

Fields of Possibility:

Engaging with Place Through Collaborative Indeterminate Electronic
Compositions

“I believe, of course, that what we’re doing is exploring a field, that the field is limitless and without qualitative differentiation but with multiplicity of differences, that our business has changed from judgment to awareness—I believe all this and it makes me speechless, for there is nothing to say...Would it be accurate to say then that we are all off in separate corners engaged in our special concerns? No. It is more to the point to talk about the field itself, which is that it is and enables us all to be doing the same thing so differently. And about this field, nothing can be said. And yet one goes on talking, in order to make this clear.” (Cage, 1973)

Fields of Possibility is a work of creative travel and collaborative music making, centered on the nature of shared creative spaces. It is both a metaphor for, and a real-world experience of, entering into collaborative creative spaces, and allowing their nature to come through.

By engagement with people in the places and communities in which they live, I explored ways to garner and re-present the essence of our interactions and shared spaces into “living” works that embody the continual shifts and changes within the sphere of a particular environment—such as those of an individual’s presence, their home environment, their community, and so on. Each of the final pieces is a collaborative indeterminate composition (as a piece of software) that is different each time it is listened to and plays endlessly, continually re-realizing itself.

My collaborators were invited to contribute materials that would become the raw elements for these self-rearranging pieces. The idea that unfolded through this process was that of a finite and always recognizable set of elements creating something effectively infinite.

“It is of the utmost importance not to make a thing but rather to make nothing. And how is this done? Done by making something which then goes in and reminds us of nothing. It is important that this something be just something, finitely something; then very simply it goes in and becomes infinitely nothing.” (Cage, 1973)

Thus each piece can be thought of as a “class”—a set of attributes through which a great diversity can be expressed while always remaining recognizable as being *of* that class. The paradox of the “field of possibilities” is expressed; that the field is finite—in this case, each piece consists of a finite set of samples whose parameters are manipulated within limited ranges—but within that finite field the possible variations are infinite.

Nature of Collaborations

“Although network theory often focuses on large-scale behaviors, these large-scale behaviors are fundamentally provoked by the ability of one individual to influence another and the notion that people can change their strategies depending on what other people are doing. Through these dynamics alone, systems can self-organize in remarkably complex ways.”

(Borgo, 2006)

Dialectics here comes to the fore, as it is only through multiple perspectives that we can move beyond the otherwise all-consuming illusion of our limited field of existence. From another viewpoint we can see, from the outside, the illusion in which we are immersed. Through the constraints of our own “field of possibilities” (our individual existence), we can recognize our separateness from the viewpoints of others, and thus can choose to engage with and understand those viewpoints in order to recognize our own constraints and what exists beyond them.

It was in this way that I chose to focus on the real-world human interactions, rather than the software or composition systems. This consisted of shared spaces—people inviting me into their living environment (their town, their home)—and me inviting them into a creative exchange. The choices they made would then affect the future interactions I’d have with others, serving to grow the network of behaviours that thus informed the journey of these pieces.

Behaviours were also reflected between the unfolding journeys and the development of the software. Many of the algorithmic processes in the pieces are random, however, these are ‘tuned’ randomizations of certain parameters within tested and refined ranges, and alongside other rule-constraints. This is reflected in the journeys themselves—the basic choice was to go to a place and create music, apart from that, once I got there the journey and its collaborations could unfold in any way, within the structure of the needs of this project that I had chosen to fulfill. However, each place had a character, a nature that I’d do my best to tune in to. And so it was also with creating these pieces, and accepting randomization as a principle of unfoldment within an aesthetic framework. Making the choice to create the piece is analogous to making the choice to make a journey to a place; once I get there, I can allow whatever needs to happen to happen, while conscious that the “place” (i.e. the piece of music) has a nature, an essence, a set of characteristics, just as a physical environment or a person does. In the case of the pieces of music, the “nature” is that there are many raw materials and rules of transformation that are fixed – thus the character of each piece is always recognizable; always changing, transforming, reconfiguring, but always unique in essence.

Towards these ends, my intention was to communicate options and an open, flexible framework to my collaborators that would allow for each of them to communicate whatever they felt drawn to communicate, rather than having them fulfill some aesthetic preconception that I’d led them to. Thus, they were free to make and record sounds, to manipulate recordings, to tell a story, show pictures, or communicate in whatever other way they were comfortable with, so as to not be overwhelmed or sidetracked by communicating through an unfamiliar medium. This also opened the project up to the possibilities of ways of creating and communicating that were well outside my oeuvre—thus again feeding into the generative network of creative interactions.

Although these collaborations were actually largely undertaken separately—that is, I created the final pieces on my own after the trips—there was still a great deal of interaction and exchange of ideas towards a shared presence in, and

awareness of, the creative space. Collaborators were given room to contribute whatever they felt to, and as they did, we entered into conversation and exchange of ideas as to how best achieve what they had in mind. In this way, we each developed and communicated a sense of what was significant in that physical space, and in the space that was to be created through the pieces themselves—with the pieces themselves seen as organisms, and also as the life-worlds of their constituent elements.

“The organism is equipped by its organs to play precisely the tune its milieu has composed for it, like an instrument playing in a larger orchestra. Each living thing, including the human, is a melodic line of development, a movement of counterpoint, in a symphony composed of larger and more complex movements provided by its objects, the qualities that its world illuminates or sounds off for it. Both the organism and its Umwelt [life-world] taken together are the units of survival. Each organism is a musician completely taken over by its tune, an instrument, ironically, only of a larger performance in which it is only one role, one voice or melody.”

(Grosz, 2008)

After creating the pieces I found that there was a large translation gap between my understanding of what each person was trying to express, and what I was able to represent of that. I’d say this was largely a matter of perspective, that if one is not absolutely present, then often one can’t perceive the essence of a place until one has significant distance away from it. Once outside of a sphere, we can see the ranges and limits of its influence. But also I discovered that what came through was not necessarily what had been apparent on the surface—that subconscious influences and exchanges were realized through these pieces.

Structures and Frameworks

Akin to Brian Eno's *Music for Airports*, the concept for each piece of music was a finite set of sounds (loops of recorded audio) created through the collaborative exchanges. Each piece is limited to a pre-determined set of loops, and the possible manipulations to them—but the myriad ways these samples can be recombined is so huge as to be virtually limitless—the loops are all different sizes, so they are constantly going in and out of phase, any combination of these samples could be playing at any time at any volume, with any combination of given effects and quadrophonic positioning, and so on—and these parameters are all constantly in flux. On top of this, a piece only ends when the listener decides to end it—it can theoretically keep playing and keep changing forever. Although, again, this is a paradox because it does not learn or evolve, thus it changes endlessly only via a limited palette of parameters. Its “endless changes” are constrained within laws governing its field of existence, its life-world.

“Uexküll argues that an animal is not immersed wholesale in a given milieu, but at best engages with certain features that are of significance to it, that counterpoint, in some sense, with its own organs. Each organism in every species is surrounded by its Umwelt, an “island of the senses” that is always a considerable simplification of the information and energy provided by any milieu. The Umwelt of the organism is precisely as complex as the organs of that organism – Uexküll advocates an extreme perspectivism in which objects are not autonomous or independent sets of qualities and quantities, but opportunities for engagement that offer themselves in particular ways to particular organs and remain otherwise indiscernable. Organisms are sense-bubbles, monads composed of coextensive overlapping beings and fragments of milieus, enclosing and carrying with them elements, one might even understand them as musical counterpoints, that are only given outside, to which the organism is itself a brilliant and inventive response.”

(Grosz, 2008)

Authenticity: Real and Virtual Places

This is also a philosophical and aesthetic investigation, tied to notions of intuition and place as discussed in *Preparing a Space* (see Appendix). How does it feel to listen to a piece of music that is conceived via human aesthetic sensibilities but then altered via automatic algorithmic processes—that is, re-realized as a virtual place. Is this authentic to the synthesis of my intentions and those of my collaborators? Can this be beautiful? Is the music any less “alive”? If a piece of music is an entity that can animate and bring life to a space in which it is played, does it animate and bring life to the software through which it is played? Does the stream of binary data—of yes and no, one and zero, black and white—become a stream of colour and form, greater than the sum of its parts? I don’t feel that any of these questions have here been, or need to be, answered, and I suspect that any attempt to answer would be subjective at any rate. In many ways, carrying out this project is more like an allegory, a simple story to bring into being some manifestation, some microcosm, of the paradox of the shifting potentials of living fields that is ever-present at myriad levels of reality. The practicalities of this current manifestation, in essence, deal with the relationship between real and virtual spaces—how one can translate a real space, or an imaginary one, into a virtual space, and how a virtual space is re-realized as a real space or an imaginary space; in this case, as the data-stream results in music that is physically realized via speakers.

Future Developments

The reason for the final realizations of each piece being software is that the works need to be alive with the potential of shifting relationships; to be different every time, to change dynamically, and to keep on changing indefinitely. As such, a rendered audio file or any other fixed medium could not accommodate these needs. With this in mind, there was no reason why the software that plays the music, couldn’t be the same software that creates the music. Indeed, the project was initially conceived as a process and a system (i.e. a piece of software) not

only for delivering (to the public) these indeterminate pieces of music, but also for creating the raw materials and rules from scratch, and for altering (remixing/re-performing) the finished works.

Although on paper I mapped this out quite thoroughly, and it would have been possible to realize, I found in practice it became an unnecessary technical feat that would have crystallized this medium before allowing a period of more open experimentation. It also would have meant that the collaborators would have been forced to work with this software—which, as I discovered along the way, would have been a great creative hindrance to most of them. So in the end, decoupling the creation and delivery processes allowed for more open and fertile creative interactions. That said, some means of bringing together the composition/performance/re-interpretation/delivery aspects into an integrated whole, while finding a way to accommodate diverse ways of interacting with collaborators, is still a valuable direction for future iterations of this research.

Aside from those large-scale changes, there are also a few technical particulars that would be important aspects to develop. Firstly, at present most of the musical changes are carried out by constrained random procedures. A more sophisticated algorithm—such as using moment-to-moment frequency and volume data from the piece itself (or from the real-world environment via microphones) to continually determine how it should unfold—would be the first important development to take place in the scope of larger research. This would give greater expressive potential to sculpting the parameters of each piece—the ranges of the parameters could be more meaningfully attuned to the characteristics of the piece, and the piece itself would be richer as it would be making adjustments based on an internal feedback mechanism—it would essentially be listening to itself and/or to the world around it.

Secondly, a system of when to trigger sounds, and the options of loop synchronization and rhythmic quantization, would all serve to support much more involved structures—where at present the system relies heavily on slow crossfades between certain types of sounds, usually slow and long, that lend themselves to floating, unstructured formations.

Another possible, though less essential, step of developing these collaborative pieces is find a way for two or more people to perform a piece at the same time, or at least in a continuous kind of Exquisite Corpse game—one after the other, responding to each other's ideas in one unbroken stream of recording. The constituent elements could then be recombined by the algorithm, or potentially re-performed/remixed by human performers if, as discussed above, that re-performance aspect of the software was also integrated.

Lastly, the software currently has a very idiosyncratic “performance style”. Implicit in all these improvements is the intention of growing the expressive potential of this software to the point that anyone can use it to make their own music, where the workings of the software become transparent to the creative intention of the composer/performers(s)—that is, the software's idiosyncrasies dissolve and clear the way for the composer/performer's voice.

Conclusion

At its essence, *Fields of Possibility* is simply about shared creative spaces. It is both a metaphor and a real-world experience of entering into collaborative creativity and allowing the nature of a space to come through. It is a metaphor in the sense that it is akin to entering into a creative process—where the work is the ‘space’—and listening to and allowing that to be what it needs to be, thus doing one's best not to impose preconceived notions on what one thinks the work should be. It is ‘real-world’ in the sense that I'm sharing the space with these people, and in that shared space, we are able to communicate the nature of the creative exchange that is to take place. Understanding each other's creative needs is paramount, and care must be taken not to override another's, and not to allow one's own to be over-ridden. A dialectic interplay subtly unfolds where the nature of mutual intention is revealed and refined through each piece.

As an unfolding collaborative journey in music, focusing on the notion of place—as analogous in physical environment, people-as-places, and musical environment alike—the pieces of music that emerge from this journey look at

the fields of those places and their infinite and yet constrained characteristics, natures, and auras. The pieces of music are then made to reflect this—they are constrained to a pool of potential materials, but within this there is endless reconfiguration and transformation. Unconstrained by time, yet always changing within the constraints of a field of possibilities, one can know and recognize the nature of each field without needing to know what-will-happen-when.

References

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