Hacking the Interfaces of Access Culture and Envisioning the Literacy of the Post-Capitalistic Future: On The Installation Works by Technologies To The People/Daniel G. Andújar

Access to Technology is a Human Right™

Since its foundation by Daniel G. Andújar in 1996, the organisation Technologies To The People (TTTP) has promoted its multiple activities under the heading of this slogan, and as such it serves as a relevant point of approach to these activities.¹ The slogan is a straightforward, honest political statement, yet with the addition of the trademark sign the statement introduces an ambiguous, if not downright confusing discourse. What does it mean to trademark a self-declared human right, and what kind of property is the trademark actually protecting, the content or the sentence? In accordance with this ambiguity neither TTTP nor Andújar have explained the reason for the trademark, nor have they commented on the slogan, except perhaps by trademarking several of its projects. One of those projects might in fact suggest a preliminary reading of the slogan. Remember, language is not freeTM, alternatively

^{1.} Officially, Technologies To The People is an entity in itself at the same time as it functions as a conceptual framework for Daniel G. Andújar's artistic practice. Technologies To The People has sponsored several of Andújar's projects and even awarded him a prize, while Andújar has represented and spoken on behalf of Technologies To The People in a number of contexts. To attempt a categorical distinction between the company and the artist is pointless, just as the ambiguity regarding their interrelation is a point. For this reason, the text will refer to them as TTTP/Andújar, a plural singularity which appropriately reflects Jean-Luc Nancy's notion of "being singular plural", and which, in dialogue with Maurice Blanchot's notion of 'communism', informs the general curatorial concept of the pavilion.

titled Language (Property) (1997),2 is a web project listing slogans that have been trademarked by various pioneering IT companies—including TTTP's own3—as hyperlinks to the respective companies' copyright declarations. Read as interconnected statements, the slogan and title suggest that the question of access involves issues of economic interests in the form of intellectual property and, furthermore, that the question of access, besides its practical dimension of actual access, is also a conceptual question in the sense that it involves the language and imagery that frame the access. Hence, when the work of TTTP/Andúiar addresses the increasingly crucial question of access to technology as well as information in contemporary culture, it is not simply as a question of having access or not.4 What makes the work such a valuable (artistic) response to this question is that it focuses on the access itself and expands the question to concern how the access is formed by mediating layers of significance. In Technologies To The People Video Collection (1997),5 the announced content, online copies of classical pieces of video art, is ultimately inaccessible, and instead one is involved with the process of (not) getting access. By engaging with these layers, TTTP/Andújar supplies the practical and formal questions of access with questions of what uses the layers institute and not least which ideas of 'the people' they put into practice. From its early web-based projects such

^{2.} http://www.irational.org/tttp/TM/warning.html

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4. The question of access or not is rather formulated as a question of access for whom. A statement from The Technologies To The People Annual Report 2000 thus reads, "Technologies To The People is aimed at people in the so-called Third World as well as the homeless, orphaned, unemployed, runaways, immigrants, alcoholics, drug addicts, people suffering from mental dysfunctions and all other categories of 'undesirables'. Technologies To The People is for people denied access to the new information society and new technologies. Technologies To The People wants more people to be networked".

^{5.} http://www.irational.org/video/. The online version also works as an integrated part of an installation.

as *Armed Citizens* (1998),⁶ which displayed the easy access to buy handguns over the World Wide Web, or *The Street Access Machine* (1996),⁷ which promoted a mobile device giving beggars access to the credit card economy, to its current installation works such as *Postcapital Archive* (2004-),⁸ TTTP/Andújar has employed a distinct tactic combining irony and criticism, fiction and reality, to playfully explore this dimension of the access to technology and information in contemporary culture. It has given the people access to incomprehensible amounts of cultural data, of which the thousands of terabytes in *Postcapital Archive* is a recent example, at the same time as it has challenged the people to develop an alert awareness of the layers of significance as a highly politicised level of cultural control as well as liberation and empowerment.

Moreover, TTTP/Andújar engages with 'access culture' through a variety of resources that span from art history, media studies and post-structuralist philosophy to logics of architectural space, activism and computer programming. It uses these references to develop subtle and complex aesthetics that challenge the people not to take access culture lightly or for granted but instead to consider it as a culture of engagement, or, more precisely, as culture produced by the engagement of the people themselves, and this challenge, which contains the potential for critical as well as ingenious development of both access culture and the people, comprises the generous artistic and political vision of TTTP/Andújar.

TTTP/Andújar's artistic engagement with the access culture that emerged in the early 1990s following the advent of the Internet resists predominant tendencies

^{6.} http://www.irational.org/tttp/Crypto/armed1.html

^{7.} http://www.irational.org/tttp/*siteTTP/index.html

^{8.} http://www.danielandujar.org/tag/postcapital/

^{9.} The concept of 'access culture' as it is employed here is related to but not identical with the concept of 'free culture' which informs much copyright discourse. Free culture refers to securing the free (not gratis) access to intellectual property legally through a set of alternative, flexible copyrights, such as Copyleft or Creative Commons. Access culture is a more general concept that refers to a culture in which how we access data, whether it is 'free' or requires permission, is the essential question, and to exploning the problems and possibilities of this 'how' is the essential concern of TTTP/Andújar's.

to let the development of this culture be controlled by technical, legal and market economy interests. Likewise, it refrains from tendencies to make a cult of technology or idealise the information revolution. While recognising the presence and fundamental significance of such tendencies it integrates them in a network of exchanges with ideas of an 'irational' culture, the name of the web-server collective TTTP/Andújar has been part of since its launch. The spelling mistake is deliberate and emphasises that the irational is not the equivalent of the irrational and not simply the opposite of being rational. The irational indicates the merging of the rational and irrational, of the simultaneous rationalisation of irrationality and irrationalisation of rationality. In that sense, the name suggests a conceptual logic that disrupts dialectical reasoning and enjoys the freedoms following from this disruption. Rather than structuring access culture in the age of the Net according to principles of order and final, purpose-oriented solutions, the irational represents a mode of approach that works to open it, make it mutate in all sorts of ways through experiments with its codes and (im)materialities.

Two references in particular guide this work: hacker culture and conceptual art, phenomena which both originate in the experimental culture of the 1960s and 1970s. The two are closely integrated, as the work *Art Power Database* (1999), an online database of technological tools and information that artists can use to hack the infrastructure of the net, illustrates. Hacking is a method with which to conceive and produce art, just as conceptual art is a method to approach technology.

^{10.} http://www.irational.org. Besides TTTP/Andújar, irational.org's members are Rachel Baker, Kayle Brandon, Heath Bunting, Minerva Cuevas and Marcus Valentine.
11. Hacker culture should here be distinguished from 'cracker' culture, which in computer slang describes destructive and criminal uses of technology, for instance spreading viruses or stealing passwords. In popular media discourse the two cultures are often perceived as one, but in computer slang hacking designates productive, ethical activity. In the same context, it should be mentioned that TTTP/Andújar deliberately and subversively plays with confusion to challenge the lack of understanding and preconceptions of this discourse.

^{12.} http://www.irational.org/APD/home/. The Art Power Database was appropriately presented at the Next 5 Minutes conference in 1999 which integrated activism, media production, hacking and art.

The point of TTTP/Andújar's work, then, is not to dissolve the differences between the two in a total techno work of art but to let the characteristics of each method feed back into the system of the other to generate dynamic connections, short circuits and networks.

Hacker culture is rooted in the computer programming communities at a handful of U.S. universities in the 1960s and refers to a certain anti-authoritarian, imaginative and playful yet effective way of 'building things and solving problems'.\bigci3 Later the culture developed beyond the institutional context and became associated with the free software and open source movements that emerged in the mid-1980s,\bigci4 both significant expressions of the open version of access culture that TTTP/Andújar is also devising. By granting users "the freedom to run, copy, distribute, study, change and improve the software",\bigci5 these movements enable and encourage active engagement in this access culture in which software is a central element. However, although an operating system like Linux, with its origin in free software principles, is gaining widespread popularity amongst users all over the world, the actual programming

^{13.} Eric S. Raymond, "How to Become a Hacker" (2001) @ http://www.catb.org/~esr/fags/hacker-howto.html

^{14.} The free software movement comprises multiple free software projects of which the Free Software Foundation, the non-profit corporation that was founded by Richard Stallman in 1985, is the most formal one. The open-source software movement represents a more pragmatic, less idealistic approach to non-proprietary software. Thus, the organisation The Open Source Initiative, founded in 1998 by Bruce Perens and Eric S. Raymond, sets out to 'sell the idea' of open-source software as a 'business-case' outside of hacker communities. The initiative experienced a quick success when Netscape announced the same year that it would release the source code of its popular web browser, and in the decade since its foundation, the initiative has also had an apparent influence on most free software projects, including Linux. The work of TTTP/Andújar employs and mixes elements from both movements, which is especially manifested in the installation work x-devian (2003-) that consists of two interconnected presentations of the same piece of free software, one in the form of a stand and one in the form of a hacker camp. Through such aesthetics, the work generates a productive exchange between the ideas of technical development and cultural promotion informing the two movements. 15. The Free Software Definition (http://www.fsf.org/licensing/essays/free-sw.html)

of software is still confined to a limited number of skilled persons. Nevertheless, the ideas of freedom, collectivity and creativity that hacker culture advances have relevance beyond the field of programming skills and knowledge. Richard Stallman, the founder of the Free Software Foundation, is indirectly pointing at that when he describes free software as "an ethics" and "a political ideological fight".¹⁶

TTTP/Andújar develops this non-technical dimension further and more explicitly by translating hacker culture into a general model for cultural engagement. It is not solving problems in the same sense as hackers do when practicing 'the art of computer programming'. Certainly it is building things, including installations, web pages, objects, videos and so on, but the function of these things is rather to problematise the codes of cultural programming and generate new forms of perception of and interaction with access culture. By appropriating, remixing and archiving cultural material, from advertisements and documentary footage to computer games and software licenses, TTTP/Andújar not only recodes the material, it also recodes the access to the material, recontextualises and reconceptualises it.

TTTP/Andújar's use of subversive media tactics, punk humour and informal do-it-together¹⁷ attitude as part of this recoding contains obvious associations to contemporary practices such as culture jamming.¹⁸ Culture jamming is a general term referring to a wide variety of practices of "media hacking, information warfare, terror-art, and guerrilla semiotics, all in one", according to writer Mark Dery, practices that catch and redirect the attention of the public to consider the politics of "the Empire of Signs" (Dery, "Culture Jamming: Hacking, Slashing and Sniping in the Empire of Signs", 2004). Another relevant reference in this connection is the avant-garde trajectory outlined by the Situationists' assault on 'the society of the spectacle', for

^{16.} http://www.stallman.org/

^{17.} The notion of 'do-it-together' often used by TTTP/Andújar to describe its activities is a development of the more common notion of 'do-it-yourself'. 'Do-it-together' tones down the individualism of the latter and cuts its inherent links to neo-liberal strategies as expressed in Nike's famous dictum, "Just do it" and instead emphasises collective, networked practices.

^{18.} The term was coined in 1984 by the band Negativeland on their 'collage album' $\it JAMCON$ '84.

instance by détournements of its imagery. This form of "extremist innovation" and "cultural weapon", as Guy Debord describes it, was a means to appropriate movies, photos, posters, magazines and so forth in the service of "proletarian artistic education" and eventually class struggle (Debord, "A User's Guide to Détournement", 1956). Despite their very different ideological agendas, culture jamming and the Situationists have a common objective of destabilising hegemonic power structures and creating possibilities for democratic and imaginative resistance; as the various e-platform projects that it has set up in cities around the world since 2001 clearly exemplify, TTTP/Andújar shares means and an overall political project with this form of activist activity.19 The e-platforms are web-based platforms where citizens can post information about and comment on the cultural politics of the city anonymously. Thereby, the platforms not only give access to cultural engagement, they also protect access, like the Free Software License²⁰ which TTTP/Andújar has included in its publications, protecting free software, ironically, by a détournement of copyright. As a folder from the late 1990s published in relation to Cyber Patrol (1997)21 says on the front, accompanied by the image of a lock, "Do you have enough defenses? Do you have the right ones?" Defence in this context, then, is not about enclosure but about keeping things open with all their ambiguity and paradoxes. Furthermore, these metaphors of fighting involving both protection and attack, which also characterise works like Armed Citizens and Information Society (2000), an installation "classified as a War Weapon", emphasise that access culture is characterised by antagonisms. Without trying to dissolve these antagonisms either through ideology or aesthetics, it exposes them as a fundamental context and condition for any activity in access culture.

However, unlike culture jamming and the Situationists, TTTP/Andújar invests its cultural engagement in the media of art.²² Without any romanticism for the au-

^{19.} http://www.danielandujar.org/tag/e-valenciaorg/

^{20.} http://www.gnu.org/licenses/licenses.html#GPL

^{21.} http://www.irational.org/tttp/pirates/Illegal.html

^{22.} The Situationists ended up dismissing art altogether in a call for 'a new practice of life', and while culture jamming often plays with connections to art, it essentially also defines itself in relation to experiences and effects outside the art context.

tonomy of aesthetics or illusions about art's revolutionary impact on society, TTTP/ Andújar explores the critical and productive potential of art. Exceeding notions of art as an institutionalised discipline or politically instrumentalised, it employs art as a particular cultural language and discourse, as a certain mode of approach and access to culture. Hence, rather than using art as an instrument to concretely transform culture, it employs art to create the virtual possibilities for both informed and speculative changes in culture.

With these explorations, TTTP/Andújar connects to conceptual art as it has developed since the 1960s, or rather to certain strands in this tradition, which engage with the media and technologies of contemporary culture and their social, economical and political significances. The focus of these strands is double, partly to analyse and criticise how the information processing of the media and technologies produce relations of power, partly to transform them into means of empowerment.

In a European/U.S. context, the work of Hans Haacke from around 1970 and the work of Muntadas from the mid-1970s to the present serve as powerful examples of these strands, as do the works of artists such as Cildo Meireles and David Lamelas, the 'mass media art' announced by Roberto Jacoby, Eduardo Costa and Raúl Escari and the The Vanguard Artists' Group's project *Tucumán Arde* (1968), all dating from the late 1960s in South America. What links these different art practices and makes them relevant references to the works of TTTP/Andújar is that they voice an opposition to the media and technologies of information processing through those very media and technologies. While working from the premise that the media and technologies are the messages, to paraphrase Marshall McLuhan, these practices influence those messages and the whole communication situation through other configurations and uses of the media and technologies. Rather than taking a position outside 'the system', they employ tactics of intervention and appropriation to force changes in the system from the inside in the name of creative democratisation.

TTTP/Andújar continues the methods and ideas of these strands of conceptual art in relation to the digital media and technologies characterising contemporary access culture, of which the distributed network of the Internet and the software that runs on it are the most significant ones. The Internet and software are not in themselves messages in the McLuhanite sense, but programmable systems that can generate a multitude of heterogeneous and opposed communicative relations.

Whether it is in the form of a website presenting its own activities²³ or a 'data-base installation' of media material as in the *Postcapital Archive*, TTTP/Andújar is concerned with programming relations of exchange. Its organisations and presentation of information processing anticipate perceptions and uses of the Internet and software which, rather than being directed by automatisms and principles of functionality that eventually lead to cultural reproduction, are guided by cultural reflection and experimentation.

Moreover, the connection with conceptual art emphasises that although TTTP/ Andújar works skilfully and specifically with the Internet and software, and is often associated with so-called 'net art' and 'new media art', its activities escape the 'NetArt-Ghetto' announced on its website. To the extent that TTTP/Andújar uses digital media and technologies it is as a cultural discourse. It is concerned with how these media and technologies technically, economically and socially produce culture and the access to it and not least with how this cultural condition can be mediated by aesthetic forms that involve the active participation of the people.

One such form, which is also prevalent in conceptual art, is the installation. After having worked primarily on the net in the late 1990s, TTTP/Andújar has increasingly moved its activities into physical space. Rather than indicating a break with the earlier activities, the installations extend the virtual space of the Net. Websites and online computers that invite the audience to sit down and use them comprise an integral part of the installations but integrated with architectural constructions, displays, audio-visual material and objects. As demonstrated by *Hack Landscape* (2008), where projected images downloaded from the Net constitute the views out of the windows of a rudimentary house, TTTP/Andújar is concerned with the merging of and exchanges between physical and virtual worlds, with how cultural hardware and software connect in dynamic, networked assemblages constituting contemporary reality. Another example of how this composite reality is given form is *x-devian* (2003-)²⁴ a presentation of a distribution of free software consisting of a video commercial, a website, free take-away discs, slogans, t-shirts, packaging, hardware trash, licenses and more. The

^{23.} http://www.irational.org/tttp/primera.html

^{24.} http://x-devian.com/, http://www.danielandujar.org/tag/x-devian/

installation displays *x-devian* as a cultural phenomenon to be perceived through the assemblage of these elements and their processual, open-ended relations involving complexities and paradoxes as well as possibilities.

A significant model for and a recurrent figure in TTTP/Andújar's use of the installation form is the workshop, in particular the hacker version, in the sense of a physical and digital infrastructure for experimental, informal processes of learning, sharing and production related to computers and computer culture. A central element of the activities of TTTP/Andújar is the organisation of hacker workshops²⁵ both as stand-alone events and as part of exhibition projects, and for "Maniesta 4" (2002) it produced a simple, flexible spatial framework for a number of computerrelated events, including the possibilities for the audience to sit down and use the online computers for web surfing and email checking.²⁶ The workshop is about giving access to information and material in ways that not only allow but also encourage active participation, and the installations explore this, whether in the form of the futuristic control centre of *Informational Society* (2000),²⁷ the cave-like laboratory of x-devian or the constructivist architecture of Postcapital Archive. Hence, the installations involve the audience as participants of reflective interaction, both within and outside of the installation context. The audience can take a copy of x-devian or material from Postcapital Archive away with them and thereby the installations, like a workshop, come to function as an operative and intellectual base for further cultural engagement.

A useful way to conceive of the multi-media installations of TTTP/Andújar and distinguish *Postcapital Archive* from a conventional archive is as interfaces. The interface is a common term in computer terminology, where it most often refers to the screen graphics and physical devices that mediate the interactive relation of input and output between user and computer. It is in other words a figure of access. Departing from this basic conception, TTTP/Andújar expands the notion of the interface as a computer-specific term to concern the mediation of interactive relations

^{25.} http://www.danielandujar.org/tag/workshop/

^{26.} http://www.danielandujar.org/tag/manifesta-4/

^{27.} http://www.danielandujar.org/tag/information-society/

between the people and culture. Lev Manovich has introduced the term "cultural interfaces" to describe a human-computer-culture interface—the ways in which computers present and allow us to interact with cultural data (Manovich, *The Language of New* Media, 2001). The *Postcapital Archive* and other installations qualify as such cultural interfaces insofar as their content is 'cultural data' obtained through an online computer, but the computer is only one, albeit an essential one, of several interconnected elements that constitute the three-dimensional interfaces of the installations, including images, concepts, narratives, objects and architecture. All these elements mediate the access to the specific content of the archive to the degree that they are not only inseparable from but also essential to the content. It is through the interfaces of the installations that the people are given access to content, that the conditions and significance of the interactive relations are produced. Hence, the installations present the interface as the level at which access culture is programmed and the level at which it can be continuously re-programmed.

A well-recognised and much debated term within interface theory is 'usability', often used in association with the notion of 'transparency'. 28 Usability generally applies to the design of interfaces guided by principles of easy and effective use, allowing the user direct focus on and access to the content. As its home page clearly demonstrates, TTTP/Andújar does not conform to the principles of usability and

^{28.} Jakob Nielsen is among those who have popularised the term usability and his website, http://www.useit.com/, is a clear example of how, according to the principles of usability, the interface in accordance with classical communication theory should function as a neutral medium for the transmission of information. Donald E. Norman, who has worked with Nielsen on a number of projects, has launched the idea of 'the invisible computer', the completely integrated machine, which would be the ultimately transparent form of technology. The user would not have to worry about interacting with an interface or even a computer. Using a computer would be an immediate, intuitive experience. While this 'invisible computer' might offer certain possibilities for the experience of technology, it would also tend to make him/her blind to the politics of the interface (s)he is interacting with, thus representing potential hidden manipulation and exploitation of the user. When TTTP/Andújar emphasises the interface, making it and the computer visible, it is with the intention to obtain the opposite effect, namely to enable the user to understand and engage with these politics.

transparency.²⁹ On the contrary, the design and infrastructure of the home page complicates navigation, in some cases to the point of mystification. It focuses attention on the mediating function of the interface and how it organises and conceptualises the access to content. This is an interface aesthetics that TTTP/Andújar advances in its installations. The installations facilitate use in the sense of giving access to content, but contrary to the principles of usability they emphasise the interface as a complex element to be considered and reflected in interplay with the content. Rather than giving immediate and intuitive access to the content, the installations function as a contextualising meta-layer that employs multiple codes, often through fiction, to produce specific forms of access, forms that are not easily decoded, or rather, that do not call for decoding in the traditional sense but activate a more profound and conscious use.

As interfaces, the installations of TTTP/Andújar conduct what Jacques Rancière has conceptualised as 'a distribution of the sensible'. A distribution of the sensible designates "a distribution of spaces, times and forms of activity that determines the very manner in which something in common lends itself to participation and in what way various individuals have a part in this distribution" (Rancière, The Politics of Aesthetics, 2004). As such, a distribution of the sensible defines the engagement of a people in culture, and according to Rancière this is effectuated through the means of aesthetics understood as "the systematisation of sense experience", in art but also in design, media and institutions. Aesthetics thus has a fundamentally political function and can serve as a means for structures of control as well as for processes of creative liberation, depending on the activities, the ways of 'thinking, speaking and acting' that they allow and support. This political dimension of aesthetics is an integral part of the installations. Hence, they are not political simply in terms of the politicised issues they deal with, such as 'post-capitalism' and free software or the opinions they express on these issues. Instead they are political in their configuration of new forms of engagement in relation to the issues.

To conceive of the installations of TTTP/Andújar in this expanded sense of the interface moreover suggests that the installations model a certain people to enter

^{29.} http://www.irational.org/tttp/

into those relations, like a regular user interface models an ideal user. Unlike this ideal user, however, the people that the installations model are not absolutely defined by the relations, rather they are able to influence the relations through their activities. The installations function as tools for the production of a people of subjectivities, for "processes of subjectivisation", to quote Rancière, at the same time as they function as the tools that these subjectivities can use to interact with culture, through a feedback of human ideas, sensibilities, energies and agency. Like hacker manuals, they are processual tools empowering these subjectivities with the capabilities to liberate and develop themselves.

What makes the installations of Technologies To The People/Daniel G. Andúiar one of the most artistically compelling and politically pointed responses to the challenges of contemporary access culture, then, is not simply the content of cultural data that they give access to, although that in itself is impressive and powerful, not least in Postcapital Archive. The people of information processors that the installations practically and conceptually envision for that access are their true accomplishment. It is a people that represents a new kind of literacy, a kind of literacy akin to that expressed by a hacker, who educates himself by challenging the logic of the system, rather than by the student, who learns how to work a system according to the system's own logic. This 'hacker literacy' is a non-institutionalised and non-disciplined literacy, an autonomous, self-reflective and imaginative activity that disturbs the equilibrium and control mechanisms of systems. It represents a new, unorthodox yet advanced way of information processing that is able to operate the radical complexity and potentiality of the system, and thereby it is able to open the system, in this case access culture, and keep it open for continuous rediscovery and reinvention, by the people.

Essentially, the hacker literacy constitutes a post-capitalistic community to the extent that it is based on free common sharing of information, knowledge and experience of a multiplicity of hackers "being singular plural" to quote Jean-Luc Nancy. So far this community, the community of the access culture of the future, is still in its embryonic stages of development, but by involving the people in its production the installations present us with the prospect that that future is not so distant.