A Social Interaction Design (SxD) Guide

Social Media, Social Practices, Social Content

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"Another sense in which the term reification is often employed is to refer to circumstances in which social phenomena become endowed with thing-like properties which they do not in fact have. Again there is a reputable ancestry for this coinage in Marx: 'In exchange value, the social connection between persons is transformed into a relation between things...'" Anthony Giddens

Introduction

The emergence of social software over the past years, exemplified first by Friendster's appearance as a massive online dating and flirting scene, and now cemented by mainstream media's preoccupation with MySpace and YouTube, continues with new sites, multiplayer games, and social media of all kinds, from the desktop to cell phones. User participation and user-generated content are now a part of many web sites, not to mention the defining insight of Web 2.0. Of course, user participation varies greatly, from drive-by commenting to all-night chats, and the quality and nature of relationships formed and pursued by social media varies correspondingly.

Communication technologies work by their integration into everyday communication and social interaction practices. They are technologies that facilitate interactions across space and time, that is, interactions not bound to face to face co-presence. That means that mediated interactions involve a dualism: communicative and social interaction made possible by individual and cultural technical competence. These two dimensions —human and technical— are so inseparable that if you really want to know how much of your communication practices depend on technologies, turn them off. Technologies have become embedded in our daily practices in ways that make it difficult for us to conceive of non-mediated alternatives. They're simply a part of how we get certain things done.

Social practices have arisen around these new media. We have practices of direct communication (phones, IM, email), practices of meeting and getting to know one another, of announcing events and inviting others to attend, of coordinating group activities, forming and facilitating teams and teamwork, learning and teaching, not to mention of course working from home and on the road. Teens today, to quote an oft-cited anecdote, can all be found on mySpace.com. That social networking site has become so deeply embedded in teen culture today as to supply both identity and social membership to millions of users. We're no longer talking about isolated phenomena, little online communities of freaks, fans, and hackers. It's now commonly understood that online dating increases one's exposure to the marketplace

(but that it's not a cure all, and suffers from the "chemistry" thing); that job hunters must have a resume online, and preferably an account with Linkedin.com, Hotjobs.com, or Monster.com (and that social networks are a great way to supplement a resume with testimonials and references), and so on and so forth. These sites, as simple and rudimentary as many are, are now embedded into social practices to the degree that one's competence in self-presentation online is a real and meaningful social attribute.

This document is an attempt to describe the design of networked applications and technologies where user practices are in fact social practices, and where the user's competence with these *sociotechnical* practices must be understood and anticipated by designers. We use social media only insofar as know what they are, what they do, how they work, and how we appear within them: in short, these are applications in which competence is a reflection on us. Although I have written this to help others in social media development, I was compelled to refer to a number of sociological concepts I found helpful as a means of providing backstory. Those interested in just the grammar of the user interface can skip this initial section. Those of you curious in social interaction design as a field may, however, find these insights revealing (perhaps, convincing?).

From Niklas Luhmann, I take the insight that mass media construct a reality beyond our direct experience, but familiar nonetheless because it is presented meaningfully. He divides mass media domains into news, advertising, and entertainment. I see new social media not as a subsystem of mass media, but as an extension of it, albeit on a communications platform. Luhmann's requirement that mass media not permit any interaction with its audiences is clearly violated by social media. But his distinctions work, I think, because much of the content of social media refers to, amplifies, and extends the reality constructed by broadcast media. And because mass media now pay attention to social media. This "structural coupling" occurs in other domains also, such as product marketing (company websites), music distribution (iTunes), direct consumption (amazon), finances (personal as well as investment capital), and much more. Social media make a new difference in all of these systems, by providing direct access and interaction with systems previously isolated by physical constraints (we can now do things without being there). My reason for ignoring most of those phenomena is that I'm interested in how we, as users, participate in social media (and not in how amazon lowers the price of books).

In grounding the sociological dimension of user interaction (with a site, and with others on the site) I take as a given Erving Goffman's theory of frames of social interaction: to know how to proceed in a social encounter, we must know what is going on. I view online interaction, though it's not face-to-face, as a kind of social interaction (we know there are real people at the other end of the interaction). But because these interactions are mediated, I supplement Goffman with observations by Anthony Giddens, for whom modernity sets conditions of action often derived from systems knowledge, abstracted, non-traditional, and subject to risk. For Giddens,

too, we are each aware of what we are doing, and aware of the "situational context" in which we do it. But for Giddens, the world of work, of news, of science, technology, of health and healthcare, intimacy and relationships, entertainment and so on each has achieved a high level of abstraction none of us could hope to master alone. We place trust in others, as well as in media and expert systems (e.g. the evening news broadcast, therapists, college degrees) in order to go about our daily routines. And as these daily routines increasingly require use of telephone, email, and online communication and interaction, our engagement with expert systems is changing. With it changes our sense of how we're doing, and of how to proceed. Want to get a better job? A resume and a peek at the classifieds no longer suffices: we now use online job sites and social software like LinkedIn, Facebook (classmates know job openings, and we know them).

Finally, we are developing a sense of how each of these sites and media works. A new kind of social competence is taking shape, one that includes a grasp of blog posts comments, of personal profiles, of social networks of friends of friends. And it's this for which I seek here to draft a grammar, as a design field (social interaction design, or SxD), so that developers and designers can better anticipate what happens when functions, features, layout, links, and so on include dynamic social data and content: user-generated content, opions, system traffic, views and hits, rankings, etc. Ultimately, the screen shows what is possible, and the screen eliminates what is not. Good user experiences are a precondition to the success of any of these systems, sure, but they belong to a world of social practices. None of us can engineer social behavior, any more than an architect can choreograph the flow of people through a subway station. But she would be a fool to design for space and light, mass and volume alone. For when people are the content, design must transcend its materials (in our case, data, information), and socially inclined.

A sociotechnical mashup?

We are a modern society, and competence describes our participation in it far better than inheritance or tradition. It's even possible, if claims of social fragmentation are accurate, that a new kind of mobility and mashup of culture, society, technology, and economy is underway: a redesign of roles, of social hierarchy, of influence, wealth, and so on. It certainly seems the case that new media, new communication tools, networked cultures and communities undermine all kinds of mainstream cultural traditions: from network television programming to branding and breaking bands. How has this come about?

It all comes back to the Internet, which is a platform agnostic medium itself capable of absorbing and then repurposing existing media. The net can be print, it can be radio, and it can be television. At the same time, the net is absorbing and repurposing communication tools and technologies: the net can be the mail, it can be faxing, the telephone, it can be CB, Ham radio, and it can be the message board. Mix all of those up, and you get a gross reorganization of all media and all communication tools in their relations to one another. And you get new social

practices emerging around tools, and around media, as well as around people and cultures. It's for this reason that I believe in framing a new kind of design discipline, one I call *Social Interaction Design*, or SxD for short.

We can no longer make sense of social software and related applications from a user-centric model—at least not the model that has come out of cognitive science. That model has insisted on a rational user, a goal-oriented user interested in achieving his or her objectives. An application would either satisfy or confound the user, and designers could set about improving UX and UI until users were all happy. But social technologies are different:

- We often end up engaging in something that wasn't on our minds when we started.
- Transactions are not discrete, they're ongoing and episodic.
- More often than not we're communicating with others, and communication clearly exceeds rational actor models of analysis (it's psychological, it's meaning-based, it involves self, other, performance, and so on).
- Interaction with others is mediated and so therefore we need new practices and new etiquettes, or codes of conduct and behavior (even when these are tacit, as most of them are).
- These technologies seem to have a relationship of observation and supplementation to real cultural phenomena and practices. Online dating does not replace dating. Online discussions do not replace real conversation. And the topics found in many of these services relate to real world news as if they are commentary on it.
- These tools enable direct interaction with others but often in a kind of public context.
- The activity on these applications is captured and then used by them, making social media dynamic (updated as they're used): in short, a production medium that records as it produces.
- Much of the social dynamic here, because it's rooted in social action, involves attention: paying attention, sharing attention, getting attention. Attention is the scarcity of these economies, not goods and materials.
- Where user interaction with non-communicating and non-social media is discrete, social interaction is ongoing. User actions don't end with a function or operation's conclusion; they solicit response from others. It is other users that pick up and continue a user's action (that action being a communicative one: blog posting, video posting, commenting, etc.)
- These media are distribution media as well as content media, and their distribution is handled in part by web protocols, in part by communication (email, sharing, etc.), making them quick to create or to lose audiences.
- Any medium of experience structures experience according to its intervention in reality. Some part of our interaction is with the medium itself. For this reason we can't ignore such simple things as pictures, text, links, etc., any

- more than architects would ignore differences between surface materials like concrete, stone, glass, and wood. (Not to mention 50's era carpeting.)
- It's possible that social media operate in a kind of tolerable and sustained failure mode, by which I mean that people often get engaged because they can't tell what's happened to their participation (dates don't happen; jobs aren't obtained; friends don't communicate; blogs aren't commented on). But the possibility of missing an opportunity, combined with the fact that there's no way to know what's going on online besides going online to check, creates traffic in and of itself!

I could make more distinctions here but the point should be clear now: architecture, design, and implementation of these things puts them in a category of their own, an admixture of social and technical practices best approached from a socio-technical orientation.

Social Media are Talk Systems

I like to call these applications talk systems because the kind of user interactions they engage are not discreet, goal oriented tasks (the concern of conventional user interaction and user experience design), but are an open and ongoing interaction much more akin to talk situations than to tasks. Furthermore, all of the mainstream and mass-media media repurposed on the web are retooled on the foundation of a networked communication medium. Consequently, users engage in web radio, web tv, blogging, online community and so on with others, often as a supplement to real world interactions, and often as a means of sustaining activities and relationships at home, among friends, and with the workplace. Users don't think in terms of technologies, they think in terms of relationships and communication. As you can see from the preceding list of social media attributes, the technologies here are hybrids demanding multi-faceted analysis. But the talk nonetheless strikes me as the best approach to understanding their emergent user and social practices.

With these talk systems and social media in mind then, the social interaction designer has to bear a number of the elements of social architecture and media in mind. Use, or interaction, can be placed on several analytical levels. There is the user and the product. Then the user, through the product, interacting with another user. Then there is the social dimension of several or many users of the product. And there is the mediating function of the product that facilitates use. And again, there is the software's self-reflexiveness (sites dynamically reflecting user participation) as well as the users themselves who also monitor their progress, competence, appearance to others, and so on. Thus individual users, even when engaged in what looks to the designer as a classic user interaction (with an online application) are aware of the virtual social context in which their activity takes place. The medium's reflexivity is reflected in the user's self-monitoring behavior. Both these points are confirmed by symbolic interactionist Erving Goffman's starting principle that in any social situation, we need to know What is going on before we can know How to

proceed, and that while enaged in social interaction, we attend to How we are doing (captured in the term *competence*).

Thus social media must reflect their use, at the social level and the interpersonal level, and the individual level. Applications then must be capable of addressing, with as little ambiguity as possible (more on that later, for some systems thrive on leaving unresolved ambiguities):

- 1. What's going on at a social level (all users, or public)
- 2. What's going on with another user (interpersonal or one-to-one, also called private)
- 3. How I am doing (user's own sense of self, progress, acceptance, like-ability; in short: competence)

To revise interaction design for use in social media, the social interaction designer must ensure the translation of a social dimension of use so that individual users can proceed successfully. The metric here is not "did it work," as it so often is with functionally-oriented software and technologies. Our metric is not a matter of discrete transactions (in which the user has a use, the execution of which is satisfied successfully or not. A simple and convenient binary!) but rather a practice episodic, infrequent, often interrupted but nonetheless ongoing interaction. Success is measured not by the software's performance but by the user's sense of competence in their interpersonal or social performance. We might say that in using social media we develop a socio-technical competence, and indeed that's what is exemplified on systems like MySpace, where users can customize web pages (html competence required) to draw attention to themselves (social competence served).

Trust and risk

Media as dynamic and interactive as social media create a lot of risk. Modern society itself creates a lot of risk. According to sociologist Anthony Giddens, risk is produced not only by the principle of doubt upon which our truth-oriented scientific method is based. Truth results from observation, hypothetical intervention, and results, which may undermine and revise previously accepted truths. In short, anything we know may prove to be false tomorrow, ironically, because risk is the byproduct of the very means by which we seek to reduce it.

This risk affects us indirectly as well as directly. It can result in a revised understanding of our world, as well as a revision of our place in it. Because social media are directly involved in the process of creating a world observed, and because we are involved in creating its content, we use techniques available to us by which to reduce risk. For the most part, they can be divided into people in whom we can place trust, and expert systems in which we invest confidence. To Giddens, a dating site is an expert system: it's a market of persons available for dates, and as such addresses the problem of finding partners. But when we strike up direct communication with

other members, we begin investing trust in them by and in their interest in us (their commitment to us, commitment being the primary ingredient of intimate relationships).

Social media must make some amount of this transparent if users are to where others stand. Our trust in people is fundamentally different than our trust in systems, and though we know all about it and can recognize or feel it when it's there, it's worth a few lines just to make some of this explicit. Social networking, for example, was one of the first "killer apps" of social media. Sites like Friendster inaugurated a method of selecting friends, and then using friends of friends to create personal social networks for the sake of reducing the risk involved in contacting complete strangers. The assumption that trust between two people can be transferred is flawed but serves a purpose. That I trust you doesn't mean I trust your friends in the same way, though it does make me feel more welcoming of them. For Friendster, which was built as a kind of dating site (meet the single friends of your friends), the concept played out awkwardly. Dating, it turned out, is still private enough for many people that they preferred not to make it too widely known. However, dating as a side-effect of socializing with one another's friends struck a chord, and though attempts by Tribe.net, Google's Orkut, Yahoo's 360 failed to take off, MySpace drew the crowd and a new kind of social networking stuck. Facebook applied the principle to college classmates, and LinkedIn, to career networking.

Mass media markets, social media economies

In a day and age characterized by "information overload," the flotsam and jetsam of brands, products, celebrities and other bits of narrative adrift on an ocean of noise, picked up and dropped as wave upon wave of news crashes alone the shoreline, media have become a blessing and curse. We turn to the news to learn which news we should know about. And we find, of course, that more knowledge does not make us better informed. News is just news, that is something new, unless it is entered into a discourse, a narrative, a story with a topic, history, and future. The media are our access to the world we don't experience directly, and for that reason the media always presents a packaged world. Call it a fiction, or culture, it doesn't matter. Blogs can be found that will claim one, the other, or both.

According to systems theorist and sociologist Niklas Luhmann, mass media are a system of observers observing the world (and themselves doing it at the same time). Radically constructed and reproduced without interruption, this media universe organizes new information according to topics of interest (whose, it is unclear, for the media create audiences they presume to exist already). Social media observe the mass media. And now, mass media have taken to observing the social media observing them. All of this observation and self observation of observers generates immense amounts of commentary, much of it in the form of written communication (blogged, linked, and googled), but also as video, audio, ratings and rankings, and of

course as consumption (the most direct and unquestionable form of approval is the purchase).

Because it is supplied directly by participants, social media talk is less produced than that of the mass media, and relations are generally more authentic and real (closer to the street, and real life, paradoxically). For this reason social media have drawn the attention of marketers and advertisers as an inexpensive (though sometimes risky) "focus community." YouTube and myspace each provide reflections on the status and popularity of brands, bands, films, tv shows and much more. This feedback ranges from that of a cheap popularity contest to high level film criticism and analysis. Where these media success better than any other is in their speed: of pickup, commentary, distribution, and revision. Programmed and broadcast media simply cannot operate at that speed, and in today's news and buzz-driven markets, speed is value in and of itself.

The mechanism of market making online is a curious one indeed. Interactions between users refer to cultural objects — blogs, people, videos, music, etc. — in a vacuum oxygenated only by the activities of others doing the same thing. A virtual cultural environment builds around buzz, and when sparked, can be explosive indeed. Online audiences are a market — an advanced market and frontier explored and sometimes mined for commercial interest and potential. Blogs are watched and blogged about, creating a vast library of viewpoints and opinions. Hits in music, books, movies, rentals and so on — where interest is captured as purchases — can be launched online and then picked up by print, TV, and radio. Markets can be made and spun out of the online world.

From markets to economies

If it takes information about the community for its members to then successfully participate in it, it takes an economy to mobilize the flow of goods and services within a marketplace. Web 2.0 marketplaces are emerging for every transaction imaginable, combining web 1.0 ecommerce with web 2.0 social networking, recommendations, ratings, and other elements of community. This is of course where the Web really shines — by combining data, traffic, transactional functionalities and connectivity, marketplaces easily bring buyers and sellers together. Just witness the success of sites like Craigslist, Amazon, and Ebay. But there are other phenomena at work here also. Economies have culture, as they have generalized rules and codes of participation, conduct. They employ self-regulating mechanisms for the integrity of trades and transactions, for the fairness of pricing, and for the credibility of its participants. Markets and economies strike me as a particularly interesting online phenomenon, and not only for the high degree of confusion they create. Mainstream media is terrified (though if there's a culture of fear, it's the media industry, for whom shots are fired first and questions asked later. It has only itself to blame...) of success stories like MySpace and YouTube — terrified that it is losing a generation of viewers and consumers, for whom "marketing speak" is no longer the God's word nor print, television, and radio, God's book.

What worries old media is that new media represent an entirely new stage in media evolution: from "the medium is the message" to "the medium is the messenger." And what's particularly frightening to them is that their primary investment — entertainment value through production values, celebrities, narrative, and action — is trumped by authenticity and sincerity, both of which belong to everyday speech and are virtually inaccessible to marketing and advertising. Truth rules out the sales pitch, by definition.

This is not to say that MySpace is populated by seekers and speaker of truth only, or that everything on YouTube is worth watching. Both services operate on the basis of a massive fiction: each has produced a world whose existence cannot really be verified any more than it can be known. So any judgment concerning its truth value takes a back seat to more functional and strategic concerns. Once people actually meet, of course, the truth of human relationships can enter the picture with flesh and blood and a heart. Until then, however, participants are engaged by appearances, signs, indications, statistics, trends, and other versions of reality, all of which serve as observations about the system's identity, and which tell users about it while reflecting back to them how they are doing. Which brings us back to the economic in all of this.

Economies move markets, as they move participants in markets. Economies are what bring markets to life. Goods might be available in the marketplace, but it's the economy that assigns their value, and that ties them to the movements of supply and demand. Economies are not just financial, or money-based, but can be cultural and social also. Some would in fact argue that most economies have a social dimension; that nobody buys or sells without an observation and awareness of others doing the same thing. The theory of mimetic desire, for example, suggests that desire itself is social: we desire what others desire, and our rivalry with others and the scarcity of the system act as an economic engine.

In the case of online markets, it's this kind of social economy that gets things moving. Members of online communities accumulate points, ratings, views, and other forms of interest in front of others. Their friends, for example, number a lot or a few depending on how many friends everyone else has. This number can vary greatly from community to community, as well as within communities. Recruiters on LinkedIn have far more connections than many loyal company men and women. MySpace celebrities number more friends than a person could possibly keep in touch with!

People are bound to one another in the real world by debts; by threads of ongoing conversation; by histories and shared experiences (memories); by tradition, ritual, or past times; by roles and positions they occupy and must fill; and more. A member

may feel indebted to another for their gesture of friendship, for an extension of their trust, for recommendations, introductions, what have you. There are countless ways in which reciprocity can be motivated by an initial communicative act. Besides reciprocity there are other social mechanisms that motivate participation and interaction.

Competition is an obvious one, as is any kind of behavior in which participants take advantage of one another (this can occur when they see no future together). Bonds and commitments (promises) will generate mutually reinforcing interactions and behavior. And there are more for which we don't have the time here. What is important is that we recognize the manner in which social action involves not just direct communication between people, but indirect reference to some kind of activity or practice at the same time.

Online economies may involve:

- Debt (I voted for you, now you vote for me)
- Obligations
- Promises
- Commitments
- Social rules
- Game rules
- Schedules and routines
- Helping others
- Helping oneself
- Indirect sign of interest in another member
- And so on

You looking at me? Or, the urge to check and the art of waiting

The web is not a camera, nor is it a television. And yet looking, and being looked at, play a big role in social software. How does one look at another person online? How do we make sure we are seen to be looking? Or conceal the fact that we're looking? How do we make sure that we are seen by others? When members participate in social content, a certain ambiguity always accompanies its reception. Was it picked up? How did it go over? This is true of face to face interaction, too. But in co-present interactions we can simply look at the other for a quick read. If "being seen" is a characteristic of social interaction, then "being acknowledged" may be its cause and motivation. We exist, for ourselves, as we exist also for others. But that may be more easily said than done, and in fact sociologists and psychologists alike speak of trust and commitment as being a fundamental tension among human relations. I take the view that a social technology needs to channel trust between members, if not help to create it, and must provide users with some level of confidence (a weak form of trust) in its handling of these things — as a technology. We obtain a hint of trust from the visual exchange we can have in a face to face encounter. Technologies are

more clumsy, but I would argue that the hand-shaking, checking-each-other-out moments of online communities are analogous to real world phenomena.

Where the technology forces trust and commitment issues to the surface, and into the light of day, where they must be handled with words, icons, messages, IM's and other kinds of explicit interaction, the anonymity provided by technology brackets and safeguards against emotional aches and pains. Not seeing the person reject you; not seeing the person effectively toss away your email; not seeing them remove you from their hotlist... These aren't joking matters, and I suspect that many a blogger has secretly combed Google for links and citations to his/her blog. Sociologist Anthony Giddens would probably describe social software systems as technologies as a combination of "expert system" and communication tool. Expert systems are those domains of life about which we assume more than we know. And we can do this only because we have invested trust (faith) in the system. Be it therapists, private schools, an emergency room or ESPN's Sports Center broadcast, experts often stand between us and their work; what they communicate to us allows us to invest in our experience of them as people. It's an accepted fact among media theorists that news anchors create trust artificially, by presenting a likeable human face to buffer us from the mayhem behind. Social software, like other technical systems, assumes some of the role of trust building by shunting emotional/trust issues over to technologies and technical methods in which we have already invested our trust. The architecture of these sites, in short, uses beams, doors, and elevators we know work already.

Because social media operate out of joint with time, we face a similar coupling problem here as that between the presence and absence of communication. Communication occurs in time, over time. It's a sequenced and sometimes stepped flow of statements (called "moves"). Some of these moves are critical moments in our relation with others. Take the move of first contact: a lot of time can elapse between the hello and its acknowledgment on an online dating service. That's a moment in time that passes in the blink of an eye in face to face situations.

The time that we live (and which matters to sociologists) is not the time of equal increments and intervals, but rather of time stretched, durations, episodes with a beginning, middle, and end, not to mention relative speeds (time passes quickly, time passes slowly). When we use asynchronous technologies to communicate with each other, these features of time are displaced onto communication itself. The signs, hints, gestures, and other suggestions possible through physical and visual cues must now be handled by explicit communications. Dating sites supply "low risk" versions of this as a way of reducing the anxiety that can accompany the act of making first contact online. When a communication is codified in the form of a gesture or type of short-hand and made available to the entire user community, its personal meaning is reduced and it can now be used as a less personal form of expression. Communication about time often involves a communication of intent. This is because time unfolds differently for the speaker and the recipient/listener. One is being waited on, the other is waiting. And when this is not the case, the lack

of simultaneity creates problems elsewhere. They are mitigated by a signaling of intention. When this places too much of a burden on users, compensation for the ambiguities of timing can be shifted onto the platform itself. (This is in fact one of the main reasons I sometimes consider social software to be society or community operating in failure mode.)

The Structure of Social Content

The internet combines commercial and private publishing—text but also games, video, audio— on the backbone of a communication network. Which matters more: the web's content or the communication underneath and throughout it? The question presents only a false problem, for the Web's particular repurposing of mainstream and mass media on the basis of a communication toolbox (IM, chat, email, etc) creates something altogether new. We can talk to friends while sharing videos, in which case a relationship precedes interaction. Or we can post videos and then communicate with those who stop by to comment: in which case the interaction precedes the relationship.

We began to relax around strangers centuries ago, in cities. But as Erving Goffman notes, even the "civil inattention" we pay to unfamiliars reproduces the basic ethical foundation of society. There's no such thing online: one cannot see another person and have them know that you did so, without declaring it. This fact — that the medium's "public sphere" is completely anonymous until individuals make their presence known — creates a unique set of circumstances for any kind of social software system. Imagine greeting another person on the street with the words "hello, I am greeting you!" And then imagine hanging around until s/he answered back "why thank you good person, for greeting me!" (That is, essentially, the trackback.)

I don't claim to have a psychological theory of the internet, or of the web, and so I proceed here with some caution. But it's carried on a vehicle driven by an author with a passion for turns of reckless abandon. The walls here are soft, and if we hit them we'll know it and simply steer in a different direction next time around.

The Reflexivity of Social Content

Most social software sites, and sites that permit user input and which involve some amount of online community, feature polls, surveys, top tens, and other kinds of rated and ranked content. What makes these content elements interesting is that they have "state," and that state changes with user activity and is then reflected on the site. Content on these sites is dynamic, changing, and because users interact with these changes, reflexive. The reflexivity is then doubled again by the user's self-monitoring relation to his or her participation in the site. it's a principle in social interaction that participants need to know what's going on, to know how to proceed, and this leads users of social software sites to engage with them according to the signs of activity and signs of their own relation to it. This attention to cultural signs and social indicators isn't just true of social media, as many consumers pay attention to statistical trends and popularity contests among companies, books, movies, music, people, and so on. These kinds of lists and orderings, because they change constantly, engage users. Trends are forgotten and the state of now emphasized

instead. Users will check to see where they stand (where others stand, where an item, band, movie stands in the rankings, etc.) not only because rankings are themselves news (content), but because they provide users with *social* information pertaining to their un/successful membership and participation. Ratings and rankings available for online content are now commonplace, and many a blogger finds himself caught in the vain pursuit of popularity and links—a condition exploited at sites like Digg.com, Technorati.com, not to mention Google.com, whose changing search engine algorithms drive some marketing people nuts.

Second order effects of user interactions are the effects that lead to emergent social behavior not with the user interface per se but with the site overall. Let's take the first order effect of displaying member photos. The first order effect might be to generate a lot of click-throughs to member profiles from thumbnails shown of their member picture. The second order effect might be that the community becomes more attentive to members' physical appearance. Members respond by showing more risqué or suggestive pictures of themselves. Flirtation ensues, and testimonials become a means of hitting on other members. And so on.

In order to anticipate the kinds of second order effects that a design decision may have (on a site), we simply have to consider the familiar, every-day kinds of social practices and their situations, interactions, and "rules." If a design supplies enough social content to support a common social practice, that practice is much more likely to emerge over time and as a result of community participation. Take another example: fantasy football.

The presentation of sports statistics describes the standings of teams competing with one another through the course of an ongoing season, for example. We know what that kind of information looks like and we can imagine how to lay out a page of such statistics. Now, if we were to build a fantasy football site, we would have to accommodate the needs of players (not the football players, but the game players). The content is very similar but its presentation now must account for and galvanize participation by its users. Design must now facilitate a social practice, that is, game play. Consider some of the ways in which we can organize content by its relevance to a social practice.

Content organization by social practice:

- Organize by time to keep things fresh and current
- Organize by personality to build social hierarchy
- Organize by role to create organization
- Organize by sequence to create relational dependencies between information and/or persons
- Organize by images to solicit impulses based on looks and appeal
- Organize by questions to open up debate and conversation
- Organize by topics to preserve and build categorized knowledge
- Organize by opinions to manifest range of cultural views

The Grammar of Reflexive Online Systems

Our thesis is that social systems are reflexive, that they are produced by their members, whose actions and interactions with each other reproduce the system *at large*. To this end, social software sites provide information about themselves and about their individual users. The kind of information they provide will depend on their overall theme, audience, and activity. We don't need to mashup our tools and technologies to see what works. Some of it we recognize already. Here, for example, is a simple breakdown of social content as it's used to reinforce community.

- When content is social:
 - Content changes, even though it refers to the same set of data
 - because data changes
 - As it reflects user participation, the updated content may result in the reordering of:
 - The newest
 - The most popular
 - The most viewed
 - The most clicked
 - The most downloaded
 - The highest rated
 - The most duag
 - The most commented
 - The most tagged
 - And bookmarked
 - And favorited
 - And hotlisted
 - And this reordering informs users whose clicks iterate the social again, and so on in a continuous cycle of social activity
 - Users, whose sense of self presence on the system, of membership in the community, and of attention earned from the audience, are motivated:
 - to pay attention to others
 - to write more
 - to respond to comments
 - to comment on others
 - to rate content
 - to download content
 - to upload content
 - to create lists
 - to browse
 - to search
 - Each of which is an act of participation, but calibrated to achieve:

- a purpose (user-centric GoingOnal or objective)
- and to be seen doing it
- by another member or members
- especially those whose recognition is valued
- All of which results in a sense (speaking here of the user) of
 - membership (identifying with the group)
 - and individual distinction (separation from the group)
 - loyalty
 - curiosity
 - stickiness
- ...in the form of a user practice and habit, a routine that picks up others, embedding itself in a new and emerging, thin but thickening social practice...
 - at which the user is a competent participant
 - about which the user can speak, with some confidence
 - of which the user can describe what goes on
 - how it works
 - and what to do next
- ...which means that the technology is now an individual and social practice, that no longer raises the kinds of questions and provokes the insecurities attached to new technologies, but which now has social and individual *meaning*.

Coupling system reflexivity and the self-monitoring behavior of users

Any reflection we can produce of a member's presence online is bound to be incomplete. Because social software sites have their limitations, a member's choice of words and images places a higher burden on impression management. Social context provided by the site can ease some of this burden by rounding out member profiles with testimonials, conversation posted and commented by a member's friends, ratings, number of views to the member's profile, and so on. All of this social context will reflect some of the member's community position, value, importance, appeal, and so on. This social positioning and contextualization is important to us as users even when we're not consciously aware of it. If we were to strip context out of a social setting, its absence would make us aware of it more readily than we are aware of it when it's there. Design provides that context, and does it most successfully when it's not noticeable!

Views of a member serve to

- Show aspects of the member that might pique a visitor's interest in seeing/learning more
- Show that the member is real and sincere
- Outline the member's interests and reasons for being there
- And describe interests in others that help them determine whether contact would be welcome

Social reflections on that member can be used to engage social dynamics at a site. Simply consider the effects of featuring members on a site's home page. Call it competition, rivalry, or simply participation, a culture that draws attention to some of its members quickly creates a sense of social value that will likely motivate community members to engage.

Social reflections correspond to community values:

- Show that the member's popularity is rising
 - has many people comment on him/her, so must be interesting
 - has many people view him/her, so must be appealing (hot)
 - has been voted hot
- Show that the member is a frequent user
 - is a contributing member
 - is interested
- Show that the member is read and tracked by many others
 - is an active blogger
 - actively comments
 - commands respect

The Social Scenes of Social Content

Social situations are themed, that is, they have qualities belonging to a kind of activity as well as their specific activity. This is just a fundamental observation of social practices. Obviously, most of the activities we engage in every day are familiar to us; it's that aspect of consistency and predictability that provides then "rules" within which we're able to then act (our spontaneity and improvisation are possible only because there's stability in the situation such that it won't fall apart for everyone).

There are several types of genres, varying in their formality, professionalism, and degree of personal expression. While I don't have an exhaustive list of social software sites and the genres they belong to, there are some groupings that will be just as recognizable to you as they seem to me: news, dating, jobs, fan sites, reviews and recommendations, classifieds and auctions. The structure of information and content within each type unfolds along axes of time, information value, usefulness, and linguistic/semantic type (examples are: request, response, fact, opinion, question/appeal, promise, etc.). A site focused on industry trends and news will contain news, opinion, facts, and events. The information comes from the industry and is legitimated professionally. A site focused on celebrities will contain news and facts, but also hearsay and gossip (in some genres hearsay is the news, opinions are the facts). In the world of talk and commentary, conversation is produced by the industry or around and about it. The conversation produces the industry itself, and is of the industry, or produces a narrative about it, and is of the observing and participating members of a community. Clearly, all the people

interested in a topic cannot be in the industry itself, so communities emerge in which politics, commercial ventures, investing, entertainment, and so on, are discussed by people not professionally engaged in their topics. Blogging is a good example of this, and it's no accident that industries are coming to realize the kind of value bloggers bring to the table. They represent the market in which these industries do their trade, after all. (I've argued elsewhere that sites like myspace serve as a kind of miniMedia: observing and commenting on themes and activities popularized by the mass media, though free of its commercial backing and marketing).

Without this time constructing an exhaustive list of the ways of looking and being seen online, I would venture to suggest that social software sites have developed ways of channeling attention and visibility according to various thematically appropriate methods. Job sites steer clear of the flirtation and bias involved in one's looks and attractiveness when it comes to resumes, jobs, and candidates for employment—to wit, no photos. Dating sites will let users know who's viewed them, hot-listed them, winked at them, but not who else that person has viewed, hot-listed, and winked at! The art of seeing is nothing without the art of seeing oneself being seen, and seeing others look at being seen, and the scenes in which seeing and being seen are activities unto themselves.

We are all familiar with these thoughts:

- Am I visible? Do people see me?
- Has anyone read what I wrote?
- Am I up or down?
- Where do I appear?
- What are people saying about me?
- Whose company am I in?
- Do people agree with me?
- Has what I've posted led people to check me out?
- Has anyone looked at me?
- Am I more or less popular than I was?
- Who are the people interested in me?
- How much of my profile, and what parts of it, are people looking at?

We can direct audience attention on a social software site in two ways: as aggregate views and interest, or as direct interest (of one member in another). While these two methods aren't mutually exclusive, I think they lead to different behaviors and practices. Some sites, to discourage the back channeling of user interest and flirtation, force it into a kind of semi-public. Testimonials and picture ratings requested and displayed on a member profile page, for example, subject communication to some degree of normative pressure, presumably to keep it clean. A LinkedIn testimonial (written by member about another member), for example, needs to be declared as former/present employer/ee and linked to a job cited on the member's page of past experiences. The tradition of supplying references upon

request is by comparison more easily gamed ("you scratch my back and I'll scratch yours").

Consider some of the ways in which content can be structured to cultivate social activity. Each involves emphasizing different personality attributes, from looks to blogging credibility and frequency, to connectedness.

- Promote celebrity
- Promote integrity
- Promote flirtation
- Promote connecting and befriending
- Promote newsworthiness
- Promote reputation and credibility

Themes, genres, topics

Themes:

- News
- Advertising
- Entertainment
- Biography
- Sales
- Products
- Recommendations
- Expertise
- Dating

Whose topics include:

- Trends and fashions
- Social scenes and celebrities
- Social scenes and events
- News and commentary
- Opinions and expert sound offs
- Buying, selling, trading

Whose metrics include:

- Good, better, best
 - by stars
 - by ranking
- Relevance
 - by connection to user
 - by association with user's preferences
 - by tag
 - by category
 - by user click history

- by user purchase history
- Popularity
 - by views
 - by links
 - by diggs
 - by favforited list
 - by endurance
- Recency (new; latest)
 - unknown
 - possibility
 - opportunity
 - unknown
- Current
 - topical
 - referenced
- Hot
 - accelerating
 - momentum
 - references
 - exposure
 - quantity and acceleration, speed
- Expert's choice
 - chosen by experts
 - chosen by staff
 - editors
 - by association, must be important
 - quality

Example: Online Dating

What matters to the member of an online dating system is not the member's social activities. In fact, dating services create one-on-one interactions; references to social activity would be out of place, if not damaging. Similarly, this is a not a job site. If members are going to talk about work, it should be through passions and interests, not positions and office parks.

These selections aren't just the packaging of relevant information, which is in this case how dating services create a singles market online. They also engage users with the site and promote their participation. Members like to see themselves online, like their participation to be acknowledged, applauded, but even more simply, like to see it appear. The virtual world is quiet... A lot is accomplished just by establishing member presence.

Information is not just content, it is a significant part of the user's experience of others and of him or herself, and the social scene and context the information refers to engages social participation.

- The most popular members page on a dating or social site galvanizes competition, and motives some to check to see if they're on the list
- Members of a dating service will often check new members, in part because they offer fresh faces and new opportunities, but also because they believe "the early bird gets the worm." It only follows that new members benefit by the attention they get soon after joining.
- Each of these examples fills the primary psycho-social function of establishing a member's relevance, interest to others, visibility, and acknowledgment.
- Dating is about getting the other's attention; the organization of information by new, recent, popular, and interested members makes associations and connections designed to manifest and relay attention.

The dating system's information is people.

The dating ritual involves an unspoken and tacit ritual that governs, loosely or rigidly, timing, intimacy, presentation formality or informality, social status, friends, career, marriage history, sexual capital, to name but a bit.

A dating service will usually show:

- New members
- Recent matches
- Members who have viewed your profile
- Most popular members
- Local members
- · Members filtered by your settings

On a dating site you will see people shown by:

- Time
 - Recent visitors
 - New members
 - Since the user's last login
- User preferences
 - Location
 - Gender
 - Physical stats
 - Dating and personality preferences (matching preferences)
- Popularity
 - Profiles most viewed

And probably not see people organized by:

- Activity
 - Participation in the site
- Social standing/Celebrity
 - Social standing
- Job Position
 - Professional occupation

Social software sites vary by theme, some emphasizing member personality, the social scene itself, jobs or other opportunities and resources, past-times (sports, trend watching, movies, music), or news. Those are just some of the themes you will find on sites like MySpace.com, Tribe.net, Friendster.net, match.com, linkedin.com, and elsewhere. What these all have in common is that content is member generated, and member exchanges follows recognizable types of talk.

Example: MySpace as online "presencing"

MySpace is a social software service that offers communication and interaction tools with which members profile themselves, find friends, contact other members, post and obtain images, files, and more. The site ranks 13th on the web for traffic, and is hugely popular as an online meeting place. What makes it so successful? What kinds of insights into social interaction design can we obtain from it?

The name alone suggests that MySpace is a kind of "presencing" system: personal presence within a social context. Members present themselves on it through their profiles, and engage in a form of online socializing that works by creating local scenes around members rather than places, events, or discussions. People are the site's content, each member's profile standing in for him or her 24/7.

MySpace has a proactive "always on" posture towards virtual presence. While members don't have to meet in real-time as they do, for example, in online games, lines are always open and the dial tone is constant. And MySpace occupies a strange zone between public and private—as the online world is a public space not in the present tense, but in the archived tense. Similarly, one's presence online is not real in the physical present, but becomes real and valid as it attracts attention and participation. If there is such a thing as social capital, then it is earned and spent as social currency at MySpace, and one's presence has the value that accrues to those who can demonstrate social competence (read: flirtation).

MySpace is also a talk system, which all social software applications are to some degree or another, and it's the perfect example of a unique form of what sociologist Erving Goffman called "civil inattention." Civil inattention is that non-committal recognition we provide strangers in public places: "I see you, you exist, and though I can't say that I want to talk, I'm not ignoring you, either." Members on MySpace

receive postings to their profile page that are short, often pithy testimonials and greetings—but which make no call on the member to respond there in kind. Profile page thus attract comments, these comments becoming a roster of one's social circle and network of friends. And because the comments are there for others to see, they have social content and intent: they're written as a reflection on the friend and friendship as much as they are for anything else. So MySpace facilitates a kind of low-intensity social mirroring: hellos and compliments produce a kind of flirtation. Not civil inattention, but undemanding attention.

Consider some of the social practices supported in a service like mySpace. The following are an undisciplined combination of psychological, communication, and sociological terms. (I'm pursuing these with more precision in a separate project.)

- **Mirroring**: mirroring others' behaviors can help members fit into a new group or community.
- **Word of mouth**: passing news or views along to other members is a simple and effective way to participate in a community.
- **Flirtation**: this socially acceptable type of interaction is reasonably low risk and well known, and it shows that a member is friendly communicative.
- **Collaboration**: while not as structured as formal teamwork, collaboration occurs all the time in social networks in which members contribute to a community—even discussion is a type of collaboration (note that dating services emphasize individual, not social participation).
- **Opinionating**: members can invite communication and commentary with statements, rants, complaints, shout outs... Short and to the point, the statements are easily recognizable for what kind of response they solicit.
- Self-Promotion: members promote themselves on MySpace to create presence for themselves, and to get feedback and responses from others. Self promotions (e.g. profiles, announcements) are usually tailored to an audience and reflect the community's soft norms and codes of conduct. At MySpace, promotional activities include out and out marketing (of bands and dj's especially).
- **Extending trust**: trust only comes to those who give it, and the extension of trust to others is a daily practice in online communities. Members can tell how far a member has gone with an offering of trust, and generally know how much they're returning if or when they do so.
- **Peer selection**: we are who we are with, and this counts for more on a site like Myspace than in most. One's peer identities and peer group membership provides others second opinion, and is an important validation of one's identity online (where so much can be misrepresented).
- Public journaling: the practice of journaling in public is relatively new, and MySpace is home to a great many "private" journal entries, confessions, frustrations, and longings. There's a self-revealing act at work in communities

like this, one that combines a need for acknowledgement and a sensitivity to rejection. Public journaling can serve as a round-about way to connect and communicate with others. MySpace is meant to be a safe place in which to make the personal public, and the private, communal.

- Stylistic displays (vernaculars, idioms, and other linguistic and cultural competencies): signs of style are an important way of establishing one's identity in online communities, style here being both personal and social.
- Web competence: the technical competence demonstrated by many
 MySpace members tells us that a generation of computer users, raised during
 the internet age, include web skills among their bag of tricks and personality
 resources.

These examples should illustrate the degree to which social software involves a kind of user interaction that goes beyond the conventional approach taken by UI and usability analysis.

Social Media: The Content is People

Contributors and contributions

There are two dimensions to user-generated content: the contributor and his or her contribution. I'd put this in plain English as people and content but I'd run afoul of the slogan, popular in social software circles, that "people are the content." Social software sites vary in their emphasis on contributors and contributions depending on what kind of system the are, and the kind of participation the site encourages. They can make people more interesting, or content. And though people lead to content and vice versa, the distinction is significant. It influences site architecture, navigation, layout, and use of sound, video, and images.

We can compare and contrast dating and discussion/editorial sites for a quick example of what I mean here. Dating services emphasize the contributor, or person, and are weighted towards expressing member personality. Discussion sites, on the other hand, emphasize the contribution, and organize posts and responses in ways that are easy to navigate and which facilitate the finding of relevant information.

What these sites have in common is that they engage users by making them visible, and provide ways in which members can be seen and see themselves being seen. Since the challenge online is to create enduring presence during our absence, we fashion ourselves into a presentation of self that attracts others and their attention. To use the above example, we do this on dating services by emphasizing personality; in discussion sites, we use our posts; job sitess, our career experiences. The former approach draws attention to the personal—the contributor; the latter, draws attention to a post (e.g. opinion), or listing—the contribution. In each case we, as users, display our competence with the social etiquette around the theme of activity organized on the site, as well as the generally accepted practices of their use. These social competences involve ways of participating and interacting with others that we are confident about.

Where social interaction design comes into the picture is in organizing the site to support these practices in site organization, selection of members and their contributions, navigation, look and feel, and so on. Because they are driven by participation, and depend for their survival on motivating users successfully, social software sites need to select and package content according to the social framework that corresponds to their particular social theme or activity. Users need to know what's going on if they are to know how to participate. Content packaging design, whether it emphasizes contributors or contributions, ought to satisfy members' need to be seen, acknowledged, and motivated to continue their participation. (Note that

dating services are about circulating attention and interest much more than they're about matching up members for successful relationships in the real world!)

Content based on contributors

Because the medium presents people through the use of profile pages, blog posts, comments, and other web and internet-specific elements, our presence online accrues a kind of semi-permanence and stability obtained from the medium and its form of representation. And we're all aware of this, and for the most part, understand how it works. Membership in today's media world takes some amount of media literacy for granted, and this is as true for teens on MySpace as it is for the rest of us and television news. We know how mass media produce their programs. And increasingly, we know how online companies build trends, how products end up related to each other, what it means to be three degrees apart, and so on. We also know how to present ourselves to others, and many of us know and accept that slight distortions, photo-shopping or cropping of images, omissions and other twists in self-presentation are simply part of the practice. Boyfriends and girlfriends are cut out of pictures if we're single and looking. Those pictures may not be up to date. Jobs we didn't have don't make it into the resume (!), and testimonials from colleagues are sometimes a return gesture, favors returned for testimonials we've solicited by writing one for somebody else first.

Anybody who's tried online dating knows that it doesn't pay to lie. If you get a date, and you've lied in any significant manner, or in matters of substance (e.g. weight, age, height), well that may be the end of it. But some falsification seems to belong to the genre of online dating, and of social software in general. We choose to present the best that we can, for the most part. And this not only to attract attention (for this is a competitive marketplace), but for deeper reasons also. Truth and sincerity are subordinate end results in marketing and sales. And in many ways, online profiles and other forms of self presentation online mimic advertising. Self-promotion is as common as "meet me on MySpace." For a look at the UI elements that deal with the status of interpersonal communication and relationships, we can use online dating as an example. It lends itself both to the promotional activity of getting attention and attracting others, and is a domain in which social action unfolds in a couple (not a group, or triangle, though those are possible too, but less likely... Give me a call. Just kidding.)

Consider some of the ways in which we produce our presence online. The quick and easy ones are achieved on the basis of our appearance. And just as beauty may be only skin deep, the speed of a first impression is substantiated by other displays of style and personality. There's another way in which to present oneself, and that is through social standing: one's association with others, one's accomplishments, reputation, and so on. The bullets list some but not all of the many ways social software has become social. As you can see from the lists, developers have already created numerous ways in which to capture and drive participation!

The design of contributors

The selections a site (or community) makes about a person, and the information about that person that can be shown and shared with other members, develop the site's theme by producing similar types of information. Just consider the differences between sites focused on personal biographical information, versus those oriented to members' professional histories and credentials. The two not only differ but can even contradict and compete with one another. (The idea of profile faceting was volunteered to address this.)

Here, again, are just some of the character attributes, interests, and other profile elements members of social software sites can use to promote themselves, and attract attention and interest:

- Picture, pique interest, click to profile
- Relations, for social capital, click to network, click to connections
- Friends, to create "we know the same people" opportunities, click to connections
- Headline, to relate member's interest, click to article
- Headlines to relate recent activity, click to list of articles
- Number of views, to relate social relevance, click to profile
- Interests, to relate character, click to profile
- Part of profile picture
- Pictures from friends
- Names friends
- Testimonials from friends
- Ratings from friends
- Number of friends
- Number of professional relations
- Number of jobs worked
- Countries worked in
- Languages spoken
- Religion
- Ethnicity
- Age
- Months on system
- Measure of prolific
- Average logins per wk
- Average messages responded to
- Average messages received in wk
- Favorite album, radio show, film, tv show, book
- Recent album, radio show, film, tv show, book
- Current playing/reading album, radio show, tv show, book
- Highest rated album, radio show, film, book
- Testimonial for album, radio show, film, book
 - Sports team

- Sport
- Sport practiced
- Sport followed
- Outdoors activity
- Joke
- Di
- Club
- Bar
- Restaurant
- Kind of food
- Website
- Technology
- Operating system
- Phone service
- Car
- My next car will be
- My other car is
- In my next life, I will be
- When I grow up, I plan to
- I would rather be rich/famous/happy
- My favorite toy
- My next trip
- My last trip
- Mv current concern
- My current research project
- My current political gripe

Member statistics

Just as the above are ways in which we present ourselves to others, there need to be ways in which we get feedback and acknowledgment. Each of these is an online substitute for "being seen" and acknowledged by others in the real world. For a blogger, for example, links from other blogs and web sites create visibility, and a sense of relevance and importance. These links don't provide the user with the immediate flash of recognition that comes with being noticed in public of course; but they provide the recognition that functions in the blogosphere.

- Being viewed
- Being commented on
- Being guoted
- Being linked to
- Being connected to
- Being hot-listed
- Being favorited (flickr)

Being tagged (submitted to a tag site)

Content based on contributions

Adhering to the laws of social situations and social life in general, social media give users information about their relations to others. All social life is about relations; user interaction occurs within a social scene and situation, not within a vacuum, even when it is online, and even when there's nobody "there." The key to understanding online media is in grasping the mental and emotional models by which we interpret activity on a site. We need to know —but often cannot and don't know—what others intend, what they mean, what they want, and most importantly, what they expect (from us). The same is true of groups and communities. As it turns out, we encounter and have civil interactions with complete strangers all the time, offline and online. And because each of these presents both risk and opportunity, we are often quick to make judgments. Online we refer to a site's context, its theme or genre, the tone and content of user posts and discussions, the types of pictures (sexy, dorky, cute icons, pets, brand logos, etc.) users select for their profile, and so on. These all make an impression and establish information about the site and experience we can then use to participate. It's a sociologist's perspective that we engage in social interaction based on an understanding of what's going on, from which we know how to proceed. And once we have started participating in a site, we'll watch how we're doing. These are basic phenomena of social interaction, our self and other awareness being the basis of how we create and maintain relationships. And these are demands that social software designers admit and build into online systems for the simple reason that they provide the social, psychological, and user-centric information participation requires.

The information provided on a social software system includes how the user is doing, where s/he stands in relation to other individual users, groups, and the community at large. Much of the time this is broken down further into cultures, sub-cultures and groups (e.g. networks of friends). Interpersonal relations and dynamics are often handled by direct messaging and interaction: here, members can carry on their relationship by communicating directly. Meta information about the relationship and its status tends to matter more when members are strangers to one another, as when they are just getting to know each other.

Sites in which community is built around thematic contributions emphasize members for what they contribute to the site more than for who they are (offline and outside their participation on the site). On these kinds of sites, which I think are the majority of them, content is usually rich, varied, time-sensitive, and updated frequently. Interactions and communication between members emerges out of the discussion posts, event listings, classifieds, requests, opinions, pictures, files, and other content provided to these sites. Depending on the site's particular theme, participation might circulate around time-sensitive news and commentary, jobs and companies currently hiring, organization of an event, industry reporting, user discussions, and so on.

If these sites were not social but were conventional online publications, content design would follow the editorial layouts and practices with which we're familiar. But the integration of member participation produces the kind of social presencing issues we've been discussing so far. Users want to contribute, to see their contributions, and to see recognition of their contributions. No member will be motivated to continue contributing content to a service if s/he receives no recognition or acknowledgment for doing so. The challenge in designing these kinds of services is in opening up the genre to participation such that the organizational needs of the content and the presencing needs of members are satisfied. Solutions vary depending on the genre or theme. Let's have a look.

Information types

What is shown of informational content will affect what users do with it and make of it. Given that content online usually entails lead-ins and clips that link to full stories, item summaries and excerpts are a type of information packaging fundamental to the web. Browsing the web is to constantly choose where to go and what to click. Short lists of top five results lead to complete lists, to individual list items, to members that submitted them, or to the genre section in which they are located. It's beyond the scope of this paper to list all the variations here. Instead I would just reiterate that on the web, content is always navigation, a selection type that leads users in directions, and engages them in particular types of people, stories, events, and conversations. That said, here are just some of the content elements used online to provide navigation that use meta content, or "information about" the full content pieces they link to.

- Pictures
- Text headlines
- Text descriptions
- Relationships (numbers of, names)
- Events
- Dates
- People
- Places
- Names (people, companies and entities, products, etc.)
- Graphs and illustrations
- Markets and marketplace statistics
- Money, capital, and investments (also statistics)
- Populations
- Measurements
- And much more

Opinion types

Content elements also include some of the following summaries and "teasers." The method used here is to provide a sampling or taste of the full content piece as a means of compelling users to click through for more. In contrast to the factual orientation of meta content, these summary views and excerpts appeal to interest, opinion, and perspective. They take rhetorical and discursive form, and suggest talk and conversation. Summaries are used as navigation to complete versions (stories, statistics, bios, profiles, etc.).

- Expert opinions
 - o Broad
 - Specific
 - Personal
 - Topical
 - Historical
- Editorial commentary
- Perspectives
- Peer reviews
- Industry trends
- Analysis
- Debates
- Position statements
- Mission statements
- Recommendations
- Advice columns
- Ask the expert
- Resident advisor
- Forecasts
- And much more

Relevance

Another means of organizing content navigation on user-generated sites involves qualifying content by social criteria. These qualifications act as a commentary on content, suggesting its social value and relevance. They are content elements we see online even when sites don't include member participation: ratings, rankings, lists of top tens, and so on.

Before these types of content can be displayed on a web page, information must be selected, filtered, sorted and arranged. Summaries must be produced from lengthy articles. Statistics must be analyzed to produce trends, movements, to show historical comparisons, and so on. Relevance must be created according to perspectives that articulate what qualifies as relevance to begin with. And that means referring to a value system of some kind; a metric that permits the

comparison of one unit or statement with another. This is where we begin using the social, for values are social and cultural in nature. To choose one bit of information over another, to select it for its significance, means selecting it for its significance to an audience. Including the audience as readers is only one step away from including the audience as participants. Consider some of the following.

- Topicality
- Credibility
- Newness
- Newsworthiness
- References
- Ouotes
- Inbound links
- Brand/publisher/site credibility (page rank)
- Tag
- Category

Popularity

Popularity is a distinctly social criterion. If a site's content is arranged, organized, and presented by its popularity, social behavior will follow. The very term popularity suggests the self-reflexivity of social groups: that there is a social organization and ordering of attention such that all members cannot attract the same amount of it. Popularity is a kind of cultural economy in which attention is scarce, in which attention is obtained by those who know how to get it (by making themselves popular). This usually involves doing something that gets others' attention. The content then of member contributions is social through and through: it relates not to intrinsic information value, but to social value. Social content is content that signifies and refers to the social relations among members of a group, audience, or community. As a result, there's an apparent arbitrariness to popularity as a content organizing principle, and the variety of popularity contests out there is seemingly unlimited. What matters to the social interaction designer is that the content elements the show popularity be dynamically updated and visible. Here are just a few of the ways in which online communities and social software sites produce this effect.

- Popularity by unique responses
- Popularity by regularity and frequency
- Loyalty emergence (as a clique or group develops)
- Social comparison: importance, popularity, rising and falling trends
- Votes received
- Rank compared with others
- Implied social hierarchy or order
- Implied positions and movement (trends) within that order

Popularity and interest generated in and about members

We just described the kinds of content that support popularity explicitly. But in addition to content that creates and makes popularity itself a theme, it is also possible for popularity to implicitly influence participation on a site. This occurs when signs (e.g. statistics) are provided on a site that tell something about a member's popularity. In this case popularity is not the explicit goal of participation, but influences it as if from behind. As a visible description of members it becomes impossible to ignore. Members soon learn how to affect their popularity indirectly, say through their posts or comments, or where they participate, or who they count among their friends. The difference being that this version of popularity has to do with members (we're back to contributors in a sense); the previous version had more to do with contributions. Here's a quick review of the kinds of data that can be captured and used on members to provide telling details and context.

- Member connections
- Member views (of their profile, posts, etc)
- Member posts
- Member comments
- Member since
- Member last login
- Member rating

The Grammar of Social Content modules

When the call to action is interaction

The web is an attention-getting medium, moreso than the mass media for the simple reason that people drive their experience. Content is designed to capture the user's selection (click). Content makes a call to action if it makes an implicit or explicit suggestion to the user to click something. For it to be successful, it has to appeal to the user's interest. This basic mental (at times emotional) fact, that content needs to connect to the user at the level of interest (and I believe interests lie on a spectrum book-ended by emotional appeal at one end and "disinterested" reason at the other), is fundamental. The user may be strongly compelled for his or her own reasons, or may be browsing for something to capture his or her attention. An appeal or call to action is built on whatever it is that creates interest and thus draws attention. Attention and interest are also preconditions for communication, which occurs when a person takes an interest in communicating something to somebody. As we're interested here in how social media, or sites whose content is contributed by users, captivate audiences and motivate them to contribute, we're interested in how they create communication. A social media site must successfully organize the user experience so that further contributions provide clear and meaningful opportunities for the participation and communication of others.

Insofar as we live in a world of information and experiences mediated by mass media as well as online media, we're familiar with social objects and social content. We communicate about them all the time. Our relationships with colleagues and friends frequently involve the reproduction of news, marketing, entertainment and work-related messages and content. We express ourselves through our attachments to them, our associations and affinities with them, and so on. We do this through observation, of the world and of ourselves and others in it. This, too, is fundamental: our engagement in this world is maintained constantly through our participation as self-aware and self-reflexive members of a society and culture whose languages, signs, and objects are familiar to us. Social media thus present that world to us, while allowing us to watch and see ourselves and our participation in it at the same time. User generated content and social media sites are participatory worlds whose success depends on their ability to engage user's interests and simultaneously create a shared archive.

In an online community, or any site that we can call *social*, the call to action is often a call to social participation. And even when it's not a direct call to participate in group activities (discussions, comments, events, etc.), it's often a call placed within a social context. Social media wouldn't be social if they didn't make other users present. This presence — be it in the form of pages with "members online" or "recent members" modules, be it in the form of recent posts and other signs of

activity — creates the sense of a public space. So even a post to another member, intended for that member, is posted "publicly."

The point we're making here is that on social software sites, a call to action is made "in view" of others. And even though others don't "see" this public in spatial terms, they are aware of this visibility and sense the presence of a public nonetheless. The social works its way into user behavior as a shaping and informing force, as context and background. Users know that a comment written today may be found at a later date by a member it wasn't directed to. This orientation to the public nature of participating online means that when users act on a call to action, it's with a sense of this strange and new social visibility that characterizes the web.

As you can see here, when the call to action on a social software site is for response and participation, individual users lose control over their communication. It is either picked up or not, just as communication is picked up or not in face to face settings. The social interaction designer must take into account the fact that individual users need feedback: from the system as to the success of their communication; from others that their communication is acknowledged and either a) rejected or b) accepted. All of which is to say because users want to interact with others—and this involves communication over time—action communicates. I will suggest once again that social media are best understood as *talk systems*.

We have a sense now for the need of socially structured content to enable interaction, to appeal to a user's interest in communicating directly with authors or indirectly, with their contributions. If the content modules we're covering here are to spark interaction, they must make an appeal to communication and interaction, which is to say they must make an appeal to a *response*. If nothing were to come of the utterances posted on user-generated sites, well, nobody would visit them. Once communication begins, then, a new system of action unfolds.

The communication framework we have to work with today is not an efficient one. Much communication among members of online communities and social software sites involves clarifying these appeals to interaction (calls to action). In sociological and linguistic terms these appeals suggest their responses. An author can play with his or her motives, character, sincerity, credibility, and expertise, and so on to spark interaction, even to provoke it. Exaggerations tend to get attention. So too, do statements (and pictures, audio and video files) that are flirtatious or suggestive. In fact it's a common practice to lead with suggestive profiles, posts, comments, and descriptions in order to get attention. We can be less accountable to others online if we don't know them (and are thus blissfully ignorant of any confusion or frustration we cause). On dating sites, members understand that messages are often not replied to *even if* the member's profile invites contact. Users often know enough about others' contributions that they can be their own best judges on the possibilities of interaction offered by a particular post, its author's motivations, interests, availability,

accessibility, and so on. But it must be noted that many posts are not taken up in communication, and in fact much of what appears in social media today is ineffective, inefficient, and even gets in the way of attempts at interaction. With that in mind, let's examine the social structure of content on social media sites.

The motivation of social content

- Persons are interested in others
- Persons negotiate their availability to others
- Persons manifest their interest in what they say
 - Explicitly
 - Through hints and suggestions
- Persons manifest their availability in what they say
 - Explicitly
 - Through hints and suggestions
- Interest in a person
 - Availability
 - Temporal: now
 - Romantic
 - Activity partner
 - For chat
 - For IM
 - For other kind of communication
 - To be consulted
 - To be polled or surveyed
 - To work
 - To provide an introduction
 - To provide a reference
 - To invite me to their network
- Interest in news and events
 - Topics
 - News
 - Advertising and marketing
 - Entertainment
- Specifically
 - Journalists covering news
 - Sites covering news
- Trends and developments
- Events and news
- Opinions
 - Of experts
 - At street level
- Interest in a social scene
 - o What's going on at this site?
 - o What is this site?

- o Who's at this site?
- o How's this site doing?
- o What are this site's topics?
- o What's this site community like?
- o Is it happening?
- o Is it the one to be a member of?

Performance, competence, and risk

- Competence assessment
 - o Am I this site type of user? Can I excel? Will others help?
 - o Do I know how to use it?
 - o What's the level of participation here?
 - Would I have to post all the time to become popular?
 - Would I have to know the right people?
 - Or know about a subject in depth and
 - Would I have to be a geek?
- Fit and comfort
 - o Is this site for me?
 - Who's at this site and
 - o What are they like?
 - o How would I do?
 - o And will it be worth it?
- Impulse interest
 - A picture that captures the eye
 - A headline that piques interest
 - Or a suggestion that captures the imagination
 - A video that shows something compelling
 - Or a bit of information that's brand new
 - A post that's highly rated
 - Or that's been viewed numerous times and thus must be extremely popular
 - o Or anything that might jus be interesting for being as popular as it is
- User-related
 - A message in my inbox
 - A comment on a post
 - A post to my post
 - A rating of my post
 - Or of my profile
 - Or of my picture
- Alert
 - To a new message
 - To an event
 - To a friend request

- Or event invitation
- Or request for information
- Or request for a response
- o Or request for participation
- Or request for a request or invitation
- A request to approve or deny a request
- And more...

The communication of social content modules

The lists above capture the structure of user-generated content. Now what is the communication layer of this kind of content? Because these are contributions made either directly to a user or indirectly to an audience (whose members are familiar, or not, or both), interpersonal, group, and collective dimensions of communication and interaction come into play. These dimensions include obvious factors such as sincerity, friendliness, flirtation, provocation, and so on. But they also include factors that are complicated or explicated by the medium of presentation: anonymous comments of questionable sincerity but in a trusted context; statements, such as testimonials, that appear to benefit the user they are about, but which may have been designed to guide attention to their author also (or instead). And so on. When communication is captured on social media sites, the fact that statements get archived radically increases the range of interpretations and responses those statements may provoke, or appear to provoke.

Truthfulness

- How truthful is a post or comment?
- How sincere is its author?
- Truthfulness itself is a valid topic of interaction, and in cases in which the author's character and personality is of interest (e.g. social and dating sites, possibly recommendation sites), communication about an author's credibility and intent offer a topic for response.
- Validated by its
 - Facticity (factual accuracy)
 - Sincerity (told as truth, not as a lie)
 - Authority (source has the authority to make the claims s/he/it makes)

Credibility

- Credibility is related to truthfulness, being perhaps a thinner form of truth.
 Where truthfulness is addressed head on, however, credibility can be read from relevant meta information about the user and his or her claims.
- As it is a matter of the individual's authority to make claims, credibility in fact cannot be guaranteed by statements made by the author but is built on related information.
- That information in turn may be subject to validation requests and inquiries.

- · Valued by its
 - Being most recent
 - Most credible
 - Most true
 - Most sincere

Communication

- Initiated
 - Communication can be initiated with a number of communicative moves, from hints and gestures to mediated introductions or actual hellos. Bookmarking a person can count as initiation
 - Bookmark
 - Hotlist
 - Wink
 - Packaged hello/system message
 - So and so wants to meet you
 - So and so says hello
 - Third party introduction
 - Invitation
 - First contact message
- Picked up and followed
 - Compliments
 - Kudos
 - Cheers
 - Honors
 - Thumbs up
- Deferrals
 - Availability signs
 - IM offline messages
 - Email out of office messages
- Strokes
 - o Emotional acknowledgments and expressions of recognition
- Each of which may communicate directly to a user
- · And indirectly to others present
 - Compliments
 - o Kudos
 - o Cheers
 - Honors
 - Thumbs up
- Group and other relationship moves
 - Add friend
 - Invite friend
- Conclusions/terminations/endings
 - Block

- o Remove
- Suspensions and
- Continuations
 - Direct messaging
 - Discussion boards
 - Blog posts and comments
 - Posts around objects
 - Video clips
 - Audio clips
 - Animations
 - Embedded communication
 - Structured
 - Work
 - Transactions
 - Exchanges
 - Play
 - Games etc

Audience

- Any communication online is addressed to an audience be it a private message or a public listing.
- For this reason many authors address their content to an audience they know is out of their control. Consequently specific audience members are often called out by name or other reference.
- Ratified audience is the term given to an audience intentionally addressed by a speaker(known viewers, invited viewers such as members of a group)
- More commonly, online, are unratified audiences (those not addressed by the original communication)
- The audience addressed by an author is often exceeded:
 - Posts are read long after they were posted
 - Ditto with responses
 - And with comments
- In some cases, members no longer visit sites they have contributed to: the member's no longer addressing the community, in other words
- Messages intended for one or several recipients are circulated
- o Or become indexed and appear in search results
- o And so on

The Grammar of the Social Content module

The Social context

Show scene activity

- Show picture of member
- Show recent member activity
- Show recent member post
- Show best member post
- Show what member has for sale
- Declare with a headline of what member wants to buy
- List clickable items
- List non-clickable items
- Subtitle a picture as explanation
- Tag
- Animate

The appeal

- How are users engaged by social content?
 - o Asked for an individual response
 - o Asked for an anonymous response
 - Asked to make donation
 - Asked to make purchase
 - o Asked to rate
 - Asked to click to read
 - Asked to confirm
 - Asked to download
 - o Asked to join
 - o Etc.

The appeal's referential structure

- What's the call to action based on?
 - Curiosity
 - Timeliness
 - Urgency
 - Personal message
 - o Alert
 - Announcement/news
 - Cultural reference
 - Celebrity
 - Social competition/rivalry
 - Social conformity/membership
 - Sex appeal
 - Statistical information (traffic to you)
 - o Etc.
- The call to action refers to
 - o Person
 - Statement
 - Member profile
 - Member posts

- Member comments
- Member recording
- Member picture
- Member video
- List of
 - posts
 - files
 - links
 - etc.
- Activity of member
- o Change in status of member
- Event
- Sale by member
- Wanted by member
- Invitation from member
- Bookmark
- o Etc.

Sequence

- Let's examine this more closely. The structure of action here mirrors linguistic structuring of meaning as well as performative (also called pragmatic) dimensions of interaction and performance. Examples include:
 - Statement / Response
 - o Action sequence: Step 1, step 2, step 3, etc.
 - Frame changes:
 - Commentary on an action
 - Perspective change
 - Performance of role as prescribed by a position
 - Corrective action
 - Confirmation of reception, understanding
 - Provocation
 - o Etc.

When the action is communication

- How is the call to action picked up?
 - Individual user can respond directly and privately
 - Using same format (e.g. email response to email message)
 - Using other format (e.g. phone call in response to email)
 - Individual user can respond indirectly and publicly
 - Using same format (post on user's blog to a post on a different blog; trackbacks connect the two)
 - o Group may respond to statements with discussion
 - Individual users may forward communication
 - Emails
 - Discussions

- Listings
- Events
- Comments
- Blog posts
- Video posts
- Etc.
- Requirements for written responses
 - Text field for short headline
 - Text area for longer paragraph
 - Radio buttons for voting
 - Check boxes for selecting more than one
- Click requirements for action responses
 - Approval button
 - Join button
 - Submit button
 - To ecommerce transaction pages
 - Play video
 - Play audio
 - etc

Temporal markers

- What is the communication's duration?
 - Communication lasts for the length of a "run of talk" (until it is brought to conclusion or fades)
 - Communication stalls
 - May be picked up later
 - Fades or becomes inaccessible
 - Communication continues and branches as new topics are created and picked up around it
- What is the communication's thickness?
 - Communication remains dyadic (one to one)
 - Communication becomes group, helping to create or maintain relationships
 - o Communication is anonymous, remains so
 - P2p file sharing

Actions are enabled by web elements:

- There are many kinds of clicks/actions possible. All work because they link to something (an action, an executable script, database submission or query, a page, etc)
- What does the call to action use?
 - o Image
 - Members
 - Pictures taken by members
 - Text

- Direct communication (addressed to member by member or by system)
 - Comments
 - Message title
 - Announcements
 - Alerts
 - Invitations
 - Testimonials
- Indirect communication (anonymous, not addressed to user)
 - Headline
 - Opening line
 - Summary
 - Posts
 - Article titles
- Statistics and numbers, numerical relations
 - Views
 - Bookmarks
 - Links to you
 - Times added, commented
 - (Measured against:
 - Environment/world usage
 - Site usage
 - Community
 - Other members
 - Group
 - Friends/Social Network)
- Audio files (action is to play, to forward, to download)
 - Podcasts
 - Songs
 - Playlists
 - Links to songs, podcasts, etc
 - Radio station playlists, channels
 - Etc.
- Video files (action is to play, to forward, to download)
 - Vloq
 - Quicktime, flash players
 - Youtube players
 - Youtube links
 - Etc.
- o Etc.

The Actions that respond to the appeal

- Complete an action, step, or sequence
 - Link to a complete version of:
 - A video

- An image
- Audio
- Blog post
- Headline
- Paragraph
- Statistic
- Status report
- Etc.
- Conclude
 - If the link is a question and clicking provides the answer
 - Buttons that finish a sequence
- Declare
 - Clicking says "OK" (yes; I agree; I accept proposition)
 - Submit a written statement
 - is not a direct response to a question; for that, see below
 - is instead an open statement (entered into a text field, or provided in a different way)
- Respond
 - Say yes/no to an invitation
 - Say yes/no to joining a group
 - Say yes/no to becoming a member
 - Say yes/no to receiving emails
 - •
- Execute
 - Submits a poll vote
 - Makes a purchase
 - Adds one to shopping cart
 - Join a group
 - Become a member
 - Sign up for email list
 - Submits a submission
- Record an action
- Start a search
- Post a query or request
- Show rest of an image, or show it bigger
- Publish a post
- Continue a sentence

Module examples

The following tables are stripped-down versions of the kinds of content modules we see at the sites above.

Module:	Recent posts or comments		
Organization:	By site section, by content category, by tag, by author		
Type:	Author contribution		
Temporal	by date		
Order:	 since member's last login 		
	 ordered chronologically (by recency, newest to oldest) by posting datestamp 		
	 ordered chronologically by author's login datestamp 		
	 ordered chronologically by author's status (new to old) 		
Found in:	Blog modules, social software sites, technorati, feed		
	aggregators, content aggregators, review sites		
Further	 by rank, popularity, or other rating of author 		
sorting:	 by credibility, authority, activity, or expertise 		
	 by number of views 		
	 by rating of post 		
	 by tags, categories, or other mode of content sorting 		
Social	Post titles, or post titles and summaries, engage an audience around topical contributions.		
Communication	Posts can be directed at an audience member, can be <i>direct</i> responses to audience members.		
	Posts may solicit responses (or serve as responses) <i>indirectly</i> (that is, to nobody in particular).		
Actions:	click for rest of post		
	 roll over post for more of the post 		
	 roll over post for tags or other content organization 		
	 roll over author for more information 		
	tag post		
	bookmark post		
	share/email post		
	 subscribe to source/author 		
	 add author to a list (hotlist, bookmark) 		
	invite/interact with author		

Module:	Recent comments
Type:	Author contribution

Temporal	by date
Order:	 since member's last login
	 ordered chronologically (by recency, newest to oldest)
	by posting datestamp
	 ordered chronologically by author's login datestamp
	 ordered chronologically by author's status (new to old)
Found in:	Blog modules, social software sites, technorati, feed
	aggregators, content aggregators, review sites
Further	by rank, popularity, or other rating of author
sorting:	 by credibility, authority, activity, or expertise
301 (1119)	 by number of views
	by rating of post
	, ,
Cocial	
Social	. ,
	•
Communication	•
	·
	, , , , , , , , , , , , , , , , , , , ,
Actions:	·
	 roll over post for more of the post
	 roll over post for tags or other content organization
	 roll over author for more information
	tag post
	bookmark post
	·
	·
	, , ,
Social Communication Actions:	 roll over post for more of the post roll over post for tags or other content organization roll over author for more information tag post bookmark post share/email post subscribe to source/author add author to a list (hotlist, bookmark)

Module:	Reviews
Organization:	Member contribution, topical, thematic
Social	 Review titles, or titles and summaries, engage an audience around topical contributions. Reviews expose and express member interests User-generated content manifests member personality through topical or thematic reviews. It says something about the thing reviewed (event, product, place, person, etc.) while saying something about the reviewer Reviews have the social function in this respect of one-sided testimonials Reviews can solicit review (or rating) by others Reviews are means of demonstrating domain competence or expertise And as such may be used to solicit requests, invitations,

or other person	al guaries from	the audience
OI OLITEI DEISON	ai uuenes non	i ti le audience

Module:	Recent members	
Organization:	By recently joined, recently posted, recently logged in	
Type:	Author	
Temporal	by date	
Order:	 since member's last login 	
	 ordered chronologically (by recency, newest to oldest) 	
	by posting datestamp	
	 ordered chronologically by author's login datestamp 	
	 ordered chronologically by author's status (new to old) 	
Found in:	blog modules	
	 social software sites 	
	technorati	
	feed aggregators	
	content aggregators	
	review sites	
Further	by rank, popularity, or other rating of author	
sorting:	 by credibility, authority, activity, or expertise 	
	by number of views	
	by rating of post	
Carial	by tags, categories, or other mode of content sorting	
Social	post titles, or post titles and summaries, engage an	
	audience around topical contributions.	
	posts arranged by recency, topicality, popularity, authority, and so on all demonstrate organized.	
	authority, and so on all demonstrate organized participation	
	members organized	
Communication	posts can be directed at an audience member, can be	
initiated	direct responses to audience members.	
miciacea	 posts may solicit responses (or serve as responses) 	
	indirectly (that is, to nobody in particular).	
Communication	Direct	
responses	 post about post within social networking site/community 	
'	 post about post outside community/on web 	
	invite/interact with author	
	 become friends with author 	
	Indirect	
	 comment on post in community 	
	 comment on or link/trackback to post on web 	
	share/email post to others	
	subscribe to source/author	
	 add author to a list (hotlist, bookmark) 	

Actions:	 click for rest of post roll over post for more of the post roll over post for tags or other content organization
	 roll over author for more information
	tag postbookmark post
	share/email post
	subscribe to source/authoradd author to a list (hotlist, bookmark)
	invite/interact with author
	explore author's profileexplore author's posts
	explore author's network

Module:	Who's viewing me
Organization:	By newest, recently logged in, number of times viewed me
Type:	member, traffic & stats
Timing:	By date, since my last login
Source:	Social software site
Examples:	

Module:	Who links to me
Type:	Relational by content
Social:	 ambiguity of intent behind the link could indicate: interest, affection, peer relation, expert reference, could be to reflect on the site it is placed on, could be for seo purposes creates opportunities for finding people by content affinity creates opportunities for aggregators to use links to qualify sites

Module:	My tags, list of cloud
Variations:	 my content tagged for use by me my content tagged for use by me and for sharing content on the web tagged for use by others
Social:	 tagging creates grassroots or folksonomic categorization members choose the tags organization of content according to tags, which is rhizomatic, not hierarchical (tree metaphor) social forces (<i>popular tags</i>) influence tag choices enables content finding also reveals interests and practices of members/users through their tags as well as the sites they tag

provides some affinity relations among users and content by combining qualifications declared by members (their tags) with related content (sites that share the same tags contributed by others)
 can reflect on a contributor whose content is tagged as well as, on a well-trafficked tagging site, by who is not tagged

Module:	Who has tagged me
Social:	 see previous draws attention insofar as tags create paths to content and contributors content of the tag itself is relevant as it a) corresponds positively b) negatively c) analogously d) erroneously e) communicatively/gesturally (tags as ingenious, as comedy/satire/parody, as signs of the user's activity, as deliberately misleading, as deliberately provocative, etc.)
Communication:	 ambiguity of intention behind tagging a contributor or his content is tag to the site's author/owner, to its overall content, or to a particular page/pos content tag may indicate interest in person(s) (see above) may be communicative ("please notice that I have tagged you") as a gesture (on the order or a bit more than a civil nod of recognition) may suggest a request for reciprocation (tag, you're it; now tag me)

Module:	Sites that link to me	
Social:	 see previous is a reflection on the site linked to as well as on the site on which the link appears is read conventionally as "peer" reference does not suggest a reciprocal relation but reciprocal relations can be seen as confirmation of peer group or content genre is understood to benefit a site's ranking, so contributes to a site's search engine results (seo) 	
Communication:	ambiguity of intention behind linking to a sitelink text is often the title of site/page/post linked to, so	

now tag me)	•	it reveals less than tag links are more likely than tags to serve seo purposes is link to the site's author/owner, to its overall content, or to a particular page/post link may indicate interest in person(s) (see above) may be communicative ("please notice that I have tagged you") as a gesture (on the order or a bit more than a civil nod of recognition) may suggest a request for reciprocation (tag, you're it;
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Module:	Who hotlisted me, added me to their favorites
Sorting:	 by recent connections by most connected, most popular has favorited me the most has most pictures/posts/contributions by social ranking by credibility, authority, expertise by new member by most recent login by genre, category, gender, interest, group/tribe, etc by friend/stranger by most active
Social:	 see previous draws attention insofar as it is a clear indication of interest hotlisting enables users to communicate with their bookmarking can be done in public or kept private hotlists can be revealed to those hotlisted or kept private ("Who has hotlisted me?" may not show all results if members have kept their hotlisting private) creates expectations of reciprocity
Communication:	 ambiguity of intention behind hotlisting a person the hotlist may be a durable declaration of interest based on peer respect or may be a communicative gesture, and if the member hotlisted doesn't respond (usually in kind), may be withdrawn in which case it is used as a conditional expression of interest (contingent on reciprocated interest) other site members or the public may not be privy to

LICE OF	hotlisting	Λn	a	cita
use or	HOUISHIIG	OH	а	Site

Module:	Winks	
Organization:	Initial wink or reply wink	
Type:	Gestural messaging on social software sites/communities	
Actions:	view member	
	 add member to a list (hotlist, bookmark) 	
	invite/message member	
	return the wink	
	delete, block member	
Social:	winks may be shown publicly	
	 or shown as private messaging icons only 	
	 public winks contribute to flirtation on a site 	
	 anonymous winks contribute more to the member who is winked at and cannot be reflexive because their author is not known to the public 	
	 though winks may be shown as anonymous but be identified to their recipient, in which case winks obtain some of the communicative and gestural possibilities described below 	
	 winks draw attention insofar as it is a clear indication of interest 	
	hotlisting enables users to communicate with their bookmarking	
	can be done in public or kept private	
	 hotlists can be revealed to those hotlisted or kept private ("Who has hotlisted me?" may not show all results if members have kept their hotlisting private) creates expectations of reciprocity 	
Communication:	ambiguity of intention behind winking	
	 the wink has a real world meaning (hotlisting does not) it is a gesture of affection/interest, usually romantic but certainly personal 	
	 it is not used as a professional gesture and if used in a professional context is probably designed to lighten up communication (though it may be genuine: a fact of its ambiguity that resides in any affectionate and flirtatious gesture and which can serve the purpose of soliciting a revealing response ["she likes me!"]) the wink may be a durable declaration of personal 	
	interest	
	 or may be a communicative gesture, and if the member winked at doesn't respond (usually in kind), may be withdrawn 	

- in which case it is used as a conditional expression of interest (contingent on reciprocated interest)
- in dating sites, the wink is a gesture designed to facilitate initial contact, which can cause anxiety and dread of rejection
- the particular silences that characterize interpersonal communication online are made less threatening by gestural messaging like winks. They lighten up communication, take the place of utterances (which require that users actually declare something), and their ambiguity actually creates opportunities for communication (strangely, they serve as ice breakers, to which users can respond with variations of "what did you mean by that?" and "should I wink back?")
- public winks communicate doubly ("double articulation") and are reflexive: winks communicate interest to the person who is winked at; winks communicate that interest to a site's audience and so contribute to rivalries, jealousy, popularity, competition and other social dynamics; and winks reflect on the person who winks
- winks can be taken up by other members as a topic of communication (who's interested in whom)
- as the subject of obtaining and giving winks can also become a theme of talk
- removal of a wink that has been left in public can also become a matter of communication handled by the person whose wink was removed; the person who removed it (removal may be accompanied by a comment); as well by the community (insofar as members notice)

Module:	Kudos, compliments
Organization:	By first kudo, reply kudo, by friends, by strangers
Type:	Gestural messaging on social software sites/communities, also in content/contribution sites (review sites)
Actions:	 view member add member to a list (hotlist, bookmark) invite/message member return the gesture return with a different gesture delete, block member
Social:	 See previous Compliments create communicative possibilities by virtue of their ambiguity as well as by the etiquette

	governing reciprocation of unsolicited comments and compliments
•	Sites (yelp.com) that offer icons for use in "rating" a
	member's contributions, their photo, writings, profile,
	etc. enable and facilitate interpersonal communication
	(where the site is ostensibly intended to focus on
	contributions of members, these icons encourage a
	focus on contributors)
•	The degree to which gestural communication can be
	formalized remains to be seen
•	Yelp has the following "Like Your Photo," "Great Photo,"
	and "Cute Pic," all of which address the same topic but
	with various personal overtones. The "Hot Stuff" is
	unambiguous in this respect.
•	Members differentiated by their collection of gestures
	stand out for their popularity, and this is reinforced if
	the site shows the quantity of compliments a member
	has received
•	A site might choose to indicate that a member has
	received such a distinction (to differentiate the member
	in search results) but not indicate how many times the
	member has been complimented.

Face pictures of members
(see Recent Members, above)
(see Recent Members, above)
Member pictures can be shown with additional information in rollovers, or inline (above, alongside, below the picture). The following variations each would facilitate and steer social behavior and communication in different ways, for different motives, according to different interests, and with varying consequences for a site or community. • show a tagline • a shoutout • number of connections • location; last login date • member rating • recent posts • recent comments • listings • events • classifieds • requests • uploads

	tag contributions
	 customized selections (top fives, "here for," etc)
Actions:	(see Recent Members, above)
Actions: Social:	 (see Recent Members, above) Face pictures make a member's appearance a theme of social interaction on a site Members not posting a face picture may receive less attention as a result Members may also stylize or personalize their pictures, as well as display more than their face, and in suggestive or revealing poses and contexts The use of face pictures on a site will make member style and personality a theme Appearances can also make other factors into tacit or explicit themes of interaction on a site: Gender Race Age Location Lifestyle
	Availability (for intimacies, interaction)
	And so on
Communication:	(see Recent Members, above)

Faces with headline links	
By date, by members online, by friends, bookmarked members, friends of friends, members in hotlist	
Faces with number of connections	
This distinction will tend to promote celebrity and popularity	
Faces with last login	
This distinction tends to promote frequent login	
Faces with requests	
This distinction tends to promote interaction	
Faces with links	
This distinction tends to promote browsing by person	
Module: Faces with events	
This distinction tends to promote event contributions	
Faces with classified listings	

Module:	Faces with biographical information
Organization:	This distinction tends to promote biographical descriptions and
	self presentation, steering connections around common
	biographical elements (location, schooling, travel, etc.)

Module:	Faces with interests
Organization:	This distinction tends to promote personal descriptions and self presentation (focusing interaction less n what the person looks like and more what the person is interested in, and shared interests among users)

Module:	Faces with ratings/rank by others
Organization:	This distinction tends to promote social hierarchy, and steers
	users to present themselves in ways that make them appealing
	(according to the site's theme)

Module:	Faces with online status
Organization:	This distinction tends to promote interactions with members
	online (for speedy response), but can also lead users to turn off
	their online status as a means of controlling requests.

Module:	Faces with bodies shown
Organization:	Depending on how much of the body is shown, will quickly lead either to censure or sexual/erotic interactions. On MySpace, Freindster, Tribe, etc, bodies are somewhat covered are flagged "friends only" for private viewing. On adult services, bodies are usually naked and may be engaged in adult activities. The imagination is not required to further elaborate on the social consequences of showing oneself full frontal

Module:	Faces with personal properties, objects, on locations
Organization:	Will supplement reactions to face appeal with interests other users can have in a member's hobbies, passions, collectibles, past times, and so on. Consider motorcycles, cars, homes, sports, travel etc. Each would build a thematic community. Flickr permits members to tag their pictures for the sake of just this.

Module:	Faces with votes turned on
Organization:	Will tend to produce popularity contests, and often cause
	members to switch out photos in order to increase their ratings.

Module:	Faces with tagging on
Organization:	When members tag their own pictures, they make themselves easier to find. When members tag others' pictures, social trends and competition may emerge as the self-reinforcing dynamic of tagging kicks in.

Member acknowledgment and interest

Module:	Invitations to make a connection/become friends
Organization:	 Variation in number of degrees a member's network includes: whether it is visible to others privacy/friends preferences set by member whether system requires two-sided confirmation (each member chooses connection with the other) organization and categorization of the relationship visible to member only or made public whether system makes "you are connected to" introductions, etc.
Actions:	 accept or reject invitation whether or not declined invitations are seen by sender of invitation depends on the system. Note that when sender can see that an invitation has been rejected, invitees will often let an invitation stand, rather than have to explain themselves.
Social:	 Social sites do not need to formalize relations among members for relationships to occur. But the practice of declaring friendship, of inviting members to become friends, and of filtering content, navigating content, and browsing content by friends as well as friends of a friend is widespread. By having friends on a site, members are encouraged to participate in ways that include friends as well as maintain friendships. The degree of friendship involved is of course a matter known by members themselves, and is not one easily rendered on social software sites (and possibly better left untouched, for the simple reason that our personal relationships, measured in depth, intensity, affection, respect, commitment, etc., are not commonly revealed or addressed publicly. The opportunities for awkwardness, embarrassment, misunderstanding and miscommunication are too great for online community environments to handle gracefully.

	 Friendship can be and is often extended beyond first degree friends to friends of friends Friend of a friend relations are socially productive in their measure of trust (though this is not the trust of a committed friend), probability and confidence, and Friends of friends are useful means of applying social networks to everyday needs and interests, such as in obtaining employment obtaining information obtaining recommendations meeting new people and so on
Communication:	 Messages can be sent to friends Friendship relations can be used to select audiences for messages, posts, listings, events, etc. Friendships can be easily maintained online when friendship is genuine, as friendship usually facilitates the handling of communication and interaction (motives, intentions, other kinds of ambiguity)

Community trends

Module:	Poll
Organization:	Captures lists, quick multiple choice votes, on topics, and produces a narrative and reflection about/on the system and its participants. In some sites, members can create polls.
Action:	Poll may or may not click through to members who have voted, or to pollster. Polls can also be used as topical navigation to articles, or to other polls.
Timing:	Aggregated votes over time
Source:	
Examples:	

Module:	Link list
Organization:	Creates navigation directly to items in the list, which might be selected for their relevance by date, by authority, rating or rank, topic, number of times viewed, or commented, or tagged, etc.
Timing:	By date, by new
Source:	
Examples:	

Module:	Rising stars
Organization:	Draws attention to members making a mark on the contribution
	to the community/site.
Timing:	
Source:	
Examples:	

Module:	Visitor statistics
Organization:	Highlights participation statistics such as recent login, last login, number of times viewed, posts, comments, tags, etc. Statistics can be selected to reflect the participation values of the community/culture
Timing:	
Source:	
Examples:	

Module:	Tag cloud
Organization:	Features the topical choices and organization described as folksonomic, that is, an informal combination of individual and social choices and selections. Because tag clouds show popularity by font size, a tagged site's value is a combination of its intrinsic value and then number of times it has been submitted.
Timing:	
Source:	
Examples:	

Objects

Module:	Product ratings
Organization:	Shows product name, picture (if avail), by rating. Product titles
	link to product page.
Timing:	New, recent
Source:	
Examples:	

Module:	Top Ten: items
Organization:	Shows linkable list of top ten items according to selection criteria:

	user scorespricesalesetc.
Social:	 Rankings of site contents establish a metric by which the items ranked are valued and by which members might participate in valuing items Details and particularities of these rankings depend on the site's purpose and organization, as well as its use of member participation The use of quantity as a means of ordering and ranking items is common: by most linked to highest-rated most purchased/sold The fact that top ten lists change with member participation mobilizes member participation and in some cases the top ten list can become a social activity in and of itself This is more common when it is a list of members

Module:	Top Ten: members
Organization:	Shows linkable list of top ten members according to selection criteria:
Social:	Top ten (and other) member rankings on social software sites create • social rivalry • friendly competition • a means by which to measure one's performance and standing • a means by which to measure one's competence • are often interesting in and of themselves • and are a way of making members available, • and to those members listed, drive interested traffic

Watch lists

Module:	Review headlines
Organization:	Headlines link to review page. Organized by selection criteria.
Timing:	New, recent,
Source:	

Module:	Most recent reviewer
Organization:	
Timing:	
Source:	

Events

Module:	Recent event listings
Organization:	Event titles, date, location. Link to event description and additional actions (purchase tickets, bookmark this, email this). Could be shown by calendar view.
Timing:	New, recent, by date
Source:	

Module:	Event invitations by member
Organization:	Title and subject of event, shown by member name and picture. Link to member invitation, accept/decline. Is a personal event invitation. Could be shown by calendar. In a social software site, may include events by friends of friends, etc.
Timing:	Recent, pending
Source:	

Module:	Event pictures
Organization:	Pictures by members of an event. Selected by tag, by category. Pictures link to more pictures by member or more pictures of event
Timing:	New, recent
Source:	

Appendix

Web 2.0 sites

Aggregators

Online Productivity Applications, Web Word Processing, Spreadsheet, Presentations and More

Upcoming.org: Home

BlogSyndicates

Corante

AlwaysOn Home

9rules — Browse: Read anything about everything

GoingON

Technorati: Popular

Weblog Networks - Blogging Networks - Nanopublishers - Collectives

Your network | drupal

Blogs

<u>apophenia</u>

Rick E. Bruner's Business Blog Consulting: Ross Mayfield

blogdex - the weblog diffusion index

Chasing the Dragon's Tale: Social Networking Technologies Archives

Citvofsound

Common Craft - Social Design for the Web

Conversations with Dina

Confluence - The Enterprise Wiki

cybersoc.com: social software

The Dead Media Project

Design Observer: writings about design & culture: Maps of Cyberspace

digitaldust » Social Software

Emerging Communications

Fraternity and Philanthropy - The Social Software Weblog -

socialsoftware.weblogsinc.com _

Full Circle Online Interaction Blog

Functioning Form - Interface Design Blog (Weblog)

Futurismic: Blog

Get Real

Hellonline

HCI commentary

How to Save the World

The HUMlab blog

Information architecture, usability and interaction design issues, plus every single

damn thing on the web that catches my, plus a few more oddities....

Joel on Software - It's Not Just Usability

Joi Ito's Stuff

Klintron's Brain » Interaction design

Nate Koechley's Blog: Information Architecture, Interaction Design

Andrew Lark: Social Networking Technologies

Life With Alacrity: Tracing the Evolution of Social Software

peterme.com: Research and Development in Interaction Design

Professional-Lurker: Comments by an academic in cyberspace: CFP - Speech

Acts/Oral Traditions

Mamamusings: Elizabeth Lane Lawley

Many-to-Many

judith meskill's knowledge notes...

O Danny Blog

Robert Paterson's Weblog: Social Software and its impact on Society

Mark Pincus Blog

Radio Free Blogistan

Rashmi's Blog

Sandhill Trek

Seb's Open Research

social beasts

Stephen's Web ~ by Stephen Downes ~ The Semantic Social Network

Smart Mobs

Socialtext -- Enterprise Social Software

Social Software | B. Mann Consulting

Technorati: Tags

Twenty Years From Now

Unbound Spiral

The Viridian Design Movement

Wired News Blog

WorldChanging: Another World Is Here: Worldchanging Social Tools

You're It!

http://stoweboyd.typepad.com/awm

Small Surfaces - Mobile User Interface and Interaction Design Resources.

Girl In Information Technology: Pearls of Wisdom From The Bleeding Edge

http://synapticburn.com/

Headshift:: Weblog

Unbound Spiral: Social Networking More Manifesto Thoughts

Lifehacker, the Productivity and Software Guide

Jovstia - www.iovstia.com

The Social Software Weblog - socialsoftware.weblogsinc.com

apophenia

Sparkcasting - Tune In To Life

Charlene Li's Blog: Social networking and local search

Building Communities with Software - Joel on Software

Chris Baum - User eXperience Blog

Valleywag

Whuffie

Junto Boyz

Jeremy Zawodny's blog

Jeffrey Veen

Om Malik on Broadband: » MySpace-d Out

EdBlogger Praxis

Identity Woman » Talking at BayCHI on Unconference Design May 9

richardgoodwin.com

Joho the Blog

Susan Mernit's Blog

Fen's Stream Of Consciousness: Four More "Laws of Identity"

SocialTwister.com

Attention Wishlist - AttentionTrust

Browse Job Categories | SimplyHired.com

CrunchNotes

Upcoming.org: Home

Opinity

adam greenfield's v-2.org

Crossroads Dispatches

Portigal Consulting

Conversate

MyBlogLog

Castro's Blog

Commenting & Ratings & Recommendations

Gothamist LLC -- Commenting Policy

.: Austin Tidbits :. (Cafeteria Ladies)

Welcome to Alonovo -the Social Values Marketplace | alonovo.com

All Consuming

Backfence.com - Arlington, Ashburn, Chantilly, McLean, Reston & Sterling, Va., &

Bethesda, Md. local news, information and events

BlinkList | The Smarter Way to Surf the Internet!

co.mments - Recently added conversations

coComment - Join the conversation

Consumer Reviews, Shopping Guides and Advice | iNods

Consumer Research & Product Reviews - Wize, People Know,

Compete - MvCompete

dzone.com - fresh links for developers

edgeio: Classifed listings in usa for autos, events, housing, jobs, merchandise,

personals and services

FindProductReview

JudysBook

Hawkee Technology Social Network. Social Shopping & Social Software -

Hawkee.com

Kaboodle

kulist.com - price comparisons and cash-back

Oodle - Online Classifieds Search Engine

Untitled Document

PollPub.com - Free Polls, Vote on Polls

PollGenius.com

Pluck: Leaders in Social Media

PriceFight.com - Price Comparison Shopping, Product Reviews, and Store Ratings -

Shop like a Champ

Retrevo

ShopWiki

San Francisco Restaurants reviews by people like you ™ Since 2004

<u>StumbleUpon</u>

Tellfriends.com

ThisNext - Recommend, Share and Discover Great Products!

Yelp - Restaurant Reviews, Doctors, Bars, Salons, Dentists and More

ViewScore.com - Product Ranking - All Reviews Combined

Yoono, People Powered

Credibility & Trust

Epinions.com - Welcome

Opinity

Trusted Opinion

ViewScore reads reviews so you don't have to - Alpha Blog - alpha.cnet.com

Feeds

Feedster :: Search Blogs, News, Podcasts and More

Feed Mailer - Feed updates via email

Mashups

WebSnapr - Website Thumbnails For Your Site

WebSnapr - Preview Bubble Javascript

intellitext

http://www.sfbeta.com/

KickApps — User-Generated Video & Social Networking at Your Website

ClickCaster

Netvouz - Online Social Bookmark Manager - Organize, Tag and Share your

bookmarks

BlogAMP.com

DiggLicious.com - a cool blend of digg.com and del.icio.us

http://www.stalkerati.com/

Aggregate Knowledge

blufr.com: Four quests have had heart attacks while sleeping in the White

House&#...

Romantic Games for Loving Couples

FKM - F*ck Kill Marry

NiftyGuy: Your Guide to Who's Nifty in the San Francisco Bay Area

Welcome to bluepulse : my place on mobile

Zoho Chat - make group discussions faster

Zoho Polls

meebo.com

CareerBuilder Monk-e-Mail

Free Sounds - Audio Samples, Freeware, Legal Music & Video Downloads on Squidoo

Karmus: Create. Share. Contribute.

BzzAgent

Music & Video

YouTube - Broadcast Yourself.

Metacafe – Serving the World's Best Videos

http://www.last.fm/dashboard/

betterPropaganda

friskvRadio | feelin' friskv?

>> Proton Radio

KQED | public radio 88.5 and 89.3: highlights

(Paused) Hot In The City by Billy Idol - Find Music You'll Love - Pandora

samurai.fm | new music radio Tokyo, Japan & London

Concert Vault – Where Live Music Lives

Night After Night

1976 - Behearer

http://destination-out.com/

Reel

imdb

metacritic

KQED

DVD Talk > Reviews

TV Listings - [TV Guide Online]

BAM/PFA

ROTTEN TOMATOES: A message from today's sponsor

Kevin Sites in the Hot Zone: Conflict Journalist & Video News

Channel 101 - The Unavoidable Future of Entertainment

blinkx.tv

http://fireant.tv/

Machinima.com: Making Movies in Virtual Reality

MobiTV® | Live Television. Anywhere. Anytime.

http://www.revver.com/

submedia

<u>Undergroundfilm.org - Independent Movie Distribution</u>

Welcome to the world of video blogs | VlogMap Community

Behearer -- Jazz Wiki

Discogs

LAUNCHcast Radio Station Guide

MP3 music download website, eMusic

Non Profits

Kiva

Greenbelt Alliance | Get Involved

One Brick Volunteer Home Page

GlobalGiving: donations and philanthropy for international development, AIDS relief, girl's and women's education, microfinance, and more in Africa, India, earthquake, and tsunami-affected regions

International Charity - Volunteer or Donate Internationally

Care2 - the global network for organizations and people who Care2 make a

difference!

SHARE Home Page

Net Impact

Kiva.org - Loans that change lives

http://www.volunteermatch.com/

Karmus: Create. Share. Contribute.

OrganizedWisdom

LIFETEEN.com - "Leading Teens Closer to Christ"

Yelp - Restaurant Reviews, Doctors, Bars, Salons, Dentists and More

http://www.tripadvisor.com/

Welcome to Idealist.org - Where the Nonprofit World Meets

American Red Cross Web Sites

ServiceLeader.org: Virtual Volunteering: Websites Promoting Volunteerism and/or

Community Service

United Way Silicon Valley Online

CharityFocus: Helping Others Help Others

Home - Big Brothers Big Sisters

GivingWorks - What We Do: Design for Performance

American Red Cross Web Sites

ServiceLeader.org: Virtual Volunteering: Websites Promoting Volunteerism and/or

Community Service

United Way Silicon Valley Online

CharityFocus: Helping Others Help Others

People

Academics & Research

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Caroline Haythornthwaite

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Abbe Don

Mikael Ericsson

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Jodi Forlizzi

Katherine Isbister

Lisa Kimball

Jakob Nielsen

Dan Saffer :: Interaction Designer

Nathan Shedroff

Thinkers and Influences

Marc Davis

Michael Hardt

Kevin Kelly

Brian Massumi

Ross Mayfield

Don Norman

Mark Poster

Paul Saffo

Clay Shirky

Steve Wozniak

Slavoj Zizek

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Sepp Gumbrecht

Andy Diaz Hope

Shannon Jackson

Jason Lewis

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Ian McFarland

Pablo Pardo

David Pierce

David Porter

David Primmer

Ingrid Seyer-Ochi

Arlo Rose

Rajeev Samant

Kate Stovel

Steven Weber

Carl Wescott

Sha Xin Wei

Resources, Directories

American Journal of Economics and Sociology, The: An Analysis of Kin-Provided Child Care in the Context of Intrafamily Exchanges: Linking Components of Family Support for Parents Raising Young Children

Blogster.com - Free blog, social network, and image hosting

Bloglines

B2B > Design in the Yahoo! Directory

Citizen Agency

CSA Sociological Abstracts Database Guide

Cybersociology - Archive

Design Directory | International Design Links Database by Dexigner

Dice.com - Job search for Technology Professionals

Directory of open access journals

Digital Web Magazine - Articles by Topic

EServer TC Library: Articles>Web Design>Interaction Design

Experience Design Resources

Formation of Economic and Social Networks (Tesfatsion)

HCI Index: Research Groups & Companies

HCI-SITES: CONFERENCES

Home of the Social Networking Services Meta List - The Social Software Weblog -

socialsoftware.weblogsinc.com _

Human-Computer Interaction Resources on the Net

Idealist.org

Index of Information Systems Journals

Interaction Design Patterns -- maintained by Tom Erickson

Martin Ryder's List of Journals

microformats | About microformats

Other Resources

Open Directory - Computers: Human-Computer Interaction: Companies and

Consultants

Open Directory - Search Results

The Foundation for P2P Alternatives - P2P Foundation

Slashdot: News for nerds, stuff that matters

Silicon Valley Watcher--reporting on the business and culture of innovation

Social Science Hub - Cyberspace

Social Psychology

Software Design Smorgasbord: Original Articles and Presentations

TechFinder

Techcrunch » Blog Archive » An aggregate review of aggregate review services

UNESCO Thesaurus: alphabetical list

Web Collaboration

Web based resources about interpersonal communication and small group

communication

Wists, top web picks from everyone for Interaction. Wists, social shopping

scrapbook, wishlist

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FullCircle: Online Community Toolkit

9rules — Rule 1: Love what you do.

All Things Web 2.0 - BOOKMARK 2.0

Home @ Blogcritics.org

Social software - Wikipedia, the free encyclopedia

VentureBeat » VC investments in Web 2.0 companies booming, better study shows

The Web VC Chart

TechCrunch » Blog Archive » A look inside PeopleAggregator

SocialNetworks

Welcome to aSmallWorld

XING

TagWorld

Facebox

43 People

Friendster - Home

LIFETEEN.com - "Leading Teens Closer to Christ"

LinkedIn: Home

Multiply

Sites

All Consuming

Planet Web 2.0

BlinkList | Your personal start page and social bookmarking engine

Boing Boing: A Directory of Wonderful Things

IceRocket blog search

Ranchero Software: MarsEdit 1.1

coComment - clear conversation in the blogosphere

co.mments - Recently added conversations

Dabble

Flickr!

Friendster

43 Things

43 People

43 Places

<u>9rules — Who said work had to be boring?</u>

About | AttentionTrust.org

Bloglines

A List Apart

Always On

Boxes and Arrows

Business Opportunities Weblog | How Much Is My Blog Worth

Design Observer

del.icio.us

Edge

elastic space

Five Across, Inc.

Fibreculture

First Monday

Friendzy - Social Networking / Free Online Dating

http://www.frappr.com/

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hi5 - Who's in?

Facebook | Welcome to Facebook!

LiveJournal.com

IAwiki: SocialInformatics
Interaction-Design.org

Judy's Book

K-Praxis

Metafilter

microformats

Multiply

OnTheCommons.org | What Can Evolutionary Science Teach Us About Designing

Online Commons?

= openBC =

Pageflakes - The whole Web at your Fingertips!

Photobucket.com Free Image Hosting - Online Photo Albums - Photo Sharing

pMachine | Publish Your Universe

PodTech.net: Silicon Valley, Technology, & Media Podcast

Project collaboration, management, and task software: Basecamp

Smart Mobs: Historical Roots of Social Software

Social Software News Sling Media :: Welcome

Social Networks

Small World Project - Columbia University -- Main Page

The World Is Not Flat (TwinF) | Our Travels, Your Experiences

SiteCritique.net: The Worlds #1 Website Reviewing Community - Site Directory:

News & Media

The News is NowPublic.com | NowPublic.com: The News is Now Public

Technology Blogs - Blog Top Sites

TagWorld

Upcoming.org: Home

<u>Uncyclopedia</u>

vizster | visualizing online social networks

Wikipedia

Yelp - Restaurant Reviews, Doctors, Bars, Salons, Dentists and More

Xanga.com - The Weblog Community

web VC chart companies

Kosmix

Trulia - Real Estate, Homes For Sale, Sold Properties, Real Estate Maps

Eventful - Search Local Events Worldwide

<u>BiggerBoat: Entertainment Search</u> Browster - Fastest Way to Browse

Kruale

Riva - Visual Search

Wink | People Search | Social Search Engine

Indeed | one search. all jobs.

Wikia - Wikia Central - A Wikia wiki

Netvibes

Oddcast - Home

Bebo

Pluggd - Discover, Listen to, and Share Podcasts

Engage.com | Top matchmaking site as featured on ABC's How to Get the Guy

Kaboodle

http://www.stumbleppon.com/

PodShow.com

Online Community and Music Band Blogs - Friends, Music, Video Sharing, Photo

Sharing, and Blogs at Buzznet

Slide - slideshows, MySpace codes, image hosting, photo sharing

Gaia:: Welcome to Gaia Online

Tagged

Vast.com - Search All The Classifieds On The Web

Untitled Document

Revver

VideoEqq:

Snapvine.com - Your Voice. Your Phone. Your Friends.™

FilmLoop: Create photo slideshows, Share, View