

Technology Based Interventions.

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“...the people who move through the streets are all strangers. At each encounter, they imagine a thousand things about one another; meetings which could take place between them, conversations, surprises, caresses, bites. But no one greets anyone; eyes lock for a second, then dart away, seeking other eyes, never stopping...something runs among them, an exchange of glances like lines that connect one figure with another and draw arrows, stars, triangles, until all combinations are used up in a moment, and other characters come on to the scene...”

Italo Calvino

At the core of human nature lies the fundamental principal that brings structure to human life. Chemical bonds and electrical impulses create a series of actions and reactions in almost all living organisms. Almost all of the physiological functions in the human body are dictated by such electrical impulses: this is, in a very broad sense, one of the most fundamental principals that binds all human being and make us, more or less, cohesive individuals. For example, the heart has its own electrical system that dictates the rhythm and frequency by which it pumps blood throughout the body. A special cell generates an electrical impulse that travels along an intricate electrical path to another cell that receives the information and thereby achieves a highly tuned synchronicity. The brain—the center that controls, stores and interprets memory, emotions, muscle flection, social interactions, language, motion, personal beliefs, irrational preferences and phobias—is the is most well-known and complex example of the body’s reliance on electricity. There are, however, many examples in nature that mimic this way if functioning.

The modern individual belongs to a more complex and elaborate system; she moves through social systems in the same manner electrical impulses move along the body. Navigating a complex network of social structures and channels, the individual becomes the center point that keeps these social structures alive. Yet, not everyone is interconnected, even when individuals navigate the same channels. It seems as if the daily movement through the social body has precipitated the individual into a lethargy

that precludes him or her from interacting with others. Urban life seems to push us in a different direction, away from social interaction, and yet it is this very interaction that defines us as human beings. Distinct from the electrical impulses that drive the human body, the social individual is capable of diverting from her well-tread pathways, stopping for a moment and talking to a neighbor without deteriorating the social body. Contrary to the human body's reliance on the uninterrupted movement of electrical impulses, what we define as "community" comprises a unified body of individuals that draws its power from this interruption: social interaction. For this reason it is important to reestablish these channels of communication, and reinforce what we define as community.

Considering this principle—that the fuel driving the motion of an individual/society is a series of electrical impulses—immediately we can delineate a clearer connection between humans and electronics. There is a similar principle in physics, which explains that mechanical stress applied to certain solid materials like crystals, ceramics, bone structure and even DNA and some proteins, generates an electrical impulse. This principle is called Piezoelectricity. That is to say, when direct pressure is applied to certain solid materials, it generates a small electrical impulse that can be read by several electronic devices.

Piezoelectric sensors can read touch, vibrations and shocks, and send an impulse to a recording device. Any type of microcontroller can read that information and interpret and re-contextualize it for multiple purposes. For example, series of piezoelectric sensors installed in a walking surface that receives high foot traffic in the city of Chicago can collect a great deal of information. I utilize this information to create an art intervention. The People's Platform is designed to illustrate the complexity of social interaction in a visual display that reacts to the changes in pressure and vibration due to foot traffic on the surface. It is designed to invite the viewer to reflect upon concepts such as community, social interaction, and public engagement. This project aims not only to establish a more meaningful conversation among commuters, but also between the designer and the people for whom we design. A series of mechanical impulses that translate into a small electrical shock travel along a system of wires and electrical connections; these take the information to a micro controller to be processed and reinterpreted. Then it is up to the designer, artist or whoever is using that information to visualize it or store it. In my case,

I intend to create a visual representation of the abstract interconnections between pedestrians in Chicago.

One of the greatest concerns of the GFRY studio, and most prevalent of the conversations on contemporary design, is the nature of the designer's relationship with the person he or she is designing for. For this reason it is necessary to reevaluate and/or rethink the actual process of design. Let it be known that it is not the intention of the author of these lines to attempt to solve the problem. It is on the other hand a true concern that motives him to react to the situation. My intention here is to propose a bridge between the designer and the person for whom the design is intended. A more meaningful conversation is required in order to undertake this problem. For this reason it is necessary to start in a location that embodies this dichotomy; 10 East Lake is located in the heart of downtown Chicago that gathers people from all socio-economical backgrounds. It is one of the most transited areas in the city, yet at the same time it is an empty lot that denies access to the everyday commuter.

It seems that the traditional channels of communication between all the moving parts in society have diverged from their original intention. Let us therefore reflect upon our interaction with one and other in order to revitalize those channels, or perhaps reinvent them. Perhaps the most advantageous function of technology in this case is its novelty. Therefore it is necessary to use technology to both illustrate our interaction in public spaces and to reflect upon it. The shades of interactions and possibilities that exist only in those fugitive moments when we exchange glances with our fellow commuters on the streets should materialize in order to begin to establish a stronger bridge with one and other and therefore the community at large.

*"Why do you speak to me of the stones? It is only the arch that matters to me.'...
'Without stones there is no arch."*

Italo Calvino

Tool Kit Statement.

These are a series of steps that I used to arrive to these particular projects. There are multiple ways to arrive to the same point; therefore these steps should be taken as guidelines and invitations to derive your own conclusions.