A conversation between Ricardo Trigo and David Armengol

David Armengol

Background Immunity *is a newly-produced project centred on the evolution of certain materials of an industrial nature. You incorporate in it pieces of a sculptural and objectual character, a ready-made linked to fire and a video installation in which you offer a visual and oral narrative that structures all the content. At one point, the voice of the narrator utters a message that is key to understanding your discursive position: "Progress is our freedom and our limitation".*

Ricardo Trigo

Broadly speaking, I have taken a critical approach to the notion of progress and the forms it adopts in various aspects of society. Progress understood as a projection towards the future that always expresses improvement in the human condition. My work occupies the cracks in this idea. I am interested in the process whereby the underlying idea of progress as a myth has percolated into society. This goes back to modernity and reaches its climax in it, when the driving ideas that dragged themselves to the present day were forged. Progress was to fix the ideas and beliefs that establish that the history of humankind is linear and progressive; that humans are the masters of their future; that the more technological progress there is, the greater the social wellbeing; that the only true path is the path of technical and scientific reason. Accepting these premises as the only ones that are valid leads us to end up justifying the disasters of progress in the interests of its own advance. As Paul Virilio would say, accidents are the price progress has to pay. The problem lies in the fact that we have structured our entire society on behalf of progress, and in order to continue advancing, we accept or overlook its costs. It seems we are unable to stop the machine. Consequently, we cannot uncouple ourselves from progress. Progress has provided us with prostheses so that we can connect ourselves to reality, but in turn these prostheses have made us increasingly dependent on the world we have created, made to measure to suit itself and with its own logic.

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This 'made to measure' and logic that you speak of is in keeping with your analysis of some of the brands found in the realms of industry, engineering and technology, which have also made a foray into the field of the visual arts, but more as supports or systems of protection. For example, Plexiglas or polyester sheets like Vivak – which is sold by the pharmaceutical and chemical company Bayer. In your case, the approach to the material rejects the

conventional use and instead embraces a discursive purpose. A discourse that ultimately plays with meta-referentiality to explore the staged artifices of art.

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Yes, I'm especially interested in analysing how the chemical and technology industries have supplied art down the years with a series of materials and tools which, in my opinion, have ended up profoundly affecting its particular language. By and large, since the 20th century, art has embraced technological inventions as mere instruments that it can employ, that is to say, technological artefacts developed by technological progress have been accepted by artists as receptacles in which they can deposit their ideas. It is this same argument that has perpetuated the divide between the concepts of hardware (material) and software (ideas). In contrast, I believe they are indivisible. Applying this equation to artistic practice could be translated by saying that we can arrive at an understanding of its language by analysing the materials. Working with these materials in their raw state, or reviving their memory, places them in the realm of visibility and helps us to point to and understand the relationships of production and of power in which they are inserted and deployed.

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This union between hardware and software is evident in the formalisation of Background Immunity in the exhibition room. I'd like us to talk about the time it took to make Preresolutions, Oriented Combustions *and* Handy Rules. *How did you arrive at the different graphic solutions that appear on the surface of the works? I'm especially interested in the aesthetic, flexible and unstable use that you make of processes of a technical and industrial methodology.*

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Preresolutions (2015-2016) centres on the reviving of a story to do with Plexiglas, an acrylic plastic originally patented by Otto Röhm in 1933 and sold during the Second World War. It was installed in the cabins of war planes and submarines, which led to the discovery by Harold Ridley, a British ophthalmologist, that the shards of Plexiglas that got into the eyes of the RAF pilots he was seeing as patients did not cause rejection reactions in human tissue. Years later, Dr. Lloyd developed intraocular lenses and the first modern cataract surgery using an acrylic plastic lens implanted in the eye. In the series, I present Plexiglas as material in its raw state and destroyed. Firstly, I disassociate it and impede its function as a usual support for printing images on; secondly, by means of its breakage, I point to the history of the material.

In the case of *Oriented Combustions* (2015-2016), I arrived at its formal resolution by means of a process of visual research and a methodological process through which a highly symbolic technological procedure runs. The series is an exercise in visual archaeology to do with the representation of smoke in the Bayer company. In this case, smoke operates as a value that transcends the field of science and which the company uses in a different way in accordance with the ethics that prevail in each era. So, we go from its use as a representation of industrial productivity to its absence as a sign of caring for the environment. In my research, this takes the form of an archive of images in which chimneys emitting smoke appear. I digitally edit these images in order to isolate the smoke from the background so I can get just the shape, which I subsequently reproduce using real smoke on polyester supports (Vivak) made by Bayer themselves. I carry out this process of reproduction mechanically and digitally by means of the computer control of a programmed robotic arm holding a burning candle. The flame draws on the panels a series of smoke shapes that correspond with a historical document belonging to the company itself. Throughout the process, I am keen to draw attention to what happens when an element like fire is subjected to attempted precision computer control. In other words, even though we might program the movements of the robotic arm down to the millimetre, whenever we want to reproduce a piece (a Bayer document) more than once, we will obtain a different result, as the combustion of the candle obeys rhythms of constant transformation. We can see this in pieces in the exhibition: *Oriented Combustions No 4 (Bayer in Leverkusen, 1988, and Bayer in Elberfeld, 1881)*, produced in 2015, and *Oriented Combustions No 5 (Bayer in Leverkusen, 1988, and Bayer in Elberfeld, 1881)*, again from this year.

In the *Handy Rules* series (2016), I take aspirin produced by Bayer and the Burnus detergent made by Rhom and Haas, plus the polyester panels manufactured by Bayer (Vivak) and sheets of polymethyl methacrylate (Plexiglas) – patented by Rhom and Haas – as emblems of the two companies. In an amateurish way, based on YouTube tutorials, I synthesised the chemical composition of aspirin and of the cleaning product using lard. Lastly, I use the built-in Android security features – which are representative of freeware – with a view to extracting various screen lock pattern graphics. I record these common gestures we make to unlock our mobile phones on acrylic sheets and I later fill them in using my homemade synthesis of aspirin and soap. With this work, I was keen to accentuate the possibility of subverting the dynamics of intellectual property and of access to information established since the industrial era and the loss of the power the company wielded by having exclusive informa-

tion that occurred thanks to the rapidly increasing democratisation of access to knowledge.

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In your pieces, there are countless stimuli and historical, technological and even social references, such as the reference to the pattern to unlock a mobile phone, or the homemade production of aspirin or soap by following YouTube tutorials. These many layers that you bring into play make me think of Performing Attachments *(2014-2016). All the screws used to affix the various works are not exactly ordinary screws. The gradual evolution of 3D printing technologies and the crisis affecting the unique and the universal come into play here.*

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Performing Attachments does indeed play an important role in the project. I start with various types of commercial screws (hexagonal, Allen, Phillips, Robertson and Pentalobe), reproduce them using 3D printing technology and employ them to fix various objects in place. The screws are printed in ABS plastic, developed by the German petrochemical company BASF and one of the most commonly used plastics for 3D printing in Europe. Screws are artefacts that traditionally remain concealed in artworks, which is why I try to overturn this logic and make them visible and prominent. *Performing Attachments* (2014-2016) is, then, a work added to other works, a work displayed in areas where the work generally stops being an artwork. Moreover, screws are conceptually regarded as artefacts through which it is possible to clarify the internal connections between technology and society. It is no surprise that it was at the height of the 19th century, specifically in 1841, that the Englishman Joseph Whitworth proposed a universal thread to the British Institution of Civil Engineers (Nieto Palomo, 2010, p. 241), or that William Sellers should suggest the same in the United States in 1864. In 1946, the ISO (International Organization for Standardization) defined the metric thread system, now currently used by almost every country (Wikipedia, 2016). To take the approach of Manuel de Landa, we can match up these historical events with the increase in the use of technology and the gradual process of standardisation and homogenisation in modern society. Seen in this light, it is interesting to consider two cases that arose in the first half of the 20th century concerning the way screw patents are handled. In 1907, Peter L. Robertson patented a recessed square-drive, pan-head screw (Rybczynski, 2013, pp. 80-81). In 1926, after several meetings with Henry Ford and other American businessmen, Robertson decided not to give up control of the production processes (Rybczynski, 2013, p. 82). As a coun-

terpoint to this event, we have the story of Henry F. Phillips, who patented a screw that was an improvement on an earlier design by John P. Thompson in 1936. This was the cross-recessed screw. Unlike Robertson, Phillips decided to grant licences permitting the use of his patents to other screw manufacturers (Rybczynski, 2013, p. 83). By 1939, Phillips screws were already in the hands of most screw manufacturers in the United States (Rybczynski, 2013, p. 84). Over the course of the history of screws, we can see how modern society has rolled out its project of increasing technology, in part due to the process of standardisation and regulation of certain knowledge. Apple's Pentalobe screw is another case in point. This screw is in the shape of a flower with five petals, designed in 2009 and developed by the company to prevent customers gaining access to the hardware of their products. Having arrived at this point, and to get back to your question, information technology allows us to access the code, the design of screws, and to reproduce them using 3D printing. In the end, it's like copying music. We are entering the era of 'copying and pasting' and of sampling objects out there in the world.

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As we said at the start of our conversation, the video – which, moreover, you have decided to screen on the wooden crates used to transport the works – has a narrative nature with a two-fold objective: firstly, and by way of a false documentary, a strange voice accompanies a sequence of images of your own and archive images that sum up the intentions of the project (the historical evolution of progress, factories, smoke, fire, Bayer, etc.); and, secondly, the audio-visual tale itself is deliberately revealed to be a filmic artifice that demands to be used. The materials, in this case cinematographic, function in a way similar to the works of sculpture.

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In the video, I have tried to keep up a discursive pace similar to that of plastic artworks. I have tried to bring to the fore not only the narrated account of the notion of progress, but also the technology itself necessary to make the video, which was basically my Apple computer and its editing software. The video also works as an element that shows part of the research done in the works displayed in the exhibition and, in turn, proposes to overturn the status of a construct that every project has. Once again, I have tried to point to the tools and prostheses with which we generate discourse. At one particular moment, the 3D designs of the screws that we have printed in plastic and copper appear in the video. They are shown burning in a virtual fire, and this situation brings us back to the heart of the matter: all information is available to be performatted.

To my mind, the artifice is related to this idea, to the potential things have to transform into others.

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You mentioned that moment in the video in which the 3D screws are burning in a virtual fire, an image that really strengthens the notion of artifice that defines the entire project, and leads me to a question about the incursion of a real fire into the exhibition by means of a ready-made, a lit pellet stove. An exercise in taming and mastering fire that establishes direct links with the other works, both the video (with the chimney, the smoke from the factories, the burning of the Zeppelin, the 3D smoke emerging from the desktop wallpaper, etc.) and physical works such as Oriented Combustions. *In a way, it seems as if the stove symbolically encapsulates the discourse even though it is performing its usual function. The burning of the pellets in the exhibition room as an allegorical summing-up of* Background Immunity.

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Precisely. The stove is a central element in the exhibition, an element taken from the real world that I have used to draw together a series of ideas that interest me and which are expressed in the project. The stove electronically regulates the amount of fuel, the pellets (100% environmentally-friendly biomass), that is fed into the burner. The quantity of pellets that the stove burns is in response to and regulated by the external temperature sensed by the stove. This process can be interpreted as an example of controlling fire by means of a technological process. By burning biomass, the stove emits very little smoke to the outside world and an amount of CO_2 so small it makes virtually no contribution to the greenhouse effect. We can also see it as a treatment of man's control and dominance over smoke. In addition, I have placed two screws – specifically, one copy of a Phillips screw and the other a copy of a Pentalobe – in the stove burner. Both were printed using copper. In the combination of the flame and the copper screws that are withstanding the heat generated inside the stove, we can appreciate the distance that exists between the industrial era and the present day. Two elements like fire and copper, both archetypal of the past, today subjected to a process of technological taming. In other words, the stove remains a stove that burns wood, but the processes that exist behind this obvious fact give us very valuable information about where we are today.

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Talking about where we are, I'd like to end this conversation by talking about the connection between your project and an entire area of thinking – not just in art but also in philosophy – associated with another type of speculative and metaphysical materialism. A new way of understanding material, or even the object, that has forged a strong link between formal practices and conceptual positions. It seems today that there is a strong tendency to revive matter in art.

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Background Immunity comes under what are called the 'new materialisms', which encompass a very diverse range of trends in the human and social sciences. The new materialisms explore the development of social structures by focusing on the crucial role played by the tenacity of the material world. History, social practices, aesthetic output and, in short, all knowledge can no longer be understood as a direct creation by human beings but as the outcome of the impact of and interaction with materiality and technologies. In one way or another, neomaterialism lays emphasis on calling into question the form of material configuration of the world. Specifically, we could say that they are approaches that analyse the structures and tangles that end up shaping the cultural and social elements with which we produce and produce ourselves. This stance leads to the restructuring of many of the ontological categories rooted in modernity. The rethinking and restructuring of the place of the material and immaterial in the specific realm of artistic practices are some of these categories that we should be addressing.

Nieto Palomo, Jesús (2010). *Instalaciones de fontanería: teoría y orientación práctica*. Madrid: Ed. Paraninfo.
    Rybczynski, Witold (2013). *One Good Turn: A Natural History of the Screwdriver and the Screw.* New York: Ed. Simon and Schuster.
Wikipedia (2016). *Tornillo*, <https://es.wikipedia.org/wiki/Tornillo>. (Last access: 1.5.2016.)