and communication might be enabled around feed items directly on the item, or with use of windows. One could enable new comment threading around a feed item, provided that the item had its own page or window.

As a common format for delivery and consumption of social content, feed designs will implement incremental changes suiting their and their users' interests. The key axes of feed experiences are time and temporality, interaction and communication, connections and navigation, preservation, personalization, and distribution. So these are likely where feed changes will be made.

Feed ingredients
- A chronologically ordered stream or flow of content
- The content feed is comprised of discrete units of content
- Content units displayed in the feed are
    - User contributions

- News
- Activity notifications
- Reshared and redistributed content
- Statements
- Comments
- Actions
- Gestures
- Content units are navigable
  - Clickthroughs to a user
  - Clickthroughs to a content element
- Content elements may contain views of social data
  - Number of views
  - Number of shares (+1s, LIkes, etc)
  - Images of users who have interacted with the feed element (shared, liked, commented, also posted)
  - Group identity or privacy constraints of the feed item (Google+ Circles)
  - Rank
  - Rating
- Actions are possible on content elements
  - Gestures such as likes, +1s, shares
  - Commenting
  - Tagging
  - Follow user
  - Follow topic
  - Save for later
  - Share to other service
- Variations include:
  - A story feed and a live feed (Facebook)
  - Realtime updates to activity on feed content elements (Google+ and Facebook)
  - Separate main feed and activity notification feed (twitter, instagram)
- The feed may be primary or secondary
  - Foursquare feeds are secondary to checkins
  - Twitter's activity notifications are secondary to the timeline
- Presentation variations

> **What if instagram** wanted to become a visual twitter, with the same kinds of communication possible on twitter, but using pictures as tweets instead of updates? Could instagram be used to capture and save interaction and communication about places, people, events, things, and more, based on a "pictures first" approach?

- Instagram uses separate image and news feeds, displayed on a mobile app
- Mapping applications display realtime checkin and commenting activity visually

Feed Bias

Practices emerge around these different kinds of feeds in ways that reflect the design's bias.

- A bias to interaction, such as following a user
- A bias to communication, such as commenting directly on a feed item
- A bias to social gestures, such as liking or voting on feed items or to the author of the feed item
- A bias to sharing, such as sharing to followers
- Display bias in presentation of the unit's author, content shared (picture, link, video, etc) determined by the display of an author post, summary view of shared content, size of picture, and display of additional user activity

Operations on feeds

- Realtime updating of activity on feed items
  - Activity on a feed item
  - Activity on the same feed item, shared by others
  - Activity on related feed items
- Suggested related content
  - Determined by simple connected series of related content by url, by topic, tag, etc
  - Determined by popularity according to sharing activity of users
  - Determined by recency, or new related content
  - Determined by content relevance, or new related content that is trending
  - Determined by social relevance, or new related content that is trending among a user's followers of social graph
  - Suggested related users according to social graph overlaps
  - Suggested related users according to common interests

Variations

- Drill down into shared content within the item in a feed
- Expansion of shared content within a feed (as with images)
- Collection of comments on shared feed content (Facebook stories)
- Actions enabled on content to evaluate content (rate, vote, save, embed, etc)

- Purchase for self, purchase for another user

Feed organization
- Chronology and flow of feeds:
    - Made customizable (by user, to a brand, etc)
    - Reversible (oldest first)
    - Made to accommodate "saved" "bookmarked," and "watch later"
    - Made to preserve top content at top of feed
- Content
    - View feed as others see it
    - Blended feeds from different sources (people, brands, sites or tools)
    - Increased range of selections and actions on feed contents: save, favorite, rate, rank, vote, share, add, remove, etc
    - Sort by importance and relevance to all
    - Sort by importance according to user preferences
    - Sort based on user history
    - Sort based on user social graph connections
- Navigation of connections
    - Navigate horizontally across content types (see related videos, pictures, etc)
    - Navigate to users subscribed to a feed
    - Navigate to users contributing to feed, view other user's feeds

Feed designs and practices
The design of feeds enables specific and unique experiences among users, and results in social practices that, if not entirely predictable, are easily anticipated. Design, which is realized in presentation, display, navigation, and functionality of feed-based user experiences, must account for both first and second order outcomes. First order experiences, as noted already, involve the conventional interaction of users with an application, product, or service. Second order experiences, however, develop and emerge as users interact with each other as design permits.

The relationship between first and second
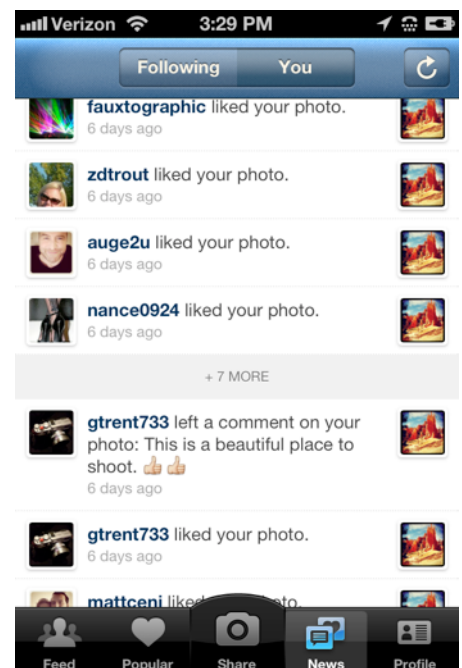
order experiences can be mapped out for a number of feed-based services as examples of how design makes its impact. Granted, social outcomes are emergent over time, and so are dynamic and changing. But their dynamics are self-reinforcing, and so reflect both the enabling and constraining features of design choices.

The example used here is twitter. But clearly, any feed-based service could be analyzed for its design outcomes.

Instagram uses **Likes** on pictures and the **follow** model to capture user participation. Likes do not reshare pictures to a user's followers. So they become a way of exchanging attention; the way to get Likes is to give Likes. Although instagram is a photo sharing service, it does not capture best pictures, types of pictures, or picture content. Users do not use albums. Pictures are not shared with groups, but with the public. Fast adoption and user growth owes to instagram's simplicity and speed. Limits to growth are in the high degree of reciprocation and engagement demanded of users, for little value other than common social engagement.

Twitter is known for its culture, which is the product of a rather strange tool used for interaction, conversation, publishing, branding, news, and much more. Twitter's core features include its 140 character constraint, its use of written posts, lack of formal gestural and symbolic actions, its realtime updating, and its follower model. Twitter's design is of course complicated by the fact that many users tweet using third-party applications, and these are not all alike. However, several core design elements can be linked to the social practices twitter is known for.

Twitter
The 140 character limit on the length of tweets (posts) serves both speed (of reading) and posting. Because tweets are written, writing practices have developed around phrasing, abbreviating, hashtagging, and mentioning others. Creative and sometimes lasting practices (hashtagging) have emerged on twitter to serve as workarounds for the system's lack of interaction design elements (actions, buttons, etc).

Twitter's thin user profiles created a social networking experience that relies on persistent tweeting by users as a means of demonstrating presence. User activity is not referred to profile pages, but to tweets. This shows that social networking is possible without

use of page-based profiles and around active communication instead. However, because user activity is the only real measure of a user's presence and participation on the system, emphasis on tweeting creates a demand for attention.

Twitter is a public social networking system, and so unlike Facebook, the social graph model implemented by twitter has a high degree of public appeal. Users relate to this as an audience, open, public, visible, and sometimes responsive. Attention is obtained not from personal friends alone, but from anybody. This contributes to psychological circuits that are built around public self image and presence.

Twitter is a realtime feed, and so active contributions pass through the system in realtime. Realtime posts are quickly lost; twitter users use twitter in the present, and not for consumption of tweets posted days or weeks prior. This creates a second demand on user attention. So not only is attention in demand because the service is open, and thus users must compete for attention; but attention is fleeting, and so users must be active to capture attention.

Both the open social graph (public graph?) and realtime demand for attention create a need for audience aggregation. Users must capture an audience, and the easiest way to do this is to amass followers. The social practice workaround for this is the asymmetrical, or one-sided follow feature. This draws on the social practice of reciprocity, and is enhanced by the fact that asymmetric following initiates relationship contact with low-level obligation. The only expectation around establishing a "relationship" to others on twitter is the solicitation of a follow back. Following does not correspond with the expectation of friendship, of conversation, or any measure of deep sharing. Users follow others to engage the reciprocity of the following social practice — in short, grow an audience by being followed back.

The high degree of effectiveness of following on twitter, which is its most notable social networking feature, contributes to the psychological circuits centered on presence, visibility, and variations on public popularity, celebrity, status, and reputation. Follower numbers thus serve as a substitute for any of these circuit objectives. For a celebrity, the follower number is a measure of popular interest. For a pundit, the follower number is a measure of influence. For a critic, the follower number is a measure of reputation. And for a socialite, the follower number is a measure of social status. The

number, as seen previously, effectively condenses the user's personal motivations into a visible, public, symbolic reality. It doesn't mean that all followers are actually interested and paying attention (many users follow in order to get a follow back; some follow in order to put themselves in that user's social company). Growing follower numbers, then, becomes a secondary social practice with benefits of its own. Users can take interest, and pride, in their increasing follower number; and users can compare their follower numbers to those of others.

The design of twitter's feed effectively creates an illusion that again contributes to attention-seeking circuits. A user's tweets are displayed in a timeline feed of tweets by users that user is following. These are not the user's followers, but are users being followed. So they are not the users who are most likely to see the user's tweet. The illusion works by creating the appearance of both social company and audience with those a user has chosen to follow. In fact, the user's tweets are being seen by his or her followers, not those shown in the timeline feed. This design choice reinforces the illusion that a user is in conversation with those he or she has followed.

Twitter's direct message feature is for bi-lateral messaging only. Three-way direct messaging is not possible. This means that side-channel conversations cannot be maintained by three or more people. Group interaction is only possible in the public timeline. This eliminates the common use of communication tools to hold side-channel commentary out of the public view. While twitter has been successful without this, the design choice undermines the possibility for creating and sustaining group conversation on the service. It also undermines the service's utility for groups in general.

The follow model is a relationship model, and in its simplicity, eliminates social differentiation by means of relationships. There are no differences in a relationship connection on twitter. Mutual follows don't become "friendships." And following cannot be differentiated

for its interest type: all are equal. When all relationship types are equal, the lowest common denominator drives the initiation of contact and connection. The lowest common denominator privileges numbers over qualitative distinctions. Only numbers can serve as social differentiation. The number of a user's followers becomes the social distinction, where, say, different kinds of audiences might have produced an alternative.
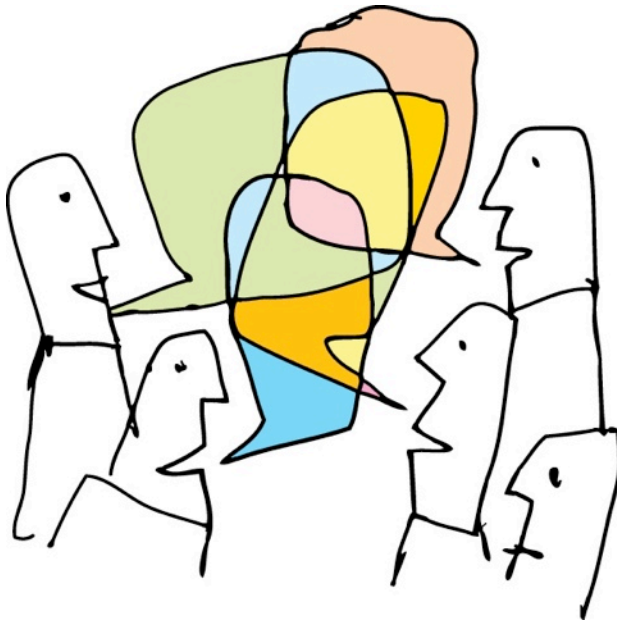
The universality of relations among users on twitter — following offers no social differentiation except by number — leads to one of twitter's most pressing social use issues: noise. When relations are undifferentiated, and when communication passes in realtime, the only means to capture attention is to tweet more and follow more. The only social resolution to the demand for attention thus results in a self-reinforcing cycle of increasing and redundant communication. Users resort to tweeting the same thing more than once, to scheduling tweets, and to naming others in order to get their attention and solicit reciprocity. In the absence of design structure and activity organization, social action workarounds produce social practices that compensate for system open-ness.

One last design feature of realtime feeds has a profound impact on twitter's content, both consumption and production. The rapid disappearance of content from twitter lends the service to lower-value contributions. Contributions are more likely to be consumed, the less demanding they are to read. Realtime updating privileges simplicity and impact over more engaging linguistic interactions: arguments, claims, debates, and so on. Niceties and personal greetings, too, become popular means of achieving two things: personalizing interaction and thus soliciting attention; and making use of familiar social etiquette to guarantee communicability. When it is difficult, in other words, to communicate complexity, etiquette offers tried and tested forms of interaction.

Design choices made (consciously or not) by twitter thus result in social practices that are easily anticipated. The lack of structure and temporal organization, the speed of realtime messaging, the brevity of communication, the universality of relationship connection, and reliance on written communication all result in a system with unique social practices.

Twitter's design choices

- **Design is self-centric** User centric design focuses on the individual user's consumption of content posted by users he or she follows. The user experience is thus unique to each user. There is no "shared" view of social content; all content streams are determined by the user's selection of people to follow. Twitter rules out social groups.
- **Relationships are undifferentiated** Follow relationships are all equal and asymmetric. No response is required by the user followed, therefore one is solicited. All follows are requests. The social practice of following is thus grounded in a highly norm-bound request and expectation system of action. Reciprocal actions indeed sort the active twitter users from those who are not.
- **Temporality is realtime** Realtime content feeds privilege the now over the past, resulting in a diminished emphasis on lasting content value. Content relevance is a reflection of its newsworthiness, and this aspect of content is understood by users, whose communication often reflects the same form: it's about news and now (the announcement is a very common form on twitter).
- **Content is communication** Absence of content collection or organization into topical sets (tags and search privilege terms, not categories) means that the system privileges a kind of messaging over content publishing. The system is not for use in browsing and consuming long-form content; nor does it serve the purpose of finding relevant or high quality content (unless that content is current). Noteworthy is that as tweets are uncoupled stand-alone messages, conversational threading is actually difficult for twitter. Only tweets in which users name the response can be identified as responses.

Feed-specific social practices

- Individual users determine their experience by selecting who and what to consume
- Common or share social views are sidelined
- Pages do not serve the primary presentation of content

- Page-based navigation is unnecessary; feeds update constantly
- Attention conditions the relationship model: reciprocal follows, or in Facebook's case, mutual friending and subscribing
- Groups are virtually ruled out of realtime feed experiences; grouping realtime conversation is extremely difficult, and like chat, requires users to provide sustained attention
- Following to grow audiences inherits the cultural meaning associated with popularity
- Social differentiation is reduced primarily to number counting
- Triangulation and transient grouping can only be achieved by communication

Feed social practice variations
- Instagram hashtags have visual pages, allowing for hashtags to create realtime views of shared content posts
- Facebook top stories surface and preserve both shared and active topics and posts
- Trending topics on twitter surface most commonly posted terms and hashstags
- Google+ posts permit posting to selected audiences (Circles), thus pushing to feeds by group (groups are asymmetric)
- Notifications on all feed systems make attention requests on users and sustain and channel attention

General design questions
- Ask **Who is it for** and anticipate the kinds of social practices likely to emerge. What kinds of users will be attracted to using the product or service? What kinds of users will these users attract, in turn?
- Ask **What is the core presentation** of content and users? What kinds of social practices are likely to emerge around the presentation?
- If the presentation updates in realtime, ask **What are demands on attention?**
- If the presentation updates in realtime, ask **Should content value be preserved?** Realtime contributions lose their value if not associated with deeper production and consumption practices; or with lasting and sustained communication practices. In the absence of techniques used to preserve and organize value over time, realtime social practices will privilege current news
- Ask **How is value created?** Value is created by user contributions interesting either because of who makes them, or their content.

Systems draw attention to value by creating views of it: trending hashtags, topics, users, pictures, etc.

- Ask **How will relationships differentiate users?** Users seek to stand out, and social distinctions are a necessary aspect of social media. How then do connections between users serve to make social distinctions? They can be made in the type of relationship (LinkedIn), the categorization of relationship (Google+ Circles), and the nature of relationship (Facebook friends). In the absence of any relationship differentiation (twitter), social practices will form around actions and activity, emphasizing numbers: liking and likes on instagram, following and retweeting on twitter.

Constraints on social practices

Constraints to the uptake and development of social practices reflect the bias built into the design supporting social practices. If a social practice reinforces itself with gestural interactions around content, for example, gestural expectations and obligation can become the constraint. A service that captures interaction using Likes on content shared by users is limited by the willingness of users to sustain the activity of liking. Instagram likes are not shared to the timeline as discrete activities but are attached to pictures. On Facebook, by contrast, Likes are shared to the timeline (as actions). The constraint on Likes on Facebook is thus their visibility as actions. Being shared to the timeline, they are news. The constraint on Facebook likes is a social constraint: the risk of spamming friends by liking. Instagram uses Likes to drive view and follows, and so Likes on instagram solicit reciprocity. The constraint on instagram Likes is then not the spamminess of liking but the obligation of liking back.
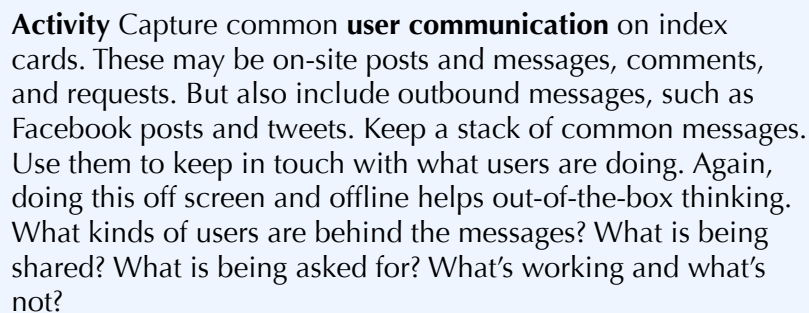
All practices are constrained by the limits of their own social interaction design. Feeds lose history. Scores become cheap. Likes create noise. These constraints owe to the intrinsic limits of any mode of interaction and to the nature of self-reinforcing social systems.

They change over time, as they are used, and as their use informs users how to use them.

Action

Because reciprocity is the most efficient means of sustaining action, any social system that tightly couples social actions to activity feeds and notifications will promote reciprocity. At first, reciprocity results in connections made between users, and in growing levels of attention and interest. Action captures attention. And if the action is a follow, or a like, the efficiency of reciprocal likes and follows soon becomes a primary social practice. The benefit of this social practice is engagement. But it has an opportunity cost. To some users, reciprocity becomes an obligation; to others, it cheapens the value of content (likes become a social gesture and not a like of the content itself). And it so favors those who reciprocate without discrimination that it undermines the merit of being popular.

Activity Capture common **user communication** on index cards. These may be on-site posts and messages, comments, and requests. But also include outbound messages, such as Facebook posts and tweets. Keep a stack of common messages. Use them to keep in touch with what users are doing. Again, doing this off screen and offline helps out-of-the-box thinking. What kinds of users are behind the messages? What is being shared? What is being asked for? What's working and what's not?

Action is serially coupled, and so needs to be sustained. Unanswered actions are just posts. Their failure to sustain ongoing activity only creates residual noise. Sometimes this is picked up at a later date. But for applications designed for sustained activity, design needs to exploit the bias that promotes continuity of action. As noted previously, this involves response actions, distributive actions, and activity aggregation in the form of meta-social representations of action. Reciprocity is the fastest and most familiar responsive action. Thus many social gestures solicit a reciprocal action or gesture. Many social applications dependent on high activity levels thrive on reciprocity.

- Reciprocity attracts users who are good at reciprocating
- Reciprocity attracts users whose core experience is fast social gestural interaction
- Reciprocity attracts users who believe in fair trades
- Reciprocity attracts users who value interaction as much as, if not more than content

- Reciprocity quickly accrues social distinctions to users who pay the most attention, and who respond the most quickly and the most universally

Feeds

Realtime feeds have the advantage of delivering content when it is new and fresh. But they are constrained by their temporality: attention paid now. Feeds lose their history quickly. This is their opportunity cost. They require a constant stream of activity. For some this is either overwhelming or underwhelming, depending on whether they seek simply news or quality content. Temporal constraints might be addressed by slowing down the feed (as Facebook does with algorithms), or by preserving feed elements that stand out of interaction or popularity.

- Feeds lose history over time
- Feeds diminish the value of content in the feed
- Feeds require attention in real time
- Feeds diminish the value of content of lasting value
- Feeds diminish the value of communication seeking in-depth discussion
- Feeds diminish the value of non reciprocating relationships (there is no feedback about the observations of users who don't show it)
- Feeds prohibit ease of grouping, categorizing, or segmenting users

Gestures

Gestures such as Likes and Google +1s serve dual functions. They share content while also capturing a vote of approval or interest. The constraint then is one of ambiguity of intent and meaning. Both Likes and +1s have meaning to those they are attached to, as to those who use them. A like is a like by a user, of a liked piece of content. Both user and recipient interpret the like as something for or about them. This is ambiguity. The benefit of simple two-sided gestures is precisely their simplicity. But simplicity compromised by ambiguity. Social actions and practices, not technical provisions, are the means to reducing ambiguity of intent. Therefore reciprocity will often govern use of the gesture. Again, one is in the diminution of value cycle that characterizes reciprocating social action systems.

- Gestures that both express and share have ambiguous meanings
- Reciprocity resolves ambiguity in action faster than any other clarification of intent, *and* is an action that can be taken by a recipient
- Automatic sharing diminishes the value of sharing

- Automatic sharing diminishes the value of belonging to a particular network or service
- Automatic sharing becomes a constraint on responding to shares
- Global sharing undermines the differences captured by relationships

Social practices are dynamic. They change over time with participation and with participants. Their dynamics will bias them in favor of particular activities for a period of time; after which the self-reinforcing nature of that activity will change its character. If the dynamics of practice are susceptible to core actions and axes of experience, they are subject to additional contingencies. Social practices do not develop in a vacuum. Competition to other companies, industry trends, and cultural forces all affect what works on social media.

For each kind of practice, then, design must respect and develop the right kind of bias according to core axes of use. An action system must be designed around action, and its sustainability through etiquettes of reciprocity and response. A status system, around social differentiation and its criteria. And so on, with checkins, lists, voting systems, etc. Practices emerge to provide a number of successful and engaging circuits to users. Practices are differentiated by their use of content, actions, their speed of updating, their use of system messages and notifications, their primary modalities, and their use of meta data to report on their own use. The more differentiated a practice is, the more circuits it can accommodate.

Communication and interaction

Much of what drives social media is of course communication: written and posted communication. In spite of the popularity of social games, of mobile apps, and many other gesture and action based experiences, most social tools are powered by the word. So much so, that conversational models become a real matter of interest. Those in the professions of making social media work — for an organization, brand, etc — make strategic use of both language and communication. Matters of who "speaks," about what, with or at whom, shape brand image and marketing success. Savvy companies have figured out that social media present a real threat to broadcast media, and so to broadcast marketing models. Interactive media, however, confound the one-size-fits all approach to messaging, and challenge companies to learn how to engage with customers.

Nothing scales like noise.

Communication is such a unique form of interaction in itself, that it in fact warrants a separate study. A respectable look at how communication works on social media would require breaking down conversations into their elements. It would mean identifying the forms of communication specific to one, two, and three person interactions. It would require dentifying the unique ways in which applications like twitter have engendered linguistic rituals and topical workarounds. It would examine how language is used to solicit interaction and to maintain relationships; and how it accommodates links and rich media. And, of course, it would look at how idioms appear among particular cultures of users — around applications and practices.

Language has its own way of structuring and organizing meaning. Symbolic expressions and actions (likes, +1, etc) augment use of language online but only that. The Like button is just "I like this" in button form. Absent the button, the expression "I like this" would have to be written and shared with audiences repeatedly. So to facilitate what seem to be fundamental expressions of interest, buttons and elements formalize linguistic expression into actions. The button is more convenient, and generates infinitely more activity on a service, than the statement. But then statement "I like this," hand-

posted to a user, would be much more communicative and clear. The price paid by standardization is always increased ambiguity.

Social media, being media, do something strange and interesting to online talk. Earlier it was seen that relational circuits engage people in mental and psychological loops with aspects of the social media that they find compelling — and which match their styles of interaction and communication. Media contribute to this in their transformation of language into written form. But not just that "speech" becomes text. Text, and the entire linguistic performance (of communicating online) takes on a commodity form. The utterance itself becomes a representation. Subjective expressions are objectified: a retweet is no longer easily understood as an expression of an author's intentions, for it now is also a citation or quote by a subsequent person. A tweet retweeted once now has two "authors." It has been uttered twice. Language as mediated text, on networks that distribute statements, takes on the form of a social object. It takes on the form of an object that itself can be shared and reused, regardless of what its first author meant when uttering it.

Virality is a misnomer. Sharing is not biological transmission, any more than communication replicates itself.

Unlike symbolic actions, linguistic statements make claims with which others may agree or disagree. "I like this" in written form, rather than as a button action, is a claim. It's appropriate to ask "why?", "how much?", or to ask "why are you telling me?" Combined with etiquettes of behavior, language makes an unlimited number of actions possible. It's just that it becomes less effective when it is mediated.

In many symbolically-mediated examples of online social interaction, people "satisfy" their relational circuits themselves. As when a person posts a picture. But mediated linguistic communication solicits the participation of others. As with other action systems, when linguistic expression becomes a communication system, it is through interaction. Statements and responses have serial organization, structured just like actions, as moves. Moves may be linguistic statements but can also be symbolic actions. Likes have a different meaning when they are used as acknowledgement of a Facebook comment. They then mean not "I want to share with everyone that I like this," but are a nod of

acknowledgment. (What would twitter be like if there were a simple way of acknowledging tweets?)

Each "move" is a response to a previous move, and even though it may not pick up what was said, is an acknowledgement that the communication has been received. In addition to feedback that communication has been perceived or received, participants must be able to agree on what the communication means. That is, agree on what has been said. Mediation clearly undermines this. But it does make new uses of language available.

The first rule of communication is that participants be able to agree on what has been said. This may all seem very obvious, but consider the importance of the system's coupling of moves with their responses. Even films are structured around this: the shot and reverse-shot organization of sequences that feature actors in conversation with each other. This single aspect of communication is critical to achieving a sustained "run" of talk, and is a reason that online communication tends to vary from normal interaction in its speed, continuity, and pacing.

Social media intervene in the user's ability to discern what has been said. It is disembodied, and the "performance" of speaking is lost. So too are all the gestures and cues people use to supplement what they are saying with other hints of meaning. But because media are a means of production of communication, they separate the act of saying something from the context of saying it to somebody. Tweets communicate to people only if they are read. Otherwise they communicate nothing. But that is not to say that tweeting is then worthless — clearly the act of tweeting served other purposes (circuits). Some of these are that talking online be seen. That is simply the creation of visibility.

Communication technologies also disrupt the addressing of communication, such that it's not clear to whom something has been said. For example, a discussion post may address the original post, the most recent post, the author of a post, or the author of a comment. Similarly, people may use twitter to tweet something they just simply have in mind, or to say something to an audience in particular, even an audience of one, in the hopes of a desired response or reaction.

Given that social media depend so much on effective use of language, one might think that improving the efficacy and efficiency of communication would make a design goal. But is this possible, in design of applications? Be this interface elements, or display and presentation, message handling? Perhaps somewhat. But technical, even social technical systems, cannot legislate what users say nor how clearly they communicate it. System functionalities and design cannot constrain behavior adequately to steer outcomes of communication. But social conventions and norms can do some of this. People turn to the familiar when presented with communication issues. When these familiar practices don't yet exist, they emerge. So, interestingly, twitter has succeeded by design: it designed itself to be so open and unstructured, that users invented cultural forms. And these cultural forms were much more interesting to users than many technical features might have been. For they convey two things in their use: engaging and compelling ways of talking; and interpersonal relationships. Design features may achieve some of the former, but not the latter.

Twitter serves as a good example of the emergence of social norms and conventions of use. Conventions have developed around use of #followfriday, @replies, RTs, follow/follow back, and lists. These conventions have of course changed over time. And in cases, they emerge incredibly quickly. Language is a much faster "design" than technology. When twitter's population undergoes a substantial change in population, through growth and adoption or balance of new and old users, conventions of use reflect these changes faster than technical updates can.

Discourse, Regimes, Economies

Language has order, and speech is organized. The same for interactions. There are in fact types of linguistic statement or utterance quite commonly found on social media. Invitations, for example, can be answered yes, no, and maybe. Questions are statements to which there are answers: and one can group questions, and group answers. It's possible to tell which is which. Offers, too, have responses: yes or no. And it's possible to tell an offer from a request. So "for sale" and "wanted" can be easily separated. Greetings, too, are recognizable: hellos and goodbyes, plus a myriad of nuanced expressions in between. Requests are a commonplace, and include variations on what they are about, as well as how to

respond to them. Some requests beg for advice, help, or reassurance, and so need to be handled personally. Some are factual, and may be handled successfully with something specific. Testimonials are examples of the kinds of speech that are highly personal and nuanced. MySpace was practically built on the culture of reciprocal testimonials.

Redundancy is the collective response to ambiguity.

These linguistic distinctions feature in the design of social tools. Statements that have formal or codifiable responses may be designed into structured interactions. Questions and their answers, which describe the primary design of sites from Quora to Mahalo and Yahoo Answers. Dating sites, using question and answer profiles, make use of answers for search results, matching, and recommendations. Whereas Quora uses Answers to drive group conversation. And Mahalo sought to use Answers to reward "experts." Similar design choices reflect intrinsic linguistic structure and organization are behind many social applications with specific uses: reviews, recommendations, trades, Q/A, and more.

The combination of social interactions, games, and language raises interesting possibilities for the design of social tools. Game theory offers compelling insights into the outcomes of different social interactions, given "strategies" and differently structured costs and benefits. "Games" exist for one person, for twos, and for threes. Multi-player games and games for an open audience have also been studied. These theoretical games structure outcomes and might be played once, repeatedly, or with an open-ended timeframe. Game outcomes are thought to manifest in player expectations, and to inform how players communicate. Classic prisoner's dilemma game theory structures expectations around self interest, and trust. But there are other kinds of games.

There is potential for design influence in the experience of communication-based social tools. And additional design thinking could be applied to the outcomes of these kinds of interactions. These are not obvious, and real. But as mentioned, designing conversation and talk is a separate project.

Conclusion

Social interaction design is an emerging discipline. It seeks to unite a deep understanding and interest in people with an appreciation of social tools and technologies. As a design methodology, social interaction design emphasizes social practices. These are outcomes of individual user habits and interactions among users mediated by a social tool. The designer's influence and role shifts slightly from crafting interface solutions to anticipating the amplifying and self-reinforcing effects of design features. Good social interaction designers know that users learn as much from others as they do from technology. Users know what they are doing — even if many are doing different things.

Social interaction design recognizes that while technologies are limited in scope, social practices are perhaps less so. Out of the box thinking about who and why users engage in social media can be of critical importance in growing both an application and a business. Best practices established around particular social technologies are not transferable. All social tools are "live events," and adoption and use of new features and functionalities are context specific.

All use of social tools can be understood as a manifestation of some of the most basic aspects of media and interaction. Media transform the human experience, and shape interactions by what they amplify as well as what they exclude. Individual responses to these distortions vary, but show consistency. The cultural forms and practices that make sense out of these distortions certainly prove that the technology of media alone never explains how they are used.

Future social media are sure to extend these basic principles, and success is more likely for those professionals who can anticipate and steer the social power of technology by insightful design. It is early days yet for social media. It is not yet clear what these tools can do, nor what people will do with them. In comparative terms, social tools are where television was in the 50s. Reality TV, LOST, and 24 hour cable news were then a long ways off.

The social interaction designer's role is to contribute social insight to design decisions, on the basis of educated and well-reasoned observations and guesses. Any design, regardless of its social foresight, will have social bias. Not taking a social interaction design approach is not to escape the reality of social practices. It is the

opinion of this author that it is better to think ahead. And one can only think on the basis of assumptions. Better, then, that those assumptions have understanding.