

# **Dreaming while online**

## **Thoughts on applying Process Work on the Internet**

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*Having pored long over the stellar text, communing with it through repeated efforts, renewed attempts, I grew at home with it in a curious way, and more than once I saw— although this was purely intuitive, with the feeling that the thing towered above me like a mountain— I saw, always obscurely, the magnificence of its structure. Thus I had exchanged, as it were, a mathematical perception for an aesthetic sense; but perhaps what took place was a merging of the two.*

- Stanislaw Lem, *His Master's Voice*

*NY State Law: 3 text violations - lose license*

- Road sign

*The book didn't come to any conclusion, and nobody wants to read a book that doesn't have one. For me, though, having no conclusion seemed perfectly fine.*

- Haruki Murakami, *Kafka on the Shore*

# Abstract

This paper examines online interactions from a Process-oriented standpoint with the goal of informing a design of online communication systems for social action, group decision-making, organizing and community-building. Several patterns of online behavior are identified, such as online disinhibition, effects of anonymity, phantom emotions, as well as frequent relationship dynamics such as those related to trust-building. These patterns are examined from a Process-oriented standpoint. Several conclusions are made:

1. Because online text-based media is mostly devoid of non-verbal signals, our experience of communicating digitally is an altered state of consciousness in which we mostly “dream up” our counterparts;
2. Online communication is naturally conducive of role-play which is a source of creativity, yet makes practical matters difficult.
3. Computer-based communication has unique rank and power dynamics, in that it favors those with technical skills and expertise.

Finally, some existing online communication systems are examined as case-studies. Suggestions are made towards possible ways to improve the quality of online experience.

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# Foreword

This work, of which this paper is just the beginning, is compelling me to undertake a difficult inner journey: one of finding harmony between two fundamentally different mindsets. The first mindset which is most prevalent in mainstream science, mathematics and computing is that of *radical exactness*. It mandates that something can only be one thing and that different things are clearly and verifiably different. The binary system is fundamental to modern computing. It mandates that the two letters of the primitive alphabet of computing, one and zero (i.e. true and false) are indicators of two states of being which are clearly and fundamentally distinct. There is no question as to whether something that is false could also be true or vice versa. All cyberspace is based on this principle; it determines both the kinds of information we transmit online and the flow of our interaction with and through computer technology.

The second mindset—critical to Process-oriented psychology--assumes that states of being which are distinct in some way may be identical in others. So, for example, a homeless person sleeping under the porch of the Process Work Institute and the President of the United States share some essential commonality. This commonality goes deeper than mere similarity (after all both are humans, both have hands and legs, both eat, etc.). The commonality I'm referring to here goes to the very root of their being: the *essence* (as A. Mindell puts it). I will refer to this mindset here as that of *interplay*.

Although computers function on the premise of radical exactness, they can still operate using inexact concepts. This is achieved through so-called fuzzy logic, which allows one to express states of being that share both similarities and differences. Some numeric measure or description would be assigned to express the similarity or distinction and then acted upon as if it were an *exact* measure. In this way, even the inexactness so deeply engrained in real world is dealt with *exactly*.

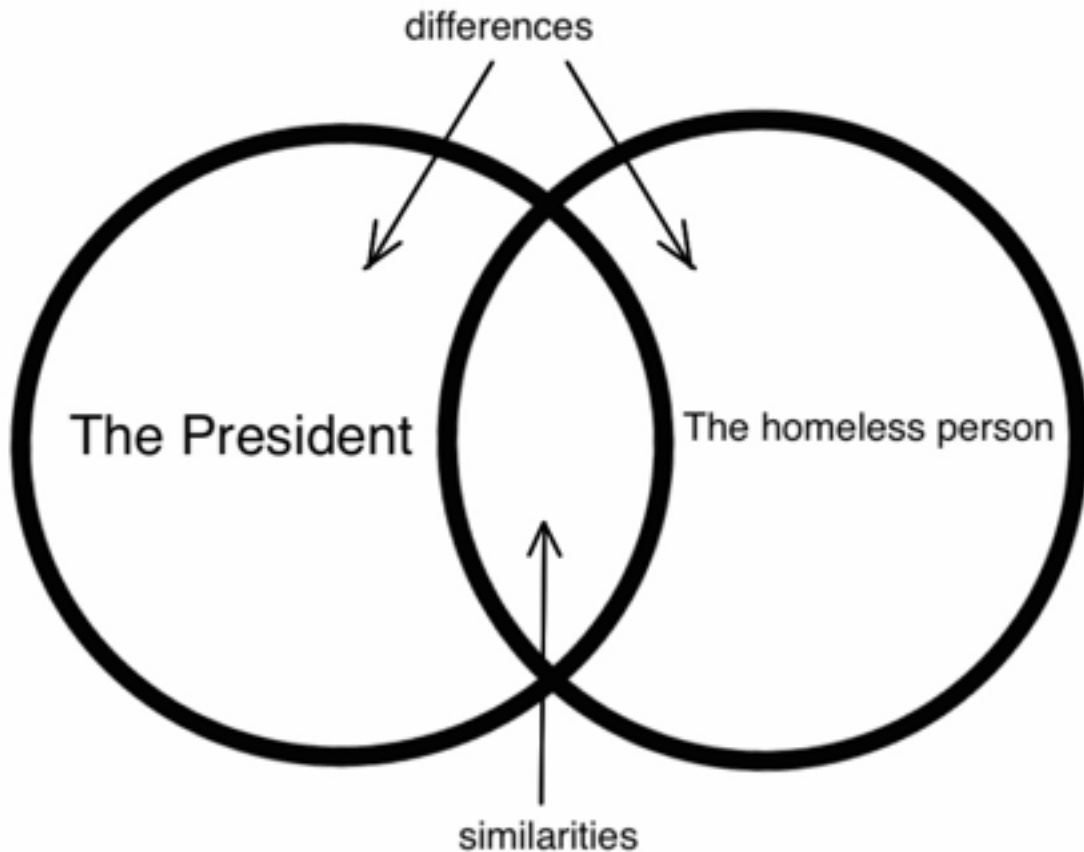
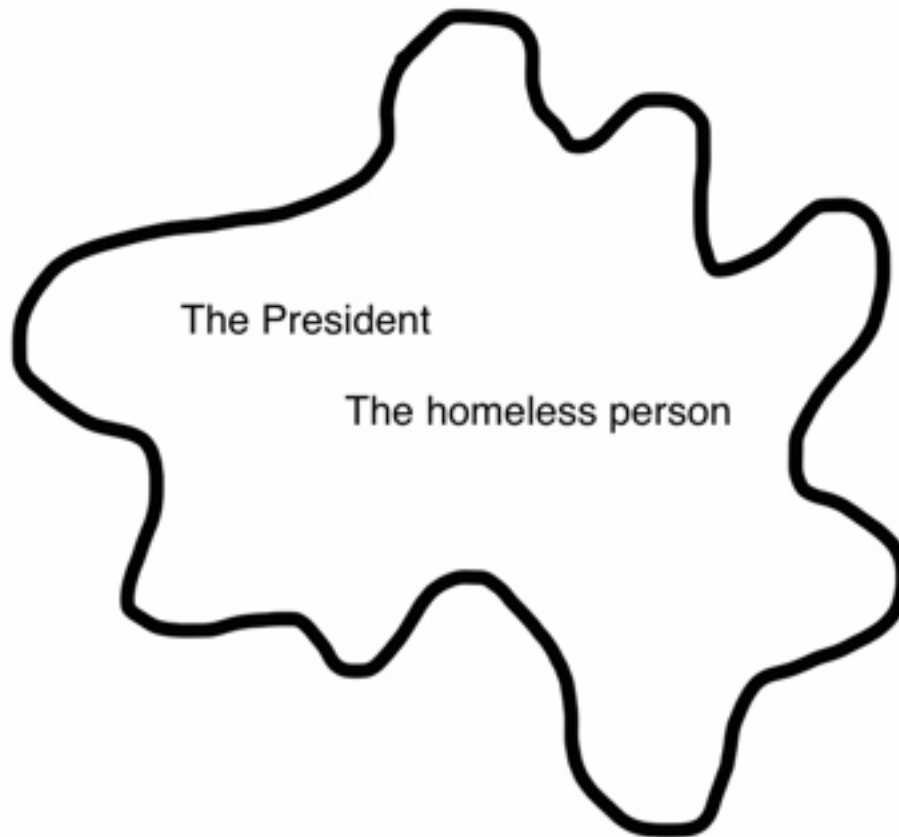


Fig 1. The exactness approach

In contrast, the interplay approach does not delineate things in this way. It always permits some amount of indeterminism, mystery, or irrationality in one's views. The homeless person isn't just similar to the President in that they both have a human body and different in that they belong to different social classes. The homeless person IS the President in a deep, yet ineffable way. The goal of the Process-oriented facilitator is then to find and allow this ineffable unity to be expressed, so as to evoke a kind of sacred union between these two community roles which are so different in all respects to an untrained eye.



*Fig 2. The interplay approach*

These two ways of thinking both have their places in the world. Technology and modern science have given us advances beyond our wildest dreams and yet when it comes to helping people work through conflicts and achieve sustainable agreement, the exactness approach fails notoriously. On the other hand, the approach of interplay, of which Process Work is one of many examples, has had much success in the areas of conflict resolution, inner healing, and community building. Yet it has not been adopted at a scale sufficient for some desperately needed shifts to occur in the world.

The goal of this work is to find a methodology for effective and deep online interaction that is informed by the tenets of Process Work. This, in my opinion, requires finding ways to create an *interplay* where both approaches—the radical exactness of computing and the Process-oriented approach--can co-exist and support each other as a cohesive system. This would bring together the accessibility and scalability of exactness-based rational mindset with the magic and healing stemming from interplay-based Process Work.

It has been both my privilege and my curse over the years to become a member and a proponent of both of these approaches. As someone with a mainstream computer science and math education, I was first taught *exactness* as a way of thinking and being. Somehow I also sought out and found various communities which practiced the *interplay* mentality, including the Process Work community. As a member of both camps, I never felt fully at home in either one and my road (including this project) was clearly not one of choosing the one camp that's right for me, but that of finding a way to



achieve peace and cooperation between the two. In this way, this work has become an inner journey for me. I believe finding a solution that meaningfully achieves my goal in the outer world is deeply connected to my ability to successfully facilitate this process in my own mind and psyche.

# Introduction

With the explosion of the internet in the last twenty years, cyberspace is now a key forum for human interaction. The internet provides a major venue for relationship-building, group decision-making, and large-scale social action campaigns. In the last 20 years, a vast number of online tools have been developed to support the exchange of ideas, community organizing, free-form discussions, and many other kinds of online interactions. Online media can facilitate greater inclusion of participants across geographical and national boundaries; it also holds the promise of increased participation and engagement in discussions among diverse economic and social classes. Yet so far the effectiveness of online tools has been limited.

In this paper I am trying to explore the question of how one can make online interactions more productive. Not just as productive as real life interactions, since those are limited by time, space, group size and human attention span, but more productive in the sense of making use of the amazing ability of the Internet to connect people across vast distances and in vast numbers, and to provide a platform for an ongoing dialog over days, months and years. I am hoping that we can eventually find ways in which Internet communication can exceed the limits of real life methods.

This task is an unusually hard one. Communicating online, as compared to in-person, is lacking some elements that human beings find very important, such as non-verbal clues

or factual data (due to frequent use of anonymity). Researchers are quick to point that out, and some then go on to discount the medium as not viable for deep interpersonal interactions. However, others find some unexpected benefits, such as the view that the Internet is a perfect medium for psychoanalysis as it removes the presence of the therapist and allows for a richer projections to arise for the patient. Another example is the way online romantic relationships often progress faster and become intimate more quickly than in real life. It is these accidental benefits that inspire me to look for answers in the unique and often uncomfortable constraints and seeming incongruities of online communication and social behavior.

The Internet is a complex phenomenon, and our understanding of it is still forming. This paper is by no means an in-depth account of its use, its effects or its structure. In talking about the digital medium I will present some facts and thoughts that I find interesting or thought-provoking, but their selection is a matter of personal choice for me and, in some cases, may not have a clear overarching structure. I am interested in emerging patterns and mysterious parallels, such as, for example, the mysterious way that the non-hierarchical structure of the Internet as a technology mimics the non-hierarchical structure of some Internet communities. It is in such patterns and parallels that I am hoping to find an answer to the question I am posing here.

Think about the success of Twitter, for example. It is based on nothing more than a seemingly random choice of limiting one's posts to 140 characters. Is it accidental? Or is there a hidden principle whose one manifestation the creators of Twitter stumbled

upon in their search for the right way to communicate online? So I ask myself: what will the system look like that makes large group interactions productive and compelling? What elements will it have? Are there some ways that we can communicate online, some hacks or quirks we can use that we haven't stumbled upon yet? How do we find them?

I don't have the answers, but this paper attempts to direct one's view towards some possible places where the answer might lie. One such area is human attention and how online it becomes a scarce resource to compete for, earn, entice and manipulate. Hence I will talk about Internet "spam", which, albeit exploitative and harmful, provides a case-study for human attention and how it flows in the digital world.

Another area is ghostly emotional experiences we have while communicating online. These "phantom" emotions arise because digital communication lacks much of the real life clues or signals we normally use to communicate emotion. This is a theme of much academic psychology research, but to me it's another mysterious dynamic. It makes me think and wonder whether it should be harnessed, not avoided, and whether, instead of building more complex and expensive technology that would potentially allow non-verbal signals to come through, we can make use of their lack in creative and unexpected ways.

And it is with the same attitude of wonder that I bring Process Work on this journey. While I don't know whether it will ultimately prove useful, I am interested to learn what it

can give us. So far Process Work has had much success in facilitating human interactions in difficult situations, such as ones with no a-priori ground-rules, or those that arise from deep intercultural differences. It has also given us a framework through which complex social dynamics can be examined and understood better. So it is my hope that using the Process-oriented paradigm to understand online communications may also give us a new perspective and perhaps lead us to uncovering something fundamental about how digital communications can be used in a more productive way.

This work is just a beginning of a much longer journey. One that may ultimately involve trying many different things and failing at most of them. My hope is that I or someone else can use it as a good starting point and build an online approach that a large number of people can use to: organize large-scale social action; make effective decisions at organizational and government levels; enhance participatory democratic process; and/ or to simply become more aware of each others' diversity online.

# Audience

This paper is an attempt to bridge two very different worlds, that of psychology and that of technology. Consequently, it is written with two possible groups of readers in mind: those with technology backgrounds, who are interested in developing better solutions for interacting online and need new tools to understand online psychology; and those who are familiar with Process-oriented psychology and are interested in understanding its implications for online behavior. I suspect that in some ways members of both groups will be left somewhat dissatisfied with this work, since those who are familiar with technology may find the language of Process Work to be overly abstract and unfamiliar, despite my attempts to define most of the concepts as clearly as possible; and those of you who chose Process Work, psychology and group facilitation may find some aspects of how technology works to be quite foreign and unexpected. There is no way out of this since good understanding of either one of these fields requires years of learning and applied experience, and so I ask my readers to kindly bear with me.

And if, by some chance, you are someone who can relate, like I do, to both of these areas with equal interest, excitement and appreciation, well then, I beg you to make yourself known, as your insight is precious to me like no other.

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# **Chapter 1**

## **Background**

## The Internet

In this section I will focus on a few aspects of the Internet as a medium that I personally find both fascinating and pertinent to the discussion at hand. (Those interested in a more in-depth and well-organized account of the history of the Internet can turn to Abbate, 1999.) These are not immediately related, but they do paint a picture: a technology that arose from applied mathematical research, but quickly because a communication medium with great potential as a tool for collaboration; its implications for human communities; the strange parallels between the non-hierarchical structure of the technology itself and its applications as a tool for non-hierarchical organizing of groups; and, finally, its use of human attention as a resource.

While it is hard to pinpoint a single story (early event, memory, dream) that comprises the “creation” of the Internet, we can still see some prominent mythic features. Such is the fact that computer science and technology, in their early days, were predominantly influenced by mathematical research. In fact, the word “computer” comes from “compute”:

*From French computer, from Latin computare (“sum up, reckon, compute”), from com (“together”) + putare (“cleanse, trim, prune, clear up, settle, adjuct, reckon, count, deem, think, suppose”), from putus (“cleansed, clear”)*

To calculate, to make sense.

Early computers were designed to assist mathematicians in performing complex calculations that were too laborious to perform by hand. And despite how far modern computing progressed from its early days (in areas such as accessibility and applicability), its mathematical and engineering roots are still very much traceable. We see them not only in the way things are done at the technology level, but also in the precise and often unforgiving attitude computers and networks impose on their users. Just think of what happens when one slightly mistypes an email address vs. what happens when one slightly misspells the name of a postal addressee on an envelope.

One wonders if the marginalization of the emotional and ineffable, dictated by logical, mathematical, scientific mindsets of modern times has thus carried itself over as a pattern into computer-based communication. Would it be surprising, if after many years of experience with tools designed by engineers and scientists, users well outside those domains have inherited an expectation and an attitude of emotionlessness towards the computer and everything that comes from it, including (potentially) content created by other human beings?

Through its ability to connect people, the Internet quickly became a hotbed for non-hierarchical collaborative effort. By the mid-nineties, when the Internet was deep in its transition from specialized - educational, research, elite - into a general-purpose consumer medium, its decentralized nature was mind-boggling to many.

As Sifry (2014, Kindle Edition, Locations 2319-2327), quotes from Brafman, Beckstrom (2006):

Dave Garrison, the CEO of an early Internet service provider named Netcom, was in Paris, trying to raise money from a group of investors at a fancy hotel restaurant. “One of the investors started asking who was the president of the Internet,” Garrison recalled: We went in circles about how “there is no president.” ... It was very funny. But this is 1995, early '95, so the Internet is still an unknown thing. We're explaining, “It's a network of networks” [... and] “There are thirty to forty thousand networks, and they all share in the burden of communication.” And they said, “But who decides?” And we said, “No one decides. It's a standard that people subscribe to. No one decides.” And they kept coming back, saying “You don't understand the question, it must be lost in translation, who is the president of the Internet?” Finally, Garrison says he gave in and said he was the Internet's president.

This refers to the fact that Internet as a platform is a decentralized entity and that large scale efforts to develop its components, protocols and structures were most productive when organized non-hierarchically. But what became quickly obvious to many, was that the Internet also held promise to serve as a platform for *other* non-hierarchical, decentralized efforts. To quote from Sifry (2014, Kindle Locations 336-338)

... [on the internet] a much larger number of voices are at least partially heard, and if what they have to say is salient, the networked public sphere will propel their content upward towards mass attention.

Or as summarized by DeTar (2013), who examines the history related to using computers to support consensus-based decision-making:

From the early days of digital computing, people have dreamed of ways that computers might contribute to human communication and decision making. In 1962, Douglas Engelbart described the way that computer systems might assist in collaboration within workgroups, kicking off the start of research into *computer supported cooperative work* (though that name wasn't coined until 1984). In 1968, Licklider and Taylor explicitly explored the potential for computers as a tool for deliberation in groups, presaging the development of Group Decision Support Systems (GDSS). From the first explicit GDSS study in 1982 through the 1990's, academic interest in GDSS resulted in a huge outpouring of research into the design and function of systems aimed at supporting and shaping decision making processes.

Here we see the major repeating pattern of the Internet - one where equality of individual participants, like the equality of individual components of the network, is a value that is both supported by the medium and is useful in developing the medium itself.

Today the Internet in many ways permeates our lives as a communications medium, source of knowledge and information, venue for entertainment, a way to engage with friends and community, etc. Where in prior years people would turn to television and newspapers, today the Internet is "... enabling the rise of a "networked public sphere," far different from the older media system built around expensive mass communications systems like television, radio, and newspapers." (Sifry, 2014, Kindle Locations 303-305).

Sifry is referring to a network of connections between people made using the network of computer connections. Such networks in pre-Internet era were heavily centralized, so that a few people (celebrities, politicians) were noticeable by many and the old-style public media was the key vehicle for such notice. However, as the barrier to entry was significantly lowered using computer technology, the network of *notice* became significantly flatter as connections were being made between people around the world and independent journalists, bloggers and writers were able to gain attention without having to rely on an intermediary.

As we consider attention and notice as the currency exchanged on the Internet, we turn to Brunton (2013), who examines the history of Internet "spam", a term that refers to any behavior that attempts to exploit existing conglomerations of human attention by unfair means, at the cost of salience and, often, to the detriment of the community. In many early Internet communities, which began as public discussion forums where the good will of participants was often the only rule governing individual behavior, "spamming"

quickly became a serious problem, one that persists in various forms until today. (You have most likely experienced spam as emails advertising pornography or viagra).

On the surface, “spam” may seem like a simple technology problem, however, examining it in some depth gives us a true wealth of information on such topic as salience (where exactly is the line between useful and annoying?), attention and notice (as this is what “spam” content is designed to exploit) and internet community (as a process of spontaneous conglomeration of attention).

Brunton (2013) writes:

Attention, the scarce resource of human notice, is what makes a community on the network, and the creation of communities, the invention of “we” on the Internet, is an act of attention. (Kindle location 139)

and then

spamming is the project of leveraging information technology to exploit existing gatherings of attention. (Kindle location 138)

If the Internet is like a field and internet communities are agricultural plants, then “spam” is a weed that tries to divert the resource of our attention to its own means. Upon examination of the dynamics of the “spam” - “counter-spam” arms race, we find that

naive attempts to curtail it will be easily circumvented, but being too forceful will likely impose too much restriction on the interaction, harming its original purpose. This is probably one of the most difficult problems in online communications today and points to the difficulty of defining salience in any but the most subjective ways. I find this insight very pertinent to my work in the scope of this paper. It illustrates that the natural feedback mechanisms that exist in real life interactions to ensure salience of every part of a human dialog are almost entirely lacking in online environments.



## **Interacting in the digital world**

Many real-time communication tools attempt to mimic real life experiences with video and audio, and so inevitably inherit real life constraints as well as add some difficulties of their own. For example, in cases other than those of a single speaker/presenter, video interactions are very difficult to manage beyond more than just a handful of participants. Additionally, behaviors which are natural in a physical setting, like interrupting, whispering to a neighbor, etc. are frustratingly hard in real-time digital communication. Since I am hoping to uncover new possibilities, I am naturally drawn to discussing those kinds of interactions that do not happen in real-time and/or use text as a communication medium.

While non-real-time text-based interactions compare unfavorably to physical ones on a number of scales (presence of feedback, interpersonal awareness, focus, etc.), they nevertheless have possible qualities that neither real-time digital nor physical interactions have. Some examples: being able to see the history of the interaction, being able to respond in your own time, larger spectrum of design choices with respect to the flow and participants' capabilities, ability to reach unlimited number of participants, etc. I wonder whether some of these qualities of non-real-time communications can be harnessed to make them more productive, as compared to both current online interactions as well as physical interactions, whose limitations around size and time are a known impediment to effective large-scale process.

The following are the broad classes of online interactions that are my focus.

1. *Group decision-making* online can take many forms. A group of hikers planning a trip together over email, a co-op body discussing a pertinent issue in the days leading up to a board meeting, a group of software developers around the world discussing an architectural issue of the system they are building, etc. Group decision-making has a desired outcome – that the group reaches a decision. The effectiveness of a decision can be seen not only as a measure of the initial agreement individuals within the group have with the decision, but also how well the decision addresses the problem and how willingly participants follow up on the actions required by the decision.
2. An *awareness process* is an interaction where a group of participants engages with a particular topic with an implicit (or sometimes explicit) goal of expressing their viewpoints and gaining more awareness of various other viewpoints present within the group. Such processes include commenting and reading others' comments on a news article, engaging with a group of friends on Facebook around a current news topic, etc. One could argue that online dating is an example of an awareness process as well, one of its goals being for the people to learn about each other enough to know whether to engage romantically or not. It is hard to measure effectiveness of an awareness process. Yet intuitively we can feel an effect if there is one. It is usually represented by a shift in the atmosphere of a discussion, when

some of the participants gain additional insight from the interaction or hear each other.

3. A *social activism* process can have many different manifestations. Emailing a senator, for example, is one way in which social activism manifests online. Many activist organizations and non-profits (such as the ACLU, for example, of which I am a member) routinely use a large mailing list to bring awareness to a current issue or suggest social action. Another example of social activism is sharing a youtube video or an article on social media, bringing attention to an issue that generates strong emotional response, such as police brutality, for example. When thinking about effectiveness of such a process, we might consider whether the desired outcome of an action was achieved. So, for example: has the authority responsible for addressing the issue taken necessary steps as the result of the action?
  
4. An *organizational development (OD)* process might combine elements of both a decision-making and an awareness process, but may also contain other elements, such as *surveying* the participants to gather relevant information. One can imagine a variety of tools that facilitate such process. Those would include survey tools or tools to analyze internal communications within an organization to discover connections and hierarchies not otherwise known to exist within the organization. We can also imagine presentation tools that gather information and present an aggregate view, reflecting on structural issues or bottlenecks in the organization. Effectiveness of an

OD process can be seen in terms of whether a positive change is observed within the organization as a result.

5. A *management process* is one whose goal is maintain knowledge, efficiency and control in the scope of a particular project and/or group. Current tools designed to facilitate project management may perform such functions as recording tasks, assigning them to individuals, track their progress, etc. Effectiveness of a management process can be measured by how accurately the computer presentation of a project, its trajectory and its current state of affairs reflect reality. It can also be measured by whether the tool helps perform the project in a more efficient, timely and sound manner.
6. Other examples of interactions that can be performed online are *negotiations* (e.g. in business or diplomatic context), *reconciliation* and *restorative justice* (for example when a perpetrator is in jail in a remote location), *arbitration* (such as the online arbitration performed by Ebay on behalf of its customers), etc.

It is useful to distinguish between online interactions that are *targeted* and those that are *open*. The former are restricted to group of known participants (such as a business unit, or a group of mutual acquaintances) whereas latter are open to the general population and have no restrictions to entry. It is often the case that targeted interactions are designed with a specific process in mind (especially true of project management-type

systems), whereas open interactions are usually much simpler and more open-ended, given the likely diversity of participants.

It is also important to notice that interactions designed for large groups have fundamentally different needs than those whose target groups are small. For example, Intertwinkles (one of the systems I will review in the case studies section below) has a feature that allows users to vote on each other's behalf. This works really well in a targeted system designed for a small community, but would not be feasible in a larger system open to the general public.

The typical elements of the design of a computer-based interaction are:

1. *Presentation* refers to all aspects of what the device may present to the human user: visual information (text, images, video), auditory information (audio), etc.
2. *Input* refers to all aspects of what the human user may contribute to the interaction: keyboard input (text), drawings (using mouse or touch screen), audio (using microphone), static images and video (using the camera). Some newer devices also contain sensors that may detect your location in the world (GPS) and even measure your heartbeat.
3. *Flow* refers to all rules that govern how the interaction progresses over time. For example, a login screen followed by a home screen is a flow at the beginning of a Facebook user session. The category of speed (real-time or not), and user authentication are also attributes of the flow.

<b>Classification</b>	<b>Type</b>	<b>Examples</b>
<b>By speed and lifetime</b>	Real-time	Skype, Google Hangouts, chat
	Non-real-time	Kickstarter, change.org
	Hybrid	Facebook
<b>By presentation medium</b>	Video/audio	Skype, youtube
	Pictures/drawings	Pinterest
	Text	change.org, plain email (with some exceptions)
	Hybrid	Facebook, Google+
<b>By complexity of flow</b>	Simple	Twitter
	Complex/tailored to specific process	Holacracy
<b>By user identification</b>	Identified users	Facebook
	Anonymous users	New York Times website comment section

*Fig 3. Some examples of classes of online interactions by their presentation and flow*

## Online conversation

In many instances, when interacting online, participants engage in conversations with each other. Conversations are an important element in most kinds of online interactions, but especially for decision-making and awareness processes.

When interacting in a physical setting, people perceive the structure of the conversation in real-time and navigate it intuitively using visual and auditory cues. Additionally, physically present participants have an option of interacting with their immediate neighbors privately. Finally, we also know that in a physical setting there is a wealth of feedback as to who is listening to what we are saying. Online the picture is different. While some elements of in-person communication, such as non-verbal feedback, are almost impossible to transmit, the medium permits much control over other elements of the interaction, such as its structure, sequence, what responses are allowed, who the audience is, what feedback participants receive and even how much they are allowed to write.

In non-real-time text-based conversations, different systems choose different approaches as to the structure of the conversation. In some cases, the conversation is presented in a linear way with each of the participants' responses physically placed below (or sometimes above) the prior responses in a presentation sometimes referred to as a *feed*. This is the case, for example, in many websites that allow readers' comments on a single topic (such as news websites). Such situations are often due to the fact that the conversation is intended as a sequence of responses to a single post

and few, if any, interactions are encouraged in the form of participants responding to each other individually. An alternative to this is so-called *threads* where each new post is associated with specific previous posts. Traditional email systems are thread-based and most modern email viewers have a way of presenting a conversation (as delineated by all emails with the same subject) as a thread, making the detailed knowledge of who responded to whom very specific.

The spectrum of choices one has online with respect to the audience to one's posts can be both more and less limited than in a physical conversation. Consider, once again, a comment sections of a news website. There, the only possibility of expressing yourself is, essentially, public. In contrast, traditional email gives users much control over the audience for one's responses, but as many readers know, the drawback of this is that it is not always easy to see who the audience actually is, since it involves browsing through a potentially long list of names and/or email addresses, and also email messages can be easily forwarded to people who were not initially part of the conversation. This makes it very error-prone, and especially dangerous for sensitive information. In other cases, such as Facebook, the audience is mostly public, with an option of starting a separate conversation with one or more participants privately in real-time.

Feedback is where online space is most deficient. In most cases, even if one knows who *can* see one's posts, one can rarely tell if they were, indeed, seen, or when they were seen, or what the immediate reaction was. In my view this is one area where much



improvement is possible. While this is not commonly done, computer systems can be designed to capture information as to when something was read and how long it took someone to read it.

Let's finally consider one of the most enigmatically successful, yet simplistic online platforms of today, namely Twitter. As mentioned previously, Brunton (2013) defines an Internet community as a conglomeration of human attention. Yet, we know that attention is a scarce resource, whether online or not, and here is where Twitter's success comes in. The invention that defines Twitter is the requirement for brevity, a magic number expressed as a maximum limit on the number of characters in one post. And this illustrates one of the benefits of digital communication as compared to real life: designers of online interactions have the freedom to introduce restrictions that are not feasible in physical space, such as brevity.

## Effectiveness: Participation, Focus and Shift

These classes of online interactions share some commonalities in what may contribute to their effectiveness. These commonalities are *participation, focus and shift*.

*Participation* is a measure of willing engagement people exhibit with the process.

Sustained participation is a key factor that will determine the success of the online system. It comes as a result of an interaction being in some way compelling to participants, fulfilling their needs and feeling good to them. Whether this is the case or not is determined by ease of use, quality of the design — both visual and interactive, depth and salience of the process, amount of feedback, feeling of being heard, etc.

While these values are easy to name, they are notoriously hard to achieve predictably.

Participation by itself is not enough. In fact, increased participation in a context of an open system brings out a different sort of problem. Sifry (2014) writes: "... with mass participation comes greater cacophony, and in a bigger ocean it's harder to make a ripple" (Kindle Locations 911-912). This refers to what I call *focus*, a measure of cohesiveness and direction within the interaction. It is often the case online that a multitude of disparate voices pull the process apart or an excessive amount of information is distracting and consequently, this negatively affects participation and outcome. It is worth noting that targeted interactions are more likely to stay on point, whereas open interactions are more prone to losing focus.

This work is mostly concerned with such situations where the good outcome can be characterized in terms of the *positive shift* some or all participants experience as a result of the process. The shift can be that of feeling heard, gaining new understanding, tipping the scale of a social action, coming up with an inclusive solution to a problem, etc. To me this is the most important measure of the process's effectiveness, but also hardest to characterize in objective terms. Some of these shifts are internal: an ineffable "good feeling" which is felt from the interaction.

In Process Work such a shift is associated with the notion of an *edge* and *edgework*. According to Gronda (2013) edgework is defined as "the technique of working with the resistance of the identity to a new and unknown, or rejected, experience" (p. 55). Edges pertain to a naturally existing boundary between the known and unknown states of the system (a human group, or an individual, for example). The inclusion of previously-unknown states of being is what ultimately creates a shift towards greater learning and understanding within a group. This can also lead to interactions with greater depth and effectiveness. Edgework also allows one to enable a more focused interaction. Edges are difficult and may naturally lead to distraction or loss of focus as a way for a group to avoid the difficult places. Working with edges consciously guides the group towards more focus and depth.

The three categories of participation, focus and shift are interrelated. Focus and positive shift drive participation, but increased participation makes focus harder to achieve and

hence will deter from the potential shift. Conglomerations of attention, as in the case with “spam” will attract the actors that try to exploit it, draw it away from the topic, and/or direct it to their own ends.

# Overview of Internet Psychology Research

With the continued growth of the Internet, its effects on relationships and communications have been studied by social psychologists. The patterns outlined here illustrate the greatest strengths and biggest pitfalls of online communication, as seen by mainstream research to date.

## 1. Online disinhibition

Suler (2004) defines online disinhibition as “[saying and doing] things in cyberspace that [people] wouldn’t ordinarily say and do in the face-to-face world” (p. 321) and delineates two distinct forms: *benign* and *toxic* disinhibition. Benign disinhibition manifests itself, for example, as personal sharing that is unusually deep, intimate or even excessive. Toxic disinhibition constitutes such behaviors as “rude language, harsh criticisms, anger, hatred, even threats.” Toxic disinhibition is one of the key reasons why many online interactions become unproductive and why careful management of anonymity and skilled moderation is necessary for most kinds of open online communication.

Suler points out six key factors that are involved: dissociative anonymity (disassociation of online persona from real life persona through anonymity), invisibility (lack of visual cues as to the others’ feelings, body language), asynchronicity (lack of need to cope with immediate reaction due to the exchange’s extended timeframe), solipsistic

introjection (reliance on one's own mental picture to fill in the blanks as to the other's voice, reaction, status), dissociative imagination (propensity to "dream up" fictional roles and situations) and minimization of status and authority (lack of factual and non-verbal clues as to the presence of authority figures). Lapidot-Lefler and Barak (2012) further distinguished general invisibility and, specifically, eye-contact, and found that the latter alone plays the most important role in the inhibition/disinhibition dynamic.

## 2. Phantom emotions

An excellent review article by Barak (2009) describes the phenomenon of *phantom emotions*, suggesting their similarity with phantom pains (in missing organs) and phantom memories (of events that didn't happen). Similarly, phantom emotions are those based on either insufficient or invalid information. For example, Barak writes:

This describes a person who despite being detached because of distance, relatively lean communication, anonymity, common deception, discontinuity of contact and marginal physical investment—still feels intimately close and attached to another person.

Phantom emotions occupy a gap left in our mind by the absence of real information about the other person. Here again, researchers point to lack of visual and auditory cues, eye-contact or other non-verbal information.

In addition, research points to written text as a mode of communication having its own special features as compared to speaking. Barak (2009) reviews research on this phenomenon in detail:

When a person *writes*, they tend to express things that might not be expressed at all in other modes of communication or that might be expressed differently (Pennebaker et al. 2003; Barak and Miron 2005). This is perhaps due to the ability to plan, edit and organize written text better than spoken words, as well as to engage in personal reflection. Apparently, this feature also owes to the experience of *aloneness* in writing, or a sense of complete privacy (Ben-Ze'ev 2003; Viseu et al. 2004) that produces an as-if feeling of self-talk in stark contrast to actually speaking with a partner. Cumulative experimental and clinically oriented research has consistently provided evidence of the special psychological influence of writing in effecting emotions and consequent behaviours (see reviews by Esterling et al. 1999; Pennebaker et al. 2003). Clinical experience, as well as research, shows that *reading, too*, exerts a tremendous emotional effect, one that is perhaps stronger than other channels of communication (Cupchik et al. 1998). The textual relations created between partners in online communication contribute to

augmented interpersonal openness and closeness, despite the physical distance and the mediation of complicated technology (Suler 2004).<sup>1</sup>

Of great interest in the context of this work is the fact that some psychoanalysts find this dynamic to be conducive of therapeutic intervention. They see phantom emotions as related to Freud's transference and projection dynamics and argue that online medium is "an ideal therapeutic environment" because transference can happen easier online than in in-person.

In conclusion, Barak (2009) argues for the need to bring awareness to personal inner process in online communication: "Although existing education and prevention

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<sup>1</sup> Cited here:

Barak, A. and Miron, O. (2005). Writing characteristics of suicidal people on the Internet: a psychological investigation of emerging social environments *Suicide and Life—Threatening Behavior* 35, 507–524.

Ben-Ze'ev, A. (2003). Privacy, emotional closeness and openness in cyberspace *Computers in Human Behavior* 19, 451–467.

Cupchik, G. C, Leonard, G., Axelrad, E. and Kalin, J. D. (1998). The landscape of emotion in literary encounters *Cognition and Emotion* 12, 825–847.

Esterling, B. A., L'Abate, L., Murray, E. J., Pennebaker, J. W. (1999). Empirical foundations for writing in prevention and psychotherapy: mental and physical health outcomes *Clinical Psychology Review* 19, 79–96.

Pennebaker, J. W., Mehl, M. R. and Niederhoffer, K. G. (2003). Psychological aspects of natural language use: our words, our selves *Annual Review of Psychology* 54, 547–577.

Viseu, A., Clement, A. and Aspinall, J. (2004). Situating privacy online: complex perceptions and everyday practices *Information, Communication and Society* 7, 92–114.

Suler, J. (2004). The psychology of text relationships. In R. Kraus, J. Zack and G. Stricker (eds), *Online counseling: A handbook for mental health professionals* (pp. 19–50). San Diego, CA: Academic Press Elsevier.



programmes highlight the effects of anonymity, invisibility, impersonation and fabrication on the Internet, they refrain from including the important, perhaps dominant, factors that relate to users' *inner processes*, especially the prevailing effect of phantom emotions, as characterizing and significantly affecting online communication and interpersonal contacts. “

### 3. Ephemerality and its effects

Ephemerality refers to a measure of how well and for how long internet content is preserved and can be accessed in the future. High ephemerality refers to situations in which content may quickly disappear without a trace. Designers of online interactions often lean towards low ephemerality as compared to everyday offline reality (which, in these terms, is seen as highly ephemeral). Mainstream communication technology and applications, such as email, Facebook, Twitter, etc. are all permanently archived leading to a situation in which historical content may be reviewed and referred to in perpetuity. This is exacerbated by search engine technology, which often picks up and permanently archives ephemeral content from websites across the globe.

Some researchers and industry players, however, find that low ephemerality of content isn't always a good thing. Offline interactions are, after all, eventually forgotten, and it may not always be desirable for some communications to remain stored in perpetuity. If our online footprint contributes to our reputation, then this situation would cause

hardship to someone who desires to improve it. I suspect that low ephemerality could hamper reconciliation or restoration efforts online.

High ephemerality is argued to be conducive of large group creative effort and to counteract some possible negative effects of anonymity, such as in the case of 4chan.org discussion group website, whose “random” board, also known as /b/ is studied in detail in Bernstein et al (2011). The authors argue that, in the case of a discussion board that is designed to be radically anonymous, the fact that most posts disappear quickly and never get archived prevents large scale or protracted conflicts while promoting creative effort, albeit in a radically counter-cultural space. 4chan community is credited with origination of a large number of internet memes (ideas, images or actions that take on a life of their own).

#### 4. Trust and lying online

Some research examines the topic of trust online. Email and other tools of electronic communication are increasingly employed in business or commercial context and, in such cases, the question of whether trust between parties can be established is salient. Also, many non-formal relationships (such as romantic ones) start online, and, again, trust is an integral part of the interaction.

In business or commercial contexts, interpersonal trust is hard to establish. This is due mostly to the fact that text-based communication lacks of non-verbal information. To quote from Naquin and Paulson (2003)

... the difficulties resulting from the communication channel restriction lead to another challenge that involves the expected ease of encoding, and expected difficulties in decoding, deceptive messages. Although verbal inconsistencies may be an important factor for determining the veracity of messages, people rely heavily on visual indicators of arousal and nonverbal leakage when assessing sincerity (e.g., Anderson, Ansfeld, & DePaulo, 1999; Ekman, 1985). Where nonverbal information is unavailable, as is the case with text-based messages, negotiators may find it easier to engage in exaggerations, bluffs, and outright lies (Valley, Moag, & Bazerman, 1998). If a negotiator recognizes that his or her opponent has these sinister opportunities available, feelings of uncertainty regarding the other party's behaviors may increase and the generation of trust may be inhibited.

In addition, it is also recognized that the potential for a broad array of unethical and hurtful behaviors increases when a person is removed, physically or psychologically, from the victim (Kelman & Hamilton, 1989). Thus, whereas the potential to exploit another individual in a face-to-face negotiation exists, such potential behavior may be perceived as being

even greater when dealing with a “faceless” opponent (Walther, 1995).

(p. 115)<sup>2</sup>

Subsequently, research on possible ways to alleviate these problems (Paulson, Naquin, 2004) studied the effects of adding structure to communication and whether establishing personal rapport through a less formal interaction that establishes a common identity fosters subsequent trust in business negotiations. Structure, a set of formal rules, such as pre-agreed politeness or pre-agreed response time, despite being a frequent approach in actual business interactions, did not achieve increase in trust development. However, establishing a common identity through informal means did. In fact, participants saw structure as an impediment to trust-building because they perceived their counterparts as more hidden from view behind the formality.

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<sup>2</sup> Cited here:

Anderson, E. D., Ansfield, M. E., & DePaulo, B. M. (1999). Love's best habit: Deception in the context of relationships. In P. Philippot, R. Feldman, & E. Coats (Eds.), *The social context of nonverbal behavior: Studies in emotion and social interaction* (pp. 372–409). New York: Cambridge University Press.

Ekman, P. (1985). *Telling lies: Clues to deceit in the marketplace, politics, and marriage*. New York: Norton.

Valley, K. L., Moag, J., & Bazerman, M. H. (1998). A matter of trust: Effects of communication on the efficiency and distribution of outcomes. *Journal of Economic Behavior & Organization*, 34, 211–238.

Kelman, H. C., & Hamilton, V. L. (1989). *Crimes of obedience*. New Haven, CT: Yale University Press.

Walther, J. B. (1995). Relational aspects of computer-mediated communication: Experimental and longitudinal observations. *Organization Science*, 6, 186–203.

In informal relationships online, we find a strikingly opposite picture. To quote from Green (2009):

... research suggests that Internet relationships can progress to intimate levels more quickly than in-person relationships (Walther 1996; McKenna et al. 2002). Like talking to a stranger on a train, individuals may be willing to share more intimate information with online partners, because those partners are not connected with the person's existing social circle and thus cannot pass sensitive information along to those individuals (cf. Derlega and Chaikin 1977). Disclosure is associated with trust, so conditions that foster high disclosure may also be those that evoke greater trust. <sup>3</sup>

The discrepancy of trust being challenging to develop online in a business context vs. being easy to develop online in informal/interpersonal context can be explained in many ways. If trust is associated with risk, then perhaps we are dealing with situations associated with different types of risks. In the business context, the risk is that the

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<sup>3</sup> Cited here:

Walther, J. B. (1996). Computer-mediated communication: impersonal, interpersonal and hyperpersonal interaction. *Communication Research* 23(1), 3–43.

McKenna, K.Y.A, Green, A. S. and Gleason, M. J. (2002). Relationship formation on the Internet: what's the big attraction? *Journal of Social Issues* 58(1), 9–31.

Derlega, V. J. and Chaikin, A. L. (1977). Privacy and self-disclosure in social relationships. *Journal of Social Issues* 33(3), 102–115.

trustee is lying and will not deliver on their promises, making online media more dangerous because of lack of clues we normally rely on to detect lying. In informal contexts, the online environment is often perceived as less risky than face to face interactions. The same factors that make people more wary of doing business online (anonymity and lack of other cues) cultivate a sense of freedom and quicker disclosure of intimate details online. There is less risk that the everyday identity of the person sharing their intimate stories will be disclosed in anonymous online contexts, and thus, people reveal themselves more easily in the informal cyberspace world. These different levels of risk would, at least partially, explain the discrepancy in trust-building dynamics in business contexts vs. informal ones.

In summary, Internet communication is characterized by two almost opposite dynamics. On one hand, interactions around real-world tasks (issues, decisions) are often bogged down because the Internet (especially when text-based, but even as a hybrid-mode communication medium) is lean on non-verbal clues that are crucially important in establishing trust and rapport between individuals. In these situations, task-oriented communications focus solely on factual and logical information and may become stuck or unproductive without access to the “juice” of deeper interpersonal connections. On the other hand, online interactions not bound by specific real-world tasks are sometimes rich in creativity, spontaneity, imaginativeness and emotional diversity. Such diversity can be a positive factor, allowing rich relationships to occur between individuals who are far removed from each other and so aren’t bound by the preconceived notions of each-

other's identity. Yet it can also be an impediment when abusive, invasive or offensive energies are expressed without inhibition.

## **Chapter 2**

# **Online communication from the Process-oriented standpoint**



## Basics of Process Work

In Process Work, a group of people is seen as engaged in a *process* and conflicts that arise are seen as necessary elements of such process. They are valuable seeds of new ways of being and, if properly addressed, lead to positive transformations. Process Work facilitates such transformations by recognizing the wisdom within the conflict and by bringing it to the surface, promoting fluidity through deeper awareness.

The premise of Process Work is transformation through inclusion. Disturbing voices or tendencies (sometimes referred to as energies) within or outside the group are seen as carrying important information whose integration is necessary to create sustainable change. Process Work seeks to find ways of including these disturbing energies into the overall dialog, so as to allow the group to receive their message, the deeper meaning.

Process Work sees ineffable aspects of our experience, those akin to dreams, as important sources of information, inspiration and transformation. They are a useful source of information when more conventional tools fails to bring the desired shift. The notion of *dreaming* in Process Work includes all aspects of experience that are not immediately placeable within the realm of *conventional reality*. Both the *dream-level* and the *conventional reality level* (CR-level) are jointly called *levels* of experience, along with the third, the *essence level*, which represents even deeper, non-dual, unformed energies. The Process-oriented facilitator brings the dream-level images and *signals* to

group's awareness and shared consciousness. This sometimes facilitates conflict transformation even in situations where the disagreement appears intractable due to irreconcilable differences of opinion.

Further, conflict situations and disturbances are seen in Process Work as an expression of so-called *edges*. An edge is a situation where the group encounters some manifestation of an as-of-yet unknown *energy* (dynamic, pattern, role). Such unknown energy is called a *secondary process* in contrast to the *primary process*, which is a sum total of all energies known and commonly accepted within the group (the group's current identity). The overall process of the group is seen as a sequence of transformations in which a secondary energy enters the group through, possibly, a disturbance, and is then adopted in some form as part of the group's primary identity through so-called *edge-crossing*. Edge-crossing is not one-directional (where the image is that of a secondary "bucket" slowly "pouring" into a primary "bucket"), but a process of establishing fluidity between the energies, so that each one may become part of the group's overall "tool-kit" of experiences. When fluidity is established, the energies may then be free to express themselves in situations where they are needed and useful. This also has the effect that such energies will become less disturbing.

According to Gronda (2013):

"Process Work theory suggests that the edge creates double signals that disturb our relationships (Mindell, 1985

p. 26-28; Goodbread, 1997, p. 215-221). The signal is double because our communication arises both from our conscious identity (we signal because we intend to communicate something) and from secondary parts of our experience (that we do not identify with). Our communication messages therefore are (at least) double because they contain information from both sides of our edges.”<sup>4</sup>

This view attributes conflicts in relationship to *double signals*, and prompts us to apply this perspective to the online space, as I will attempt later on.

Process Work advocates for awareness as a tool of transformation and community-building. One way to bring forth awareness is through *framing* - a method of bringing out experiences not yet known within the group. There are two kinds of these: first, the facilitator can bring awareness to experiences that are present but not yet known. These are aspects of experience that individuals have, but they may not yet be aware of. In this category are personal experiences, such as unintended expressions of emotions or cultural patterns that an individual may be following unconsciously or

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<sup>4</sup> Sited here

Mindell, A. (1985). *River's Way: The process science of the dreambody*. London: Routledge & Kegan Paul.

Goodbread, J. (1997). *The Dreambody Toolkit: A Practical Introduction to the Philosophy, Goals, and Practice of Process-Oriented Psychology*. Second Edition. Portland, OR: Lao Tse Press.

reactions they may have missed in the heat of the interaction. The second kind of awareness is of the commonality of experiences. These are aspects of experience that people may be aware of individually, but they may not be known to be shared in the group. This kind of framing may involve referring to shared actions (“we are all listening”, “everyone wants to express their pain”), shared reactions (“we all feel relieved by this”), shared emotions (“we are all hopeless”) etc. Bringing awareness and attention to all these experiences is an important element of helping the group work through the transformation necessitated by the disturbance or conflict because it establishes a shared consciousness which allows the group to achieve a new state of being without dissipating or losing its identity.

In this chapter I examine online interactions through the prism of Process-oriented psychology. This will involve identifying some dream-level roles of the online experience, mapping out its levels, examining the question of what can be framed and what kind of awareness is generally missing. In some cases I will discuss the possibilities of bringing simple automated information to the attention of the group. I will also discuss role-play as a source of inspiration and transformation.

## Levels of online experience

Process Work delineates three levels of experience: *conventional reality* (CR), *dream level* and *sentient or essence level*. Conventional Reality “describes the realm of experience that is generally consented to or agreed upon as “real.” CR corresponds to majority views and statistical norms. It is a collective understanding about the nature of reality” (Diamond & Jones, 2004, p. 21). In dream level “... you notice dreams, fantasies, figures, and objects while awake or asleep. You can formulate these experiences more readily in words, in contrast to the experiences of [essence level], which can barely be grasped in everyday terms.” (Mindell, 2000, p. 35). At the essence level “... you notice deep experiences, normally disregarded feelings and sensations that have not yet expressed themselves in terms of meaningful images, sounds, and sensations. These disregarded or marginalized feelings are sentient, that is, preverbal, feelings and sensations.” (Mindell, 2000, pp. 34-35).

Process-oriented psychology makes use of this framing to formulate and perform facilitative interventions that are appropriate to each of these levels. Process is said to exist in some way within each level. For example, a conflict between friends may be caused by a disagreement over some CR contract, such as a loan, but may have dream-level elements, such as some threatening historic figures from one of their lives who didn't repay loans. The essence level of the same conflict can manifest a need for deeper connection between the two friends.

In this section I will attempt to map out the levels of online experience in relation to Process Work. The main conclusion that will become apparent is that in the digital world there is a wider gap between CR and Dream levels of experience than in face-to-face interactions. This makes it important, in thinking about facilitative tools online, to properly identify the correct level of experience being facilitated.

As we saw in Chapter 1, the very nature of the online medium makes one prone to dream-level experiences. When we are engaged with written text, much of the everyday non-verbal information is missing and our minds are forced to fill in the gaps with what amounts to dream-level figures, emotions and reactions. However, in many types of online interactions, CR-level information is still very much present. Consider, for example, a situation where negotiations between business counterparts are done online. Although researchers notice the dynamic of trust-building online is more difficult than in real life (Naquin, Paulson, 2003), such interactions are commonplace in the business world today. Overall, if an interaction is dictated by real life needs (negotiation, problem-solving, organizing, decision-making, etc.), much of the content will be attributable to the CR-level, otherwise the interaction can never complete itself in a satisfactory way.

Conversely, a wholly different domain of online experiences revolves around purely dream-level experiences. Such are, for example, the [4chan.org](http://4chan.org) discussion groups and the multitude of game-playing and role-playing communities online, fed by individual

imagination and counter-culture roles. Much of the role-play, de-identification and highly-charged emotional exchange online belongs to the dream level of experience.

In my work I consistently interact with co-workers over email. This includes both people whom I know personally and those I have never met. It is my experience that if I or any other participants slip into the dream-level of the online experience and let emotions dictate the communication style, such interactions quickly become unproductive and can have highly detrimental effect to the work relationships. (This is due to reasons outlined in Chapter 1 — emotions online often come off a lot more extreme than in face-to-face interactions). I am inclined to look at this dynamic as a sort of conflict between the two levels. The CR content of a discussion often has little bearing on the emotional/dream level that online is highly projective (using the psychoanalytic term) due to lack of non-verbal feedback and context. This dynamic is often a challenge to a facilitator or designer of online interactions.

The gap between the dream-level and the CR-level of online experience can also be noticed in examining the mainstream research on development of trust online. Research suggests that establishing trust in business/formal negotiations is difficult, and generally parties in negotiations subjectively perceive the quality of negotiation outcomes to be worse when performed online than through face-to-face interactions. Research shows that adding real life information, such as personal data, photographs, self-disclosure and identity, to online negotiations enhances trust in formal situations.

However, research on personal self-disclosure and romantic partnership online paints an almost strikingly opposite picture. Romantic relationships and friendships that begin online progress faster than those that happen in real life and, generally speaking, develop trust faster as compared to relationships established in real life. This effect is compared to that of “a stranger on the bus” where personal self-disclosure and emotional sharing occurs quicker in a situation with no CR connections between individuals.

In my view this disparity arises from the fact that online experience is mostly a dream state. If this is indeed so, then it is not surprising that romantic relationships flourish online while formal business relationships struggle. It would have to do with which levels of experiences are marginalized in either situation. So, for example, traditionally, in business contexts, dream-level experiences are usually not seen as useful (whether they are excluded consciously or implicitly). In romantic relationships, however, the opposite is true - dream experiences are very much welcome, whereas, up to a point, CR-level is not pertinent. Thus, in online facilitation, tracking the level at which the online interaction takes place is crucial and appropriate interventions differ significantly for various types of online interactions.



## Rank and power online

In Process Work, rank is defined as the effect or the force of one's communication, or an expectation that one has of such effect. To give some examples, a person with *psychological rank*, can speak powerfully or securely, making the group listen.

*Contextual rank* is one that comes from one's formal position in an organization or social structure, for example a high-level executive. Someone with contextual rank can also have a strong effect on members of their organization, but this comes from their status, not their inner sense of psychological power. Someone with *social rank*, such as a white male in a white-male-dominated society has similar expectations because of the environment in which he grew up and social conventions in this environment.

*Unconscious rank* refers to a situation when someone who doesn't perceive themselves to have rank in a particular situation nevertheless assumes control of the interaction by other means, such as, for example, talking without receiving feedback and taking up space without realizing it. In other words, rank can be seen as a measure of an individual's ability to dominate the interaction. It is also connected with one's privilege and access to resources--for example, resource of others' attention.

For any interaction to be successful, it is critical to properly address rank dynamics by identifying the kinds of rank at play, making rank differences explicit and providing proper mechanisms to counteract imbalances. Failure to do so will quickly cause a breakdown in communication. Take for example a situation when a high-rank individual (such as a CEO) invites feedback from their subordinates without first addressing their

own rank, for example, their ability to retaliate against negative feedback. Most likely this will lead to incomplete information skewed towards positive messages. This may even increase the amount of resentment felt by members of organization who do have a negative message they want communicated, since they will feel even more unheard as a result. To address rank dynamics in this situation would mean to acknowledge the rank differences and to provide mechanism to even out the playing field, such as insuring anonymity for some negative messages, or creating a non-retaliation policy.

When looking at the forms rank takes online, we see a picture that is very different from real life interactions. The imbalances are created by a wholly different set of factors. These factors may also depend on the structure of interaction and the software rules that govern it. Let's examine different forms that rank takes in the online space.

*Technical rank* refers to fluency that some individuals have with technology. Systems used for online interaction vary greatly in terms of the number of features, ease of navigating and using them, and the clarity of the overall design. Even the simplest systems require such skills as typing, which, though commonplace among younger people, can pose difficulties to older generations, especially when it comes to smaller touch-screen devices. Some level of technical proficiency can be said to be a prerequisite to even joining an online conversation. Individuals with technical background and experience using computer systems will, typically, find online media easier to use and will have less trouble navigating various features of communication systems. A special form of technical rank refers to a simple matter of having the right

devices and connectivity and, because of expense involved, is correlated to *economic rank* in Process Work. This form of rank remains pertinent, despite consistent advances towards making technology cheaper and more accessible.

*Linguistic rank* refers to participant's ability to communicate clearly in the language chosen for the interaction. In a medium which is lean on non-verbal expression, those participants who are able to express themselves clearly, fluently and concisely will naturally receive more attention than those who are not. It is also worth noting that some online communities have a lingo and a symbolic system which is endemic to that community and may be strikingly different from the mainstream written language (see Bernstein et al (2001) for a detailed discussion of such lingo and symbolic system in the 4chan discussion group community). In such environments, becoming fluent in expressing oneself may not just be a matter of having good command of a particular written language, but also a matter of becoming versed in the particular quirks of the symbolic system. At the extreme end of spectrum, this may even include learning some specialized technical skills in order to produce certain kinds of symbols not available through regular keyboard typing.

*Content rank* refers to some participants' ability to attract attention online through the content of their message. It is slightly akin to Process Work's psychological rank, but projected onto written text-based medium. While, in some cases, content rank may be due to a particular level of insight that some participants have or salience of what they write, it may also be a result of psychological attractiveness of the message without it

being a useful contribution to the discussion. On a similar note, Sifry (2014) writes on the struggle to get attention and membership online: “making the hurdle for attention higher just keeps the arms race going, a contest where inevitably the only way to get more eyeballs or clicks is to make your message more sensational, more spectacular, and more emotionally transfixing. That is, more manipulative.” (Kindle Locations 1776-1777)

*Systems rank* refers to some users’ abilities to affect the interaction as a result of being given specific privileges within the system. Such privileges are embedded in the system from the start and there are rules by which some users may be given such privileges, for example, through a vote, or through other administrative users’ decision. The privileges may include abilities that regular users don’t have, such as deleting posts, giving and revoking other users’ privileges, changing page titles, banning users, etc. This practice is commonplace online. Sites such as Wikipedia will distinguish several levels of users, including anonymous guests, registered users and administrators, or trusted users. Users with different levels of privilege have different capabilities. For example, some Wikipedia articles may be edited by anybody, including guests, whereas others can only be edited by registered users, and yet others can only be edited by privileged users, in cases of some especially contentious topics that are prone to online vandalism.

Finally, I’d like to consider *online disinhibition* as a form of rank. In some systems, notably email (which was invented and standardized long before these dynamics

became an issue), but also in some forms within newer systems, users may find ways to deliver messages to others in a way that pushes emotional boundaries far beyond what is acceptable in real life interactions. A good example of this dynamic is so called internet spam (those viagra and porn ads we still receive once in a while, despite Google's multi-million dollar attempts to curtail them). In a chat room, nothing prevents users from "spamming" the discussion by simply pasting the same message hundreds of times. In Process Work terms, this may be seen as a form of unconscious rank - a situation when someone who perceives themselves to be at a disadvantage may be able to gain notice though ignoring feedback or their effect on others.

In structuring online interactions all of these forms of rank need to be accounted for. For example, one can hardly expect to have an inclusive dialog online in a situation where some stakeholders don't have internet access. This may be a difficult issue to resolve fully. However, as technology and access becomes cheaper, we may find the inequality of technical skills and access to be diminishing quickly in the future. Also, there are other ways to access the population that does not have internet access. See, for example, [betweenthebars.org](http://betweenthebars.org), a blogging platform for people who are in prison, created by Charlie DeTar of the MIT Media Lab (same person who developed Intertwinkles, see case studies for more details). This website provides a way for the inmates, who do not have internet access, to write blogs and make online posts. This is done using a network of volunteers who act as a gateway between the online world and the paper world. The volunteers are tasked with scanning hand-written letters written by the

inmates and posting them online. They also print out responses and comments that those letters get online and send them via paper mail back to the original poster in jail.

Another aspect of technical rank is the different skill levels people have with respect to using online media. In order for something to be widely inclusive online, we must be able to design a system that is simple, intuitive, easy to understand and easy to use. When I spoke to Charlie DeTar about his work and about my ideas, there was one piece of advice he emphasized. He said that if one can't make the system barebones simple, one will never succeed in this area. The reason is that systems that are hard to understand will only be used by a small number of people and will exclude the voices of those who aren't proficient with technology. When these other voices are excluded, the productiveness of the interaction is diminished and eventually those who *can* use the system will leave as well.

With respect to systems rank (user privileges), there are also many pitfalls to consider. Bad use of rank, whether it be online or in a real life situation, is detrimental to the quality of the process. But giving some participants special privileges online isn't the same as naming their role in real life. A group can attack a bad facilitator during in-person group interactions-- one may get shouted down, given visible signals of distrust, etc. This is the way that a real life interaction will protect itself from bad use of facilitator rank. This may not be the case with system-embedded privileges if they are naively designed. If a facilitator role is encoded in the software and if such users have the ability to "physically" evict others from an online exchange (let's say by "banning" them), there

may simply be no way to counteract that. Natural protective mechanisms that groups have against bad use of rank, such as gossip, for example, may not work here, because the group may consist of people who simply have no way to contact each other outside of the system, making “banning” final and not amenable to correction.

The reason why special privileges are given to some users is that this is one possible way to counteract participants interfering with the process through spamming practices, aggressive or offensive behavior or simply statements lacking salience. Again, consider article vandalism on Wikipedia (see <http://www.buzzfeed.com>, for a hilarious list of “12 best” ones). While some of the instances are mere funny pranks and possibly only add to the charm of the platform, others aren’t as benign, when used to incite conflict around current political events. Wikipedia’s choice of having a number of trusted users, who become known to the community through their work over time, is designed to counteract that to the extent possible.

As we see from this discussion, rank dynamics are what sets online interactions far apart from those happening in physical settings. Online medium can be seen as a world created by programmers and designers, in many ways not governed by the rules we are used to in real life. Unique forms of rank that arise through rigid control of the interaction put in place by the software design make the online medium a unique and difficult setting. In addition, every social website, every decision-making system constitute their own distinct world, sometimes very different from others in look, feel, flow, features and possibilities.

The goal of working with rank is not to equalize the playing field, or to distribute power equally or fairly, as in many cases it is simply impossible to do. More often than not, acknowledging rank and being conscious of the way it is used can be a helpful tool of conflict de-escalation and trust-building. This is just as true online as it is in real life. For example, consider the fact that developers of a website, such as Facebook, have an incredible amount of control over our experience as users of their system. As they develop new features or change the look and feel of the website, our experience changes. Sometimes it happens completely unexpectedly for us. Perhaps sometimes we don't like the changes they made. Yet there is never a dialog that we, as users, can participate in, related to these changes. Facebook is a for-profit organization and is making these modifications for its own purposes. And it is within its rights, some may argue, as it provides us with its service free of charge. However, imagine for a moment, if Facebook developers were to acknowledge the effect their changes have on us, their human users, by sending us a note, for example announcing the changes before they take place. In my view it would constitute a big positive change in the atmosphere of the whole Facebook community.



## **Anonymity online**

The possibility of complete anonymity also makes online interactions very distinct from face-to-face ones. In face-to-face work, even if we don't know the person's name or address, we can still glean much information about them from just the way they look and sound. Making someone completely detached from their identity in a physical setting is virtually impossible. In the digital world, however, the opposite is true. The default state is, usually, complete anonymity, with effort required to make somebody identified. Creating full and complete identification online is virtually impossible. It isn't that we can't authenticate online participants, since financial and government websites are able to do just that routinely. It is because online authentication doesn't carry much interpersonal meaning. If some website tells you the name of the person and their age and gender, that, by itself, doesn't have the same effect on us as seeing that person and perceiving their physical characteristics directly. Furthermore, with respect to digital images, authenticating the identity of someone online doesn't mean that the photographs they post are authentic. This is a key way in which the online medium is different from physical communication, and given these constraints we need to look for proper balance between anonymous and identified communication that is both technically feasible and structurally meaningful.

While sometimes, as we saw in Chapter 1, anonymity may contribute to toxic disinhibition, Process Work teaches us that uncovering and representing the secondary process of a group (i.e. unpopular or marginalized voices) is crucial to the group's ability

to have productive dialogs (whether as part of decision-making or an awareness-oriented process); in this way, anonymity in the form of confidentiality plays an important role in Process-oriented intervention. A Process Work consultant facilitating organizational change in a corporate setting ensures anonymity by holding confidential interviews with individual employees. The contents of these interviews may later be incorporated into the consultant's conversations with the management without disclosing where the information came from. In an online interaction, by allowing anonymous communication, we can make it extremely easy to access these otherwise hidden layers of the process.

Similarly, consider the way that a World Work facilitator can draw in marginalized roles by expressing unpopular opinion in front of the group through role-play. In this situation a facilitator invites participants to play an unpopular role (a hater, an abuser, for example) framing the interaction as a kind of a theater, where what we say doesn't belong to us, but rather is an expression of a role that is "not us". In some cases, this has the effect of allowing someone in the group who has such unpopular feelings to express them more freely and personally. Once personified, this unpopular perspective can become more known within the group and can participate in decision-making, resulting in more solid and inclusive decisions.

Online we see anonymous interactions as the platform where role-play happens naturally. Consider the fascinating example of a woman who created an elaborate theatre of online personas that bore no relation to her everyday life, coining the term

“catfish” as the name for her online role-play behavior (see Jarecki, Joost, & Schulman, 2010). It is my opinion that anonymity may be conducive of a rich and creative online process if managed through skillful design.

This also brings us back to the matter of *double signals* in the online space. In real life double signals occur when an individual communicates unintentional information.

Process Work facilitation strives to notice double signals and use them as an entry point to deepen communication by allowing the underlying dynamic to express itself fully.

Consider for example a situation in which, during a negotiation, one of the parties looks away during a handshake. This signal may indicate an unwillingness to agree accompanied by a perceived inability to openly disagree. A good facilitator might step in to help the individual express their disagreement more openly, thus allowing the underlying issue to be addressed at a deeper level. Such double signal may be an indication of a polarity that is, at least to some extent, known to the participants. In other cases, a double signal may be an indication of a dynamic that is, as of yet, completely unknown. This could be an unintentional movement, such as shifting one’s weight, leaning noticeably in one direction, gesturing in some specific way, etc. All of these could, under right circumstances, be interesting doorways to explore into the unknown experiences of the group.

In my opinion finding and unfolding double-signals online is much harder than in real life, due to lack of physical information being communicated. However, some amount of information leakage could still be possible, and anonymous disinhibited behavior could

be our doorway to uncovering it. Consider the above example — that of a negotiation — but imagine now that the communication is happening online. Imagine that every side in the negotiation, including the facilitator, can have an unlimited number of anonymous personas that can enter and comment on the process at any time, so that whenever an anonymous persona is used to express an opinion, it cannot be meaningfully attributed to any actual party. It would seem useful, in such a situation, for a facilitator to always strive to express dissenting opinions via such anonymous personas and observe whether any of the parties have a reaction to such opinion. If a positive reaction is noticed, this can be used to deepen the discussion around the disagreement. This can happen anonymously at first, but with time can become accepted by the identified parties and eventually be resolved via practical steps.

In short, from the Process-oriented perspective, anonymity can be an important doorway into deepening the process of a group either through creative role-play, or through uncovering the secondary process in the absence of a more conventional ability to perceive double-signals. So we need to think about finding the right place for anonymity in the design of the online process.

There are two pitfalls to watch out for: interactions getting out of hand, due to disinhibition and, also, situations where anonymous creative role-play simply stays anonymous role-play and doesn't affect or get included in the practical aspects of the interaction. For example, a group decision-making process may benefit from anonymous roles that express positions that are too edgy to be expressed directly, but

the process will need these roles to eventually become personalized and taken into account, not just observed and ignored. In other words, practical decision-making and organizational work cannot happen between anonymous participants - the interaction has to eventually take place between fully identified people. After all, real tasks may need to be assigned as an outcome of the decision-making process. Same is true about an awareness process: if we are to gain additional awareness of other members of our community, we must see opinions expressed as those coming from real people eventually, even if they originate as anonymous voices.

So how does one include anonymity in the online process, while minimizing its negative effects? We may choose to do this in several ways.

1. Limiting the amount of interaction that can happen anonymously. For example, if we only allow one anonymous post per day (week, or some other unit of time) it may facilitate bringing in anonymous roles, without letting the interaction get out of hand.
2. Making anonymous statements short-lived, and preventing lengthy interactions through anonymous means. This follows the idea of high ephemerality on [4chan.org](http://4chan.org) as discussed in chapter 1.
3. If the design of online interaction is such where the process is separated into distinct stages (for example preliminary discussion, followed by a fleshing out of details, followed by a vote) then we can envision permitting anonymous conversation in one stage, but not others. So, for example, one can have a limited ability to participate anonymously in the initial stages of discussion, but one may not vote anonymously.

4. We may choose to make it necessary for anonymous interactions (e.g. posts) to be supported by some identified users before they become visible to a larger number of members. So, for example, if the design of an online interaction is such that some users have a designated role of facilitator and/or moderator, then we may require that anonymous posts only become visible to such privileged users until some of them choose to promote it to become visible to the larger group. Alternatively, we may occasionally display anonymous posts to random users, giving them ability to express whether these posts should be seen by others. If several identified users so endorse the anonymous post, it will then be shown more widely.

Finally, I'd like to examine the process of discovering the secondary process online. In digital text-based communication between two people or within a very small group, double-signals are scarce. While they do occur in text through general tone and style of writing, and in such attributes as the time it may take someone to respond (long vs. immediate, etc.) I don't see them as giving us enough material to work with in order to uncover the unknown secondary process. However, in larger groups, the picture might be different in that there is more likely to always be a minority of participants representing a marginalized view, and so the secondary process can be uncovered by giving it a voice. Anonymous interaction may be a good channel to do this.

## **Altered states and fields**

As I mentioned before, the online environment seems to naturally support role-play. From the perspective of Process Work we find a model for such behavior in the concept of roles, fields and altered states. Mindell (1988) defines altered states as:

A term referring to a state of consciousness which is different from the state connected to collective primary process. For example, if ordinary waking consciousness is our primary state, altered states include nocturnal dreaming, hypnotic conditions, drunken and drugged states, states centered around strong emotions like rage, panic, depression, elation, or states induced by meditation. (p. 256)

To see how this relates to the online experience, let's start by imagining a person who is in some way engaged online. While in reality interacting with the electronic device of their choice (a computer, a smartphone or a tablet, for example), they perceive themselves to also be engaged with some number of people on the other end of the network. Since usually the information about who those people are or even how many of them are listening is severely limited, our subject is forced to fill in those blanks through imagination, phantom emotions, or, in Process Work terms, through perceiving the counterparts as disembodied roles or *ghosts* (energies that are not present in the current physical space). As the situation involves very little direct feedback and is often fully anonymous, our participant is then free to assume any role in this field he/she feels

drawn to. To the extent that such role-play is not a usual part of everyday physical experience, this can be seen as an altered state. This dynamic is wide-spread across much of the online space.

This position is supported by mainstream research. Suler (2004), for instance, writes with regards to online disinhibition: “The online companion then becomes a character within one’s intrapsychic world, a character shaped partly by how the person actually presents him or herself via text communication, but also by one’s internal representational system based on personal expectations, wishes, and needs” (p. 323). Barak (2009) similarly describes phantom emotions as those that appear in a space occupied in real life by factual information, visual clues, eye contact, tone of voice, immediate feedback, etc. - all completely or mostly absent online.

Compare this with the description Mindell (1988) gives to a schizophrenic process: “The unusual characteristic of this process in contrast to the majority of other processes is that this field is unpopulated by real, living people” (p. 55). I find the parallel to be uncanny.

As we saw earlier, mainstream research cites lack of eye contact and face-to-face feedback as major factors that define online experience. Here, again, we find a parallel with Mindell’s research (1988, pp 53-55) in which he describes an “unusual feedback loop” as “typical of many diagnosed schizophrenics”.



Further, some researchers note a parallel between toxic disinhibition online and deindividuation - a process that “has traditionally been defined as a state of reduced self-awareness, or even loss of self, often associated with immersion in the group or crowd” (Lea et al, 2001). This is an interesting parallel as deindividuation often leads to destructive or otherwise socially unacceptable behaviors and is traditionally explained by an increased sense of anonymity and subsequent loss of personal responsibility in a large group (Zimbardo, 1969). While anonymity and loss of responsibility may have different reasons on- and offline, their consequences and resulting altered states may, in fact, be similar.

There is also an interesting mythical connection here: loss of personal identity of internet users through anonymity and lack of verifiable information may be mythically parallel to the very way the Internet operates: as a myriad of indistinguishable components operating in interchangeable fashion, i.e. in a way where no part is irreplaceable or in some way special. While there are important technical reasons why computer networks are designed in this way for greater stability, perhaps the altered states we experience when engaged online are due to the non-local effect of this property of the online medium itself.

Overall an important conclusion that one arrives at with respect to facilitating online experience is that one should consider approaching it much like an altered state process: having an unusual feedback loop and full of dream experiences and disembodied roles and feelings. Online, such feelings arise out of a blank space left by

the lack of non-verbal information and, in some cases, the absence of clear factual data about the other, such as name, gender, race, or physical characteristics.

## Computer fields, roles and gods

In Process Work we sometimes talk about *roles* and *fields* as pertaining to the dream-level of a group experience. A field is seen as an organizing principle within the group, and individuals are said to occupy roles that are defined by the field, either temporarily or permanently. The field and its roles interact, creating one another. A simple example of this would be a situation when an individual sees someone crying - a “child” role - and naturally wants to help them, thus stepping into a “parent” role. Even if one does not have children of their own, the parent role is known to us through our experience with our own parents, or someone else’s. Our psyche picks up that role easily. The “child” who is crying has created a field and the “parent” is another role in that field.

Process Work also talks about *ghost roles* - such roles that are not currently personified by any particular person, and yet visibly present in the interaction. These roles can be identified through noticing that some participants may be subtly addressing someone who is not currently present in the room, or having a reaction to something that didn’t actually happen in the current physical space.

While some may be inclined to see online medium as devoid of such dynamics, I have a strong feeling that, on the contrary, it has a pronounced, mystical field that affects and shapes our interactions with each other. One aspect of this field is the software system that enables online communications. Its effects are unique and warrant an in-depth discussion.

Digital medium is always governed by the rules that are programmed into the software and hardware components that enable online interactions. These rules may have come as a result of conscious design, or may have arisen without much thought, but in all cases they will determine the means by which users interact, send messages, request attention, etc. While, in some cases, the rules governing the interaction may have been an outcome of some consensus-based decision, it is almost never the case that users of the resulting system take direct part in this decision. In this way, the designers and the programmers of a computer system are roles in the interaction. And even if those same physical individuals eventually become users of the system, the role of the designer is, still, most frequently, a *ghost role*, i.e. one that is not physically represented in the moment. It is only when the discussion of the design is an explicit part of the interaction that these roles become personified and that happens rarely if at all.

Furthermore, the programmers themselves (and I am speaking from intimate personal experience) are bound by rules they have no say about. Software components never exist in a vacuum, but instead rely on other software components to operate. Computer systems are built with a hierarchy of tools, approaches and conventions, where it is often the case that the design of some of the pieces is dictated by historical factors that arose in a different time, but are still around due to difficulty of changing something that already has world-wide adoption. And just like the rules of a particular online interaction

are written in stone from the perspective of the end-user participant, the rules of *implementing* the system that enables such interaction are often written in stone from the perspective of the programmer and designer who is implementing it.

Consider standard email as an example. The protocol for exchanging email messages was developed at the very earliest stages of the Internet, even before it was a globally connected network and emails sometimes took hours or days to reach their recipients. This protocol (a term referring to the set of rules used by the computer system to send and receive messages, essentially a “language” that individual computers use to talk to each other) is set in stone as far as the global community is concerned. While individual systems may be able to use modified versions of this protocol and thus relax some of its restrictions (such as enclosed, specialized corporate email servers, like Microsoft Exchange), they have no power over their interactions with the outer world. So, for example, one simply can’t add a working feature to “unsubscribe” an email, even if one can implement it in the scope of the local system.

Such rules and restrictions, implicitly embedded into any computer system, including the Internet, become akin to the laws of physics, in that there is simply no feasible way to change or circumvent them. And yet, every programmer becomes responsible, by nature of their work, to implicitly create new ones with every decision they make related to the system they write. If someone who defines laws of physics and functioning of the Universe at large can be seen as God (a ghost role), then the computer universe can be

seen as a field with an extensive hierarchy of such “gods”, i.e. every programmer who has directly or indirectly contributed to the functioning of the online system.

Is this pertinent to our discussion in the scope of this paper? I believe it is. Ghost roles, even if not seen directly, are powerful forces, and in the online world the designer and the programmer are constant unseen presences, in that their decisions affect every moment of our interactions with the electronic device that we use for communication. Though unseen, they create emotions we experience while doing something online. (How many times, while using a website have you cursed under your breath wondering “Where is the send button?” or “Who chose this annoying color?!”?)

Process Work successfully addresses ghost-role dynamics by trying to personify them, either through role-play, or, preferably, through supporting members of the group to own some of these roles, to identify with the way in which they *are* “that thing”. The idea here is that once we can personify the ghost role, we can also interact with it and shift the structure of the field that contains it. With respect to the “god-like” nature of the computer systems developer, we are forced to concede that in order for the online interaction to be successful, we must, first, have a discussion about how we interact, by what rules, and with what restrictions and we must make that discussion an ongoing part of the process. This would be the way to personify the “gods” and make their presence known. This will allow us to develop systems that are inclusive and best serve their stated purpose.

## Containers and space

In facilitating face-to-face interactions, much attention needs to be dedicated to the so-called *container*. A container is comprised of the layout of the space, the framework around the interaction (for example the consensus of the participants to work on a particular topic), its time constraints, the quality of presence of individual participants, whether people know each other or not, and so on. The container is all things that create the space within which the participants communicate. It affects the subjective safety and depth of the interaction. Setting up the container is, thus, very important. It includes such elements as the seating arrangement (e.g. circle vs. classroom-style), having the participants introduce themselves, a discussion of ground rules, etc.

Sometimes bringing attention to the container allows for an additional level of engagement to emerge within the group. For example, during a heated exchange in the room, a Process Work facilitator may find it helpful to acknowledge and openly appreciate the presence of those participants who are observing the exchange without being an active part of it. This achieves several goals: on one hand, it clears the way for the active participants to continue their interaction, on the other hand, it acknowledges passive participants' attention as being, none-the-less, an important part of the work. This, again, brings us back to attention: containers shape and direct it, and attention is what ultimately allows the work to happen. It is especially important for participants to

notice the attention they are receiving, since being heard is, probably, the ultimate human need and is the essence underlying any effective communication.

So what constitutes a container online? How does one set it up and engage with it? I have already discussed some unique elements of the online container when I wrote about software and the rules that govern it. I will now focus more on the aspect of the online container that has to do with the participants' awareness of each other.

When we interact online, how do we know whether we are heard? Truth is, most often we simply don't. While we may get responses from others that address some points we brought up earlier, an essential element of being heard is knowing whether the other was, indeed, listening prior to responding. Naturally, a response that came from someone who didn't listen would be taken differently than one that came from someone who did. It is, then, not enough to just hear the response, as we do online, as by itself it doesn't contain this essential information.

I once had an experience working over email with someone, whose responses to my input seemed to indicate that he spent very little time reading and digesting it. Sometimes he would respond in a way that kept me puzzled - did this person even read my last email? It was a very frustrating experience. In truth, however, I did not know, and had no way of knowing, how this collaborator's attention flowed in our interaction. What if, however, such information was available? What if the email software told me how long the person spent reading my emails? It would be a different situation then - I



wouldn't have to infer it from his responses and if there was, indeed, a problem, I could address it more directly, as it would be easier to express.

This situation is even more pronounced in group interactions. Consider Facebook for example. Facebook has a "like" button, but this mechanism is a rudimentary and insufficient model for feedback. First of all, not everybody who reads one's posts may click the "like" button. But secondly, and most importantly, "like" without a "dislike" is meaningless. Sifry (2014) writes:

Participation on Facebook is also shaped dramatically by the ubiquitous "like" button. There's no way to "dislike" anything on Facebook, something that advertisers certainly appreciate. But imagine going to a real-life town hall meeting where the only way to comment on something was first to "like" it. Developers are literally banned by Facebook from making a "dislike" button for people to use, and they also aren't allowed to make apps that might encourage people to "unfriend" each other.

(Kindle locations 1944-1948)

A naive alternative would be to allow a spectrum of reactions, such as "like", "dislike", "agree", "disagree", etc. With this approach one would have to first gauge the emotional effect of a "dislike" response on the writer, but more importantly this may be a dangerous direction to go to simply because of added complexity (as defined by the sheer number of on-screen buttons one can click), which is always a concern online.

A more workable solution would be to provide a way, in some cases, to simply know who spent time and attention reading your posts. What if, in order to read a post, one had to click or tap it and hold one's finger or mouse over it for the length of time one is reading it, allowing the system to record exactly how much time was spent by every participant reading every post? What if we then take this information and reflect it back to the writer to see, in aggregate terms, who many minutes others spent on what they wrote?

Again, we want to keep things very simple and to use idioms of online behavior people are already familiar with. Since many websites already have a way to shorten on-screen space in a large discussion by having a "read more..." button following the first few lines of a post being displayed, it would be easy to record the number of times people opt to "read more". This would be a good source of feedback without overcomplicating the reading mechanism.

Interestingly, content websites (such as news organizations) spend much effort measuring in minute detail their readership patterns. They try to find out who is reading, how much time they spend on the page, how they switch from one page to another. So far, however, group communication systems online haven't been reflecting this information back to the participants. In my view this is a serious drawback of current online software, one that needs to be addressed in order for our interactions to become more effective.

Coming back to the Facebook's "like" button as a feedback mechanism, I am also thinking about "endorsement", as a way to provide feedback. The minutia of how exactly such features are presented to users is always a very important subject that requires field testing, but as an example imagine something like a "+" button next to a post, which causes the post to, possibly, change color slightly with every click, or provide some other way to know, visually, how much endorsement the post received.

Another way to provide ongoing feedback and to represent the container may be to show the amount of current activity in the discussion. This may include displaying such information as how many people are currently reading or posting, how many posts were created in the last hour/day/week, etc. In cases where agreement/disagreement is pertinent (for example when discussing a proposal), we may display the overall state of agreement within the group (as already done in Loomio and some of the Intertwinkles tools we will examine in the case study section).

## **Working on roles**

In a real-life process, the facilitator works to notice the polarities that exist in the room, with the goal of making them more visible to the group. We can envision some way of doing similar work online. For example, if users are able to express their agreement or disagreement with a particular statement, we can use automated analysis to find polarities and identify posts that belong to one of the poles, or create fluidity in the group.

So, for example, we can identify posts that are supported by the same loose subgroup of people. There may exist other posts that are supported by a different subgroup. If these subgroups don't intersect, we know there is a polarity in the discussion. If, however, later a new post is supported by members of both subgroups, we can automatically identify it as one that reduces the polarity. The system can be built to promote such posts automatically.

Sometimes in real life, when a polarity is identified, a facilitator can bring the work into a level of interpersonal relationship. So, for example, members from each of the two opposing subgroups can be given space to interact with each other in front of the rest of the group. Such small interaction can go deeper and be very productive for the whole group that watches it. Bringing a large group interaction into relationship space is an effective conflict-resolution technique.

In the online world we know that conflict resolution can be difficult because important interpersonal signals are missing in text-based communication. However, real-time interpersonal interaction, such a Skype conversation, is not feasible between a large number of participants. I imagine a hybrid approach that could work as follows.

Polarities can identify themselves in a text-based dialog, along with participants who represent the opposing views. Once this is done, we can set up a Skype conversation, or even a facilitated in-person meeting between just a few participants from different sides of the dialog, making the resulting video available for the rest of the group to watch.

## **Case Studies**

In this section I will present some examples of online platforms that implement one of the kinds of online interactions that are the focus of this paper. These, typically, do not attempt any kind of active “facilitation” of the interactions. Instead, given a task, they seem to arrive at a design that makes this particular task easy to achieve in the right context. In most cases, simplicity and narrow focus seem to be crucial design considerations. In some cases I will point out features that are reminiscent of process-oriented interventions used in real life (although only unintentionally so). I will also discuss what I think are important aspects of the design and, in some cases, its limitations.

Online decision-making: loomio.org

According to Sifry (2014), Loomio<sup>5</sup> was first developed in New Zealand by a group that was intimately familiar with the workings of the local Occupy movement. The idea behind it was to “design software that could enable groups of people, even dispersed by time and space, to work the same way [as the Occupy general assembly process]” (Kindle location 2386).

At its core, Loomio is very simple. First, it makes it easy for anyone in a Loomio group to initiate a topic for conversation. And second, it makes it easy for any group member to offer a proposal up for a vote. You can vote yes, no, abstain, or block, as in a face-to-face consensus meeting process (a block is stronger than a no vote, and can stop a group in its tracks; it is meant to be used only when a participant has serious objections to a proposal and wants to make sure they are heard before a decision is made). The software puts the vote results into a pie-chart, so at any point in the conversation about a decision, members of the group can see what the group as a whole is thinking. That’s it. It’s also easy for a group member to form a sub-group, like a committee that works on a narrower topic area. (Sifry, 2014, Kindle Locations 2395-2401)

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<sup>5</sup> Interested readers may go to [www.loomio.org](http://www.loomio.org) for more information and to watch the introductory video.

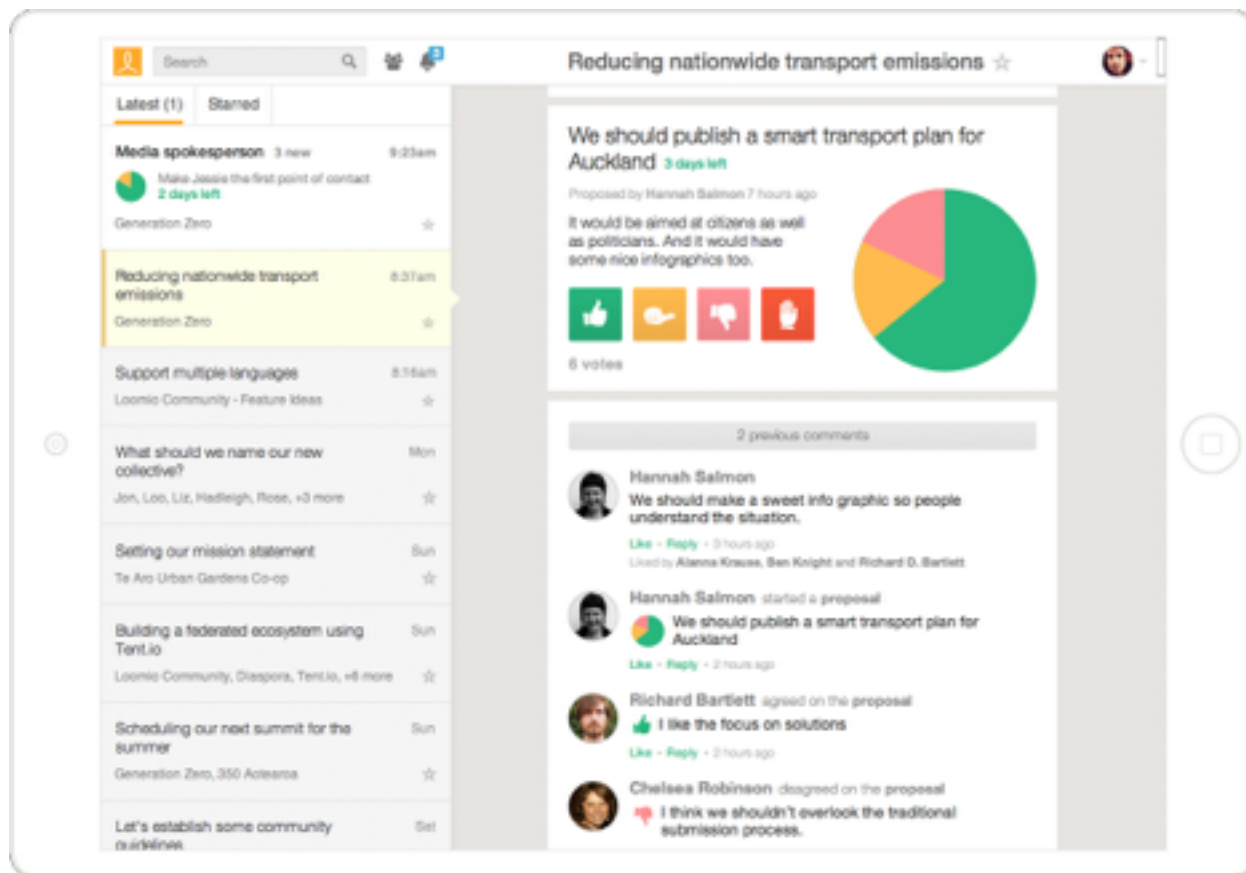


Fig. 4: Loomio screenshot<sup>6</sup>

Loomio has been adopted around the world by multiple groups and organizations. Sifry (2014) writes: “As of early 2013, Loomio had more than 2,500 beta testers using it in nearly 400 groups. By the end of the year, that had more than tripled to 8,000 people in 1,200 groups spread across thirty countries” (Kindle Locations 2404-2406).

Sifry also mentions a “need for smart community moderation; groups using the tool still need to have shared norms about their purpose and practices. But unlike many social software projects that start out by offering random people a place to congregate and

<sup>6</sup> From [www.loomio.org](http://www.loomio.org)



then invariably fail, Loomio has taken a smarter development path by first offering to host discussions for well-defined groups of people who all have something in common with each other“ (Kindle locations 2428-2431).

However, the designers recently introduced features to allow participants to “make it easier for people to participate in a decision, even without having to be part of a Loomio group beforehand. Watching their users, they’ve realized that the basic unit of participation is actually joining in a decision, not a group” (Sifry, 2014, Kindle locations 2460-2462).

In my view, Loomio represents a relatively successful effort in the field. It has the simplicity of both entry and use necessary to attract a wide range of people whose proficiency with technology varies and allows the participants to focus on the discussion at hand rather than on the quirks of the process. The interaction it encodes is one that has been used successfully in real life - “battle-tested” by the Occupy movement. Its success can also be attributed to the way the target audience of participants was chosen over time: first it was opened up to existing groups and made to work well for them, and then slowly, Loomio designers allowed the larger public entry into broader discussions.

It is worth noticing some features of the website that are reminiscent of Process-oriented facilitation techniques. For example one of the features is the way the discussion is implicitly “framed” - the pie-chart at the top confers to participants an

immediate sense of how close the discussion is to consensus. To me this is critical: it gives the immediate visual representation of the state of the discussion back to the group. Here one of the tasks of the facilitator is taken on by the computer system underlying the deliberation.

Loomio is specialized to groups and communities that self-identify as consensus-based. Such specialization is both a blessing and a curse. It is a blessing because it allows the structure of the tool to closely follow the structure of the primary process of the group that is using it and allows for relative simplicity of the design since it is created with a particular governance structure in mind. It is a curse because larger groups, or those that do not self-identify as consensus-based democratic groups in the same way or to the same extent, will not find it attractive. Yet such groups may still benefit from a similar tool that is designed in a way that increases the flow of information between participants (let's say upwards in a hierarchical organization), uncovers hidden roles, or frames the discussion. But, in such cases, they would need software which did not assume a consensus-based decision structure, as such an assumption would not be correct in most conventional organizations.


Social action: [change.org](http://change.org)


Change.org is a website that provides its users with an ability to take social action online. It is organized as a collection of so-called petitions, letters requesting actions of various authorities - government organizations, companies, schools, etc. Anyone can start a petition and anyone who supports the cause of a petition can sign it. Momentum is gained by various participants rallying additional support for petitions from friends or online communities. People can also support the petitions by organizing events in real life, such as demonstrations or dialogs, around their cause. Some petitions gain hundreds of thousands of supporters and achieve worldwide notoriety. Sifry (2014) calls [change.org](http://change.org) “[T]he closest anyone has come to cracking the code with respect to aggregating online political action” (Kind location 1582).

Petitioning The US government and 3 others

## Bring my sister home; #FreeGhonchehGhavami

خواهرم را به خانه برگردانید


 Iman Ghavami London, United Kingdom






**Confirmed victory**

This petition made change with 777,523 supporters!

Add a personal message (optional)

 The US government: Bring my sister home...

 Post to Facebook

TRITTER EMAIL

Since June 2014 my younger sister is in solitary confinement in Tehran. She was arrested for going to a men's volleyball match.

Ghoncheh is a British Iranian dual citizen. She was there to watch a game. She was arrested because of a misunderstanding.

Fig. 5. Screen-shot of a [change.org](https://www.change.org) petition. This one received over 700,000 signatures and caused the British government to take action that resulted in successful release of the woman from prison in Tehran.

It is interesting to consider the history of [change.org](https://www.change.org). It started in 2007 as a hub where users could search a large catalog of organizations to find those they wanted to support. The catalog was populated with rudimentary data purchased from a third party, but individual organizations could then "claim" their profiles and fill them with more specific information. This was similar to those websites that help you find a doctor or a lawyer. One could view this as something like a consumer-oriented approach to charity, a "supermarket for causes".

This approach didn't produce enough engagement, so the founder, Ben Rattray, revamped the site from donation-centric to content-centric. According to Sifry (2014) "deciding that a better way to find users was through organic search results, [the founder] hired editors and bloggers to cover dozens of issue areas like "gay rights" and "global warming" (Kindle Locations 1594-1597). But this apparently wasn't enough either. Finally, through observation, the developers realized that what users were most actively trying to do on the website, was introduce their own causes. This prompted a third re-design, and the features were added to the website to make possible creating online petitions and enabled further activity around them (such as the ability to send free emails to signers, etc.). Finally, after seeing how much engagement developed around user-created online petitions, the website de-emphasized centralized content creation (blogging, news) and made the online petitions its "centerpiece".

Today the site has more than 50 million online users and some of the issues that were introduced by its users gained world-wide notoriety, often prompting the action to be taken by the authorities that were otherwise passive or resistant. Some examples as listed in Sifry (2014):

... while Change.org is best known for big campaign wins like twenty-year-old Eagle Scout Zach Wahls' campaign to get the Boy Scouts of America to end their anti-gay policies or twenty-two-year-old nanny Molly Katchpole's petition demanding that

Bank of America rescind a new \$ 5-per-month banking fee, most of the “wins” are of a more small-scale and local character, such as enabling girls to play football in Philadelphia’s Catholic Youth League 33 or getting a gym in Bethesda, Maryland to take down an offensive and sexist billboard ad. (Kindle Locations 1627-1631)

Interestingly, [change.org](http://change.org) is a for-profit organization. Its customers are large advocacy organizations who are willing to pay to get traction for their own causes by piggy-backing on the support user-created petitions generate. Sometimes this involves purchasing a list of emails of people interested in a particular cause, and sometimes it means displaying “sponsored” content alongside a user-driven petition. In order to achieve growth that a for-profit company needs to have, [change.org](http://change.org) presents itself as an “open” platform. This means that by itself it doesn’t advocate on any particular side of the social and political spectrum. This sometimes creates a situation where it can be used to promote causes that are at odds with each other. The site doesn’t attempt to “resolve” this conflict in any way, as it is seen as unavoidable in this model.

There are several things I’d like to notice here. First, the website goes to some length to make the effect of a petition known. This mostly applies to physical action (such as response from authorities, for example). But none-the-less, one knows that their efforts do not go into vacuum, but are instead noticed, at least sometimes. This is probably one of the factors that enables the site’s success. On one hand, this is fairly obvious. On the

other hand, I am wondering whether consciously increasing the feedback loop, by expanding it to non-physical feedback (and making you aware of such information as how many people read your petition, how long did they spend with it, etc.) would possibly increase participation even more.

I also find it very informative the fact that the traction of the platform was gained through promoting grass-roots user-driven efforts. It was not the large prominent global causes that gained the most action, it was the local issues introduced by the individual users of the website. To the credit of the website developers, they were able to notice this and adapt. This points towards something that I already mentioned in Chapter 2, a seeming need for the meta-dialog to occur around online platforms (by meta-dialog I mean an open conversation about what the platform needs to do and how). In the case of [change.org](http://change.org) it happened implicitly, through careful observation of user behavior. I am wondering whether making the process of designing the system open to users explicitly is feasible and what potential it would hold.

## Consensus support: Intertwinkles

Charlie DeTar developed Intertwinkles as a culmination of his work on consensus-support systems at MIT Media Lab (see DeTar, 2013). From the very beginning he used the participatory design principle: “Don’t build anything without a clear target user, who is participating in the design” (p. 99). This had only limited success: he was “unable to recruit any participants who were willing to sign on to a project as a full codesign partner complete with a memorandum of understanding; nevertheless, there were a large number of interested but diffuse participants without formal relationships.” (p. 99)

Intertwinkles is not one online system. Instead it is a suite of tools, each designed to assist with a narrow well-defined task, such as brainstorming, discussing and voting for proposals, agreeing on a set of governing principles and even time-keeping at meetings. Its target user community is small consensus-based groups and organizations: activists, coops, intentional communities. The design is based on a set of principles typical for such communities: distrust of centralized external bodies (government or corporate), need for privacy, openness and relatedness within the group. The former warrants a need for being security-conscious, while latter determines such unique features as allowing users to vote on each other’s behalf.

Individual tools are built with very specific tasks in mind. Their designs value simplicity and intuitiveness as principle characteristics. For example, a tool called “Points of unity” is designed to help the group decide on a set of common principles. Principles (in a



form of text statements) can be created by anyone. Members of the group can either endorse a principle, or suggest modifications in a form of “drafts”.

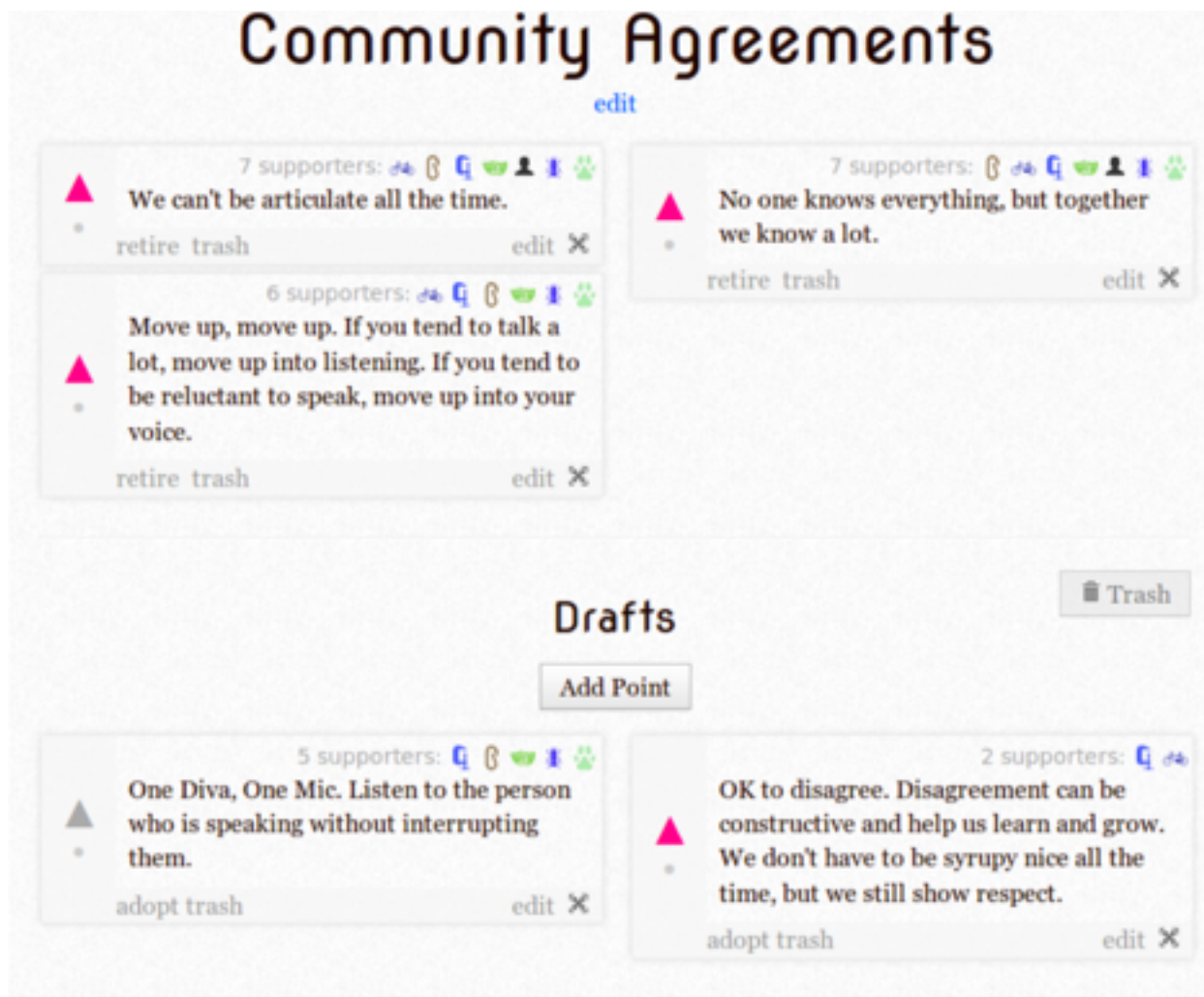


Fig 6. Screen shot of “points of unity” tool from the Intertwinkles system

Another tool from the set called “Resolve” is used to vote for proposals. Users can vote, comment, or even modify a proposal. A tally of the voting is displayed at the top of the screen.

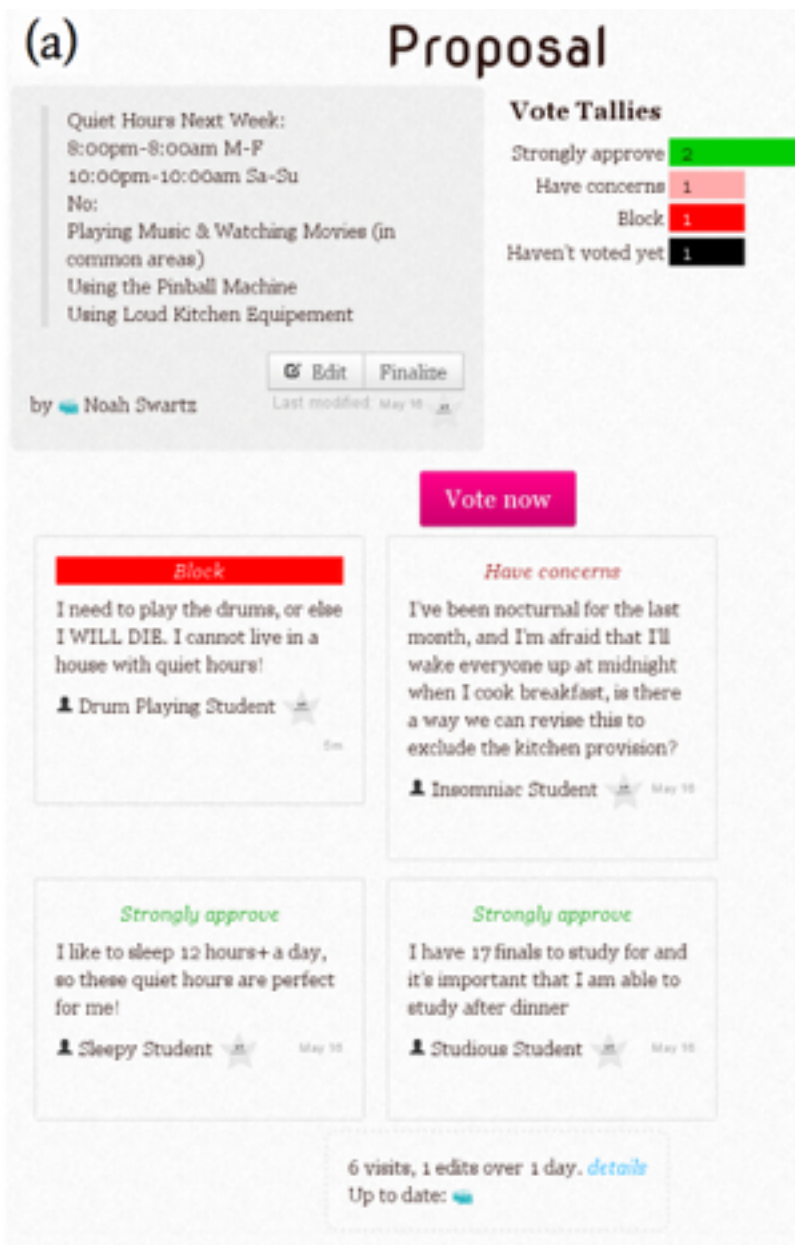


Fig 7. Screen shot from “Resolve”

An interesting take on rank and power in group discussions is presented by the tool called “Progressive Clock”, designed “for tracking speaking time in groups by identity

category (e.g. white, male, female, person of color)“. According to DeTar, “This can be helpful to groups which are encountering difficulty where people with particular identities dominate meetings. Abundant analysis of speaking time in groups has found a strong correlation with behavioral dominance and speaking more in meetings”.

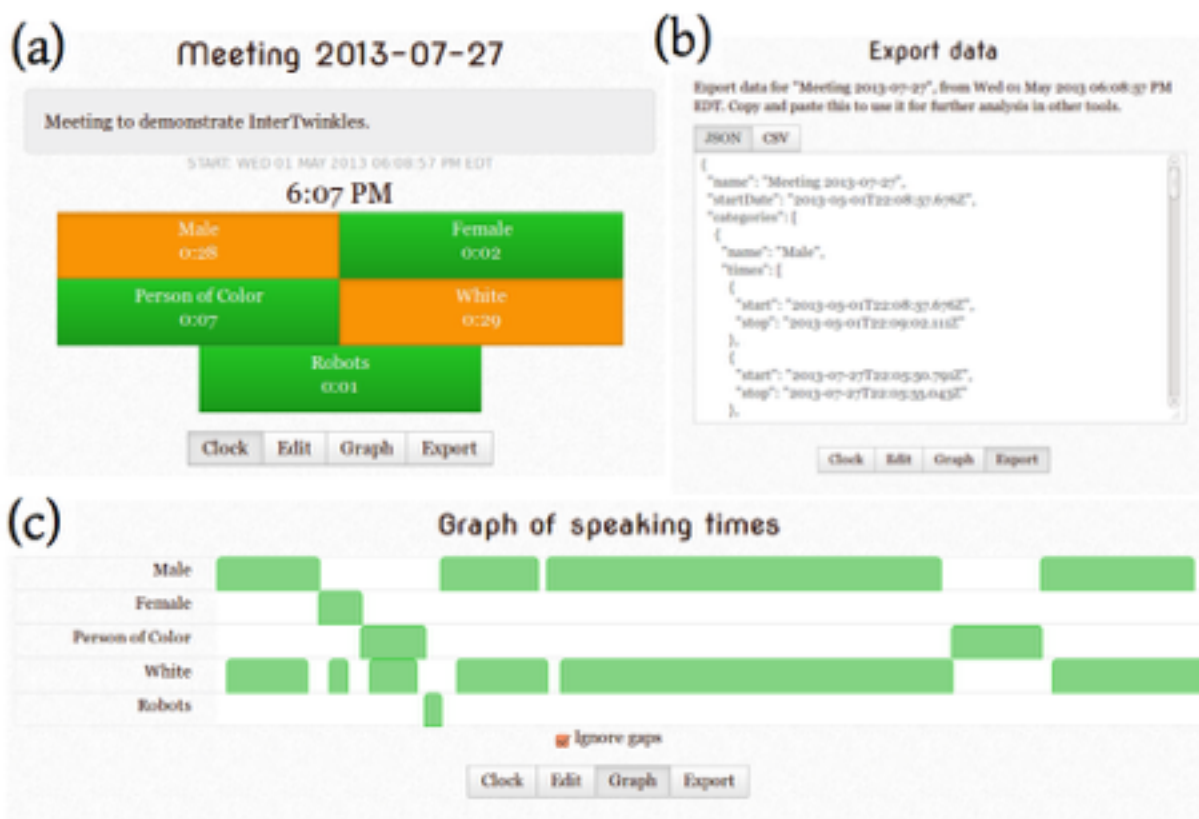


Fig 7. Graphic illustrating the functionality of “Progressive Clock”

Another important consideration in the design of these tools is whether the tool can be effectively used asynchronously (i.e. when time is not coordinated and interaction is not real-time). All tools except for Progressive Clock are designed with asynchronous communication in mind.

Intertwinkles is not a large-scale effort, and was developed to be used in small communities for some specific aspects of the consensus support process. The system is not attempting to be facilitative. In fact, DaTar writes that “The tools are not, and not intended to be, comprehensive. Human facilitators are still needed to guide a group’s process when using the tools“ (p.105). Even so, Intertwinkles and the accompanying analysis of the dynamics of design, adoption and participation are extremely informative to someone attempting to build an online communication system.

# **Conclusion and Further Research**

Throughout this paper we saw that the online world operates on fundamental principles that are very different from those at play in the physical world. Let's consider the statement I made earlier that anonymity online is the default state, in that extra effort is required to build a system where identification is possible, whereas the opposite is true of the real-life interactions, where effort is required to *remove* identification. It might appear that the reason why this is so lies in the fact that computers transmit incomplete information, whereas the true nature of our individual identity is full of subtlety and we haven't yet developed a way to give such subtlety form that is possible for computers to process. It might seem that as the technology improves, it will gain new ways to encode progressively more subtle elements of communication, thus making online communication progressively more representative of that happening in real life, and removing this divide. Indeed, the proliferation of real-time video communications, such as Skype, that became possible due to a dramatic increase in throughput of computer networks, seems to follow just this pattern.

However, I think the opposite is actually true. As technology improves, it will become progressively harder to make electronic representations conform to real-life standards. For example, virtual reality software — which is improving dramatically due to steady increase in computing speeds — makes possible creating worlds that are entirely computer-generated and make identification harder, not easier. Consider a simple feature of the online video software “Google Hangouts”, where with a click of a button you can make a cartoonish hat appear above your head on the screen of those you are speaking with. The hat will appear to move as your head moves (it's very neat!) and so

appears to stay on. This effect is simplistic (in appearance only - it involves some very advanced technology), but consider where it leads, as the software improves. Could there be a time where with a click of a button you can make yourself appear on your opponent's screen to have a different hair color or skin color? Or, perhaps, a different face, that mimics the actual facial expressions of your real face, but has completely different features? What I am suggesting here is not at all far-fetched, and it tells me that the reason for difficulty of associating online personalities with the real life ones isn't that online personalities are not detailed enough. The difficulty lies in the fact that computer systems don't associate the *data* that they operate on (such a digitized video stream) with what that data *represents*, and that such association is simply impossible.

But there is an important flip-side to this. Consider for a moment that our views of ourselves are largely made up of how other people see us, and that, in real life, people only see our real bodies, hear our real voices and respond only to those "*real*" attributes. The fact that computers allow us to present ourselves in ways and shapes that are not bound by our real-life identity makes it possible for us to be seen in other ways, those that we feel are more true to our inner reality, or simply those that we want to explore, perhaps only temporarily.

Even in real world it is a matter of life and death for some people to be seen in ways other than those dictated by our physical attributes. Such is the case with people whose identity gender is different from their birth gender. But isn't this to some lesser extent true for most of us, at least some of the time? The online medium gives us such ability

through anonymity, and so creates an environment where we may get to know ourselves in a variety of different non-physical identities, and be so reflected by others we communicate with. This to me is a strength of the online medium, one that has the potential to affect large groups of people by helping individuals become more fluid through experimenting with identities and forms that are not available to them in the physical world.

An online process can be of benefit if fluidity of identities and roles is encouraged. But it must be done wisely, since experience shows that disinhibited behavior of participants that aren't bound by real-world interpersonal constraints can lead to unproductive dialogs which may never lead to the increase of real-world awareness. Coming up with the appropriate balance between uninhibited anonymous role-play and fully identified conventional-reality dialog is critical.

It is in this area that I feel lies most promising area of further research. Someone attempting to use these concepts in a design of an actual online system must decide which mechanism s/he would use to address the usual pitfalls of anonymous communication and how to structure a system where both anonymous and identified interactions interplay with each other most productively. Much further experimentation is needed in this area.

So in conclusion, let me summarize some principles that I feel could serve to guide one's thinking in designing a particular online communication system. For many of



these, I don't yet know how to make them work in practice, nor how to make them work together. These ideas need to be attempted, explored and understood before one truly knows what they entail. Here they are:

1. A conversation often takes places between roles, not individuals. We need to identify roles and we need to enable them to interact as such. De-personifying individual expression and attributing it to a role or a sub-group could be a powerful new approach to an online process.
2. One individual can represent multiple roles. We should be conscious of this and provide a mechanism by which people can be encouraged to express multiple opinions, even those that are in seeming contradiction with each other.
3. Some roles are more secondary than others. It is important to enable anonymity in a form where it facilitates secondary roles to be expressed.
4. Attention is a very limited resource. We must be conscious of how attention is used and support or mandate brevity as well as discourage duplication of thought by motivating users to promote each other's statements instead of making their own.
5. Feedback to individual action is important. The system must be built in such a way that each participant is made aware of the effect s/he has on others. An example of this would be to reflect back to users such information as time spent by others reading their posts.
6. Ongoing information about the group's overall state is important. The system should reflect information about the group's atmosphere to each participant. In some cases

we may be able to determine the overall level of agreement or disagreement, or simply the amount of activity currently happening.

7. The system must be built in a way that promotes process, not state. Discussions on many topics may go on for a long time and even if sometimes they create a fleeting moment of consensus, we must be conscious not to end the discussion too early.
8. We should be conscious of supporting change and shift. To this end we must not allow old statements to live forever, since a polarizing statement made in the past will likely remain polarizing, even if the individual who originally made it is no longer in agreement with it.

In conclusion, I close my eyes and I see a dream. *I have a laptop in front of me. On the screen I see a reflection of an interaction happening between 50 million people. It consists of a multitude of topics, some global, others pinned to a specific area. When I focus on one topic, I am able to see the sides of the dialog represented as multi-colored circles on the screen. I can see the “center” of the discussion - the part of it that most eyes are currently focusing on. On the right I see individual posts scrolling by. Some of them I find pertinent, so I click on them, giving them energy. For every person who clicks such a post 20 more people will see it and may choose to click on it. Eventually the posts “float up” into the “center”, but by then they don’t belong to anyone in particular, yet they belong to many - the whole side of the discussion. By analyzing individual reaction to each post the system is able to place it on the appropriate side of the overall polarity. The dialog represents a whole vibrant field, yet is comprised of individual actions. Some posts can be seen to occupy a special place - they are in the middle and*

*about equally “liked” by all sides. The system promotes them automatically to become more visible, since it is designed to facilitate agreement. The current level of agreement on the topic that I am looking at is about 60%. Full consensus is never achieved, and 60% is a pretty high level. It means that people are starting to organize around a particular outcome, backing it up with their real-life identities and in some cases a donation of money towards a particular action or personal participation. The system has a way to promote real-life action. For money it includes a donation mechanism. For other things it includes a way to independently confirm that an action was indeed taken.*

*Sometimes a particular dialog happens around a topic where the other side isn't present. An agreement is quick in such cases. A group of online participants quickly agrees that they need to organize a protest against a new warehouse construction on the local waterfront. Ideas for other ways of boycotting the project are also being expressed. Those responsible for the construction can see the conversation happening and they know that if they don't intervene they will have a hard time with this project. Someone enters the dialog as a confirmed spokesperson for the company. An argument ensues. A facilitator offers help to the spokesperson. Her job is to promote a resolution that most can agree on. After some rounds of exchange a proposal is made - the warehouse project will include a small park and a waterfront improvement project. The company will also donate money to a local parks development nonprofit. The agreement is possible in principle, but both sides want specific assurances. Out of the dialog emerge several individuals who are willing to meet in person, discuss details and*

*present the outcomes to the community. This work will be on-going for several months, but the online system will be a way for all interested to monitor its progress.*

*Thousands of such conversations are concurrently happening around the world. Some include a dozen participants, others - over a million. Political bodies are paying close attention to some of these topics. They can immediately see the benefit of keeping track of where people and communities stand on some of these issues. The discussions have an effect of pulling more and more people into the middle ground, because once the true extent of the polarity is visible, there isn't as much of a polarity left.*

*And so it goes on, until something new happens....*

# References

Abbate, Janet (1999). *Inventing the Internet*. Cambridge, Mass.: MIT Press.

Azy Barak (2009) Phantom emotions: Psychological determinates of emotional experiences on the internet. *Oxford Handbook Of Internet Psychology*, Chapter 19.

Bernstein, M. S., Monroy-Hernández, A., Harry, D., André, P., Panovich, K., & Vargas, G. G. (2011). 4chan and /b/: An analysis of anonymity and ephemerality in a large online community. *Proceedings of the Fifth International AAAI Conference on Weblogs and Social Media*, 50-57.

Birgit Bräuchler (2007) Religious Conflicts in Cyberage, *Citizenship Studies*, 11:4, 329-347.

Brunton, Finn (2013). *Spam: A Shadow History of the Internet (Infrastructures)* The MIT Press. Kindle Edition.

Diamond, J., & Jones L. S. (2004). *A Path Made By Walking: Process Work In Practice*. Portland, OR: Lao Tse Press.

Diener, E. (1980). Deindividuation: The absence of self-awareness and self-regulation in group members. In P. B. Paulus (Ed.), *The psychology of group influence* (pp. 209-242). Hillsdale, NJ: Lawrence Erlbaum.

DeTar, Charles (2013) InterTwinkles: Online Tools for Non-Hierarchical, Consensus-Oriented Decision Making. Retrieved January 11<sup>th</sup> 2014 from <https://tirl.org/writing/intertwinkles/cfd-intertwinkles.pdf>.

Green, Melanie C. (2009) Trust and social interaction on the internet, Oxford Handbook of Internet Psychology, chapter 3.

Gronda, Hellene (2013) Growing, Dying and Relating: Exploring the Concept and Experience of 'the Edge', Masters Thesis, Process Work Institute, retrieved 04/2015 from <http://www.processwork.org/files/Hellene%20Gronda%20Final%20Project.pdf>

Jarecki, A., Joost, H., & Schulman, A. (2010). *Catfish* [Documentary motion picture]. USA: Supermarché & Hit The Ground Running Films.

Lapidot-Lefler, N., & Barak, A. (2012). Effects of anonymity, invisibility, and lack of eye-contact on toxic online disinhibition. *Computers in Human Behavior*, 28(2), 434-443.

Lea, M., Spears, R., & de Groot, D. (2001). Knowing me, knowing you: Anonymity effects on social identity processes within groups. *Personality and Social Psychology Bulletin*, 27(5), 526-537. --> 264.

Mindell, A. (1988). *City Shadows: Psychological Interventions In Psychiatry*. London & New York, Routledge.

Mindell, A. (2000). *Dreaming While Awake: Techniques For 24-hour Lucid Dreaming*. Charlottesville, VA, Hampton Roads.

Naquin, Charles E., Paulson, Gaylen D. (2003) Online Bargaining and Interpersonal Trust, *Journal of Applied Psychology* Vol. 88, No. 1, 113–120

Newman, Judith (2014-10-17) To Siri, With Love. How one boy with autism became BFF with Apple's Siri. *The New York Times*. Retrieved 5/5/2015 from [http://www.nytimes.com/2014/10/19/fashion/how-apples-siri-became-one-autistic-boys-bff.html?\\_r=0](http://www.nytimes.com/2014/10/19/fashion/how-apples-siri-became-one-autistic-boys-bff.html?_r=0)

Ori Brafman, Rod A. Beckstrom (2006)  
*The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations*, Penguin Group (USA) LLC.

Paulson, Gaylen D., Naquin, Charles E. (2004) Establishing Trust via Technology: Long Distance Practices and Pitfalls, *International Negotiation* Vol. **9**: 229–244

Prentice-Dunn, S., & Rogers, R. W. (1989). Deindividuation and the self-regulation of behavior. In P. B. Paulus (Ed.), *The psychology of group influence* (2nd ed., pp. 86-109). Hillsdale, NJ: Lawrence Erlbaum.

Sifry, Micah L. (2014). *The Big Disconnect: Why the Internet Hasn't Transformed Politics (Yet)*. OR Books. Kindle Edition.

Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior*, 7(3), 321-326.

Zimbardo, P. G. (1969). The human choice: Individuation, reason, and order vs. deindividuation, impulse, and chaos. \*In W. J. Arnold & D. Levine (Eds.), *Nebraska Symposium on Motivation* (pp. 237-307). Lincoln: University of Nebraska Press.