

On Plasticity: Sound Cartographies

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Thus, even more than a substance, plastic is the very idea of its infinite transformation; it is, as its common name indicates, ubiquity made visible; and it is indeed in this aspect that it stands as a miraculous matter: the miracle is always a brusque conversion of nature. Plastic has remained totally impregnated with this admission: it is less an object than the trail of a movement.

Roland Barthes

There are terms that we use so often that they lose their primary meaning and wander aimlessly, subjected to the inclemency of their usages. We have become used to designating a certain set of artistic practices as *plastic arts*, without this showing any special clarification as to the nature of what is being named. A first reconstruction of the meaning of that designation might involve the etymological origin of the term, which since the very beginning, with the Greeks, has been associated to the field of aesthetics. Thus, the Greek *plastikós* – *relative to works in clay and to their modelling* – would provide a wider understanding of the plastic nature of materials and of their malleability, but also of their availability to take on a shape, even under permanent contingency. The idea of a material that is subjected to modelling (and which accepts it in a way that is completely different to other, more noble materials such as stone) but which is outside the congealing of the mould that allows the fixing of the shapes is the character that seems to define the plasticity of some arts. Plasticity thus evokes a whole material but also conceptual view that is dominated by variability and transformation, the backcloth to which is that soft matter of which the human hand is the metamorphosing agent.

On the other hand, the fact that the *plastic arts* are always referred to in the plural refers to the modern division between a plural and a singular of the arts,

in which art in the singular is always defined outside the restricted field of technique and arts in the plural are always in the more precise field of technique. The arts would thus be technical and art would be poetic. The plurality and openness towards the world of the former would be the opposite of the circular self-absorption of art, also known as aestheticism. The plural of the arts would always amount to a face-to-face confrontation with technique, and its singular could be understood as an untranslatable common denominator. In this manner, each of the arts would only be able to be configured in the plurality of the means it uses. But the implications of this division are not so simple, and it is possible to counterpoise it with a singular plural of art, a problematic statement proposed to us, for example, by Jean-Luc Nancy.^[1] This singular plural tells us that it is impossible to think of the abstract singular of art without thinking of its concrete plural, forcing one to relocate the break between art and technique on a plane in which its operational capacity is questioned. If we go back to the original meaning of *techné*, which for the Greeks meant not only the name for the activities and skills of the artisan, but also for the arts of the mind and the so-called fine arts, the break between art and technique, between a plural and singular of art, no longer makes any sense. *Techné*, in its illuminating splendour, as Heidegger^[2] reminds us, belongs to the field of *poiesis*, and is above all an instrument of revelation – “the *poiesis* of the fine arts was also called *techné*”.^[3] It is before that internal rift that we should seek the essence of the relationships between art and technique, a couple which mutually attracts and repels each other like two old friends. Because is it not the “technicality of art that dislodges art from its poetic security”,^[4] that is, from its aestheticising rest? And is it not the poetics of art that frees art from the prison of technique? Thus Nancy was able to state that “the ‘end of art’ is always the beginning of its plurality”,^[5] to which we might add that the end of the arts, its technical exhaustion, is always the continuous re-beginning of art. As Benjamin has taught us, all of the arts are inscribed, for the better or for the worse, within a time of techniques.

Let us now return to that suggestive idea of a plasticity inherent to (the) art(s) in order to think of it also outside the aesthetic field. Well, according to Catherine Malabou,^[6] plasticity may today be characterised as a *conceptual symptom*, or as an operating scheme that has been increasingly used in several different areas of knowledge, not only as a metaphor but also, for example, as an interpretational model for the functioning of social systems, of neuronal networks or of biological models in general. But where is the irresistible appeal of plasticity as an operational or interpretational model? For Malabou, the essence of plasticity resides in its dual substantive condition that designates that which is capable of giving but also of receiving form, or, to be more precise, in

the “double movement, contradictory and thus indissociable, of the emerging of and of the annihilation of the form”, [7] thus taking its place in a between-two in which the very idea of creation is at play. But Catherine Malabou, in her reading of Hegel, goes further in her conceptual definition of plasticity in linking it to subjectivity, being dependent as it is on the processes of *self-determination*, in which “the universal (the substance) and the particular (the autonomy of accidents) mutually inform each other” [8] according to principles that are close to the purely plastic mechanisms of individuation. In this manner, subjectivity and accident would be intimately connected, with the plastic process being a game between form and its metamorphosis that depends on accident, on *what happens to it*, [9] but in which the substance is granted with the capacity to self-determine its mutations, to expose itself to that which is outside it, without endangering its own essence, conjugating resistance and fluidity in a single action. It is indeed in that rejection of passivity, in that idea that all individuality constructs and simultaneously receives its own form, that the operativity and presence of plasticity is to be found.

The modern concept of plasticity – which oscillates between its aesthetic origin, closely connected to the plastic characteristics of matter, and its updating, more centred on a biological signification, of a plasticity of life itself – is still today fully active in order for us to comprehend the mechanisms of artistic practice, very particularly in the field of the plastic arts. We might even say that if we wished to find a term capable of fusing these two meanings of plasticity for the territory of art we could only do so in the hybrid state of a certain *bio-aesthetics*, an operative mechanism that explains the relationship of the substance with its accident in the field of plasticity.

We must then return to the field of aesthetics in order to observe that the idea of plasticity, even in its widest sense, is impossible to be thought of outside of this problematic relationship between art and technique, the more so because, as we have seen, the point of dissolution of art is also “the point of re-affirming of its plastic independence”, [10] of the plurality of its sensible plasticity. But also because modernity and the path of art in its singular have taught us that artistic practice has developed, far beyond that sensible plasticity, another plasticity that we might call conceptual, and that it is in this double face of plasticity that the *singular plural* of art may be found. This tension between art and technique, between an art of ends and an art of means, places art once again far beyond the mere option between its ends and its means, placing it more precisely as a place of intense experimentation. The fact that this experimentation has only radically taken over art in the era of technique – and so often beyond technique itself – only confirms the need to re-think the opposition between means and ends. In relation to this, Maria Teresa Cruz reminds us that, “artistic

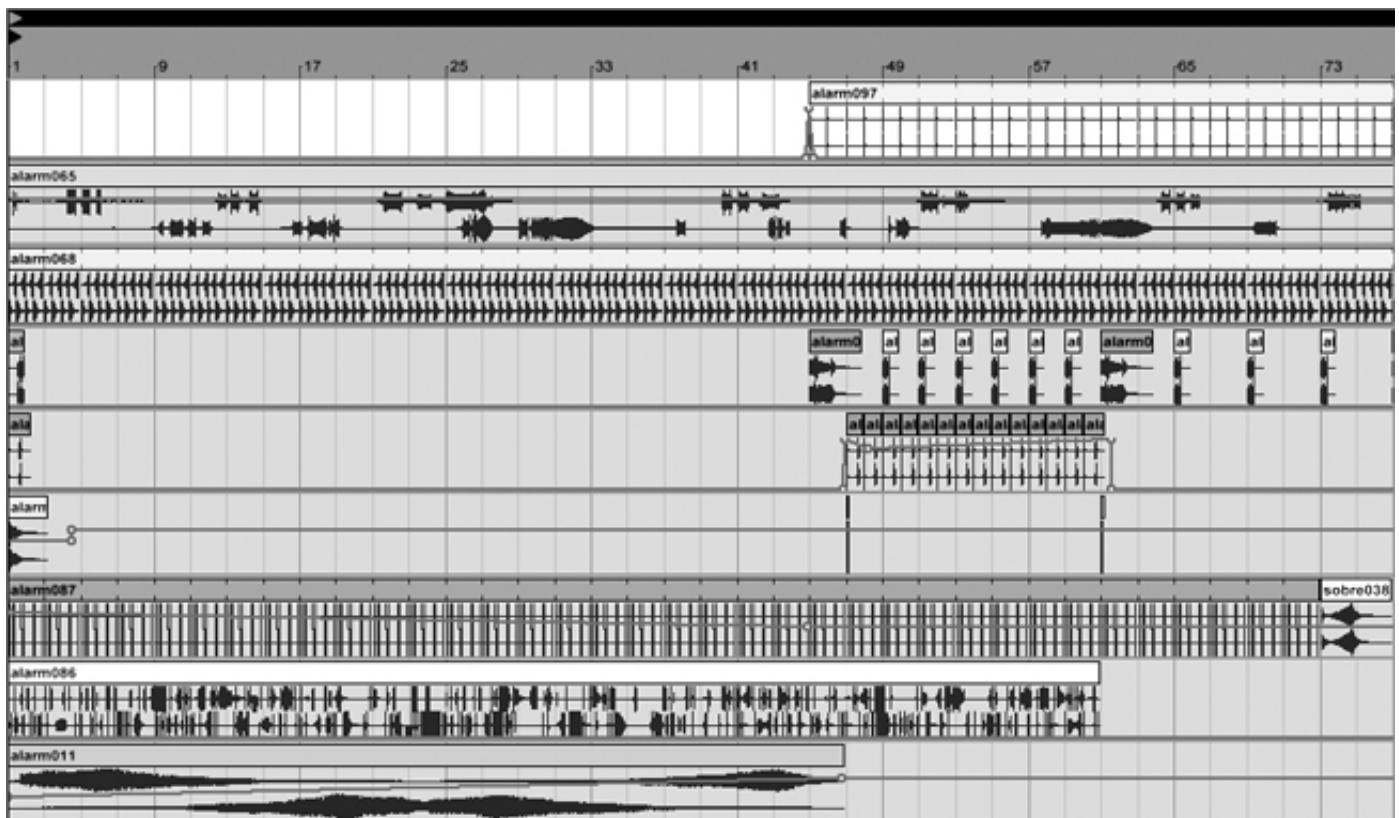
experimentation, often appearing to be an essay in means, is in fact an essay in ends, that is, an essay in freedom”,^[11] with that linear kinship between technique and experimentation being thus destroyed. Which is because, according to Maria Teresa Cruz’s reasoning, the modern laboratory of art has made the whole of life its space for experimentation, and it is, indeed, subjective. That subjectivity draws out a triangle the vertices of which are three verbs: to be able, to want and to do; that is, it is located at the centre of the volitive tensions that make up plasticity as we have tried to schematically define it. And if art sometimes, at least in the manner we have come to understand it since modernity, seems to turn its back on technique in order to look more attentively at its ontology that is foremost a plastics of freedom, it is also true that it is cyclically compelled to return to technique. Today, at a time when technical devices are unquestionably taking control of experience, we are witnessing a veritable recovery of that primordial relationship between art and technique – to which Heidegger alluded –, to the point of it seeming that the aesthetic issues of experimentation and of plasticity itself are once again returning towards technique.

Pedro Tudela’s most recent work is exactly at the epicentre of this argument, particularly due to the way that it has manipulated sound matter and in the way that the latter has taken on an invasive and central role in each of his interventions. This work of his with sound and with its crossing with other languages has been taking place for some time, yet it appears that it has only taken on significant autonomy over the last few years in the field of the plastic arts in which Tudela has always acted.

Indeed it was over ten years ago, in 1992, that Pedro Tudela presented his first sound installation – in the exhibition “Mute... Life” –, in what was still a mere sound environment for the objects being exhibited in the gallery and with which it co-existed in a relatively autonomous manner. Even so, already in 1993, in the work *Take a Walk Inside*, presented in the exhibition “Tradition, Avant-Garde and Modernity in the Portuguese XX Century”, which took place in the Auditorio de Galicia, in Santiago de Compostela, Pedro Tudela experimented with the incorporation of sound and its mechanisms of reproduction in the work itself. However, this was an isolated case during that period, and the principles of relationship between the objects and the sound still showed an unbalanced hierarchy in favour of the former. Even the division between Pedro Tudela’s own work and his collaboration work in the field of sound (at the time shared particularly with Pedro Almeida and Alex Fernandes) only served to reinforce that clear separation that marked out several experiments taking place on a

similar register for a few more years. It was necessary to wait for the exhibition “Traces”, in 1997, for us to be able to witness the objectualisation of sound itself, integrated in an inseparable manner into some of the works being exhibited. The sounds thus became something like extensions of the images and of the objects, functioning in a complementary manner that was sometimes somewhat descriptive or even tautological. In several works following this, such as, for example, in his intervention in the Pharmacy Faculty of the University of Oporto in the context of the exhibition “The Experience of the Place”, this objectual understanding of sound was refined, in a direct relationship with the materials and the events of the place. The exhibits literally began to embody the speakers that uttered the sound, and it was no longer possible to deal with these two instances – the material object and the non-material sound – as independent things.

In Tudela’s work since then sound has most often emerged as an underlining of a manipulated initial nature, but has almost always been more directly connected to an object or to an event, and is often impregnated with a metaphorical dimension. In his proposal for the spaces in the Serralves Museum, Pedro Tudela is going one step further, as we will see, in this process of exploring the plasticity of sound, treating it as autonomous matter, itself creating images, objects and paths.



There is a surprising number of plastic artists who today manipulate sound matter, incorporating it within their projects, releasing CDs, performing as DJs and VJs, and even shifting their main activity into that territory that until a very short time ago was closed to them by the rules of technical specialisation. There may be reasons for this movement that can be found in the increasing approximation between the several different arts, or even in the limitations of the so-called plastic arts, which need attention to other languages, but to a large extent that option became possible because the specific abilities required for working with sound have been reduced to a minimum – at least for carrying out a set of basic operations. That movement also has its reverse side, with the approximation to the plastic practices of art by many people moving in from other territories, who explore the emptying of workshop practices that art traditionally required. A part of these movements is due to the technical emptying of art and another part, paradoxically, to the possibility of delegating skills to technique itself.

In the particular case of the use of sound, the digital revolution and the consequent generalisation of the tools of computing have brought about a radical change that oscillates exactly between technical emptying and its recovery. The introduction of graphic interfaces allowing the visualisation of sound has greatly contributed towards plastic artists (trained more specifically to work in the field of the visual) being at home in manipulating the waves they see on their computer monitors. Sound matter has literally become visual, and it is these graphic representations that are stretched, shrunk, cut or pasted in order to obtain the desired results or even to experiment with surprises in the correlations between sounds and their visualisations. The notations of conventional musical script have nothing to do with this new reality in the sense that the actions on this script are only fully realized with the action of the musician on the instrument, in a process that always obeys the interpretational principles of translation. But an action on the graphic visualisation of a digital sound implies an immediate reflection on the sound itself. It is the existence of a same code, the zeros and ones of computation, that leads us to think that in these cases the *image is the sound*.^[12] On the other hand, the characteristics of the digital, which divides the information into samples, as opposed to the continuous organisation of analogical information (although it is possible to find analogical media that combine both solutions – continuous and discreet –, as is the case of the cinema), that are easily capable of being remixed and appropriated, have enhanced the reproducing principles that have taken hold of electronic music and which plastic artists had long ago incorporated, as is proven by the whole history of collage and montage. As digital information is not only discontinuous but also quantified, that combining calculation takes on

completely new proportions, making it particularly plastic. But does the digital pose the questions of the plasticity in a different manner, or even in a more intense one?

There are, it is true, specific elements of digital information that make it a *plastic* matter, as if perfectly responding to that magic trick that Barthes associates to all plasticity and which allows the conversion of matter, almost stripping it of a body, making it essentially the *trail of a movement*. Firstly, it is in that abstraction through absolute concentration on matter that the fundamentals of the plasticity of the digital can be found. This is not done without some contradictions however.

According to Lev Manovich there are five principles governing digital media (or numerical media, as he prefers it): numerical representation, modularity, automation, variability and trans-codification.^[13] Numerical representation and trans-codification were principles that had been called upon when we referred to digital sound, its visualisations and mixings, and variability is also, as we have seen, essential for us to be able to speak of a plasticity of the digital. But the principle of modularity appears to clash with the very idea of plasticity.

Catherine Malabou states that “plastic is that which is not modular”, in the sense that modularity presupposes a fixed architecture, thus removing it from the plasticity, for example, of thought.^[14] On the other hand, recent chaos theories teach us that fractility also implies a determined degree of modularity, only structured exponentially and from which its variability depends. Even so, modularity, due to the discontinuity it implies, seems to break with the idea of a matter that is capable of being transformed yet which resists, in a movement in the opposite sense, its *infinite deformation*.

The ideas of programming and of annulling an intention underlying automation also go against the volitive and experimental principles we connect to the concept of plasticity. However, and in a new contradictory movement, it is also this indifference in relation to what is most human in the gesture that allows a plasticity in which the experimental decision is delegated to the machine’s greater or lesser competence. With the digital experimentation often involves allowing the machine itself to experiment.

These principles of the contingency and variability of the digital are precisely that which Pedro Tudela’s work most intensely shares with the territory of so-called electronic music, being then distinguished by his attention to the above-

mentioned objectualisation of the sounds, sometimes in greater proximity to the sculpture and at other times having working methods that call up a flatter spatiality. However, in this installation, very simply entitled *Over*, some different aspects emerge, particularly because the sound does not only inhabit the objects or statically occupy a space, but rather operates in the field of a wider spatiality. The sounds effectively take over our paths, largely destroying the descriptive character that some of them, even though they are manipulated, might still transmit.

The exhibition, despite presenting a set of works that may be shown autonomously, can only be understood as a whole that one moves through like a line-up of paths that each individual work is restricted to punctuating. If we draw up a scheme standing out from the plan of the rooms in which the several different works are set up, yet maintaining their relative positions, we may better understand this construction of a space that gives itself to the movement of our body (see figure 1).

movements throughout the installation will provide us with soon. Our gaze is, in the meantime, led by some other steel cables to a window opening over the stairs to the auditorium bar. These lines seem to project the sound itself over the plane of the window, and two speakers are placed on the glass set up in this opening, one turned inwards and the other towards whomever is in the atrium, in turn reproducing a sound (e') which is now the result of a double reflection (an echo) originating in the re-mixing of the other sound we called (e). Indeed, sound (e) should be called (e'') and sound (e') could also accept the designation (e''') and so on indefinitely, as in theory, and if it were possible to take this reflexivity between sounds to the limit, these sounds would behave like the images in two mirrors placed in front of each other, mirroring each other mutually until their dissolution.

In the inner rooms, where the rest of Pedro Tudela's intervention takes place, we have four sound moments – and also the sound here designated as (e') – punctuating the visitor's path. Sounds (a), (b) and (c) are manipulations and re-mixings of various capturings and appropriations, some of which are taken from the spaces of the Serralves Museum itself; and sound (d) is mere static noise, a sort of primordial residue of sound matter itself.

All of these sounds refer to each other, forming an internal path, in a model of self-referentiality that is the appanage of all systems, the construction of which “is based on their capacity to ‘dialogue with themselves’”.^[15] But there is also a series of external, less static paths which depend on each visitor and on the way he establishes his extensive and intensive maps in his relating to the sounds, images, objects and their layout in the spaces. At each moment in our path the sounds are remixed in different layers, closer to us or more distant, clearer or fading away. This physical contamination among the sounds denies any idea of purity and autonomy for the different works in the exhibition. Curiously, after a first attempt establishing an outline of the space in which the works are installed (we are thinking of the network of steel cables in the atrium), it is more of a cartographic understanding of the way the different parts are related to each other, to the place and to the visitors that most stands out.^[16] It is for this reason that here the plasticity we have been dealing with is not exhausted in the constant manipulation and variability of the parts in relation to a whole that maintains a certain unity but which is also prolonged throughout the paths exterior to it and that help in the construction of the body of this intervention as much as its paths of self-referentiality.

As a conclusion, and taking advantage of the tone set by Pedro Tudela himself,

we may now more closely observe the intervention taking up two rooms at the end of this exhibition. When we reach the penultimate room we see a video projection that occupies a whole wall, staging the destructive explosion of a plane. This is a sequence of slow-motion images accompanied by sounds (c), which are descriptive, yet out of sync with the images, of explosions and of broken glass. The opening allowing access to the last room is barred by a perforated glass panel letting us hear those other static sounds (d) we have already referred to. Through the glass we may see the inside of the room and the debris from the explosion. Faced with this staged event we guess that the object of destruction might be one of the walls hidden from our gaze, due to the blind angle of observation.

The option for the use of slow motion in the video reinforces some of the ideas related to the plasticity we have been analysing. Indeed, the moving cinema or video image, working in the field of plasticity, of its distancing and abstraction in relation to the real, reveals an intense optical dependence of the world, thus necessitating encounter with its element of plastic variability in order to show the thickness of its own matter. And what is the infinitely variable matter of the cinema and of video other than time itself? As we are reminded of by Dominique Païni, it is time that the moving image manipulates as it sees fit. Time is moulded in a particular manner in the editing process, but it is above all in that operation we call *slow motion* that we may find one of the most intense forms of showing the *viscosity* of the material in the arts of the moving image. With *slow motion* the plasticity of time takes on a sensible thickness and photogrammes take on unexpected visibility, which allows Païni to conclude that with *slow motion* we find a sort of *plastic awareness* of the unfolding of the cinematographic images, *making time itself a plastic matter*.^[17]

These last rooms thus reinforce the idea that a subtractive process may generate new things and that in order for matter to show its plasticity it is above all necessary to grant it thickness. Just as in the video, we also find the viscosity of the material in the sound in the last room. The sound that is heard there is pure static, residual material or just its state right before being shaped. It is also the hidden part of sound; the phantom that haunts it and that may be originated only by the flights and imperfections of the process. It is an aesthetics of the residue that ends up presiding over the major part of the plasticity that the digital has made possible and which the intervention in these rooms stresses, showing the exposing of matter to accident and to contingency, its opening up *to what happens to it*.

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Translation David Prescott

[1] See Nancy, Jean-Luc, *Les Muses*, Paris, Galilée, 1994.

[2] See Heidegger, Martin, “The Question Concerning Technology” [Die Frage nach der Technik] in *The Question Concerning Technology and Other Essays*, New York, Harper & Row, 1977 (1954).

[3] *Ibid.*, p. 34.

[4] Nancy, Jean-Luc, *op. cit.*, p. 66.

[5] *Ibid.*

[6] Malabou, Catherine, “Le voue de Plasticité”, in *Plasticité*, Paris, Léo Scheer, 2000. See also her book *L’Avenir de Hegel – Plasticité, Temporalité, Dialectique*, Paris, Vrin, 1996.

[7] Malabou, Catherine, “Le voue de Plasticité”, p. 8.

[8] Malabou, Catherine, *L’Avenir de Hegel – Plasticité, Temporalité, Dialectique*, p. 25.

[9] *Ibid.*, pp. 9-10.

[10] Nancy, Jean-Luc, *op. cit.*, p. 77.

[11] Cruz, Teresa, “Arte e experimentação – Tecnociência e os laboratórios da arte”, in *A Experiência do Lugar*, Oporto, Porto 2001, 2001, p. 36.

[12] See, for an introduction to these issues, Abreu, Rui Miguel, “Samplar=a pintar o som”, *Número*, no. 4, Lisbon, Ópio – Arte e Cultura, Winter 1999, pp. 52-57.

[13] See Manovich, Lev, *The Language of New Media*, Cambridge (Mass.), MIT Press, 2000, pp. 27-48.

[14] See Malabou, Catherine, “Le voue de Plasticité”, pp.13-14.

[15] Malabou, Catherine, “Le voue de Plasticité”, p. 21.

[16] Cf. Deleuze, Gilles, “O que nos dizem as crianças”, in *Crítica e Clínica*, Lisbon, Século XXI, 2000, pp. 87-95 (1993).

[17] For this issue of the plasticity of the cinema in relation to the *ralenti* that places its matter "between solidification and liquefaction", see the text "Ralentir", by Dominique Païni, included in the above-mentioned volume *Plasticité*, directed by Catherine Malabou (pp.188-193).