

# Juum Means Noise in Maya<sup>1</sup>

## *Improvisation, electronic sound, and the art of coding I*

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This document explores the artistic practices and research activities I develop in my work from a historical and theoretical perspective<sup>2</sup>. For a more personal approach refers to the other document *The Shape of the Spiral*.

### **Areas of engagement**

When I started to write this document I faced a problem. Which are my “areas of engagement”? After evaluating the different angles that I could have taken, it became clear that there is neither a single area nor clear delimited mediums of engagement in my work. While it is clear that there is a collection of mediums, techniques, and expressive desires that have been present for many years and seems to remain in my future work, the balance and importance of each element varies among different projects. These elements are: sound as main medium, improvisation as technique for organizing materials, coding as a mechanism for extending the expressive pallet, and live mixing of media as a vehicle of exploration.

### **Electronic music**

The history of electronic music is surly longer than the electric era, and started in the creative imagination of musicians, writers, and visionaries. With the gradual but constant development of technologies -initially mechanic, later electronic, and finally digital-, sound recording, reproduction, transformation, and sound synthesis and analysis became first feasible, then possible, and now easily accessible. [7][11][13][18][24][55][56][60]

Nowadays, the *electronic sound* has been assimilated and we find it in all kind of sonic contexts from massive pop commercial music to refined and complex compositions, from cell phones bells to elegant and sublime electroacoustic performances. The *electronic sound* has been blended with reality and is now part of our culture and society. [51]

It is in this context that electroacoustic musicians we are producing and performing sound material. The only possible way we have to transmit meaning and poetic ideas is by carefully organizing and shaping our materials and giving them the right context and connotation. In other words, we as experts of sound organization have the responsibility of creating artworks with deep and strong poetical meaning. [14][15][42][54]

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<sup>1</sup> While not native Indians from the Peninsula of Yucatan, half of the author’s roots come from that region of Mexico. The author’s family has had a natural desire of preserving some of such influence that can be find in the family cooking and use of Mayan phrases and words.

<sup>2</sup> Present even a small overview of the history and theory of the different areas cover in the document is impossible. The bibliography presented help to contextualize the text.

It is important to mention that in recent years computer music has integrated knowledge and development from technical areas that are offering new possibilities of music composition, analysis and organization. As examples some books, journal articles, and conference proceedings papers are cited. [1][2][4][5][8][9][12][16][22][25][26][27][28][30][31][32][33][35][36][37][39][40][41][43][44][50][68].

## **Improvisation**

The term *music improvisation* is extremely generic and covers different types, situations, contexts, and methods of music creation, being the only constant the desire of leaving some parameters open to variation during the execution of the musical material. The specific parameters, their range of variability, and the acoustical, structural and compositional implications of such decisions depend on the type of improvisation that in most of the cases relies on the musical context where the term is employed. [6][34][48][49][52][53][61]

*Gestural improvisation* is a type of free improvisation that aims to create short and long-term relationships in several parameters such as pitch and intensity. The gestural improvisation style is closely related to the concept of *real-time composition* and is an interesting field for developing code and digital technologies. [20][45][46][62][63][64][65].

## **Coding as an extension of the art production**

If the medium permeates the meaning, and the characteristics of the medium are given by its internal configuration, then in the digital context the code that generates the medium will impact the final meaning. This is true at different levels of the analysis: technically by defining our pallet of possibilities and constraining the resources depending on the software we employ, socially by subscribing the user to a particular group that employs the same tools, and pedagogically by the influence of the previous works of the group in our work. [47]

In a historical moment where specific code is developed for specific art pieces, we can suggest that the code that generates the art piece is a hidden part of the work itself. If the code changes the art piece change, and the art piece would not exist if the code –created with the art piece in mind- would not have been written.

Said that, it possible to see coding as an extension of the art production. Therefore the importance of developing our coding environments is not only technical but also aesthetical and conceptual. [19]

## **Live performance**

For some philosophers and thinkers art is *ritual* and *collectivity* [23]. In order to achieve the entire art experience live performance and/or active participation by the audience are required. While recording is extraordinary for distribution and preservation, and studio listening is great for studying, analyzing, and experiencing the *sonic* component of a musical work; the concert format with live performances still offering a sensual and poetic framework for achieving an “art experience” as a hole where performance, drama, theater, and the human body become unified. [63][64]

## Mixing of mediums

During the twenty-century, with the gradual incorporation into society of digital technologies the Wagner's idea of *total art* has become at least partially achieved. From superficial entertainment to sensual and original art works, creators are exploring and creating pieces of art composed of several *modules* each in different medium. Audio, video, sculpture, painting and dynamic graphics, dance, theater, electronics, mechanics, poetry and literature, methodological science, among a huge list of human activities are digital interconnected and open for art exploration. [3][38][67]

While working in single media is still attractive and open to discover and creativity, the expressive possibilities of interrelating different areas are more attractive and offer a bigger space for purposing original and challenging sensuality.

## Musical human computer interaction

From my point of view, the introduction of computers in the art has mainly created new mechanisms of reproduction and recreation of traditional art forms. The creation of original art work where the use of digital media induces new art paradigms, new types of perception, and personal use of the media is possible but rare and hard to achieve. Artist of my generation we all use computers one-way or another, however few artist uses the computer originally. In order to take advantage of digital media it is a must not only to understand and master its properties, singularities, behaviors, and technicalities but also understand the relationship with human activities. [66]

Human Computer Interaction is the field that study such relationships mainly from practical and usability perspectives, but we could stretch its meaning to philosophical, and ontological views. It is within this framework, that Musical Human Computer Interaction can be seen as the area that study the relationships obtained from the mixing of digital and human elements in the musical domain. [1][5][13][41][45][52][54][61][67][57][58][59]

## Digital performance and New media

On his book, *Digital Performance* [17] Steve Dixon gives an extraordinary overview and history about the use of technology in the arts. Several points clearly emerge by observing the developing in the digitalization of art,

- Content and more important context of the content are still the *key* elements for creating poetic and greatness work.
- The field of art and technology has been permeated –and probably will remain permeated- by an unhealthy but natural cult to technology displacing in many occasions the art meaning.
- Even if we sometimes could argue that digitalization of art is a recycling of old paradigms, it is clear that new media “has and does bring about genuinely new stylistic and aesthetic modes, and unique and unprecedented performances experiences, genres, and ontologies.” [17]

It is of extreme importance to take into account these points, learn from them, and include derived conclusion into the creative process by suggesting and creating work with meaning, sensuality, and poetry that using technology suggest new aesthetics.

## **Partial Conclusions**

In order to produce original, significant, and transcendental digital art works our delimited space of exploration has to be contextualized within the broad area of digital performance and new media. We also have to master our expressive resources not only by developing the technical skills but most important by understanding the implications of their relationship with the human condition and human perception.

In the case of sound based work –as stand alone media, or supported with other mediums- we have to work having in mind the importance of the concepts and poetic ideas that encompass the work, and also the importance of the content and value of the context. In the case of improvisation works, we have to carefully study the reasons and methodologies of the improvisatory techniques and maintain a responsibility in the result. It is important also, to deepen into the implications -at artistic, technical, and ontological levels- of blending the code that produces the artwork with the art piece itself.

Finally, it is of extreme importance to have in mind that all the work we do –by nature interdisciplinary and technology oriented in many times- has to be driven by an artistic sensuality. This mean that our poetic intuition supported by our experience, knowledge, and technical skills should aim for the production of works that help –creators and observers- to understand some element of our human condition.

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<sup>3</sup> This bibliography was collected for the course Research Techniques in Digital Arts.

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<sup>i</sup> This document corresponds to the written portion of the qualifying examination of the DXARTS PhD program that ask for the history and theory of the candidate's mediums of engagement.