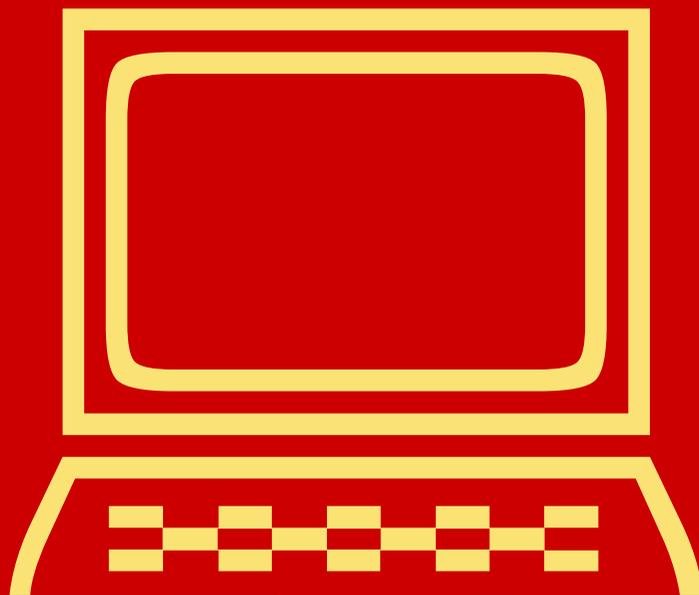


LEA
BOOKS

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JULIAN STALLABRASS / BOOK EDITOR BILL BALASKAS

The Leonardo Electronic Almanac is proud to announce the publication of its first LEA book, titled "Red Art: New Utopias in Data Capitalism." The publication investigates the relevance of socialist utopianism to the current dispositions of New Media Art, through the contributions of renowned and emerging academic researchers, critical theorists, curators and artists.



RED ART

New Utopias in Data Capitalism

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Red Art: New Utopias in Data Capitalism

BOOK SENIOR EDITORS

LANFRANCO ACETI, SUSANNE JASCHKO, JULIAN STALLABRASS

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Commonist Red Art: Blood, Bones, Utopia and Kittens

Does Red Art exist? And if so, who creates it and where can we find it? This special issue of the Leonardo Electronic Almanac addresses these questions and collates a series of perspectives and visual essays that analyze the role, if any, that Red Art plays in the contemporary art world.

Red Art, these are two simple words that can generate complex discussions and verbal feuds since they align the artist to a vision of the world that is 'Red' or 'Communist.'

Nevertheless, even if the two little words when placed together are controversial and filled with *animus*, they are necessary, if not indispensable, to understand contemporary aesthetic issues that are affecting art and how art operates in the context of social versus political power relations within an increasingly technological and socially-mediated world.

Red Art could be translated – within the contemporary hierarchical structures – as the art of the powerless versus the art of the powerful, as the art of the masses versus the art of the few, as the art of the young versus the old, as the art of the technological democrats versus the technological conservatives, as the art of the poor versus the art of the rich... Or it could be described as the art of the revolutionary versus the status quo. In the multitude of the various possible definitions, one appears to stand out for contemporary art and it is the definition of art as bottom-up participation versus art as top-down

prepackaged aesthetic knowledge. And yet, what does Red Art stand for and can it be only restricted to Communist Art?

The contemporary meaning of Red Art is different from what it may have been for example in Italy in the 1970s, since so much has changed in terms of politics, ideology and technology. It is no longer possible to directly identify Red Art with Communist Art (as the art of the ex Union of Soviet Socialist Republics or of its satellite states and globalized Communist political parties which were and continue to be present in the West – albeit inedulcorated forms) nor as the art of the left, but there is a need to analyze the complexity of the diversification and otherization of multiple geopolitical perspectives. ¹

If today's Red Art has to redefine its structures and constructs it becomes necessary to understand who is encompassed within the label of Red Artists and what their common characteristics are. Red Artists – if we wanted to use this category – and their aesthetic production cannot be reduced to the word 'Communist,' borrowing passé ideological constructs. An alternative to the impasse and the ideological collapse of communism is the redefinition of Red Art as the art of the commons: **Commonist Art.** ² If Red Art were to be defined as the art of the commons, Commonist Art, thereby entrenching it clearly within technoutopias and neoliberalist crowd sourcing approaches for collective participation, this would provide a contradictory but functional framework for the realization of

common practices, socially engaged frameworks, short terms goals and 'loose/open' commitments that could be defined in technological terms as *liquid digital utopias* or as a new form of permanent dystopia. ³

The XXIst century appears to be presenting us, then, with the entrenched digitized construct of the common versus the idea of the Paris Commune of 1871, thereby offering a new interpretation of the social space and an alternative to traditional leftist/neoliberal constructs. The idea of the common – as an open access revolving door, is opposed to the concept of the commune – as a highly regulated and hierarchical structure.

The 'semantic' distingo between commons and communes becomes important since both terms are reflections of constructions and terminological frameworks for an understanding of both society and art that is based on 'likes,' actions and commitments for a common or a commune. The commitment, even when disparagingly used to define some of the participants as click-activists and armchair revolutionaries, ⁴ is partial and leaves the subject able to express other likes often in contradiction with one another: e.g. I like the protests against Berlusconi's government and I like the programs on his private TVs.

I find the idea of the commons (knowledge, art, creativity, health and education) liberating, empowering and revolutionary, if only it was not expressed within its own economic corporative structures, creating further layers of contradiction and operational complexities.

The contradictions of contemporary Red Art and contemporary social interactions may be located in the difference between the interpretations of common and commune – the commune upon which the Italian Communist Party, for example, based its foundations in order to build a new 'church.'

The relationships in the commune of the Italian communists (oxymoronically defined Cattocomunisti or Catholic-communist) rests in faith and in compelled actions, in beliefs so rooted that are as blinding as blinding is the light of God in the painting *The Conversion of Saint Paul on the Road to Damascus* by Michelangelo Merisi da Caravaggio.

[...] and from the leadership an aggressive unwillingness to allow any dissent or deviation. 'That time produced one of the sharpest mental frosts I can remember on the Left,' the historian E. P. Thompson would recall from personal knowledge of the CP... ⁵

It is this blind faith that has generated the martyrs of communism and heretical intellectuals, accusations from which not even Antonio Gramsci was able to escape. The vertical hierarchical structure of the commune and of the Communist Party produced heretics and immolations, but also supported artists, intellectuals, academics and writers that operated consonantly with the party's ideals: people that sang from the same preapproved institutional hymn sheet.

Stefania: *This young generation horrifies me. Having been kept for years by this state, as soon as they discover to have two neurons they pack and go to study, to work in the US and London, without giving a damn for who supported them. Oh well, they do not have any civic vocation. When I was young at the occupied faculty of literature, I oozed civic vocation. [...] I have written eleven novels on civic duty and the book on the official history of the Party.*

Jep Gambardella: *How many certainties you have, Stefania. I do not know if I envy you or feel a sensation of disgust. [...] Nobody remembers your civic vocation during your University years. Many instead*

remember, personally, another vocation of yours that was expressed at the time; but was consumed in the bathrooms of the University. You have written the official history of the Party because for years you have been the mistress of the head of the Party. Your eleven novels published by a small publishing house kept by the Party and reviewed by small newspapers close to the Party are irrelevant novels [...] the education of the children that you conduct with sacrifice every minute of your life ... Your children are always without you [...] then you have - to be precise - a butler, a waiter, a cook, a driver that accompanies the boys to school, three babysitters. In short, how and when is your sacrifice manifested? [...] These are your lies and your fragilities. ⁶

To the question, then, if Red Art exists I would have to answer: YES! I have seen Red Art in Italy (as well as abroad), as the Communist Art produced in the name of the party, with party money and for party propaganda, not at all different from the same art produced in the name of right-wing parties with state or corporate money – having both adopted and co-opted the same systems and frameworks of malfeasance shared with sycophantic artists and intellectuals.

In order to understand the misery of this kind of Red Art one would have to look at the Italian aesthetization of failure – which successfully celebrates failure in the *Great Beauty* by Paolo Sorrentino when the character of Stefania, and her ‘oozing civic duty,’ is ripped apart. It is a civic responsibility that is deprived and devoid of any ethics and morals. ⁷

This is but one of the multiple meanings of the concept of Red Art – the definition of Red Art as Communist Art, is the one that can only lead to sterile definitions and autocelebratory constructs based on the ‘aesthetic obfuscation of the lack of meaning’ as a

tool for the obscurity of the aesthetic to act as a producer of meaning when the artist producing it is inept at creating meaning. ⁸ Even more tragically, Red Art leads to the molding of the artist as spokesperson of the party and to the reduction of the artwork, whenever successful, to advertising and propaganda.

Commonist Art, founded on the whim of the ‘like’ and ‘trend,’ on the common that springs from the aggregation around an image, a phrase, a meme or a video, is able to construct something different, a convergence of opinions and actions that can be counted and weighed and that cannot be taken for granted. Could this be a Gramscian utopia of re-construction and re-fashioning of aesthetics according to ‘lower commons’ instead of high and rich ‘exclusivity,’ which as such is unattainable and can only be celebrated through diamond skulls and gold toilets?

Commonist Art – the art that emerges from a common – is a celebration of a personal judgment, partially knowledgeable and mostly instinctive, perhaps manipulated – since every ‘other’ opinion is either manipulated by the media or the result of international lobby’s conspiracies or it can be no more than a reinforcement of the society of the simulacra. Conversely, it may also be that the image and its dissemination online is the representation of a personal diffidence towards systems of hierarchical power and endorsement that can only support ‘their own images and meanings’ in opposition to images that are consumed and exhausted through infinite possibilities of interpretation and re-dissemination. ⁹

If Commonist Art offers the most populist minimum common denominator in an evolutionary framework determined by whims, it is not at all different from the minimum common denominator of inspirational/aspirational codified aesthetics that are defined by the higher echelons of contemporary oligarchies that

have increasingly blurred the boundaries of financial and aesthetic realms.

Commonist Art – if the current trends of protest will continue to affirm themselves even more strongly – will continue to defy power and will increasingly seek within global trends and its own common base viable operational structures that hierarchies will have to recognize, at one point or the other, by subsuming Commonist Art within pre-approved structures.

Red Art, therefore, if intended as Commonist Art becomes the sign of public revolts, in the physical squares or on the Internet. It is art that emerges without institutional ‘approval’ and in some cases in spite of institutional obstacles. Gramsci would perhaps say that Commonist Art is a redefinition of symbolic culture, folk art and traditional imageries that processed and blended through digital media and disseminated via the Internet enable Red Art to build up its own languages and its own aesthetics without having to be institutionally re-processed and receive hierarchical stamps of approval.

Red Art can also be the expression of people whose blood and tears – literally – mark the post-democracies of the first part of the XXIst century. Non-political, non-party, non-believers, ¹⁰ the crowds of the Internet rally around an argument, a sense of justice, a feeling of the future not dominated by carcinogenic politicians, intellectuals and curators, that present themselves every time, according to geographical and cultural spaces, as Sultans, Envoys of God, or even Gods.

Red Art, the Commonist Art that perhaps is worth considering as art, is the one that is self-elevated, built on the blood and bones of people still fighting in the XXIst century for justice, freedom and for a piece of bread. Art that rallies crowds’ likes and dislikes based

on the whims of a liquid Internet structure where people support within their timelines an idea, a utopia, a dream or the image of a kitten. ¹¹

This piece of writing and this whole volume is dedicated to the victims of the economic and political violence since the beginning of the Great Recession and to my father; and to the hope, hard to die off, that some utopia may still be possible.

Lanfranco Aceti

*Editor in Chief, Leonardo Electronic Almanac
Director, Kasa Gallery*



REFERENCES AND NOTES

1. Larry Ray, "At the End of the Post-Communist Transformation? Normalization or Imagining Utopia?" *European Journal of Social Theory* 12 (August 2009), 321-336.
2. Commonism was used by Andy Warhol. In this essay the word is rooted in Internet 'commons,' although similarities, comparisons and contiguities exist with the earlier usage. "Thus Warhol's initial preference for the term 'Commonism' was as ambivalent, and ambiguous, as the oscillating signs 'Factory' and 'Business.' Although it flirted with connotations of the 'common' with the 'Communist' (from cheap and low to 'dignity of the common man'), the term betrayed no hidden, left-wing agenda on Warhol's part." Caroline A. Jones, *Machine in the Studio: Constructing the Postwar American Artist* (Chicago, IL: The University of Chicago Press, 1996), 205.
3. "For one thing, utopia has now been appropriated by the entertainment industry and popular culture – what is termed the contemporary liquid utopia – as a kind of dystopia." Anthony Elliott, *The Contemporary Bauman* (Abingdon: Routledge, 2007), 17.
4. The blurred lines between real and virtual do not exempt click-activists or armchair revolutionaries from the persecutions and abuses of the state police. The sitting room within one's home becomes the public space for conflict and revolts. One example of many around the globe: Alexander Abad-Santos, "Turkey Is Now Arresting Dozens for Using Twitter," *The Wire*, June 5, 2013, <http://www.thewire.com/global/2013/06/turkey-twitter-arrests/65908/> (accessed January 10, 2014).
5. David Kynaston, *Austerity Britain, 1945-1951* (London: Bloomsbury, 2007), 342.
6. The English translation from the Italian is from the author. *La Grande Bellezza*, DVD, directed by Paolo Sorrentino (Artificial Eye, 2014).
7. "Anti-communism was never accepted as the moral equivalent of anti-fascism, not only by my parents but also by the overwhelming majority of liberal-minded people. The Left was still morally superior." Nick Cohen, *What's Left?: How the Left Lost its Way* (London: Harper Perennial, 2007), 3. La questione morale or the 'moral issue' in English is the problem identified by Enrico Berlinguer and that questioned the role of the Communist party and the Left in general in Italy. The moral issue has not been resolved to this day and is at the core of the current impossibility to distinguish between the ideological frameworks of Left and Right – since both political areas are perceived as equally and intrinsically corrupt as well as tools for an oligarchic occupation of democracy. For the original interview in Italian of Enrico Berlinguer see: Eugenio Scalfari, "Intervista a Enrico Berlinguer," *La Repubblica*, July 28, 1981 available in "La questione morale di Enrico Berlinguer," Rifondazione Comunista's website, <http://web.rifondazione.it/home/index.php/12-home-page/8766-la-questione-morale-di-enrico-berlinguer> (accessed March 20, 2014).
8. "Under the surface of images, one invests bodies in depth; behind the great abstraction of exchange, there continues the meticulous, concrete training of useful forces; the circuits of communication are the supports of an accumulation and a centralization of knowledge; the play of signs defines the anchorages of power; it is not that the beautiful totality of the individual is amputated, repressed, altered by our social order, it is rather that the individual is carefully fabricated in it..." Michel Foucault, "Panopticism," in *The Nineteenth-Century Visual Culture Reader*, ed. Vanessa R. Schwartz and Jeannene M. Przyblyski (New York, NY: Routledge, 2004), 78.
9. There are those who think that the image is an extremely rudimentary system in comparison with language and those who think that signification cannot exhaust the image's ineffable richness. Roland Barthes, "Rhetoric of the Image," in *Visual Culture: The Reader*, ed. Jessica Evans and Stuart Hall (London: Sage Publications, 1999), 33.
10. Non-believers stands for skeptics and does not have a religious connotation in this context.
11. Lanfranco Aceti, *Our Little Angel*, Lanfranco Aceti Inc., personal website, January 10, 2014, <http://www.lanfrancoaceti.com/portfolio-items/our-little-angel/> (accessed January 10, 2014).

Changing the Game: Towards an 'Internet of Praxis'

There is a new spectre haunting the art world. Not surprisingly, it has been put forward in recent articles, panel discussions and books as the 'ism' that could, possibly, best describe the current dispositions of contemporary art. The name of the spectre is "post-internet art."¹ Unlike, however, its counterpart that was released in the world by Karl Marx and Friedrich Engels in 1848,² this contemporary spectre has not arrived in order to axiomatically change the established order of things; conceivably, it has arrived in order to support it.

Post-internet art refers to the aesthetic qualities defining today's artistic production, which is often influenced by, mimics, or fully adopts elements of the Internet. At the same time, the term incorporates the communication tools and platforms through which contemporary artworks reach their intended (or non-intended) audiences. Notably, in his book *Post Internet* (2011), art writer Gene McHugh suggests that regardless of an artist's intentions, all artworks now find a space on the World Wide Web and, as a result, "[...] contemporary art, as a category, was/is forced, against its will, to deal with this new distribution context or at least acknowledge it."³ Quite naturally, this would seem like a strong oppositional force directed against the modus operandi of the mainstream art world. Yet, further down in the same page, McHugh characterizes this acknowledgement as a constituent part of the much larger "game" that is played by commercial galleries, biennials, museums and auction houses.

Thus, there are inevitable contradictions and challenges in the role that post-internet art is called to fulfil as a movement and/or as a status of cultural production. Firstly, there is an easily identifiable 'anxiety' to historicize a phenomenon that is very much in progress: the Internet is changing so rapidly, that if we think of the online landscape ten years ago, this would be radically different from our present experience of it. Furthermore, the post-internet theorization of contemporary art runs the danger of aestheticizing (or over-aestheticizing) a context that goes well beyond the borders of art: in the same way that we could talk about post-internet art, we could also talk about post-internet commerce, post-internet dating, post-internet travel, post-internet journalism, etc. Therefore, the role and the identity of the post-internet artist are not independent of a much wider set of conditions. This false notion of autonomy is quite easy to recognize if we think, for instance, of 'post-radio art' or 'post-television art' or, even, 'post-videogames art,' and the inherent structural and conceptual limitations of such approaches.⁴

Most importantly, however, any kind of aestheticization may readily become a very effective tool of depoliticization. The idea of distributing images, sounds and words that merely form part of a pre-existing system of power, inescapably eradicates the political significance of distribution. The subversive potentiality inherent in the characterisation of a network as 'distributed' was systematically undermined over the 1990s and the 2000s, due to the ideological perva-

siveness of neoliberalism during the same period. Distribution – not to mention, *equal* distribution – could have enjoyed a much more prominent role as a natural fundament of the Web and, accordingly, as a contributing factor in any investigation of digital art. Last but definitely not least, one cannot ignore the crucial fact that apolitical art is much easier to enter the art market and play the ‘game’ of institutionalization (and vice versa).

To the question: could the Internet and new media at large become true ‘game changers’ in the current historical conjuncture? What does ‘red art’ have to propose, and how does it relate to the previously described ‘post-internet condition’?

Interestingly, the term “post-internet art” was born and grew parallel to the global economic crisis and the Great Recession of 2009. One of the most important objectives of the social movements that were engendered by the crisis has been the effort to “reclaim” and “re-appropriate.” This aspiration referred not only to economic resources, but also to social roles, democratic functions, human rights, and – of course – urban spaces. Syntagma Square in Greece, Puerta del Sol in Madrid, Zuccotti Park in New York, as well as some of the most iconic public locations around the world saw diverse, or even ‘irreconcilable’ in some cases crowds demand change. Within the reality of Data Capitalism and its multiple self-generated crises, people increasingly felt that they have now been totally deprived of a place (“topos” in Greek).

It is worth remembering that the coiner of “utopia,” Thomas More, chose an island as the location where he placed his ideal society.⁵ Any island constitutes a geographic formation that privileges the development of individual traits through a natural process of ‘appropriation.’ This encompasses both the material and the immaterial environment as expressed in the landscape, the biology of the different organisms, and – most relevant to our case – culture. Notably, when it comes to connecting utopianism with the cultural paradigm of new media art, we should not focus merely on the lack of a physical space (as articulated, for instance,

through cyberspace); rather, we should address the juxtaposition of “topos” with a potentially ‘empty’ notion of “space.” The transcendence of space in a ‘digital utopia’ absolutely necessitates the existence of a ‘topos.’ In a similar way to the one that Marx sees capitalism as a stage towards a superior system of production (communism),⁶ the construction of a ‘topos’ is a prerequisite for the flourishing of utopianism.

‘Red Art’ can be understood as a tool for the creation of such ‘topoi.’ The lesson that new media artists can learn from the political osmoses catalyzed by the economic crisis is that, in order to be effective, cyberspace should become part of a strategy that combines physical and online spaces, practically and conceptually, whilst taking into account the individual traits of both. The necessity expressed through this combination constitutes (at least partly) a departure from the developing discourses around the ‘Internet of Things’ or the ‘Internet of Places.’⁷ Alternatively, or additionally, what is proposed here is the formulation of an ‘Internet of Praxis’ (including, of course, artistic praxis). This approach is vividly reflected in several of the projects examined in this publication, as well as in the theoretical frameworks that are outlined.

Digital art is today in a position to capitalize on the participatory potentialities that have been revealed by the socio-political events that defined the early 2010s. The reconceptualization of cyberspace as a ‘cybertopos’ is a constituent part of this new ground on which people are called to stand and build. Accordingly, the emergence of a culture of ‘post-net participation’ in which digital media transcend physical space by consolidating it (instead of ‘merely’ augmenting it), may allow us to explore “concrete utopias”⁸ to a greater extent than ever before in recent times. It is by actively pursuing this objective that we would expect to change the rules of the game. Artists are often the first to try.

Bill Balaskas

REFERENCES AND NOTES

1. The term ‘post-internet art’ is attributed to artist Marisa Olson. See Gene McHugh, *Post Internet* (Brescia: LINK Editions), 5.
2. Karl Marx and Friedrich Engels published *The Manifesto of the Communist Party* in London, on February 21, 1848.
3. Gene McHugh, *Post Internet*, 6.
4. The etymological comparison between the terms ‘post-internet art’ and ‘postmodern art’ could also highlight this context. Notably, in the case of this juxtaposition, ‘post-internet art’ puts a tool (the Internet) in the position of a movement (Modernism). If we were to consider the Internet as a movement, then, the natural historical link that would be established through the term ‘post-internet art’ would be with net art. Nevertheless, such a decision would assign net art to a status of ‘legitimization,’ towards which major museums, curators and art fairs have shown a rather consistent hostility. In this instance, historicization becomes a foe, since it would refute a ‘neutral’ relationship of the Web with art. This perspective is closely connected with the formation of an abstract notion of universalism, to which I refer further down (see endnote 8).
5. Thomas More’s *Utopia* was first published in 1516, in Belgium. There are several translations of the book.
6. Karl Marx and Friedrich Engels, *The Communist Manifesto*, with an introduction by David Harvey (London: Pluto Press, 2008), 51: “What the bourgeoisie therefore produces, above all, are its own grave-diggers. Its fall and the victory of the proletariat are equally inevitable.”
7. The Internet of Things represents a vision in which physical items become ‘smart’ objects by being equipped with sensors that can be remotely controlled and connected through the Internet. The Internet of Places focuses on the spatial dimension of the capacities that Web 2.0 offers. For an account of the Internet of Things, see Mattern, Friedemann and Christian Floerkemeier, “From the Internet of Computers to the Internet of Things,” in *Informatik-Spektrum*, 33 (2010): 107–121, <http://www.vs.inf.ethz.ch/publ/papers/Internet-of-things.pdf> (accessed February 20, 2014). For an account of the Internet of Places, see Giuseppe Conti, Paul Watson, Nic Shape, Raffaele de Amicis and Federico Prandi, “Enabling the ‘Internet of Places’: a virtual structure of space-time-tasks to find and use Internet resources,” in *Proceedings of the 2nd International Conference on Computing for Geospatial Research & Applications* (New York: ACM, 2011), 9.
8. For more on the concept of ‘concrete utopias’ see Ernst Bloch, *The Principle of Hope*, tr. Neville Plaice, Stephen Plaice, and Paul Knight, 3 vols (Oxford: Blackwell, 1986). Bloch differentiates between ‘abstract utopias’ and ‘concrete utopias,’ associating the latter with the possibility of producing real change in the present. ‘Concrete utopias’ should not be confused with seemingly similar theorizations such as Nicolas Bourriaud’s ‘microtopias,’ which structurally aim at preserving the existing status quo. Bourriaud asserts in *Relational Aesthetics* (2002) that “it seems more pressing to invent possible relations with our neighbours in the present than to bet on happier tomorrows.” Quite evidently, this approach stands far from the universalism that he advocates in his *Altermodern Manifesto* (2009) as a direct result of new technologies and globalization. At a time when neoliberal capitalism was entering its worst ever crisis, Bourriaud chose to largely ignore this context and build on a concept that – in the end – is apolitical and counter-utopian. ‘Post-internet art’ appears to follow a comparably dangerous trajectory.

Suggestions for Art That Could Be Called Red

What is Red Art? Or rather: what could Red Art be in today's post-communist, post-utopian world, a world shaken by conflicts engendered by contrary beliefs and ideologies which have little to do with communism? A world in which countries and societies are disrupted by territorial disputes, and by bloody fights about questions of religious identity, national identity, and ideology? Where communism has been overrun by capitalism with rare exception; where the European left movement is weak. Where the post-industrial era has produced an economic reality that is orders of magnitude more complex, transnational and therefore more difficult to control or change, than history has ever seen. In this situation, can there (still) be art that deals with ideas of communism constructively, or does contemporary art look at communist ideals only with nostalgia?

And let's be clear: is art that simply speaks out against capitalism, globalisation and neo-liberalism from a leftist position – is this kind of art 'red' per se? Do we expect Red Art to be 'red' in content, for instance, in directly addressing topics such as class struggle, the negatives of capitalism and a new neo-liberal world order? And if it does, is it enough to be descriptive or do we want art to be more than that, i.e., provoking, forward-thinking or even militant? In 1970, Jean-Luc Godard drafted a 39-point manifesto *Que faire? What is to be done?* that contrasted the antagonistic practices of making political films and making films 'politically.' It called unequivocally for art that actively takes up the position of the proletarian class and that

aims for nothing less than the transformation of the world. With his legacy, what kind of objectives do we request from Red Art? Do we really still think that art can change the world or is that another idea from the past that has been overwritten by something that we like to call reality? Can art that is for the most part commercialised and produced in a capitalist art market be 'red' at all, or does it have to reject the system established by galleries, fairs and museums in order to be truly 'red'?

Decades ago, when artists started to use new media such as video and the computer, their works were 'new' in the way they were produced and distributed, and changed the relationship between artists and their collaborators as well as between the artworks and their audiences and 'users' respectively. Most of this new-media-based art circulated outside the ordinary market and found other distribution channels. The majority of works were inspired by a quest for the 'new' and consistently broke with old aesthetic principles and functions. Much of it was also driven by a search for the 'better,' by overthrowing old hierarchies and introducing a more liberal and inclusive concept of the world, based on self-determination and active participation. Last but not least the emergence of the Internet brought us a fertile time for new and revisited utopias and artistic experiments dealing with collaboration, distribution of knowledge, shared authorship, and appropriation of technologies. Today we know that neither the Internet nor any other new technology has saved us, but that the hopes for a more demo-

cratic world and alternative economies sparked by it have come true, if only to a minor degree.

So how do artists respond to this post-communist, post-utopian condition? What can be discussed as Red Art in the recent past and present? In this issue of Leonardo we have gathered some answers to these questions in the form of papers, essays and artworks, the latter produced especially for this purpose. Bringing together and editing this issue was challenging because we decided from the start to keep the call for contributions as open as possible and to not pre-define too much. We were interested in what kind of responses our call would produce at a moment when the world is occupied with other, seemingly hotter topics, and it is fascinating to note that the resulting edition quite naturally spans decades of art production and the respective 'new' technologies as they related to ideas of social equality and empowerment – from video art to net art to bio art. This issue shows that the search for alternative ideas and perspectives, and an adherence to leftist ideals is neither futile nor simply nostalgic. But that this search is ever more relevant, particularly at a time when European politics is seemingly consolidating and wars around the world are establishing new regimes of social and economic inequality.

Susanne Jaschko

Why Digital Art is Red

The divide between the art shown in major museums and art fairs and that associated with the new media scene has been deep and durable.

Many critics have puzzled over it, particularly because there is much that the two realms share, including the desire to put people into unusual social situations. ¹ Yet some of the reasons for the divide are plain enough, and they are about money, power and social distinction. The economic divide is across competing models of capitalist activity: the exclusive ownership of objects set against the release of reproducible symbols into networks with the ambition that they achieve maximum speed and ubiquity of circulation. The social divide is between a conservative club of super-rich collectors and patrons, and their attendant advisors, who buy their way into what they like to think of as a sophisticated cultural scene (Duchamp Land), against a realm which is closer to the mundane and more evidently compromised world of technological tools (Turing Land). ² Power relations are where the divide appears starkest: in one world, special individuals known as artists make exceptional objects or events with clear boundaries that distinguish them from run-of-the-mill life; and through elite ownership and expert curation, these works are presented for the enlightenment of the rest of us. In the new media world, some 'artists' but also collectives and other shifting and anonymous producers offer up temporary creations onto a scene in which their works are open to copying, alteration and comment, and in which there is little possible control of context, frame or conversation.

This description of the divide has been put in extreme terms for the sake of clarity, and there are a few instances of the split appearing to erode. ³ Yet its persistence remains one of the most striking features of the general fragmentation of the fast-growing and globalising art world. That persistence rests on solid material grounds, laid out by Marx: the clash of economic models is a clear case of the mode and relations of production coming into conflict, and is part of a much wider conflict over the legal, political and social aspects of digital culture, and its synthesis of production and reproduction. ⁴ Copyright is one arena where the clash is very clear. Think of the efforts of museums to control the circulation of images and to levy copyright charges, while at the same time surrendering to the camera-phone as they abandon the attempt to forbid photography in their galleries.

So where is Red Art and the left in this scenario? Amidst the general gloom and lassitude that has beset much of the Left in Europe and the US, the development of the digital realm stands out as an extraordinary gain. It allows for the direct communication, without the intermediary of newspapers and TV, of masses of people globally – who turn out to be more egalitarian, more environmentally concerned and more seditious than the elite had bargained for. Alexander Cockburn, with his long career in activism and journalism, remarks:

Thirty years ago, to find out what was happening in Gaza, you would have to have had a decent short-wave radio, a fax machine, or access to those great newsstands in Times Square and North Hollywood that carried the world's press. Not anymore. We can get a news story from [...] Gaza or Ramallah or Oaxaca or Vidarbha and have it out to a world audience in a matter of hours. ⁵

It is hard to ban social media, it has been claimed, because it entwines video fads, kittens and politics (and banning kittens looks bad). So the insight attributed by some to Lenin – that capitalists will sell us the rope with which to hang them – is still relevant. ⁶

In an era in which the political and artistic avant-gardes have faded, the affiliation of the art world that is founded upon the sale and display of rare and unique objects made by a few exceptional individuals – in which high prices are driven by monopoly rent effects – tends to be with the conspicuous consumption of the state and the super-rich. ⁷ Here, the slightest taint of the common desktop environment is enough to kill aesthetic feeling. The affiliation of at least some of new media art is rather to the kitsch, the populist, and to the egalitarian circulation of images and words, along with discourse and interaction. New media artists who push those attachments work against some of the deepest seated elements of the art world ethos: individualism, distinction, discreteness and preservation for posterity (and long-term investment

value). It should be no surprise that they are frequently and without qualification denied the status of 'artist.'

It is also clear why the death of leftist ideas in elite discourse does not hold in new media circles, where the revival of thinking about the Left, Marxism and Communism is very evident. ⁸ The borders of art are blurred by putting works to explicit political use (in violation of the Kantian imperative still policed in the mainstream art world). ⁹ Very large numbers of people are continually making cultural interventions online, and value lies not in any particular exceptional work but in the massive flow of interaction and exchange. In that world, as it never could in a gallery, the thought may creep in that there is nothing special about any one of us. And this may lead to the greatest scandal of all: think of the statements that artists who deal with politics in the mainstream art world are obliged to make as their ticket of admission – 'my art has no political effect.' They have to say it, even when it is patently absurd; and they have to say it, even as the art world itself becomes more exposed to social media, and is ever less able to protect its exclusive domain and regulate the effects of its displays. So at base, the divide is economic, but at the level of what causes the repulsion from digital art – that puts collectors and critics to flight – it is deeply and incontrovertibly political. ¹⁰ They run headlong from the red.

Julian Stallabrass

REFERENCES AND NOTES

1. On the affinity between new media art and socially engaged art, including relational aesthetics, see Edward Shanken, "Contemporary Art and New Media: Toward a Hybrid Discourse?," <http://hybridge.files.wordpress.com/2011/02/hybrid-discourses-overview-4.pdf> (accessed March 31, 2014).
2. The reference is to Lev Manovich, "The Death of Computer Art," Lev Manovich's website, 1996, <http://www.manovich.net/TEXT/death.html> (accessed March 31, 2014). The complicity of both worlds with establishment powers has been criticised since the origin of the divide. For an early example of the engagement of computer art with the military-industrial complex, see Gustav Metzger, "Automata in History: Part 1," *Studio International* (1969): 107-109.
3. See Domenico Quaranta, *Beyond New Media Art* (Brescia: Link Editions, 2013), 4-6. Quaranta's book offers a thoughtful and accessible account of many of the aspects of the divide.
4. Marx discusses the effects of the transformations of the industrial revolution in the chapter "Machinery and Large-Scale Industry," in *Capital*. See especially, Karl Marx, *Capital: A Critique of Political Economy, Volume I*, trans. Ben Fowkes (Harmondsworth, Middlesex: Penguin Books, 1976), 617f. On the online synthesis of production and reproduction see my book, *Internet Art: The Online Clash of Culture and Commerce* (London: Tate Gallery Publishing, 2003), ch. 1. *Capital* is available online at <http://www.marxists.org/archive/marx/works/1867-c1/index.htm> (accessed March 31, 2014).
5. Alexander Cockburn, *A Colossal Wreck: A Road Trip Through Political Scandal, Corruption and American Culture* (London: Verso, 2013), 441.
6. According to Paul F. Boller, Jr. and John George it is a misattribution. See *They Never Said It: A Book of Fake Quotes, Misquotes & Misleading Attributions* (Oxford: Oxford University Press, 1989), 64.
7. On monopoly rent and art, see David Harvey, "The Art of Rent: Globalization, Monopoly and the Commodification of Culture," *Socialist Register* (2002): 93-110. Harvey uses Marx's example of vineyards as a prime example of monopoly rent: the wine from a particular vineyard is a unique product, like the products of a particular artist. The article is available here: <http://thesocialistregister.com/index.php/srv/article/view/5778/2674> (accessed March 31, 2014).
8. See, for example: Alain Badiou, *The Communist Hypothesis*, trans. David Macey and Steve Corcoran (London: Verso, 2010); Bruno Bosteels, *The Actuality of Communism* (London: Verso, 2011); Costas Douzinas and Slavoj Žižek, eds., *The Idea of Communism* (London: Verso, 2010) and the follow-up volume Slavoj Žižek, ed., *The Idea of Communism 2: The New York Conference* (London: Verso, 2013); Boris Groys, *The Communist Postscript*, trans. Thomas Ford (London: Verso, 2010). For the most concerted attempt to revise and extend Marxist thinking, see the journal *Historical Materialism*, <http://www.historicalmaterialism.org/journal> (accessed March 31, 2014).
9. See Joline Blais and Jon Ippolito, *At the Edge of Art* (London: Thames & Hudson, 2006).
10. Remember Bataille: "Communist workers appear to the bourgeois to be as ugly and dirty as hairy sexual organs, or lower parts [...]" Georges Bataille, *Visions of Excess: Selected Writings, 1927-1939*, ed. Allan Stoekl (Minneapolis: University of Minnesota Press, 1985), 8.



Grounds for the Political Aesthetics of Cultural Commons in the Post-medium Condition

THE OPEN SOURCE CULTURAL OBJECT

by

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INTRODUCTION

The open source concept of software production and distribution has brought about its own vision of the commons, remaking this notion of an old heritage in the light of digital production forms. ¹

The term 'commons' dates back to medieval England when it referred to land and its resources upon which a community of people had joint rights of use as a means to sustenance. ² Up to the present day, the

Figures 1-4. Stills from *Elephants Dream* digital animated movie, Orange Open Movie Project, 2006. Netherlands Institute for Media Art, dir. Bassam Kurdali, Blender Foundation. Used with permission via the Creative Commons Attribution License 2.5, Blender Foundation / Netherlands Institute for Media Art / www.elephantsdream.org, 2006.

ABSTRACT

Based on the open animated movie Elephants Dream and the Free Universal Construction Kit project, I delineate and critically examine open source cultural production as a specific practice of the contemporary post-medium condition (Krauss, Manovich). I explore how the open source model of the commons is translated into aesthetic strategies when the open source concept is applied to cultural production. Furthermore, I suggest a model for the cultural object in the post-medium condition, grounded in the way in which this practice affirms its source material. Through this model, I propose categories for the articulation of specificity in practices of the post-medium condition. These categories are further analyzed amid the tensions of commodity market. The discussion proceeds to relate open source cultural practice to issues relevant to the tradition of materialist aesthetics. In particular, the open source artwork is read against the grain of modernist political aesthetics, critically comparing the new media condition of open source production with the political imperative of accessing the mode of production (Benjamin). In conclusion, I outline the politico-aesthetic function ascribed by this practice to digital cultural commons.

use of the term has been expanding and it has been applied not only to common land, but also to environmental and cultural resources such as rivers or heritage sites, as well as software and information. ³ In its contemporary form, the concept of the commons is associated with modes of sharing common property, thus standing in direct opposition to the concept of private property rights, one of the fundamentals of

economic liberalism. As such, it has gained political currency, as well as critique. Its viability was contested, most famously, in Garret Hardin's formulation of the "tragedy of the commons." ⁴ Hardin's "tragedy" is based on a metaphor of common land employed for cattle herding. Since individual owners of cattle are concerned with maximizing their profits, they attempt to consume more resources at the expense of

others, thus causing the collapse of the system. David Harvey succinctly formulated the counterpoint to this argument: if the cattle as well as the land were held in common, the metaphor would not work.⁵ Clearly, there are different definitions of what the commons are or might be, and I will here focus on the one brought about by the open source concept. More specifically, I will take up the following question: how does the open source model of the commons translate into an aesthetic strategy when the open source concept is applied to cultural production?

I will explore open source cultural practice as a specific structuring of the (digital) object that emerges from a politically strategic constellation of production categories, especially source materials. What is the role of this object-structure in establishing the open source mode of today's cultural commons? Moreover, considering the political potency of the idea of the commons, how does this role relate to the tradition of materialist political aesthetics and its aims and strategies? After the introduction of select examples, those questions will be discussed in the ensuing sections, which are organized on the basis of the respective contexts and discourses in which this practice takes place: the post-medium condition, the commodity market and materialist aesthetics.

1. OPEN SOURCE IN CULTURAL PRACTICE - INTRODUCTION OF EXAMPLES

'Open source' is a term originating from debates in the 1990s regarding software production and distribution.⁶ This widespread notion refers to software for which the original source code is made freely available and may be redistributed and modified.⁷ The concept that it denotes involves open and communal qualities of production and public distribution of software, principles that stand in direct opposition to a proprietary model of technological production.^{8,9} These principles have been translated into other fields, including that of cultural production. I will introduce two such examples of cultural practice which embrace the open source concept in order to produce a working outline of the issues raised by this practice.

The animated short film *Elephants Dream* was released in 2006 as "the world's first open movie."¹⁰ Its source material, namely all 3D models, textures and audio files, are freely available to download from the site of the project.¹¹ Furthermore, the tools used to produce it, most importantly the three-dimensional computer modeling environment Blender 3D, are open source programs.¹² These two factors make it possible for the recipients to explore how this animat-

ed movie is made. Further, through access to its production elements, it offers the possibility to re-make the movie or use its components in new projects. This may occur free of charge under the Creative Commons license, provided that attribution to the original project is given.¹³ In the context of cultural production, having an open source structure does not necessarily point to the openness of the 'source code,' as is the case with software products. Elements of a higher order such as the digital 3D models of *Elephants Dream* can be understood as the source material for a given cultural object. This also means that the high threshold of required programming skills necessary for participation in an open source software project is somewhat lowered. It is, however, still present in the form of the threshold posed by the skills necessary for digital 3D modeling. Keeping this in mind, let us consider the following questions: what exactly does a 'source' represent for a cultural object? What kind of access to modes of production does this openness provide? And, what are the conditions in which such a source can be appropriated and employed in different production processes?

Another example of open source principles present in cultural practice is the *Free Universal Construction Kit* (2012), a collection of adapter blocks that enable interoperability between ten children's construction toy lines, such as those of LEGO or Tinkertoys.¹⁴ This design project was developed by hacker and technological organizations F.A.T. and Sy-lab with the aim of "encouraging new forms of interplay between otherwise closed systems."¹⁵ The project provides "missing pieces" that corporations in market competition do not produce, such as a LEGO block that can be combined with K'Nex gears or Lincoln Logs cylinders.¹⁶ This intervention into enclosed commodity systems and their prescribed modes of use is realized and distributed through the open source availability of digital designs of the missing pieces, which are made

freely available to download.¹⁷ The design models are available in .STL format, which is very convenient for computer-aided manufacturing techniques such as 3D printing. The idea is to make possible the printing of the necessary adapter piece, either on a home printer or through a specialized 3D printing service.¹⁸ The sharing of digital source materials is here linked with issues of mass-manufactured physical commodities through the lens of "openness," which is one of the more prominent idiosyncrasies in the discursive field of digital culture. I will, for now, leave aside the discussion of the actual position this project occupies in relation to the dominant mode of commodity production, and first focus on what these examples bring to light about digital source material and its potential critical capacity.

For each of these examples, I argue that integrating open source principles is just as integral to the project as are their respective conventionalized cultural practices, animation and design. The open source concept is not merely an interesting technical innovation or a phenomenon of the contemporary digital environment that is accepted by new media artists and employed in their creative explorations of digital media and culture. Rather, adopting the open source principles means inheriting a particular cultural politics with concern for issues of property and access. A specific politics concerning their source material is what sets these examples apart from new media or contemporary art projects that are based on comparable cultural forms.

2. THE SOURCE-EXECUTANT MODEL OF THE POST-MEDIUM OBJECT

Examples of open source principles of production and distribution in cultural practice can be found in a variety of media forms such as digital animations,



images, web sites, games, etc. This practice is not tied to a particular medium or format, and its specificity cannot be extrapolated from this basis. Another way to go about this is to consider the open source cultural object as a manifestation of the 'post-medium' condition, relying on Rosalind Krauss' introduction of the term 'post-medium,'¹⁹ as well as the post-media argument employed by new media scholars Peter Weibel and Lev Manovich.²⁰ I will first summarize these accounts and, then, revisit the framework of the post-medium condition in light of the relations and categories established by the open source cultural object.

Introduced by Krauss, the term 'post-medium' reflects the decline of the modernist concept of medium-specificity. It refers to the situation in which artistic practices can no longer derive their 'essence' from the physical medium in a modernist search for purity. According to Krauss, reductive modernism turned its pursuits of medium specificity into its opposite (intermedial) end: 'art in general' as embodied in conceptual art. Another example of this condition would be a practice such as installation art, which manifests itself in several different media, often employed simultaneously. Historically-established mediums such as painting and sculpture are replaced by generic 'art.'

New media scholars deal with similar issues through the post-media argument, which makes it possible to bring them into discussion with the art-historical understanding of the situation. It is in this sense that Weibel and Manovich use the term 'post-media.' Weibel focuses primarily on the technical aspect of the post-media condition where "no single medium is dominant any longer; instead, all of the different media influence and determine each other."²¹ It would seem that the production process of open source cultural objects provides a platform for such "mixing of the media," and might be considered as an expres-

sion or a symptom of this condition. For example, the 3D models from *Big Buck Bunny* (2008), the second open movie that was produced and distributed under the same terms as *Elephants Dream*, are employed in an open game titled *Yo Frankie!* (2008).²²

Manovich characterizes the digital attack on older media as the ultimate blow to the materiality and specificity of practices, since the computer imposed its own operations across the media, such as copy and paste, morphing or interpolation.²³ These operations can be applied, regardless of the medium, to photography, images, sounds and moving images, thus, blurring the distinctions between photography and painting, as well as between film and animation.²⁴ Predictable as it may be for digital media scholars, there is a special emphasis on the 'universal machine' that makes the enduring culturally and socially coded specificity collapse.

In contrast to these accounts of how digital media forms de-specify objects of aesthetic production, one could claim that adopting open source practice

as a distinct cultural form implies that some form of specificity still resides within the object itself. After all, the open source concept is established in its particular configuration of the object, in its structuring of the source material, rather than as a purely contextual or discursive category. Therefore, an articulation of open source cultural practice also means demarcating an object within the post-medium condition. What kind of object does this bring about and what makes it specific while, at the same time, applicable across media forms? Although it would not function as its direct methodological background, but rather as a sort of underlying motivation for this endeavor, we could recall Walter Benjamin's dream of a form of criticism so tenaciously immanent that it would remain entirely immersed in its object.²⁵ As Terry Eagleton concisely noted, for Benjamin the idea is "not what lies behind the phenomenon as some informing essence, but the way the object is conceptually configured in its diverse, extreme and contradictory elements."²⁶ The starting point here is to affirm the self-contained category of the digital source so as to develop a model of an object that can be employed both to articulate the

open source cultural object, as well as make visible the structural relations inherent in an object manifesting a (digital) post-medium condition.

The model I am proposing identifies the categories of the *source* and the *executant* within a cultural object. To place these two categories in dynamic relation to one another a third category is necessary – the *production process*. In computer-related discourse, the term 'source' usually refers to the software's source code, a textual listing of commands. For a consideration of a cultural object, elements of a higher order can assume the structuring role that a source code has for its software (as was the case with the digital 3D models and textures of *Elephants Dream*). In the model presented here, the term 'source' signifies production categories established and employed in the making of the object. The 'executant' indicates a conventionalized mode of executing or performing the source. I have appropriated this term, which most often stands for a person who performs or executes something, for instance a musical piece. The word also captures the '.exe' file of a computer program that



elephants dream



executes or 'runs' the source code. A few contemporary examples of the source-executant relation could include: a digitally printed image as the executant of the computer file (its source), a digital scan as the executant of an old photograph (its source), a web page as an executant of all the digital images, texts, animations and sounds that function as its source material.

I will here primarily focus on the category of the digital source because of its relevance to open source practice, but this account of the object could also be related to older aesthetic frameworks. The source as conceived in digital culture has a conceptual resonance with, for example, the respective functions of Fluxus score cards, Sol LeWitt's instructions for wall drawings, or even clay models of bronze sculptures, to a limited degree. However, most historically established artistic mediums and practices do not materially distinguish the source and executant categories. In a traditional cultural object such as a marble sculpture, it is impossible to fully discern on one side the executant and on the other, the source. They are closely interrelated even in digital cultural objects, but examples such as those of open source cultural practice point towards the possibility of accessing these categories separately. As a consequence, they open up the field of post-medium possibilities of remediation and re-mixing, as described by Weibel and Manovich, among others. If it can be accessed, a source can be given an alternative executant in a different medium altogether. The digital models of *Free Universal Construction Kit* are employed when making the accompanying poster as one of its executants, although they are mainly intended as sources for 3D printed physical executants. The differentiation of the source and executant to a degree of separation gained momentum within the technical circumstances of digital reproduction, but this is more fundamentally conditioned by powerful market interests to which we will return in the third section.

The post-medium condition can be understood as increasing the possibility of structural differentiation among the source and the executant, bringing about a flexibility of their medial configurations. These configurations escape the scope of historically established mono-medial definitions of practices, which also makes it untenable to assert aesthetic conventions based solely on the media form of the executant. I find it necessary to consider both the source and the executant as constitutive of the aesthetic object in the post-medium condition.²⁷ In other words, I would argue that the specificity of post-medium practices has materially established foundations within its object, through the way in which the source and executant are interrelated in a given practice. By employing this model to articulate the specificity of post-medium practices, I am countering the arguments discussed above regarding the "universal" post-media condition or the notion of collapsed vertical barriers between practices.²⁸ For example, the kind of specificity that is being articulated through the source-executant model can clearly differentiate sculpture made with digital technologies of 3D printing from a carved marble sculpture. Their source-executant relation differs decisively, including differences in the type of labor and associated skills, employed materials and technical supports as well as reproduction possibilities. Fundamentally, these media categories necessitate a consideration of the production process in order to be related. In a corresponding manner, I would propose to consider open source cultural production as a specific practice, which means that the *Elephants Dream* is not a manifestation of the same practice that can be found in conventional digital animation with hidden production elements and techniques, or that the *Free Universal Construction Kit* is not sufficiently defined as a piece of product design. It is their materialized open source condition, and its economic and aesthetic consequences that crucially define them.

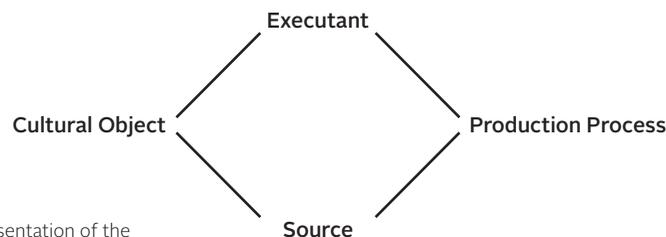


Figure 5. Schematic representation of the source-executant model of a cultural object.

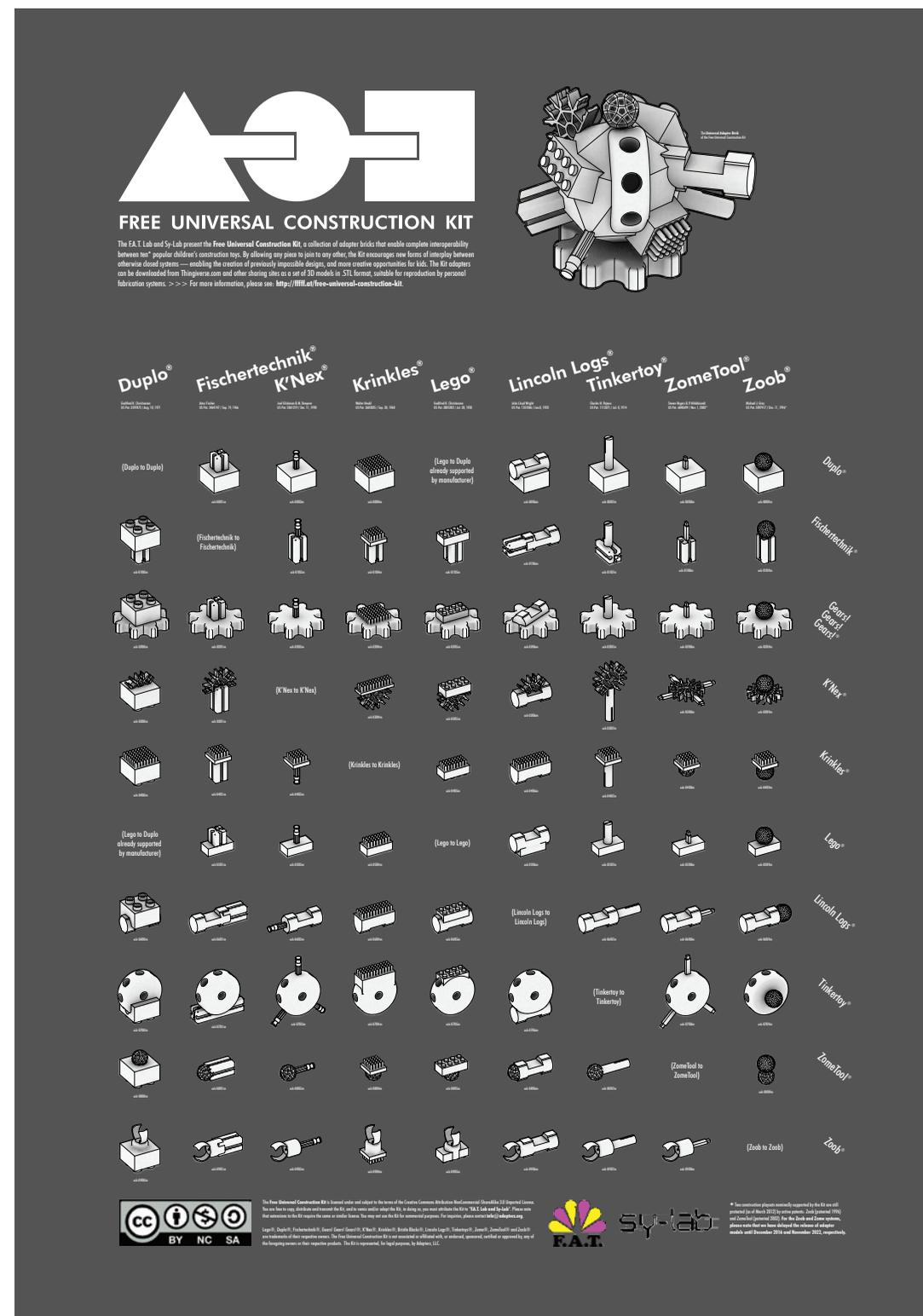


Figure 6. Free Universal Construction Kit poster, F.A.T. Lab and Sy-Lab, 2012. Used with permission via the Creative Commons Attribution-Share Alike 3.0 Unported license, F.A.T. Lab and Sy-Lab, <http://www.ffff.at/free-universal-construction-kit>, 2012.

3. THE POST-MEDIUM OBJECT AND THE COMMODITY MARKET

The separation of the source and the executant in software products is embedded in the financial interests of the software industry. The notorious example of Microsoft hiding the Windows source code is a clear illustration of this. The purpose of withholding the source is to secure the profits based on selling the separated executant. Consequently, these interests shape the condition of the executant beyond its separation with the source. Software products as executants are released in machine language of the binary code as long strings of ones and zeros that a computer can read and execute, but a human cannot productively understand, at least not without the source code. Political economist Steven Weber provides an accessible description of the role of the source code in these circumstances:

*The source code is basically the recipe for the binaries; and if you have the source code, you can understand what the author was trying to accomplish when she wrote the program – which means you can modify it. If you have just the binaries, you typically cannot either understand or modify them. Therefore, shipping binary code is a very effective way for proprietary software companies to control what you can do with the software you buy.*²⁹

Seen in this light, it is clear why contemporary struggles against the commodification of software and intellectual property, such as the Free Software Movement, placed an emphasis on access to the source code and its distribution alongside the software package. However, in order for the accessible source to exert a meaningful challenge to the corporate mode of developing and distributing proprietary software, the users need sufficient skills in order to be empowered as producers and to engage in modifying the software according to their own, or communal, needs. It goes without saying that a majority of users lack these skills, although the exact

figures would depend upon the type and complexity of the particular source.

This connects the problem of open access to the source code with a Marxist perspective on ‘social deskilling.’³⁰ In this view, the development of technology under capitalism transfers knowledge from labor to machinery. As a result, direct producers lose control over the production process since machinery is owned by capital and managed by its representatives. As Johan Söderberg explains, technology is specifically designed into ‘black boxes’ so that the laborer/user is left without influence over the functions that the machinery imposes upon her.³¹ In the software world, the separated executant, severed from its source code, embodies the ‘black box’ concept and functions both as a technical guarantee for the legal protection of intellectual property (necessary to sustain its commodity form), and also as a mode of isolating the evermore specialized sets of skills of software/information labourers.

The situation of the source and the executant in the software market is somewhat different from that in the field of cultural production and cannot be directly translated into it. Instead of primarily securing the commodity form, the separated executant brought about a new set of problems for the mass-entertainment businesses, a sector heavily influenced by digitization processes. A large quantity of films and music is distributed through peer-to-peer networks and torrents, thus escaping the content flow of big production companies, as well as their revenue streams.³² This raises issues not only for the media business, but also for our discussion of open source cultural production. If a Pixar animated movie can be found online, then what is the point of creating *Elephants Dream* as an open animated movie? Granted, there is certainly the issue of legality as digital executants of Pixar’s production are obtained illegally, whereas

Elephants Dream is distributed under a Creative Commons license. But I will not ponder here the overarching forms taken by the intellectual property regime. Instead, I focus this investigation on the material conditions and roles of the source and the executant of contemporary cultural objects as I believe they hold importance for aesthetic production.

Media researcher Göran Bolin describes a number of strategies by which media businesses are trying to secure profits.³³ For instance, he observes how fictional characters become commodities, which makes the trademark law increasingly important.³⁴ But with the increased difficulty of cashing in on the content itself, media conglomerates turn to (closed) media platforms, such as mobile phones or game consoles, as an alternative or supplementary source of profits. These hardware platforms are commodities themselves, but also function as means of consumption of media texts as products. He notes that the audience “needs to buy increasingly more media technologies that can decode the digital content.”³⁵ I would add to this that the means of consumption are becoming more and more specialized for specific kinds of executants, and vice versa, especially when we think of devices such as e-readers, tablets or smart-phones. Finally, the audience itself becomes an important commodity for media producers.³⁶ Economic revenues for media companies are secured in yet another important way by selling this commodity to advertisers.

All of these tendencies are associated with the lucrative process of media (market) convergence, in which the boundaries between different media are becoming blurred and content is ‘flowing’ from platform to platform, as theorized by writers such as Henry Jenkins.³⁷ This transmedial ‘flow’ yields consequences for the source-executant relations, and reveals that the source, while separated and suppressed, still has a significant structuring power within the cultural object

as a whole. For example, when a short film featuring landscape shots is to be repurposed in a music video, a contract has to be signed. Besides legal rights being sold, these deals state as standard that raw footage with extended shots needs to be provided.³⁸ In other words, source material is still essential for a productive re-use of the given film, even though its executant is available on distribution channels such as YouTube or Vimeo. Therefore, providing the source material in the manner of *Free Universal Construction Kit* or *Elephants Dream* does in itself challenge the black box of the executant.

In short, on the media market the commodity form is secured not only by various embodiments of the intellectual property law, but also by the severed link to the source of the distributed executant. Tensions in the media market manifest in many areas, and I would argue that they are also present on the level of source-executant relations. The observed pressures on the object’s structure are always in some way associated with the commodity form and its struggle with contesting (digital) commons. What follows from this discussion, in which the categories of the source and the executant have been given some materialist opacity, is the question of whether these categories can be instrumental, or at least productive, in order to conceptualize the political aesthetics for the post-medium condition?

4. THE POST-MEDIUM OBJECT AND MATERIALIST AESTHETICS

Open source cultural practices contain the ambitious promise of free participation and the democratization of cultural objects. How do these aspirations relate to the century-old leftist tendencies in modernist aesthetics that focus on enabling access to the mode of production? One of the recurring themes of

Marxist writers on political aesthetics, such as Walter Benjamin, is the breaking of the phantasmagoric effect, the illusionary and magical appearance of commodity culture and its material products that serves the ideological function of concealing their conditions of production.³⁹ This kind of phantasmagoria is epitomized in Hollywood productions where ‘magic’ is achieved through special effects whose mode of production is concealed. By contrast, avant-garde tendencies such as those of 1920s Soviet cinema aspired to make the apparatus of production visible, and to relate film production with material relations in society in general.⁴⁰ Constructivism, Fluxus and many other twentieth-century practices produced diverse responses to this aesthetic and political goal. Furthermore, Benjamin more specifically argues that it is not enough to merely transmit the apparatus of production (to the recipients); what is also needed is its transformation.⁴¹ But if the transformed production process is not merely transmitted, how is it accessed?

The source-executant model of a cultural object structures a typology of two possible points of access. On the one hand, the executant of a work can reveal or materialize its underlying production process. A classic example of this type of access to the mode of production would be Dziga Vertov’s montage technique in his 1929 movie *Man with a Movie Camera*, where the director reveals how the final shots have been filmed. For example, apart from showing footage related to trains and their movement, the director also uncovers the difficulties and peculiarities that the cameraman faces when filming such shots. In this way, the audience is constantly reminded of the fact that the movie has been produced for them as a result of a specific mode of labor, thus making the production of a film relatable to material relations in society, as well as to other labor forms and economic units.⁴² The audience receives these relationships as visual content through the executant – the finished movie version

they are watching. Arguably, this type of a response to the posed political and aesthetic problem is trapped in a contradiction between achieved ruptures of the ‘phantasmagoria’ and the fact that these breaks are again ‘transmitted’ to the viewer in a prearranged way: there is always an off-screen cameraman filming the one on-screen.

On the other hand, the articulation of a fully separate source of a digital cultural object offers the possibility of an alternative access point into the mode of production. *Elephants Dream* is such a case. However, this is not immediately apparent because its executant is a closed movie file, just like any Hollywood DVD edition. Furthermore, the high technical quality and visual complexity of its digital animation does not highlight this film’s production process any more so than viewing Pixar or DreamWorks products.⁴³ And yet, its mode of production is made blatantly bare in the publicly available source material. This kind of access reveals elements of the cultural object that are not visible in the executant, thus implying a deliberate intention to promote the accessible source as an active element of the visual system. With some skill in navigating a 3D production environment, the recipients are able to have a look ‘behind the scenes’ and reveal how each shot or element of the animation was produced, as well as to re-use the source material in different executants, as long as it is shared under the Creative Commons license.

When viewed through the lens of twentieth-century political aesthetics, the source-based means of production-access produce twofold results. From the perspective of its utopian promise of open access, *Elephants Dream* highlights a possible transformation of cultural production with respect to a proprietary mode of production. Thus, it appears compliant with Benjamin’s imperative of working on *transforming* the conditions of production while providing access to the

production process itself, though it should be stressed that, in terms of production, it mainly empowers a relatively narrow community of 3D modeling enthusiasts gathered around specialized forums.⁴⁴ Even if the utopia of democratic and free participation dissipates at the skill threshold – which inevitably appears when the source and executant are reintegrated in the conditions established by ‘deskilled’ technology developed under capitalism – there still remains a considerable degree of resistance to the commodity form that also affects the unskilled recipients. The attained non-proprietary status of the commons allows for non-commodified forms of distribution. Therefore, while the main political capacity of the digital source material as it is organized in open source practice stems from its role in securing the free distribution of commons, the open source as a politico-aesthetic strategy is inherently dependent upon skilled specialists and contains an implicit retreat from modernist concerns with the division of labour and a transformation of the audience into producers *at large*.

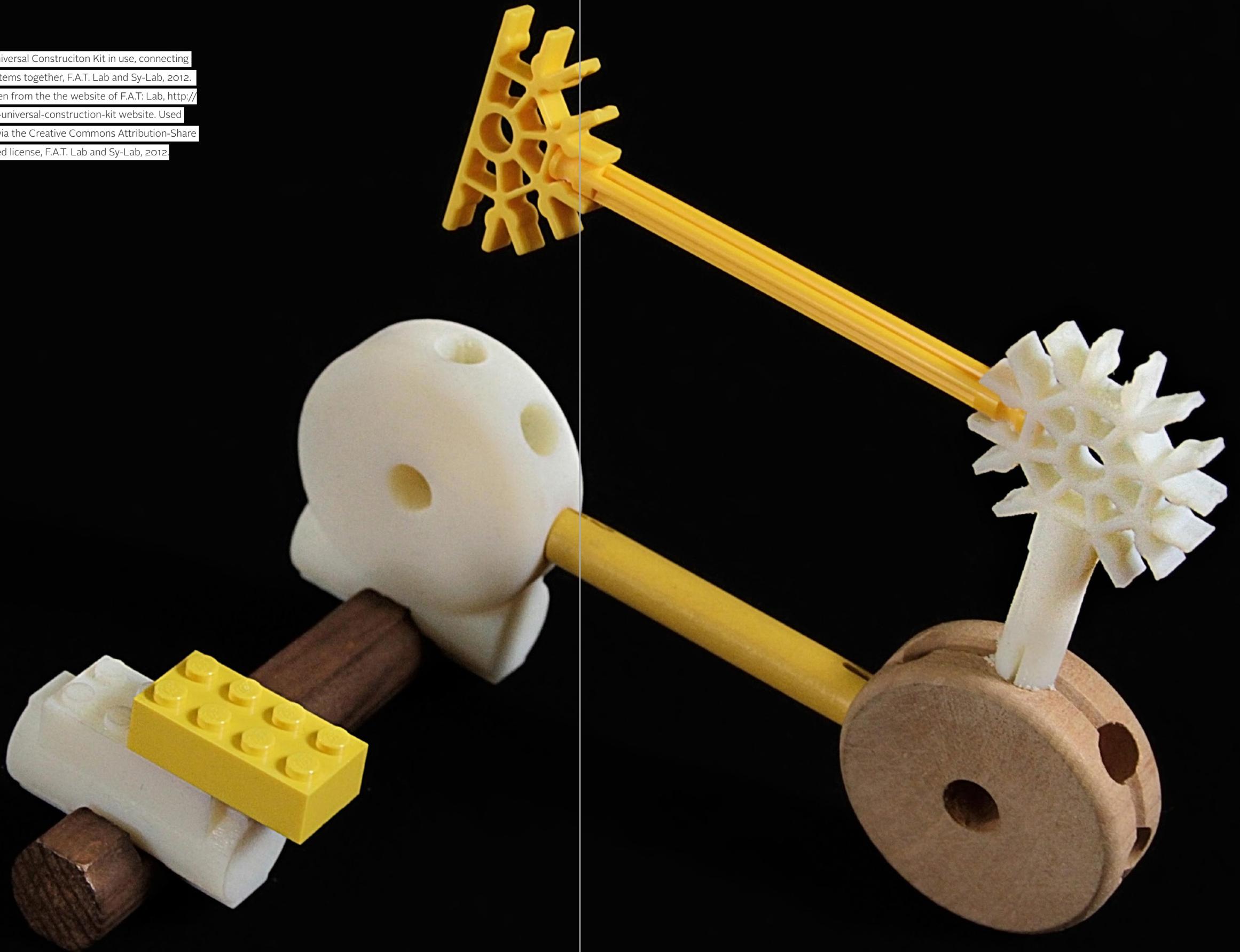
Free Universal Construction Kit perhaps even more clearly illustrates the position of open source cultural practice towards the dominant socio-economic hierarchy of the market. Although its executants – the ‘missing pieces’ required for construction toy interoperability – do rework the form of the mass produced products, they do not aim to subvert that commodity altogether. Rather, the aim is to augment the existing commodity systems and intervene into their delimitations by reworking their (digital) source materials. This is in line with what Josephine Berry Slater states as the case for the creative commons license (which both of my examples employ): it understands the commons as “a necessary adjunct to the market, not a proto-communist phase of development.”⁴⁵ Following the trail of *Elephants Dream* and its re-use, the cultural practice supports this evaluation. It leads not only to fan re-mixes but also to commercial use of

its footage and screenshots.⁴⁶ Furthermore, from this skill-centered perspective, open source cultural practice can also be evaluated as an effective advertisement for the labor market.⁴⁷ Fundamentally, both *Elephants Dream* and *Free Universal Construction Kit* subscribe to the commons-based utopianism of the concept of open source without taking it up for further investigation and thus, do not establish themselves as reflective, critical practices.

Alongside this interesting formation of utopian tendencies and its historically conditioned limitations, there is also an aesthetically negative resonance of the open source cultural object as compared to modernist practices and utopian strategies. As illustrated by the *Elephants Dream* short film, the executant does not necessarily have to reveal its mode of production in order to achieve the open source goal of transforming the object into cultural commons, since the production process of the object is accessible through its publicly available source. This kind of reception strategy is essentially *non-modernist* in terms of aesthetics. It does not produce a reworking of sensory strata, let alone the conventions associated with the format of its executant. In modernist art as defined through the paradigm of medium specificity, any accentuation of the source material necessarily had to bring about consequences for the executants, since those categories were not separately established or sharply divided. On the contrary, they were fused within the confined articulation of the medium or its support. On this ‘media-categorical’ level we could state that the emancipation of the source in digital production forms breaks the modernist horizon of aesthetic expectations when it comes to reception of the executant.

This is not to say that the executant necessarily *has* to conceal its mode of production, although it does inherently bring about that tendency through its function of a stand-alone package: the separated

Figure 7. Free Universal Construciton Kit in use, connecting four different systems together, F.A.T. Lab and Sy-Lab, 2012. Photography taken from the the website of F.A.T. Lab, <http://www.fatff.at/free-universal-construction-kit> website. Used with permission via the Creative Commons Attribution-Share Alike 3.0 Unported license, F.A.T. Lab and Sy-Lab, 2012.



executant is already at one remove from its conditions of production and employed source materials. But there are other levels upon which this link may be re-established to a limited degree. For example, I would interpret *Elephants Dream* narrative as addressing this object's open source condition. The story of the film features two characters, the elderly Proog and the youthful Emo, jointly inhabiting an undefined environment of surreal industrial and electronic constructs they refer to as "the Machine." They travel through it and explore it, which gradually reveals that they do not perceive the Machine in the same way. Proog is presenting the environment to his younger companion and trying to conserve what he makes of it, while Emo questions this understanding of the machine and eventually attempts to intervene in it by proclaiming his visions of what the Machine is or could be. I find that the relation between the narrative content of the short film, specifically the role and the portrayal of the Machine in the story, and the open condition of its source material is rather direct, although it is never made explicit. This relation is important to take note of as a counterpoint to executant separation, although it should also be stressed that the leftist wing of modernism worked on surpassing exactly this *metaphorical* level of aesthetic relations to production. But the materialist fundamentals of such modernist aesthetics seem to be put in question by the source-executant divide. Having discarded modernist techniques and strategies, what is left in store for (political) aesthetics?

Precisely because of this line of critique, it is important to understand and conceptualize post-medium practices in terms of their source as well as the executant. In my native discipline of art history, the confined focus on the executant seems particularly acute, which I believe is one of the reasons why the very object of art-historical research has become vague and contested.⁴⁸ While the executant of the open source cultural object is not necessarily materially distinct from its corresponding mass cultural form, the condition of its source establishes a difference in terms of media and commodity forms, and this difference needs to be acknowledged. Moreover, an aesthetic mode of self-reflexivity is not inconceivable for the interrelationship of the source and the executants, as hinted at in the manner in which *Elephants Dream* addresses its own

open source condition through the presented narrative. However, I would suggest that this rift in the object needs to be explicitly accounted for in such a self-reflexive structure because of the discussed political, economic and aesthetic functions of the categories of the source and the executant in contemporary production forms. Even if this practice does not directly commit to modernist political aesthetics, I believe that at the same time it offers tools for their refurbishing in the post-medium condition, especially by proposing an aesthetic system that includes the category of the source as an integral component of the cultural object.

CONCLUSION

The open source cultural object brings to our attention the category of the digital source which I hold to be crucial in both envisioning and analyzing contemporary materialist strategies and utopian tendencies in cultural practices. Together with its counterpart category of the executant, the digital source has an active function in contemporary socio-technical systems of cultural production and distribution, a function I could only begin to outline in this format through the lenses of the market, media and aesthetics. In light of its attitude to the production category of the digital source material, open source cultural practice returns some much-needed materialist substance to the nebulous field of digital culture marked by notions such as media convergence or the post-medium condition.

Moreover, this practice begins to enact an aesthetic model in which the (skilled) recipient is positioned *in between* the categories of the source and executant – a space opened by the ruptured object of the post-medium condition. The mode of public sharing and distribution of the open source cultural object constitutes a part of the necessary conditions of its reception (or to put this the other way around, if the digital source

material is not freely distributed, then the practice is not established as 'open source'). Hence, a possibility arises for the conceptualization of an aesthetic experience for which it is essential that the aesthetic object is established as a commons. I would identify such a strategic positioning of the recipient and the aesthetic activation of the very conditions for the work's distribution as the main strategies of open source cultural practice when it envisions how the political aesthetics of (digital) cultural commons are to be established. These strategies are still nascent and largely only implicitly manifested in concrete examples of contemporary open source cultural practice, but nevertheless I find them to be highly provocative and productive utopian tendencies of our time that need to be attended.

What I also tried to pose in this essay is how such strategies relate to the modernist tradition of leftist aesthetics, its methods and fundamental objectives. Rather than emphasizing limited strands of continuity between the two, it seems more accurate and productive to acknowledge the open source mode of aesthetic production as a pragmatic reinterpretation of Benjaminian demands for access to a mode of production that retreats from aspirations for wider social transformation. Open source cultural practice coexists with and within commodity culture, much like open source software development is incorporated in corporately driven technology development. Nevertheless, or precisely because of this, the open source political aesthetics of cultural commons are not established as a purely utopian tendency. The open source cultural practice does empower its main audience of peer specialists to be participants and producers, rather than treating them as competitors. In addition, the example of *Free Universal Construction Kit* implies a possible reworking of predetermined forms of commodity consumption *through* the circuits of cultural commons. Future aesthetic articulations of

the political capacity of digital source material should certainly take these factors into account.

If this exploration of the political aesthetics of the commons in the post-medium condition has resulted in presenting utopian prospects, then I trust that the methodological results of this discussion are, on the contrary, very concrete. I believe that the presented mode of object-analysis and research opens a possible way of locating and engaging practices in a still vague territory of the contemporary post-medium condition. The open source cultural object requires a new strategy for examining aesthetic production, and I have proposed a departure point from which to address the challenges it poses to the categories and narratives of art history, as well as to those of media studies. The question of what this alternative field of aesthetic production brings about for conceptual frameworks of contemporary art and its practices and concerns remains. In order to engage with this issue, in the future this project will have to relate the contemporary significance of digital source material with the history of comparable production categories employed in artistic production. However, that discussion will have to take place within other trajectories of artistic and cultural practice. ■

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REFERENCES AND NOTES

1. This paper draws from my master's thesis at Leiden University in the Netherlands titled: "Problems of Specificity and Production in the Post-medium Condition: The Open Source Art." It was developed with the generous guidance of Eric de Bruyn in Spring 2011. Segments of sections one and two were a part of a short article in the Zagreb-based journal *Frakcija*, listed in the references, but they have been greatly reworked for this paper and are for the first time presented internationally here. Sections three and four have been developed specifically for the purposes of this publication and have greatly benefitted from discussions with Sven Lütticken at the Vrije Universiteit Amsterdam.
2. For more information on the history of the commons and early documents governing its use rights, see Peter Linebaugh, *The Magna Carta Manifesto: Liberties and Commons for All* (Los Angeles: University of California Press, 2009).
3. David Berry, "The Commons," *Free Software Magazine*, February 21, 2005, <http://fsmsh.com/1092> (accessed on 10 October, 2013).
4. Garret Hardin, "The Tragedy of the Commons," *Science* 162 (1968): 1243-1248.
5. David Harvey, "The Future of the Commons," *Radical History Review* 109 (Winter 2011): 101-107.
6. The term 'open source' emerged out of internal disputes within the free software movement and was adopted by those advocating a more pragmatic approach that does not antagonize corporations. For more information on the free software movement and its central figure, see Sam Williams, *Free as in Freedom: Richard Stallman's Crusade for Free Software* (Sebastopol, CA: O'Reilly, 2002); for a concise overview of the open source versus free software debates, see: Julian Stallabrass, "Free From Exchange?," in *Internet Art: The Online Clash of Culture and Commerce* (London: Tate Gallery Publishing, 2003), 106-112.
7. *Oxford Dictionaries Online*, s.v. "open-source," accessed December 15, 2012, <http://oxforddictionaries.com>.
8. For an overview of the open source concept as a set of principles that govern a way of organizing production I would recommend: Steven Weber, *The Success of Open Source* (Cambridge, MA: Harvard University Press, 2004)
9. Although I am here considering only the software and cultural objects that are distributed free of charge, which is not necessarily the case for every product of an open source project, I have chosen to apply the term 'open source' throughout this paper, because it is associated more closely with the very object and its structural condition. I find this term more suitable for my task of conceptualizing the source as a category of cultural objects later in the text.
10. The website of *Elephants Dream*, <http://www.elephants-dream.org/> (accessed January 10, 2013).
11. Download location of *Elephants Dream* production files: <http://orange.blender.org/download> (accessed January 10, 2013).
12. An open source digital 3D modeling suite Blender 3D, <http://www.blender.org/> (accessed January 10, 2013).
13. "Creative Commons license is one of several public copyright licenses that allow the distribution of copyrighted works. A Creative Commons license is used when an author wants to give people the right to share, use, and even build upon a work that they have created." *Wikipedia*, s.v. "Creative Commons license," last modified January 20, 2014, http://en.wikipedia.org/wiki/Creative_Commons_licenses. Also see the website of Creative Commons, <http://creativecommons.org/> (accessed January 10, 2013).
14. The website of Free Universal Construction Kit, <http://fffff.at/free-universal-construction-kit/> (accessed October 10, 2013).
15. The Free Art and Technology (F.A.T.) Lab, the poster of "Free Universal Construction Kit," the website of F.A.T. Lab, <http://media.fffff.at/free-universal-construction-kit/images/free-universal-construction-kit-poster.pdf> (accessed October 10, 2013). See also the website of F.A.T. Lab, <http://fffff.at/about/> (accessed October 10, 2013).
16. The Free Universal Construction Kit poster offers the best overview of designs and interoperable links achieved in this project: <http://media.fffff.at/free-universal-construction-kit/images/free-universal-construction-kit-poster.pdf> (accessed October 10, 2013).
17. For example, Free Universal Construction Kit designs can be downloaded from Thingiverse.com, <http://www.thingiverse.com/uck/designs> (accessed October 10, 2013).
18. An example of specialized 3D printing services could be those provided by Shapeways, a New York based company: the website of Shapeways, <http://www.shapeways.com/> (accessed October 10, 2013).
19. Rosalind Krauss, *A Voyage in the North Sea. Art in the Age of the Post-Medium Condition* (London: Thames & Hudson, 1999).
20. For a very useful outline of various post-media arguments, including those of Weibel and Manovich, see Domenico Quaranta, *Media, New Media, Postmedia* (Milan: Postmediabooks, 2010).
21. Peter Weibel, "The Post-media Condition," in *Post-media Condition*, ed. P. Weibel (Madrid: Centro Cultural Conde Duque, 2006), 14.
22. *Big Buck Bunny* open animated movie, <http://www.big-buckbunny.org/> (accessed January 10, 2013); *Yo Frankie!* open game, <http://www.yofrankie.org/>, (accessed January 10, 2013).
23. Lev Manovich, "Post-Media Aesthetics," Lev Manovich's official website, 2000 -, www.manovich.net/DOCS/Post_media_aesthetics1.doc (accessed January 10, 2013).
24. *Ibid.*, 3.
25. Terry Eagleton, *The Ideology of the Aesthetic* (Oxford: Blackwell, 1990).
26. *Ibid.*, 328.
27. For the sake of clarity, I am focusing on single source-executant relations. This is sufficient to articulate the basic condition of 'open source.' However, a variety of practices in the post-medium condition are characterized by a whole set of nested source-executant relations. After all, most of the source materials I have mentioned thus far are themselves produced commodities and have in a sense previously functioned as executants. I have addressed cases of multiple source-executant relations in a shorter essay on digital image rendering available online: Boris Čučković, "Imagining the Rendered Image: Visuality in Post-medium Circuits," Visual Arts, Media and Architecture research master programme blog, <http://visualartsmediaarchitecture.wordpress.com/boris/> (accessed October 15, 2013).
28. Domenico Quaranta portrays the post-media condition as "breaking down the barriers that still separate contemporary art from film, architecture and design to arrive at a new, open vision of the visual realm." *Rhizome.org* editorial from January 2011, <http://rhizome.org/editorial/2011/jan/12/the-postmedia-perspective/> (accessed January 20, 2013).
29. Steven Weber, *The Success of Open Source* (Cambridge, MA: Harvard University Press, 2004), 4.
30. Harry Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1998). Referenced in Johan Söderberg, "Copyleft vs. Copyright: A Marxist Critique," *First Monday* 7, no. 3-4 (March 2002), <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view-Article/938/860>.
31. Johan Söderberg, "Copyleft vs. Copyright: A Marxist Critique."
32. Göran Bolin, "Media Technologies, Transmedia Storytelling and Commodification," in *Ambivalence Towards Convergence: Digitalization and Media Change*, ed. T. Storsul and D. Stuedahl (Göteborg: Nordicom, Göteborgs Universitet, 2007), 240.
33. *Ibid.*
34. *Ibid.*, 243.
35. *Ibid.*, 240.
36. *Ibid.*, 246.
37. Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York and London: New York University Press, 2006).

38. I would like to thank Giovanni Anthony Silva, an aspiring movie director, for sharing this insight and his experiences of 'media convergence' with me.
39. For a more detailed insight into Benjamin's use of the term phantasmagoria see Margaret Cohen, "Walter Benjamin's Phantasmagoria," *New German Critique* 48 (1989): 87-107.
40. For more information on (Soviet) cinema and its approach to the apparatus of production see Jonathan Beller, *The Cinematic Mode of Production: Attention Economy and the Society of the Spectacle* (Hanover, NH: Dartmouth College Press, 2006).
41. Walter Benjamin, "The Author as Producer," *New Left Review* 1, no. 62 (July-August 1970): 14.
42. For more information on the *Man with a Movie Camera* see Jonathan Beller, "Chapter 1: Dziga Vertov and the Film of Money," in *The Cinematic Mode of Production: Attention Economy and the Society of the Spectacle*, 37-87.
43. *Elephants Dream* was produced roughly at the same time as DreamWorks studios' digital animation movies *Madagascar* (2005) and *Flushed Away* (2006), as well as Pixar's *Cars* (2006) and *Ratatouille* (2007).
44. The primary audience for the source material of *Elephants Dream* seems to be a community organized around its main production tool, the Blender software suite. They frequent the associated Blender forum at: <http://www.blender.org/forum/> (accessed October 10, 2013).
45. Cf. Josephine Berry Slater, "Chapter 4: Of Commoners and Criminals," in *Proud to be Flesh: A Mute Magazine Anthology of Cultural Politics after the Net* (London: Mute Publishing Ltd, 2009), 161.
46. Different re-uses of *Elephants Dream* include simple remixes of the original executant such as the music video for the band *Buried Time* and their song "The Same" [YouTube video, 3:50, posted by EmanuelsStuff, February 10, 2010, <http://www.youtube.com/watch?v=QccukAr2j6s> (accessed October 10, 2013)], as well as the re-used original source materials for a new trailer –with different camera angles on objects and characters: "Elephants Dream" [YouTube video, 1:16, posted by David Windscheffel, September 23, 2010, <http://www.youtube.com/watch?v=qVTjrzWjhxM> (accessed October 10, 2013)].
- There are not many examples of source-based re-uses of *Elephants Dream* mainly because of the steep technical requirements when it comes to rendering a film format (new executant). The film was also employed for commercial promotion as one of the samples for HD capabilities of ArcSoft's TotalMedia Theater player: http://www.arcsoft.com/totalmedia-theatre/?utm_source=newsletter&utm_medium=email&utm_term=banner&utm_content=banner&utm_campaign=TMT6 (accessed October 10, 2013).
47. A quick glance at the open project section of Blender's forums will reveal calls for specialists and enthusiasts in various commercial and non-commercial projects: <http://www.blender.org/forum/viewforum.php?f=20&sid=a433b0959b233b7f1e00f705a49ecd04> (accessed October 10, 2013).
48. Art historian Julian Stallabrass presented this problem very clearly in the case of Internet Art. For him, the problem of the singular art object, which implies "something that connects Paleolithic cave paintings with a Cézanne landscape or a shopping trip by Silvie Fleury," makes it particularly difficult to define post-medium practices disconnected from the museum and the market for art. As the historical experiences of photography and video art remind us, in order to grasp a new mode of practice the definition of the art object as such has to be contested. See Julian Stallabrass, "Can Art History Digest Net Art?" in *Netpioneers 1.0 - Archiving, Representing and Contextualising Early Netbased Art*, ed. D. Daniels and G. Reisinger (Berlin: Sternberg Press, 2010): 165-179.



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