CGI: Culture, Groups, Individuals

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Social systems, because they are built on the participation of individuals, can at best be steered and guided; there is no engineering human activity. Yet it's the designer's job to understand how a social system is likely to evolve, given the interaction of system constraints and system users. The designer's tools are what we call levers. Design choices affecting first order system architecture, functions, features, and so forth steer individual and aggregate participation. These choices guide the system's evolution and growth over time. The results achieved by first order design decisions are called second order effects. And in the case of social interaction design, the leverage applied by the designer couldn't be more tricky or elusive.

UI designers are usually familiar with the framework of human-computer interaction, and the basic human factors concepts of user interface and user experience design. But what about concepts of communication and interaction? Are they so important, and so unique, that they need to belong to a social software designer's repertoire? I think so. Social software is intended for communication and interaction; what it does, it does to relations between people. Designers and developers should know that there is form, structure, and system to human communication just as there is to information architecture. It's just that we need to expand our idea of the user, interactions, and interfaces if we are to understand the influences of technology on social interaction.

The field of social interaction design picks up where conventional user interaction stops: at the production of interpersonal relations and the circulation and resolution of communicated meanings. Social interactions are a "guided doing." Activity has meaning—and that meaning (even when up for debate) organizes individual behavior, social positioning, self-presentation, conversational and dramatic timing, emotional intensity, and more. Communication in face-to-face situations involves far more than simply what is said—it involves the unspoken rules and constraints of the current social context, the hidden impressions and unspoken intentions of participants, and the implicit commitment to group performance that grounds face-to-face encounters.

Insofar as these strips of activity engage individuals in a social experience, interaction binds them to one another on the basis of a shared commitment to spare any one person, and thus all, the pain of exposure, incompetence, shame, insult, or any other kind of embarrassment. Interaction generates a sense of action and rhythm (suspense, thrill, excitement, relaxation, boredom, or some other kind of social time). It gives people a sense of one another's integrity, sincerity, and interest. And it does this without demanding that everyone remain equally involved and available. In short, face-to-face encounters can be incredibly rich even when they seem trite and directionless.

Technology intervenes in many aspects of interaction and communication, screening out physical and visual cues while enabling temporal displacements, delays, and distances. We don't yet know how far technology takes us from the essence of social interaction—from the unspoken and largely unconscious dimension of human exchange. And yet if we are to improve our grasp of technology we have no choice but to start with ordinary, face-to-face encounters. That is, to some degree, where any user begins.

A social interaction design theory needs a theory of social interaction. Ours is modeled on social interactionism, with concepts borrowed from systems theory, communication theory, psychology, and linguistics. Since no theoretical approach exists that can explain the interplay of communication tools, social interaction, and information dissemination from one privileged point of interpretation, we need to come up with our own. One or more, that is. Our theoretical goal, and the task of this introductory section, is to map out the process by which technologies and mediated encounters translate and transform the dynamics of face-to-face interaction.

Social interaction design is distinct from UI design, UE design, and human-computer interaction (HCI) approaches insofar as it covers intersubjective experiences. In contrast to the user model adopted by the aforementioned theories, our user model is engaged in communication with other users. Ambiguities, errors, uncertainties, motivations, interests—all those conscious (and unconscious) stirrings involve relations with other users. We need to modify our concept of the user to accommodate the fact that in systems of social interaction, user interests involve other users.

To get there, we could study individual user experiences and come up with a laundry list of how users engage in social software, what they try to accomplish, how they feel about it, etc. We could add up individual user concerns and deduce a general user from them. For social software designers to be truly effective, however, we have to be interested not only in collective experiences but in the second order phenomena that emerge as the dynamics of social systems. Nothing grows out of aggregated individual experiences—that's addition and subtraction. Community and participation grow out of process—time. Social interaction design must develop an understanding of communication and interaction dynamics that contains not only users, but the feedback loops and cycles that produce emergent phenomena.

Cultural elements

The very idea that culture might form in an online community seems counter-intuitive at first. After all, we're talking about people who aren't in the same place. Any sense that members have of one another's personality and presence is either incomplete, partially projected and imagined, or based on offline experiences. So we need to be careful with our terminology.

Culture "is" not something that has an existence outside of the actions and experiences of the individuals who reproduce it. Culture's not a thing, it's a context. "It" informs and shapes individual behavior only as it is simultaneously reproduced and reinforced by that very behavior. Though we may identify the attributes of a particular culture, we cannot assume that it would exist without those who are living it. But we have to assume that those who reproduce it are its interpreters and disciples.

Nor is culture only strictly communication in the form of talk and conversation. Economies are cultural. Entertainments are cultural. Education, disciplinary institutions, law, and so on and so forth are cultural. We may focus here on communities that involve a great deal of discussion and messaging, but we could also look at peer to peer sites, trading communities, stock trading sites, even distance learning and knowledge management applications for mediated culture.

Does culture occur online? Enough so that one online community is different from the next? And different in a way that has some character we can only ascribe to the system—that exceeds the contributions of members themselves? It's seems unlikely that we could build culture out of a wireframe alone, or that we could grow a culture in a social software system with significant degree of predictability. Hence the importance for designers of augmenting technical expertise with an understanding of social interaction. This section will attempt to tease apart and arrange some of the cultural, individual, and group attributes we can already recognize among various online communities.

In so far as culture means that social interaction has some kind of observable organization and consistency, we can break it up into subcategories. There is a semantics of fact and meaning (discourse, themes, etc). There is organization in time, as routine, regularity, recurrence, past (memory, history) and future (goals, anticipation, etc.). And there is the organization of social interaction (behavior, "norms," body language, gesture, face, etc.).

Because the very nature of online culture is presence through absence, mediated interaction fills out each of these cultural dimensions uniquely. Postings, discussions, public and private messages, profiles, and the many other ways in which we create meanings through statements and appeals, expression and description take on written form. Writing, though, that is as much a kind of speaking as it is written correspondence.

The cultural imprint on time and temporality appears distorted again in its online form. Since interactions are out of synch (only instant messaging comes close to real time interaction, and even it is subject to latency), social interaction is intermittent, interrupted, and irregular. There's no flow to interaction, and so there's no sense of "shared time." To the medium's contribution, however, interaction (in the form of written posts) persists beyond the constraints of individual participation. Member contributions stand available for interaction regardless of where the member is at any particular time. Because time is a fundamental constraint on presence (and we all have so many things to do), mediated interaction creates possibilities that wouldn't exist were we to be everywhere and with everyone at the time we wanted to interact with them.

This leads to the social dimension of culture, which takes its shape in the organization of individual relations. Online as well as off, it is often who you know (and how you know them) that contributes the most to position within a social system. Connections create opportunities—by reducing the risk of interaction, by increasing the amount of culture one has in common with others, by providing ice-breakers and conversation points. Up until the modern era, in fact, society was organized according to personal relations. If it wasn't tribal (meant literally and socio-politically here!), then it was stratified. One's position in a social stratum constrained whom one might meet, interact with, and develop relations with. In society today we conduct a great many impersonal interactions with people we don't know personally. Online cultures such as those we find among social software applications map well to our new knack for impersonal interaction. They can be efficient and effective ways of making and developing contacts without creating excessive demands on one's time and presence.

The distortion of these three cultural dimensions—factual, temporal, and social—within social software-based communities can lead members to adopt various tactics and strategies. Some of these in turn become cultural characteristics. Communities may speed up (temporal dimension), thus foregrounding one's responsiveness to messaging. Or they may focus on connectedness and celebrity (social dimension), in turn leading members to gather together as many friends as possible. Or they may emphasize participation in written contributions (factual dimension) and discussions.

One final point about the way in which online culture captures presence through absence. In systems theory terms, the temporal flow of everyday life prevents the formation of subsystems. Lacking in subsystems, interactions lack the ability to complexify; complexification is required for survival of environmental stresses and changes. They serve themselves and their own reproduction only. Participants interact with an eye to maintaining the group's shared sense of time and performance. You see extreme examples of this in the conformism of crowd behavior. However, unburdened by the face-to-face demands of live social interaction, temporally-dislocated cultures like those we find online *do* permit the formation of subsystems and subcultures. As communities scale up, tribes, groups, and circles may close in, and culture becomes more differentiated *precisely* because the ties that bind members to one another are weak and forgiving.

This section, which covers culture, individuals, and groups, is improperly organized. In fact, culture organizes individuals and their groups—it is not separable as presented here. But it seemed that attributes associated with culture would be best presented on their own terms.

Cultural elements

- Representations of:
 - Traffic growth
 - New members
 - Average number of friends/connections
 - Visits/connections made among members
 - Participation growth
 - Messages sent
 - · Messages read
 - Messages replied to
 - Introductions made
 - Discussions and new posts
 - Number of clusters > 5 members
 - Growth trends for überclusters vs. middle clusters vs. sub clusters
 - Most active domains of interest
 - Most active discussions
 - Most active individuals
 - Tempo and pacing information
 - How many people on
 - Time since last visit
 - Recent traffic history
 - Fastest growing groups and subcultures:
 - Geography
 - Gender
 - Age group
 - Interest
 - Relationship status
 - Physical stats
 - Job industry
 - Job type
 - Job status
 - Hobbies
 - Interests
 - Skills
 - Community market places
 - Music, Dates, Books, Events, Roommates, Jobs, and other marketplaces.
 - Offering
 - Seeking

Recommendations

Cultural distinctions

Culture is organized in factual, social, and temporal domains. In this way it expresses the organization within statements and discourse (doing by saying, information, communication, speech), among interpersonal and social relations, and ascribed to events and actions (which are temporary and fleeting). We can think of these separately to better grasp the manner in which mediation affects social and cultural organization.

Cultures have boundaries. The first boundary set is that which distinguishes membership in the community:

- Most online communities permit the general public to view a community but not to participate.
 Membership is required for participation and serves as a means of regulating behavior—the logic being that members are less likely to abuse their own peers than visitors and tourists.
- The distinction between public and private is blurred by online cultures. We conventionally think of public spaces as visible places. An internet-based distribution network, however, has neither space nor place. The simple fact that the Net's public sphere and publicity have no physical or spatial presence means that each of us learns what we personally feel is "public" versus private. And we each develop our own sense of comfort with the boundaries that delimit one zone from the other.

Cultures inform members' personal investment in a community and steer their individual exposure to it and to one another. Put simply, cultures set down expectations for what's ok. They proscribe boundaries that cover the intensity of self-expression, revelations and flirtations, risk taking, extensions of trust, and so on.

- Cultures and their subcultures will often make a theme out of member involvement as real
 persons. Members may be encouraged (explicitly or implicitly) to reveal secrets or to confess
 private thoughts and practices. In fact subcultures can use personality "tests" like this to
 manage membership.
- Communities may even develop system functions and features that allow members to reveal and conceal private parts of their profile (preferences, memberships, messaging, and pictures).

Cultures organize their own subcultures and inform their relations and interconnections. Online communities benefit from the fact that the internet, the web, and personal computers are well suited to information access and retrieval.

- Online communities contain subcultures and in some ways are shaped by the influence subcultures have on the system's overall culture. The vocal minority *can* ruin the party for all.
- Systems can set:
 - who is allowed to establish a subculture (or subgroup)
 - how it's moderated (if at all)
 - what is permitted (in speech, pictures)
 - · how many members it may have
 - · how it is joined

• whether it's public or private

Cultural codes inform what constitutes a failed social or interpersonal interaction. In daily life, we use our faces and bodies to augment or even take over when exchanges go awry and feelings are hurt. When intentions or exchanges go misunderstood, we can normally turn to non-linguistic forms of expression as a system by which to clear things up. Online culture is required to work differently.

- It's a fact that mediation of interaction increases the likelihood of misunderstanding.
- What can be communicated about one's communication in face-to-face interaction (that it's sincere, whimsical, joking, or absolutely earnest) cannot be indicated as easily with writing alone. The very act of stating meta meanings explicitly partially undoes them. ("Meta" wants to be implicit, or tacit.)
- Themes (that articulate risk, exposure, confession, embarrassment, flirtation, and so on) emerge through online interactions to help members negotiate the uncertainties of communication. These themes are often as simple as "do as the others do," "listen to the moderator," or "follow the leader." They can often work to the group's advantage, such as when they draw out lurkers and empower members to share private experiences.
- Since embarrassment "in front of" a group can be hard to recover from, system features often enable members to edit or delete failed postings.
- System features often provide members with ways to avoid the public embarassment of
 personal missteps, misstatements, and miscues. The community is not aware of a member's
 rejection from a subgroup, or of his rejected invitations and requests. In this way "high-risk"
 interaction is commonly respected and protected.

Online cultures vary in how they value (sub)group membership. They vary, in other words, in their focus on the individual vs. the group/community.

- Some communities emphasize group membership, if not group participation, as a way of communicating and contributing to the culture overall. These tend to be cultures that value participation.
- Some cultures place more emphasis on individual resources, such as job leads or professional connections, work roles and positions, and so on.

Cultures set definitions, rules, codes, and all manner of interpretive frameworks, linguistic and otherwise. What's at stake here is not the actual definitions a culture may establish for particular terms—but rather the help that it provides in characterizing what's acceptable. The essence of communication between people is not what's said, but what's accepted and what's not. It's with acceptance or rejection of communication that it becomes interaction (as action): as choice, agreement, and thus as a manner of moving forward. It's very important that members of an online community know what's acceptable (to other individuals, to groups, to the community at large) lest their communication be rejected. Some of the "semantics," then, around communication online will cover issues of:

- Self-presentation. In any communication, there's a balance between speaking about a topic and self-expression. Online cultures tend to compress and conflate the two, as one expresses oneself through speaking about (oneself or whatever). Cultures thus inform members as to the line between rude and polite, active and passive, arrogant and quiet, and so forth.
- Explicitness vs implicitness is closely related to self-presentation, though it has more to do with how we hint and suggest our intentions than it does how we draw attention to ourselves. Online

- communities have unstated rules about what has to be said, and what doesn't, in order to communicate a particular kind of interest in others (be it flirtatious or be it a job inquiry!).
- Failure and Correction Because miscommunication is so common online (simply consider the number of messages that go unanswered), cultures develop guidelines for what members should do when interactions fail. These kinds of guidelines can matters of timeliness, promptness, politeness, signatures and signoffs, delivery acknowlegement, and much more.
 - How many chances do members get with one another before the exchange is considered a hassle?
 - In what ways can shared groups or friends serve to bridge and clear up misunderstandings?
 - How can third party testimonials, personal statements, recommendations, and so on, be helpful in mediating broken communications?
- Face. We all know what it's like to be embarrassed in daily life. But what's face in an online
 community? In real world interactions we take a certain amount of responsibility for one
 another's face. Embarrassing situations are shared by the group; it makes sense that group
 members have a shared stake in avoiding or at least repairing embarrassments. Similarly but of
 course differently, online group members will often cover for new members and even come to
 one another's defense.

Cultures may create dependencies out of personal relations and degrees of connection. Online and offline relations are usually considered equal. What counts is not where a person was met but that they were directly invited to be friends (and that they accepted). In this way a primary relation of trust can be assumed of any first degree relation. This isn't true of relations in the second degree and higher, simply because trust is dyadic (it exists between people directly, and is not something borrowed or duplicated). So any "real" trust between members would lead to first degree relations. Second degrees and higher essentially equate to assumed relations. Relations and networks can be used in many ways:

- Trust Relations and extended networks can be used to create trust, even when in fact they
 don't describe existing trust. For example, I may view people within two degrees of my network
 with more confidence than those who are five degrees out, even if I know neither of them. The
 appearance or assumption of trust can be good enough to facilitate interactions (particularly
 introductions).
- Access Relations can be used to regulate access among members, be it in terms of
 communication, viewing profiles, reading listings and events, etc. Cultures and their
 subcultures can be notoriously clique-ish and exclusive. Access tied to relations among people
 is one common use of social networks. It results in both inclusivity and exclusivity.
- Positioning Expressed in systems theory terms, cultures can accrue some amount of social structure. It might be "invisible," but any kind of structure that emerges among online relations can be very powerful. Thus communities may give rise to special and privileged relations and positions. Moderators can have the power to edit and censor; system administrators can do even more. We may see future communities experimenting with positions created to make romantic matches, resolve conflicts, organize events, broker job offerings, find experts within community systems, and more.

Cultures accumulate a stock of resources and assets from individual contributions. In real life, various social institutions contain and represent this cultural stock. Online, institution-building

would be much more difficult. Contributions, which may be writings, pictures, music files, animations, movies, objects for sale, events, or classifieds, are less structured than they are in real life. Some online communities develop economies, and in this way lock a great deal of value into wanted and for sale ads.

- Communication is not the only means by which cultures are reproduced. Gift exchanges, commercial transactions, marriage customs, and other economies are means by which people are put in relation to one another such that their futures are bound together (if only somewhat!).
- Online trading, file swapping, and classifieds communities all involve some amount of trust and agreement, insofar as it's required of buyers and sellers to do business. The web has not only inspired but enabled numerous trading communities and markets. The lower the degree of actual interpersonal exchange that's involved in a transaction, the more likely those transactions are to proliferate in faceless and frictionless marketplaces.
- The future of online communities and social systems will entail better defined and structured
 action systems as well as emergent differentiation among types of communication and
 contribution. These cultures are too new at the moment for us to expect a high degree of
 recognizable differentiation.

Cultural practices have relative speeds and rhythms, online as well as off. Speed describes involvement and participation—in short, action. The rhythm and pacing of interaction among members varies according to numerous factors, but is a self-reinforcing phenomenon. By that we mean to say that participation produces speeds, not structure, architecture, framework. Speeds are also tendencies. Slow discussion boards tend to remain slow; fast ones tend to pick up speed.

- Online communities and social software systems have a sense of rhythm and pace. Some are
 active and hot, others cool and quiet. Speed can describe the community's preference for
 information or interaction, and for individual connections versus community-centric interactions.
 In general, the less interactions focus on getting to know one another, the more impersonal
 they are, the more slowly they move. Fast and "hot" discussions often obtain some of their heat
 and speed from personal involvements and commentaries.
- Speed and rhythm can be very important to the flow of online interaction where there are
 dependencies and sequences among member contributions. Examples would include uploads,
 approvals, milestones, comments, and similar activities. We are good at getting into the flow of
 things when we're face to face; achieving that kind of integration is much more difficult without
 real-time cues. We should expect future social software applications to address some of these
 issues
- Community members develop a sense for how frequently members check in as well as how
 often they post or reply to posts. Members often have their own rhythm with the communities
 they participate in. Insofar as silence or absence can communicate as much as communication
 itself, these routines are worth knowing and can be helpful in decoding interactions.

Cultures reveal more about themselves to those on the inside than they do to those on the outside. Style and tone, noise and rhythm, privacy and exposure—these features can be seen at the community's surface. But they don't show everything about communication between members. Members of a culture develop an ability to read and interpret not only what's visible but what's not.

• The longer a member spends time at a community, the better he or she will be able to read what's going on away from the public's view. Evidence can be read from its own absence!

- Common culture can be inferred from member profiles and postings, which often display a
 consistency even in their diversity. It pays to blend in, and it pays to stand out. Members
 manifest their belonging by mirroring cultural themes and differentiate themselves in order to
 attract attention.
 - Even when members seek to differentiate themselves, they may do so within the community's vernacular. A culture's vernacular may in fact be to stand out. Witty cultures reflect this principle.
 - The "tighter" a community is, the more member interaction and communication will reflect it. Interaction style, greetings, sign-offs, and signatures will tend to reflect cultural values (open-minded, aggressive, assertive, forgiving, etc.).

Population size can have a dramatic impact on culture. Most obviously, the bigger a population, the more opportunities, the more communication, and also the more noise it produces.

- The low cost of interaction online exposes communities to a rapidly-increasing volume of communication. Popular communities become self-perpetuating (to a point).
- Higher levels of "noise" will often produce a vicious circle, the result of which is even more communication (required to get through, and thus more noise).
- As populations increase in size, and community resources subsequently increase also, selection and information management itself can become an issue. Discussions can get too long (to read, or even to load). A community may become host to more events than members could possibly attend, thus hurting the chances of members meeting at their own events. And while it's often to one's advantage to have many friends within online communities, the demands of corresponding with newcomers can threaten to undermine the rewards of membership in the first place. The less members know of one another, the more they have to handle each other's emotional well-being in communication. This is as true online as it is offline. That demand alone can raise anxiety levels!
- Populations undergo cultural changes as they scale in size. Online communities hit a threshold beyond which membership and communication suffer from an eroding cultural integrity. Some communities seek to handle this by increasing their internal differentiation: they encourage subgroups to form in order to sustain participation.

Individual elements

Communication technologies allow us to communicate with others without having to be in the same place. As members of online communities, we have a virtual presence at all times,—our profiles, postings, and other communication and interactions having been captured for consumption by the community. But this benefit of social software—and it is the primary reason such a thing exists in the first place—creates ambiguities. When it comes to interacting with other people, we naturally want to know who a person is; whether or not they like us; and what they are like. In daily life, interaction affords us a means by which to find these things out about one another. Online, and with interaction tools like email, chat, discussion boards, IM, texting and so on, overcoming these ambiguities is another matter altogether.

The previous section described some of the ways in which online cultures can give a certain identity or character to interactions online, helping members to participate while reducing the uncertainties, risks, and ambiguities of mediated communication. When it comes to the features that a system provides its individual members, other factors come into play. Individuals must be given a chance to stand out, to differentiate themselves from others. They must be allowed to

control, or at least suggest, the kinds of interactions they are open to and would like to solicit. Members need ways to manage access, lest they get hassled by excess demands for interaction. And at the same time, the system needs to give members an opportunity to play and experiment, be this with other members, with their own self presentation, or with messaging. So systems designers have to build out member presentation formats and interfaces such that members can still show their personality.

The lack of physical co-presence in online interaction, and the demands placed on us by others to be responsive and participatory can be summed up as issues of self-presentation and the negotiation of presence availability. One of the unique challenges of self-presentation in mediated environments deals with the presentation of intention and sincerity, or authenticity. Media like the web, and messaging tools that compress interaction into text form afford little in the way of meta-level communication. But in addition to helping us convey our authenticity, meta communication also permits us irony, parody and other self-referential communication. In many cases it's non-linguistic: consider the winks, smiles, grins, and other facial and physical gestures we use to indicate that what we're saying is not literally what we mean. Having to state this explicitly in text messages rather blows the whole point of meta-communication.

Social software systems are at a loss to address meta communication with satisfaction. To enforce community standards of honesty and authenticity, Friendster banned Fakesters (online frauds). The most effective solution so far has been to encourage members to get to know each other in semi-public contexts such as discussions and listings, where public expectations can serve as a check on insincerity. Still, text is an inadequate means by which to compensate for the wide range of expressions we have access to in daily life.

Beyond knowing that a person's for real, and is for the most part sincere, we want to know what a person's like. How often do they visit the site? Will they respond to messages (and if not, should I take it personally)? In short, we wish to know what to expect of our interactions with them, and what kind of relationship the person has to us. And just as the important part of communication is a communication's acceptance or rejection, we seek the same relational terms: are we accepted or rejected. Since any kind of self-presentation (read: profile) is submitted to a group or to the community, it takes public interpretation into account already. We can safely say that the presentation of self online already accounts for the reception (reading) of self online. I write my profile with an idea of what it's going to say to others, what it might suggest to others, and even perhaps what it might encourage others to do.

If the members of an online community were required upon joining to read all other members' profiles, then those alone would suffice to get interaction going. As we all know, however, members will participate in discussions with one another without so much as clicking through to a member's page, let alone directly messaging them. Other means of presenting oneself, of getting attention, of differentiating oneself are required.

In the previous section we discussed how culture forms a kind of "interpretive practice" or "reading practice" among members of an online community by setting tacit and unspoken guidelines for how to read individual contributions. In this section we focus on the ways in which a similar kind of interpretive practice develops into a member's competency with interpersonal interaction and communication. In short, the part involved with relational questions like: "Who is this person," "Do they like me?" and "What can I expect?" The single most qualitative difference of mediated interaction now becomes the substitution of interface for face. Designers cannot legislate how and what individuals should invest in their profiles. But by changing the balance between appearance,

written statements, questions and surveys, and check boxes, they can shape the options afforded to members.

Individual member elements

Member profiles and participation at an online community serve several communicative goals at once. Some system features allow and encourage members to describe themselves. Descriptions stand in for what other members would otherwise miss, since of course an online community is populated by people who aren't there. Then there are statements and other kinds of signs that signal and set expectations. These help the member to let others know what to expect, in terms of interaction and communication. They might signal activity preferences, dating preferences, interests and hobbies. And they might also say something about how often the member is online, and when she is, how responsive she is. These can be stated outright, but are most often indicated in member statistics and actual participation.

In a community characterized by a strangely immaterial and invisible public, the overriding challenge of membership is getting attention. The medium itself is flattening, that is, it reduces differences among members to those that can be gleaned from text and pictures. Member features already enable much-improved means of self-expression. Over time, they are likely to get better as they integrate with future platforms, protocols, and services.

These member features can satisfy several of these needs at the same time:

About Me

- Toggles could be set for these to control views by 1) general public; 2) friends; 3) designated members; 4) members within designated groups; 5) members within degrees of relation...
- Member profile page(s)
- Picture(s)
- Testimonials
- My groups
- My friends
- My listings
- My classifieds
- My dating/flirting status/preference
- My content rating (e.g. "mature," used to caution against explicit content)
- My activity
 - Most recent posting
 - Most recent view by
 - Most recent communication/interaction
 - Most recent listing
 - Etc.
- Independent ratings

- Independent accreditations
- "My traffic" vs. group averages, community averages (a measure of participation)

My activity

- Calendar and schedule
- My skills and expertise (value to the community)
- · Discussions I belong to
- Trackbacks/links from messages I have posted

My communication

- Incoming questions or comments
- Invitations (personal)
- Pings + winks
- Evites (2 degrees out, and/or from tribes)
- My community or cluster roles
 - Helper (to newbies)
 - Moderator (discussions)
 - Validator (will validate newcomers)
 - Clean up and watchdog (will clean up posts/enforce community norms)
- My watch lists (persistent searches)
- My matches
- Browse
- Match
- Invitations
- Email to friend
- Pay now, subscribe now, join now, members only
- Last here
- Currently online
- Rankings vs. cluster or community overall
 - Your interests are this popular
 - · Your field is this hot
 - Your value to (this group) is X
 - Your ranking in (this group) is X

Individual member distinctions

Member profiles must communicate several types of information, whether this is done implicitly or not, and whether it's codified in UI selections and lists, or written. It's important to note that member information is transmitted as communication and in the course of interaction: that is, some of it comes across in standing profile features, the rest of it in discussions, messaging, listings, and so on. The reason this is important has to do with how we address our speech/writing. Written communication is addressed generically or indirectly, and does not necessarily contain an appeal (for response). Spoken communication is addressed to one or more individuals within range of interaction (extended in our case by technologies...). The style and content of our communication and interactions are influenced by addressing.

Identity

It's necessary to make a number of features of one's identity explicit in social software systems. The medium simply doesn't transmit or capture the presentation of self possible in real social interactions. Profile selections (think checkboxes, lists, short-answer questions) and text must fill in for personality that's normally performed, and they compress one's natural dynamic range and spontaneity. In fact members must practically put themselves into job descriptions and wanted/seeking ads.

Member self-descriptions can be organized by the manner in which they are addressed to the community: I, me, and you. Or, "who I am, simply put", "who I am, taking into account what you'll think of me," and "who you are (desired, or hoped for, or who you should be if I'm to interact with you)." As complicated as this may seem, it's really nothing more than a self-description that takes social context into account while also setting some expectations.

"I" descriptions

• These descriptions express the member's relation to the community as an "I." They will tend to cover what she is there for, what she wants, who she is, and so on. They are those statements that can be phrased in the first person transititive, and they're *projective*. "I" descriptions involve expressions, and are relatively free of the interpretive treatment our self-presentation gets from the community.

"Me" descriptions

These descriptions convey the member's self in relation to the community. They are
introjective, and will tend to reflect the member's sense of self and of others' perceptions at the
same time. What's risqué in one online community may be tame in another, or suicidal in a
third... So "me" descriptions incorporate cultural coding. They involve impressions insofar as
they are self-presentations of the impression a member has one his or herself given the
community's culture.

"You" descriptions

• These descriptions put the member in relation to possible contacts, and are important for setting expectations as well as for creating legitimate opportunities for interaction. They may be written into profile statements, checkboxed in categories, or suggested during conversation. In

contrast to invitations or inquiries sent to other members, these "you" descriptions are not addressed to anyone in particular.

Relations

Relations among people are always a constraint (and opportunity) on interaction and communication. How we interact with each other reflects how we know each other. In online communities and social software systems, this can be handled architecturally, as in the use of social networks to filter member access. But social software systems overall tend to reduce the significance of existing relations in order to facilitate contacts between strangers. Most social software is designed to build networks more than it is to facilitate interactions among existing groups of friends and colleagues.

Friends, connections

- Links to other members representing first-degree friends are a common feature of most social software systems. They serve a member's profile by naming the people that member can legitimately count as friends, and by showing quantities of friends and connections.
- Though they could, friend lists tend not to differentiate between "real life" friends and online friends, or between old friend and new friends.

Group connections

- Relations can be inferred about members from their interactions online—though with some degree of guesswork.
- Relations can exist among members of a group and may take on varied characteristics depending on the group's themes and activities.

Testimonials

Testimonials written about other members reflect upon those who write them, and so are useful
personality descriptions. Testimonials are read as much for their style as for their content. Style
gives away a member's relation (playful, serious, sincere, self-aggrandizing, etc.). Content
gives away something about what the member considers important in friendship (loyalty,
respect, physical features, attractiveness, intelligence, etc.).

Interests

Members often describe themselves in terms of their interests. Not all self-descriptions need to be entirely self-referential ("I amses," "I believeses," "I wantses"). Interests usually reflect culturally valid themes, and by identifying with a particular interest, we describe ourselves in terms that provide information to others.

Interest lists

- Top five's and Top ten's are ubiquitous mass media surveying formats. Lists are common in social software systems also. They're easy to write, to take, and to program. We all know how to read them, and so they can provide a lot of information for little effort.
- Free-form lists (name your favorite books) provide members more opportunity to show wit, style, education, and personality than pre-structured lists. The degree to which a member plays with the list, with its rules, and with his or her choices can express a great deal about his or her

understanding of the system, its "game," and so on. Small degrees of structure (e.g. Top Ten Albums) create opportunities to play with content as well as rules. Other members know what to make of member responses on several levels: content, personal style, respect for rules/code, and level of play and invitation.

Structured lists are not good for expressing personal style, but they enable system-level match
making, advanced search, and data aggregation. These lists can make the system a better
partner in setting members up with one another, capitalizing on their asset value (e.g. their
resources), and more.

Interactions & Connections

Addressing

- When members solicit impersonal interaction they tend to address their messages indirectly, or to the community in general, so as to engage others in an impersonal mode of interaction.
- Messages addressed to particular individuals indicate an appeal for response from that individual. Directed messaging of this kind implies a request and desire for a response (in essence, interaction). The response need not be an agreement, and in fact rejection or disagreement is preferred over silence.
- Messages can be composed with ambiguous addressing—a kind of addressing unique to
 mediated interaction. This kind of addressing may embrace members of a group, may suggest
 (through content) who's addressed, or may appear to be addressed individually when in fact it
 is (blind) copied. Competent community members use this kind of ambiguity to say things
 without having to state them outright, and to identify members of an audience without having to
 refer to them by name.

Presence Availability

Profiles must suggest, if not state explicitly, the kind of interaction members desire. Cultural coding and generalization can only go so far in setting expectations. Furthermore, members may want to invite interactions where the culture discourages them. In real life we convey and indicate our availability for certain types of interactions all the time. What's unique to mediated interaction is the lack of implicit and unobtrusive signifying and signalling techniques, or what one writer called ways of showing "civil inattention."

Impersonal

- We take up impersonal relations with one another any time our interaction completes an activity
 or task that does not involve us as personalities. A preference for impersonal contact and
 exchange means that the member would rather avoid personal queries and interactions.
- A preference for impersonal contact doesn't mean that a member is anti-social. It means that
 contacts should be couched in factual, descriptive, and general terms, and not in private,
 intrusive, suggestive, or otherwise personal terms.
- Generalized speech/writing of this kind signals a preference for low-intensity interactions and transactions. Writing to an "everybody or anybody here" instead of a "hey you in particular" seems to effectively set the tone for non-demanding responses.
- Impersonal interaction topics can be more accessible to a community if they can be categorized. System level organization can then make member contributions available without

requiring members to read word for word. What these kinds of contributions gain in ease of use of course comes at the expense of style and personal expression.

- Some kinds of impersonal interaction involve transactions handled by existing interaction codes:
 - File exchanges (e.g. music)
 - Project-based activity coordination (scheduling, confirmations, invoicing, work-related comments)
 - Event invitations
 - Commercial transactions
 - And more

Personal

- Members will often use their profile content and style to suggest, hint, or state outright what kinds of interactions they wish from other members. Revealing or suggestive photographs are a common example. Others include group memberships, interests, inside references (understood by the intended audience), and so on.
- Members will tend to use profile content and style to provide other members with "hooks," icebreakers, and other invitations. In social interaction terms, these are called "frames":
 - Emphasis on physicality, sexuality, intimacy
 - Suggestive self-descriptions intended to provoke flirtation
 - Explicit "I'm looking for" descriptions designed to get straight to the point—and to invite such commentary
 - Oblique and ambiguous statements intended to provoke curiosity and to facilitate repartee
 - Wit, insider jokes, cultural references used to screen other members for intelligence, style, shared interests, cultural similarity, etc.
 - Self-exposure and self-revelation such that the choices a member makes about what s/he reveals to others contains the question: "Am I interesting to you?"
 - A great deal of personal content comes through interaction itself, and is often not
 reflected in profiles. One reason for this has been the tendency for abuse and hassle
 that can result from exposin oneself without adequate privacy or protection. Such
 information, because it is revealed during interactions (discussions, or in private, etc.)
 may not be easy for the community to leverage as data, meta data, or other kinds of self
 observation and description.

Presence

- Member profiles (especially system meta-data on recent visits, message replies, etc.) provide
 an indication of how frequently and recently the member has been to the site. This is not
 usually stated by the member in his or her profile, but is left to be read from profile information,
 number of friends, and other signs of activity and participation. Knowing a member's level of
 participation can be useful when measuring that member's responsiveness to contact.
 - Connective possibilities

- Because social software systems are designed to facilitate connections—between
 members, but also events, groups, resources, etc.—members will tend to advertise the
 connective potential of various personal attributes, knowledge, areas of expertise, skills,
 relationships, and so on.
- Connections are often the primary purpose of a social software system (jobs, dates, new friends, knowledge sharing), and so it serves members to emphasize their best connective potential.
- Connections with others may be desired more than they are offered. Members will tend
 to safeguard their own availability more than others'. The presence asymmetries that
 make it easier to initiate contact than to sustain it often lead to misunderstandings and
 disappointments among members.
- Members will tend to articulate what kind of contact they wish to have: personal or impersonal; transactional or communicative, and so on. To this end they use their profiles to encourage/discourage various kinds of contact for the sake of others as well as for their own sake.

Group elements

Groups are a common way of organizing online communities. They go by the names "tribes," "groups," "teams," "networks," and more. Some groups exist for the sake of a discussion; others exist because their members have real work to do. Groups can be defined in several ways: by their themes, by their memberships, by their "border control" (access), and by their activities. A discussion of independent films would be a theme-based group; membership is based on a shared interest. A member-based group, in contrast, would be one in which shared backgrounds (high school, college, religion, profession, etc) unite individual members. Groups vary, too, in their accessibility to members, from small and exclusive to open and popular. Finally, groups are more or less intense, that is, active. Some groups do little more than provide nominal membership. Others serve to coordinate teamwork, and are characterized by a high degree of communication and interaction.

If social software systems are to do more than provide individual members with a new means of interacting, communicating, and perhaps transacting within loosely-organized online communities, then the organization of groups presents serious challenges and opportunities. Groups are a common way of presenting and assigning roles and positions. They are an accepted way of coordinating and administrating tasks, activities, dependencies, decisions, and more. Online communities vary in the degree to which groups constitute the community's character. In some, groups differentiate the culture and provide more manageable ways by which members participate and meet one another. In other communities, groups are formed out of existing relationships between members, and are not treated as an organizing principle. Groups also vary from one to the next in participation style. They can vary in how members treat one another, in how much members are expected to reveal or be themselves. Some function without moderation, others might exist to feed the moderator with content.

The questions of interest to us, then, are: Do online groups have the same kind of identity and character that groups have in real life; and how are groups maintained, when boundaries to and spaces exist only in software and not in space? Since any group exists only by virtue of having some identifiable character and identity, it must draw a boundary between itself and others. Boundaries can be drawn by negating other groups or cultures (negative self-definition). They can be drawn around an existing group (say, of real-world friends). They can be drawn by demanding certain kinds of interaction from members (such that tourists are discouraged from participating).

Or they can be loose enough that non-participants might even consider themselves members of the subculture.

Group elements

- Group pictures (like a yearbook page)
- Group get a group space/page where they post communal stuff (including intra- group ripping for others to appreciate. Just like a community blog.)
- Group trends and stats:
 - Your group is (this) popular
 - Your group is (this) active
 - Your group "trust coefficient" is X
 - Your group's trend is X
 - (This) interest group has X new members
 - Marketing to social networks
 - Group growth rate
 - Your group can have X for discount from advertiser Y
 - Your group can have X for discount from advertiser Y if % of you participate
- Group rating (by other members)
- Group ranking (by the system)
- Qualitative group information (e.g. if clusters are special interest groups, hobbyists, task or work groups, etc.)
- Group leader
- Other group hierarchical information:
 - Group structure, which may be loose, dense, tight, strong, weak, etc.
 - Roles taken by members of the group, officially or unofficially, informally or formally
 - Roles played by members of the group
 - · Roles available
 - Rules (for roles, role rotation, etc.)
 - Most active member
 - Most communicative member
 - Most responsive member
 - Most proactive member
 - Group technical help
 - · Group organizer
 - · Group writer
 - Most connected member (outside cluster)
 - Group broker (to other groups)

- · Group moderator
- Group membership required for participation in, or access to
 - Events
 - Announcements
 - Discounts and pricing
 - Information about other members
 - Information about other clusters
 - Currency, or action system
 - Pictures of members
 - · Pictures by members
 - Files from members
 - Recommendations
 - Introductions
 - Items for sale
 - Knowledge/expertise
 - Other kinds of resources

Group distinctions

Groups vary by their degree of organization

- A group's organization is read through relations among members, through activities undertaken
 or pursued by the "group," and through internal hierarchy, stratification, or functional
 differentiation. Most of these kinds of distinctions require that the group exist within some
 greater framework or form of organization.
- Educational and corporate social networks and learning/knowledge management systems may differ, but for the most part only to facilitate completion of specific tasks/projects.
- In contrast to the behavior coding of groups in daily life, online behavioral coding is weak.
 There are few real sanctions that an online community can press upon its members beyond exile. Group identity as an expression of style is thus captured in verbal play and conversation, in the use of pictures, recommendations, testimonials, etc, but in little else.

Type of currency/ecosystem

- Groups, as small societies, have a currency. Interactions put this currency into play. In social
 systems, currencies tend to vary in the degree to which they involve members as persons.
 Members of an MP3 trading site probably care less about how attractive they are than they
 care about getting the music they want. Members of a dating system couldn't care less about
 who's got what on their iPod! Currencies can involve:
 - What members say
 - What (and how much) members reveal about themselves
 - What they look like

- Who they know
- What resources they can make available to the group
- How they behave (nice, friendly, witty, etc.)
- How available they are for interaction
- How well they go along with other members of the group
- How much allegiance they show to the group
- Etc.
- A group's currency will help to define how members distinguish themselves from one another.
 The same kinds of attributes, in other words, will bind members of a group and also allow them to stand out.
 - If a group's activities entail a highly personal currency, in which personal resources make the difference, then members endowed with those attributes will tend to rise to the top of the group (attractiveness, intelligence, writing ability, connectedness, etc.).
 - If the currency in play is impersonal, members may distinguish themselves by possessions, access, knowledge, and similar attributes.
 - Social currency will vary in the degree of participation that it requires, on a spectrum of having vs doing.
- Fundamentally, groups may be oriented towards members (persons) or towards content (ie.
 themes or activities). Emphasis on persons will focus attention on interactions, relations, and
 the interpersonal and group dynamic aspects of exchanges. Emphasis on content will focus
 attention on themes, topics, discussions threads, resources, etc.

Nature of relations among members

- Online communities are held together by weak ties, that is, non face-to-face ties. The kind of
 binding that belongs to live social interaction is missing from mediated interaction (regardless of
 how good the interaction is!). Performance takes a back seat to the communication of
 information. And the investment that we make with one another in real-time, face-to-face
 interactions, is stretched over time and transposed as it were into an investment in routine,
 consistency, and participation. "Showing up" takes precedence over "being together."
- Group membership is voluntary. Relations are thus voluntary also. The fact that members can leave a community when they wish mitigates their level of commitment to it.
- Trust, as an ingredient of social relations, functions most powerfully one-to-one. It serves to counter the risks of social interaction and to motivate people to sometimes take those risks. In the semi-public spaces of online groups and group discussion, the risk of exposure or embarrassment during interaction is mitigated in part by familiarity with other members, and in part by the very fact of electric mediation itself (which means that nobody will see me blush). However, nothing is a real substitute for the reassurances that face-to-face interaction can provide. Some group members will lurk rather than risk rejection, disagreement, being ignored or contradicted by other online participants.
- New members will discover the nature of relations among members of an online group when they first join. Groups naturally manifest their identity, and their openness in particular, to new members in welcome greetings (or lack thereof).

Functional density, durability, often related to communication/interaction

- While groups will do what they can to bind members through interaction and theme-based discussions, the simple fact is that the vast majority of an online community's members are off doing something else at any given time. There's no time-binding with an online group—no sanction to be "in the same place" at any given time. We have to use message frequency and volume as a substitute for group density and participation—and this is a poor analog at best. For the volume of communication associated with a group doesn't necessarily correspond to the group's strength, relations among its members, its longevity or its future. Not only does the medium's fundamental asynchrony displace group attributes away from actually being together, it seems to change groups from ongoing collectives into conversations.
- Though members will often use message volume and frequency to discern how active an
 online group or community is, communication is only one measure of activity. Offline
 conversations, private messaging, even messages exchanged w/thin other groups—these and
 other signs of activity may go unnoticed. Better methods of capturing and visualizing group
 activity and participation levels would help qualify most online communities.
- Members of a community may join its subgroups out of curiosity, and then leave when they
 have gotten what they want (or when they get bored looking/waiting). It is difficult to get
 members of a group to sustain interest levels. Thus online groups often have rhythms based on
 their members' participation and interest levels—which leaves groups susceptible to individual
 caprice.
- At any given time, most members of an online community are busy doing something else. They are elsewhere and preoccupied. This puts a "natural" constraint on the amount of attention that any online interaction might sustain, and lends all online communication its characteristic intermittence. Conversation is sustained online in a manner unique to the medium (part writing format, part distribution format).
- The fluidity of online community participation creates a hurdle for long-term commitments and membership obligations. The fact that so many members may come and go discourages all members from making long-term commitments. Any commitment to a group or to other members runs the risk of being disappointed; probably more so than in "real life."

Group-based communication and interaction

- Intra-group (member to member) communication is more easily represented than inter-group (group to group) communication. It's difficult to show the ties that exist, or that could exist, between groups, whether as actual communication or as its potential (e.g. several groups dedicated to film discussions). Even if it were possible to relate groups to one another when starting new ones (to store relations in the communities database), would members of one group begin communication with another group? And would there be group benefits if members maintained communication between groups? At what level or in what manner would either group benefit? Is this a feature that might make more sense in trading communities, and where economies favor combining resources and memberships?
- It is difficult to structure tasks and activities using mediated interaction systems alone. Any kind
 of activity in which sequencing and order is important probably needs live interaction. Online
 mediated systems don't bind action and time in sequence; rather, they work by displacing
 temporal flow.

Identity and self description, definitions

- Some kind of a group self-description is required for a group to have an "identity."
 - Identity is often stated in a group description of some kind:
 - as a thematic interest
 - as a condition of membership
 - as a characteristic shared by members
 - as an idea or attribute with which members identify
 - · as a distinction from other groups
 - Descriptions may have little to do with interactions among group members. We can think of them as a group's identity only loosely.
 - Group descriptions based on shared interests filter group membership only in the most undemanding of terms—whether or not a person is interested in a particular discussion topic. We cannot even say that members of a group are qualified to discuss a topic.
 - There seems to be little that a social software system could build into its design that would demand any kind of consistency from a member's participation in various groups such that it could be used as an indication of his or her personality. The degree to which a member's involvement in groups says anything depends on whether or not groups have anything in common. Even then, it is easy for any member to join and then leave a group; affiliation is not a reliable indicator.
 - The fact that a member belongs to a group is not a sign that he or she agrees with the group's purpose, or even agrees with its members. Participants often join groups out of curiosity. Or they might avoid groups close to their interests because their level of discussion is below them. Again, group affiliation is an unreliable metric of member interests.
 - Groups are rarely mutually exclusive. Membership in one doesn't preclude membership in others. Membership thus suggests a kind of affiliation that only weakly binds members. Identification with a group is at best a partial identification. As much as groups organize online participation, they are not the primary mode in which members of an online community relate or interact with one another.
 - It is difficult to enforce codes and rules in mediated contexts. Authorities and sanctions lack the physical presence to coerce effectively; punishments and discipline are neither very embarrassing nor consequential. Any kinds of social conventions will tend to be voluntary and self-policing. Even these are really limited to those conventions that are visible to the group. What anyone does offline has little bearing online. Exceptions to this hold for groups that do meet in real life.
 - Group communication and conversation can quickly move away from a group's selfdescription. Online discussions are far more disjointed and subject to transformation than a self-description could anticipate. Rather than trust a group's mission statement to describe itself, we tend to read group's discussions to discover what its members are really up to.

Internal group differentiation

If members of a group hold different functional positions we can say that the group has some internal structure. This is the case even if positions go un-named and are only informally recognized.

- Members can "belong" to groups with varying levels of commitment, participation, and definition. There are many and different degrees to which members identify themselves as members of a group. For example as:
 - Roles/Positions/Functions: founders, leaders, moderators, bridges (to other groups), "passive" members, etc.
 - Type of Participation: contributions to shared projects, events, resources, etc.
 - Mode of participation: to discuss, to listen/lurk, to view/watch, to read
- Internal differentiation should structure group interaction even moreso where task-oriented
 activities are concerned. Any formal roles assigned to group members will help to organize
 activity and action flow. While this would be mostly irrelevant in voluntary online communities
 (Tribe, Friendster, etc.), it could be significant in virtual classrooms, distance learning,
 knowledge management, etc. It would help then if those contexts reinforce roles and positions
 offline also.
 - Roles and positions should be defined separately from activities and tasks.
 - Roles and positions should play a functional part in activity completion.
 - Roles and positions should be of help in group tasks and activities comprised of sequences and dependencies. Here, the ties between actions should reinforce roles and positions, just as the latter contribute to the execution of the actions.
 - Group moderation can help to organize interaction but is rarely used to directly filter
 member contributions. Members of a community would participate far less if their messages
 were subject to approval or moderation before being posted. While moderators may be
 used to pull down offensive messages, they add the most to online communities when they
 are played by local area experts.