# 1AC – Community of Care

#### I woke up this morning and It was tough to get out of bed I missed rounds 1 and 2 because I had to go to mourn the death of a friend Gone too soon like So many other members of this community I wasn’t sure if I was gonna come to round three and I realized that I should because Debate is a space where I’ve always been able to find those Who care for me when my other friends couldn’t even today, while I’m in pain, I invite you all into my home. For queer kids like me, we get fixed by doctors and psychiatrists. They fix us and tell us how to be but There’s a disconnect because those forms of knowledge production only fix But never heal. I’ve emailed you several zines where you can learn about engaging in safe sex and HIV testing. Life saving communal forms of care for one another.

#### Welcome home everyone. I love you all, and trust me, I’ve got your back.

#### 1954: the invention of the Pill and the transexual changed capitalism forever – no longer concerned with the production of material, but rather, the material production and control of subjectivity itself

Preciado 08. Paul Preciado (Spanish philosopher, queer theorist, and king), 2008, “Testo Junkie,” translated by Bruce Benderson, I have a pdf, if you need it, sean!

From an economic perspective, the transition toward a third form of capitalism, after the slave-dependent and industrial systems, is generally situated somewhere in the 1970s; but the establishment of a new type of “government of the living”3 had already emerged from the urban, physical, psychological, and ecological ruins of World War II—or, in the case of Spain, from the Civil War. How did sex and sexuality become the main objects of political and economic activity? Follow me: The changes in capitalism that we are witnessing are characterized not only by the transformation of “gender,” “sex,” “sexuality,” “sexual identity,” and “pleasure” into objects of the political management of living (just as Foucault had suspected in his biopolitical description of new systems of social control), but also by the fact that this management itself is carried out through the new dynamics of advanced technocapitalism, global media, and biotechnologies. During the Cold War, the United States put more money into scientific research about sex and sexuality than any other country in history. The application of surveillance and biotechnologies for governing civil society started during the late 1930s: the war was the best laboratory for molding the body, sex, and sexuality. The necropolitical techniques of the war will progressively become biopolitical industries for producing and controlling sexual subjectivities. Let us remember that the period between the beginning of World War II and the first years of the Cold War constitutes a moment without precedent for women’s visibility in public space as well as the emergence of visible and politicized forms of homosexuality in such unexpected places as, for example, the American army.4 Alongside this social development, American McCarthyism—rampant throughout the 1950s—added to the patriotic fight against communism the persecution of homosexuality as a form of antinationalism while at the same time exalting the family values of masculine labor and domestic maternity.5 Meanwhile, architects Ray and Charles Eames collaborated with the American army to manufacture small boards of molded plywood to use as splints for mutilated appendages. A few years later, the same material was used to build furniture that came to exemplify the light design of modern American disposable architecture.6 During the twentieth century, the “invention” of the biochemical notion of the hormone and the pharmaceutical development of synthetic molecules for commercial uses radically modified traditional definitions of normal and pathological sexual identities. In 1941, the first natural molecules of progesterone and estrogens were obtained from the urine of pregnant mares (Premarin) and soon after synthetic hormones (Norethindrone) were commercialized. The same year, George Henry carried out the first demographic study of “sexual deviation,” a quantitative study of masses known as Sex Variants. 7 The Kinsey Reports on human sexual behavior (1948 and 1953) and Robert Stoller’s protocols for “femininity” and “masculinity” (1968) followed in sexological suit. In 1957, the North American pedo-psychiatrist John Money coined the term “gender,” differentiating it from the traditional term “sex,” to define an individual’s inclusion in a culturally recognized group of “masculine” or “feminine” behavior and physical expression. Money famously affirms that it is possible (using surgical, endocrinological, and cultural techniques) to “change the gender of any baby up to 18 months.”8 Between 1946 and 1949 Harod Gillies was performing the first phalloplastic surgeries in the UK, including work on Michael Dillon, the first female-to-male transsexual to have taken testosterone as part of the masculinization protocol.9 In 1952, US soldier George W. Jorgensen was transformed into Christine, the first transsexual person discussed widely in the popular press. During the early 50s and into the 60s, physician Harry Benjamin systematized the clinical use of hormonal molecules in the treatment of “sex change” and defined “transsexualism,” a term first introduced in 1954, as a curable condition.10 The invention of the contraceptive pill, the first biochemical technique enabling the separation between heterosexual practice and reproduction, was a direct result of the expansion of endocrinological experimentation, and triggered a process of development of what could be called, twisting the Eisenhower term, “the sex-gender industrial complex.”11 In 1957, Searle & Co. commercialized Enovid, the first contraceptive pill (“the Pill”) made of a combination of mestranol and norethynodrei. First promoted for the treatment of menstrual disorders, the Pill was approved for contraceptive use four years later. The chemical components of the Pill would soon become the most used pharmaceutical molecules in the whole of human history.12 The Cold War was also a period of transformation of the governmental and economic regulations concerning pornography and prostitution. In 1946, elderly sex worker and spy Martha Richard convinced the French government to declare the “maison closes” illegal, which ended the nineteenth-century governmental system of brothels in France. In 1953, Hugh Hefner founded Playboy, the first North American “porn” magazine to be sold at newspaper stands, with a photograph of Marilyn Monroe naked as the centerfold of the first publication. In 1959, Hefner transformed an old Chicago house into the Playboy Mansion, which was promoted within the magazine and on television as a “love palace” with thirty-two rooms, becoming soon the most popular American erotic utopia. In 1972, Gerard Damiano produced Deep Throat. The film, starring Linda Lovelace, was widely commercialized in the US and became one of the most watched movies of all times, grossing more than $600 million. From this time on, porn film production boomed, from thirty clandestine film producers in 1950 to over 2,500 films in 1970. If for years pornography was the dominant visual technology addressed to the male body for controlling his sexual reaction, during the 1950s the pharmaceutical industry looked for ways of triggering erection and sexual response using surgical and chemical prostheses. In 1974, Soviet Victor Konstantinovich Kalnberz patented the first penis implant using polyethylene plastic rods as a treatment for impotency, resulting in a permanently erect penis. These implants were abandoned for chemical variants because they were found to be “physically uncomfortable and emotionally disconcerting.” In 1984 Tom F. Lue, Emil A. Tanaghoy, and Richard A. Schmidt implanted a “sexual pacemaker” in the penis of a patient. The contraption was a system of electrodes inserted close to the prostate that permited an erection by remote control. The molecule of sildenafil (commercialized as Viagra© by Pfizer laboratories in 1988) will later become the chemical treatment for “erectile dysfunction.” During the Cold War years psychotropic techniques first developed within the military were extended to medical and recreational uses for the civil population. In the 1950s, the United States Central Intelligence Agency performed a series of experiments involving electroshock techniques as well as psychedelic and hallucinogen drugs as part of a program of “brainwashing,” military interrogation, and psychological torture. The aim of the experimental program of the CIA was to identify the chemical techniques able to directly modify the prisoner’s subjectivity, inflecting levels of anxiety, dizziness, agitation, irritability, sexual excitement, or fear.13 At the same time, the laboratories Eli Lilly (Indiana) commercialized the molecule called Methadone (the most simple opiate) as an analgesic and Secobarbital, a barbiturate with anaesthetic, sedative, and hypnotic properties conceived for the treatment of epilepsy, insomnia, and as an anaesthetic for short surgery. Secobarbital, better known as “the red pill” or “doll,” became one of the drugs of the rock underground culture of the 1960s.14 In 1977, the state of Oklahoma introduced the first lethal injection composed of barbiturates similar to “the red pill” to be used for the death penalty.15 The Cold War military space race was also the site of production of a new form of technological embodiment. At the start of the 60s, Manfred E. Clynes and Nathan S. Kline used the term “cyborg” for the first time to refer to an organism technologically supplemented to live in an extraterrestrial environment where it could operate as an “integrated homeostatic system.”16 They experimented with a laboratory rat, which received an osmotic prosthesis implant that it dragged along—a cyber tail. Beyond the rat, the cyborg named a new techno-organic condition, a sort of “soft machine”17 (to use a Burroughs term) or a body with “electric skin” (to put it in Haus-Rucker & Co. terms) subjected to new forms of political control but also able to develop new forms of resistance. During the 1960s, as part of a military investigation program, Arpanet was created; it was the predecessor of the global Internet, the first “net of nets” of interconnected computers capable of transmitting information. On the other hand, the surgical techniques developed for the treatment of “les geules cassées” of the First World War and the skin reconstruction techniques specially invented for the handling of the victims of the nuclear bomb will be transformed during the 1950s and 1960s into cosmetic and sexual surgeries.18 In response to the threat inferred by Nazism and racist rhetoric, which claims that racial or religious differences can be detected in anatomical signs, “de-circumcision,” the artificial reconstruction of foreskin, was one of the most practiced cosmetic surgery operations in the United States.19 At the same time, facelifts, as well as various other cosmetic surgery operations, became massmarket techniques for a new middle-class body consumer. Andy Warhol had himself photographed during a facelift, transforming his own body into a bio-pop object. Meanwhile, the use of a viscous, semi-rigid material that is waterproof, thermally and electrically resistant, produced by artificial propagation of carbon atoms in long chains of molecules of organic compounds derived from petroleum, and whose burning is highly polluting, became generalized in manufacturing the objects of daily life. DuPont, who pioneered the development of plastics from the 1930s on, was also implicated in nuclear research for the Manhattan project.20 Together with plastics, we saw the exponential multiplication of the production of transuranic elements (the chemical elements with atomic numbers greater than 92—the atomic number of Uranium), which became the material to be used in the civil sector, including plutonium, that had, before, been used as nuclear fuel in military operations.21 The level of toxicity of transuranic elements exceeds that of any other element on earth, creating a new form of vulnerability for life. Cellulosic, polynosic, polyamide, polyester, acrylic, polypylene, spandex, etc., became materials used equally for body consumption and architecture. The mass consumption of plastic defined the material conditions of a large-scale ecological transformation that resulted in destruction of other (mostly lower) energy resources, rapid consumption, and high pollution. The Trash Vortex, a floating mass the size of Texas in the North Pacific made of plastic garbage, was to become the largest water architecture of the twenty-first century.22 We are being confronted with a new kind of hot, psychotropic, punk capitalism. Such recent transformations are imposing an ensemble of new microprosthetic mechanisms of control of subjectivity by means of biomolecular and multimedia technical protocols. Our world economy is dependent on the production and circulation of hundreds of tons of synthetic steroids and technically transformed organs, fluids, cells (techno-blood, techno-sperm, technoovum, etc.), on the global diffusion of a flood of pornographic images, on the elaboration and distribution of new varieties of legal and illegal synthetic psychotropic drugs (e.g., bromazepam, Special K, Viagra, speed, crystal, Prozac, ecstasy, poppers, heroin), on the flood of signs and circuits of the digital transmission of information, on the extension of a form of diffuse urban architecture to the entire planet in which megacities of misery are knotted into high concentrations of sex-capital.23 These are just some snapshots of a postindustrial, global, and mediatic regime that, from here on, I will call pharmacopornographic. The term refers to the processes of a biomolecular (pharmaco) and semiotic-technical (pornographic) government of sexual subjectivity—of which “the Pill” and Playboy are two paradigmatic offspring. Although their lines of force may be rooted in the scientific and colonial society of the nineteenth century, their economic vectors become visible only at the end of World War II. Hidden at first under the guise of a Fordist economy, they reveal themselves in the 1970s with the gradual collapse of this phenomenon. During the second half of the twentieth century, the mechanisms of the pharmacopornographic regime are materialized in the fields of psychology, sexology, and endocrinology. If science has reached the hegemonic place that it occupies as a discourse and as a practice in our culture, it is because, as Ian Hacking, Steve Woolgar, and Bruno Latour have noticed, it works as a material-discoursive apparatus of bodily production.24 Technoscience has established its material authority by transforming the concepts of the psyche, libido, consciousness, femininity and masculinity, heterosexuality and homosexuality, intersexuality and transsexuality into tangible realities. They are manifest in commercial chemical substances and molecules, biotype bodies, and fungible technological goods managed by multinationals. The success of contemporary technoscientific industry consists in transforming our depression into Prozac, our masculinity into testosterone, our erection into Viagra, our fertility/sterility into the Pill, our AIDS into tritherapy, without knowing which comes first: our depression or Prozac, Viagra or an erection, testosterone or masculinity, the Pill or maternity, tritherapy or AIDS. This performative feedback is one of the mechanisms of the pharmacopornographic regime. Contemporary society is inhabited by toxic-pornographic subjectivities: subjectivities defined by the substance (or substances) that supply their metabolism, by the cybernetic prostheses and various types of pharmacopornographic desires that feed the subject’s actions and through which they turn into agents. So we will speak of Prozac subjects, cannabis subjects, cocaine subjects, alcohol subjects, Ritalin subjects, cortisone subjects, silicone subjects, heterovaginal subjects, double-penetration subjects, Viagra subjects, $ subjects . . . There is nothing to discover in nature; there is no hidden secret. We live in a punk hypermodernity: it is no longer about discovering the hidden truth in nature; it is about the necessity to specify the cultural, political, and technological processes through which the body as artifact acquires natural status. The oncomouse,25 the laboratory mouse biotechnologically designed to carry a carcinogenic gene, eats Heidegger. Buffy kills the vampire of Simone de Beauvoir. The dildo, a synthetic extension of sex to produce pleasure and identity, eats Rocco Siffredi’s cock. There is nothing to discover in sex or in sexual identity; there is no inside. The truth about sex is not a disclosure; it is sexdesign. Pharmacopornographic biocapitalism does not produce things. It produces mobile ideas, living organs, symbols, desires, chemical reactions, and conditions of the soul. In biotechnology and in pornocommunication there is no object to be produced. The pharmacopornographic business is the invention of a subject and then its global reproduction.

#### All of capitalism is structured around pharacopornography

Preciado 2. Paul Preciado (Spanish philosopher, queer theorist, and king), 2008, “Testo Junkie,” translated by Bruce Benderson, I have a pdf, if you need it, sean!

If we consider that the pharmaceutical industry (which includes the legal extension of the scientific, medical, and cosmetic industries, as well as the trafficking of drugs declared illegal), the pornography industry, and the industry of war are the load-bearing sectors of post-Fordist capitalism, we ought to be able to give a cruder name to immaterial labor. Let us dare, then, to make the following hypothesis: the raw materials of today’s production process are excitation, erection, ejaculation, and pleasure and feelings of self-satisfaction, omnipotent control, and total destruction. The real stake of capitalism today is the pharmacopornographic control of subjectivity, whose products are serotonin, techno-blood and blood products, testosterone, antacids, cortisone, techno-sperm, antibiotics, estradiol, techno-milk, alcohol and tobacco, morphine, insulin, cocaine, living human eggs, citrate of sildenafil (Viagra), and the entire material and virtual complex participating in the production of mental and psychosomatic states of excitation, relaxation, and discharge, as well as those of omnipotence and total control. In these conditions, money itself becomes an abstract, signifying psychotropic substance. Sex is the corollary of capitalism and war, the mirror of production. The dependent and sexual body and sex and all its semiotechnical derivations are henceforth the principal resource of post-Fordist capitalism. Although the era dominated by the economy of the automobile has been named “Fordism,” let us call this new economy pharmacopornism, dominated as it is by the industry of the pill, the masturbatory logic of pornography, and the chain of excitation-frustration on which it is based. The pharmacopornographic industry is white and viscous gold, the crystalline powder of biopolitical capitalism. Negri and Hardt, in rereading Marx, have shown that “in the course of the nineteenth and twentieth centuries, the global economy is characterized by the hegemony of industrial labor, even if, in quantitative terms, the latter remains minor in comparison to other forms of production such as agriculture.”31 Industrial labor was hegemonic by virtue of the powers of transformation it exerted over any other form of production. Pharmacopornographic production is characteristic today of a new age of political world economy, not by its quantitative supremacy, but because the control, production, and intensification of narcosexual affects have become the model of all other forms of production. In this way, pharmacopornographic control infiltrates and dominates the entire flow of capital, from agrarian biotechnology to high-tech industries of communication. In this period of the body’s technomanagement, the pharmacopornographic industry synthesizes and defines a specific mode of production and consumption, a masturbatory temporization of life, a virtual and hallucinogenic aesthetic of the living object, an architecture that transforms inner space into exteriority and the city into interiority and “junkspace”32 by means of mechanisms of immediate autosurveillance and ultrarapid diffusion of information, a continuous mode of desiring and resisting, of consuming and destroying, of evolution and self-destruction.

#### Capitalism is terminally unsustainable

von Weizsäcker & Wijkman ’17 Ernest Ulrich von Weizsäcker, Professor and Director of the United Nation Centre for Science and Technology for Development, Founder and President of the Wuppertal Institute, Member of the German Bundestag, chairing the Committees on Globalization and the Environment, Dean of the graduate School of Environmental Science and Management at the University of California, appointed Co-Chair of UNEP’s International Resource Panel, Anders Wijkman, chairman of the Swedish Association of Recycling Industries, member of the Board of the Swedish Development Authority (SIDA), appointed chair of the Swedish Cross-Party Committee on Environmental Objectives, member of the European Parliament, Assistant Secretary-General of the United Nations and Policy Director of UNDP, Secretary General of the Swedish Red Cross and Director General of the Swedish Agency for Research Cooperation with Developing Countries, Member of the Swedish Royal Academy of Sciences, the World Future Council and the International Resource Panel, 2017 (“Come On! Capitalism, Short-termism, Population and the Destruction of the Planet – A Report to the Club”, November 11th, Available Online via Subscription to Springer, Accessed 03-20-2018)

1.1 Introduction: The World in Disarray We all know that the world is in crisis. Science tells us that almost half of the top soils on earth have been depleted in the last 150 years1 ; nearly 90% of fish stocks are either overfished or fully fished.2 Climate stability is in real danger (Sects. 1.5 and 3.7); and the earth is now in the sixth mass extinction period in history.3 Perhaps the most accurate account of the ecological situation is the 2012 ‘Imperative to act’,4 launched by all the 18 recipients (till 2012) of the Blue Planet Prize, including Gro Harlem Brundtland, James Hansen, Amory Lovins, James Lovelock and Susan Solomon. Its key message reads, ‘The human ability to do has vastly outstripped the ability to understand. As a result, civilization is faced with a perfect storm of problems, driven by overpopulation, overconsumption by the rich, the use of environmentally malign technologies and gross inequalities’. And further, ‘The rapidly deteriorating biophysical situation is barely recognized by a global society infected by the irrational belief that physical economies can grow forever’. 1.1.1 Different Types of Crisis and a Feeling of Helplessness The crisis is not cyclical but growing. And it is not limited to the nature around us. There are also a social crisis, a political and a cultural crisis, a moral crisis, as well as a crisis of democracy, of ideologies and of the capitalist system. The crisis also consists of deepened poverty in many countries and the loss of jobs for a considerable part of the population worldwide. Billions of people have reached a state of mind where they don’t trust their government anymore.5 Seen from a geographic point of view, symptoms of crisis are found nearly everywhere. The ‘Arab Spring’ was followed by a series of wars and civil wars, serious human rights violations and many millions of refugees. The internal situation is not better in Eritrea, South Sudan, Somalia, Yemen or Honduras. Venezuela and Argentina, once among the richer states of the world, face huge economic challenges, and neighbouring Brazil has gone through many years of recession and political turmoil. Russia and several East European countries are struggling with major economic and political problems in their post-communist phase. Japan finds it difficult to overcome decadelong stagnation, and to deal with the 2011 tsunami and ensuing nuclear disaster. And the temporary economic upswing several African countries have enjoyed lost its dynamism as soon as the prices of mineral resources collapsed, and partly due to very unusual droughts. Land grabbing is plaguing much of Africa, but also other parts of the world, leading to involuntary dislocations of millions of people and the related problems with refugees both within countries and abroad.6 The response of governments has been concentrated, at worst, on managing their own political image, and at best to treat the symptoms of the crisis, not the cause. The problem is that the political class in the whole world is strongly influenced by investors and by powerful private companies. This indicates that the current crisis is also a crisis of global capitalism. Since the 1980s, capitalism has moved from furthering the economic development of countries, regions and the world towards maximizing profits, and then to a large extent profits from speculation. In addition, the capitalism unleashed since 1980 in the Anglo-Saxon world, and since 1990 worldwide, is mainly financial. This trend was supported by excessive deregulation and liberalization of the economy (see Sect. 2.4). The term ‘shareholder value’ popped up in the business pages of the media worldwide, as if that was now the new epiphany and guardrail for all economic action. In reality, it served to narrow business down to short-term gains, often at the expense of social and ecological values. The myth of shareholder value has been effectively debunked in a recent book by Lynn Stout.7 A different, if related, feature of ‘disarray’ is the rise of aggressive, mostly rightwing movements against globalization in OECD countries, often referred to as populism. These have become overt through Brexit and the Trump victory in the United States. As Fareed Zakaria observes, ‘Trump is part of a broad populist

Chart, line chart

Description automatically generated

upsurge running through the Western world. … In most (countries), populism remains an opposition movement, although one that is growing in strength; in others, such as Hungary, it is now the reigning ideology’.8 This phenomenon of right-wing populism can be explained to an extent by the ‘trunk valley of the elephant curve’ (Fig. 1.1) 9 showing the decline of developed world middle classes, during a 20-year period. While more than half of the world’s population was enjoying over 60% income rises, OECD’s middle classes suffered losses caused mainly by the deindustrialization and job losses in major parts of the United States, Britain and other countries. In the United States, the median income increased by a meagre 1.2% since 1979. The stunning income growth on the left-hand side of the curve, the ‘back of the elephant’, lifting some two billion people out of poverty, was caused mainly by China’s and some other countries’ economic success. What remains invisible on the picture is the far end of ‘the trunk of the elephant’: The richest 1% of the world and, more revolting, the richest eight persons of the world now own as much wealth as the poorest half of the world population combined, a figure publicized by Oxfam during the 2017 World Economic Forum.10 The ‘elephant curve’ gives an incomplete picture for a second reason. The Oxford Poverty and Human Development Initiative (OPHI) has proposed a Multidimensional Poverty Index (MPI) going beyond just income and including ten indicators around health, education and living standards. Using that MPI, OPHI counts 1.6 billion people living in ‘multidimensional poverty’ in 2016 – nearly twice as many as the number of people living in extreme poverty measured by income alone.11 Thirdly, the interpretation of the curve requires an analysis of the people in each percentile group. In fact, they tend to move. And the curve does not distinguish those in Russia and East European countries who lost much of their income after 1990 from those in Detroit or middle England who, for very different reasons, also were among the losers.12 Another fact cannot be seen in the picture: the massive shift of money and income from the manufacturing and trade sectors to the financial sector.13 Bruce Bartlett, a senior policy advisor to both the Reagan and Bush administrations, argues that this ‘financialization’ of the economy is the cause of income inequality, falling wages and the poor performance. David Stockman, Reagan’s director of the Office of Management and Budget, agrees, describing our current situation as ‘corrosive financialization that has turned the economy into a giant casino since the 1970s’.14 Populist politicians in the OECD countries see themselves as speaking for the forgotten ‘ordinary’ people and for genuine patriotism, but they tend to fight and antagonize the people representing democratic institutions – what an irony! For the European Union (EU), the strongest trigger for populism has been the millions of refugees who came or would like to come to Europe from the Near East, from Afghanistan and from Africa. Even the most generous European countries have reached their own assumed limits for receiving these masses of refugees. The EU institutions were too weak (not too powerful, as they are depicted by the new nationalists) to deal with the ‘refugee crisis’, resulting eventually in an identity crisis in the EU. Once a success story of an entity ensuring peace and economic development, the EU has lost some of its unifying narrative. The populist right-wing movements or parties see and criticize the EU as the culprit for all kinds of undesired events. The irony is that continuing the success story would require more, not less, powers for the Union. The Union should be entrusted with border protection, a well-funded common asylum and refugee policy to deal with the refugee crisis and maintain the advantages of the Schengen agreement. And for the re-stabilization of the Euro, the EU or at least the Euro zone needs a common fiscal policy, as the new French President Emmanuel Macron is proposing. But it is these very measures of which nationalist populists are most afraid. The EU in its present form is not without shortcomings. Free market principles have come to dominate EU policymaking, leading to a subordination of other policies, like environment. Notably the UK wanted that priority, as it preferred to see the EU chiefly as a union for mutual trade. And the austerity policies pursued have blocked many benign investments and led to unnecessary suffering among tens of millions of Europeans. Such shortcomings, however, should never be used to put in question the overall objectives of the EU – a union of peace, the rule of law, human rights, cultural understanding and sustainability. Addressing the global crisis of democracy, the German Bertelsmann Foundation has published a 3000-page empirical report on progress (or lack thereof) on democracy and a social market economy, as measured by the Bertelsmann Transformation Index (BTI).15 Over the last few years, the report sees a consistent decay of such parameters as civil rights, free and fair elections, freedom of opinion and of press, freedom of assembly and separation of powers. Within the same time frame, the number of countries in which authoritarian, mostly religious, dogmas influence political decision making rose from 22% to 33%. That report was published before the assaults on democracy and civil rights that occurred in summer 2016 in Turkey or the Philippines. Symptoms of tyranny are spreading, including in some of the countries with a solid tradition of freedom and democracy.16 Let us briefly turn to a different kind of crisis. Well, not exactly a crisis but an unpleasant feature in an otherwise fruitful communication tool, the ‘social media’. Aside from being practical and useful for everyday arrangements and exchange of news and reasonable opinions, social media also have become vehicles for enhancing conflicts and vilification of mostly innocent individuals, and for spreading ‘post truth’ nonsense. Much of the contents of social media political conversation is selfenhancing political rubbish, as those media serve as ‘echo chambers’ for networks of like-minded frustrated citizens.17 An empirical study from China found that anger and indignation are the emotions that are most likely to get viral in the social media, meaning they are multiplied faster and stronger than other emotions.18 The Internet and the social media are also vehicles for ‘bots’ (short for robots) that can disrupt or destroy messages, multiply nonsense and create all kinds of mischief. There are dozens of types of malicious bots (and botnets) to harvest email addresses, to grab content of websites and reuse it without permission, to spread viruses and worms, to buy up good seats for entertainment events, to increase views for YouTube videos or to increase traffic counts in order to extract money from advertisers. A more frightening cause of disarray relates to terrorism. In earlier times, humanity’s violent conflicts occurred mostly between different countries. In recent times, systemic and at least partly religious conflicts prevail, using terror attacks with the explicit intention of making people feel insecure. During much of the twentieth century, religions remained quiet, non-aggressive and geographically confined to rather stable territories. This no longer is true. Partly because of globalized populations moving or being forced to leave their home territories, some factions of Islam have expanded geographically and are claiming strong influence over national states, for example, attacking countries like France with its tradition of laicism that does not permit religion to dominate politics. What tends to be underrepresented in the media is the positive role of religions. In Christian-dominated Europe, liberal and tolerant religion became part of the European identity a century after the Enlightenment successfully discredited the earlier doctrinaire, authoritarian and colonialist-missionary manifestations of the faith. During the Cold War, Christian goals of social cohesion helped build the system of ‘Western values’, often described as the social welfare state, or the ‘social market economy’ (for its partial demise, see Sect. 2.4). With a view towards leading Islam into an equally benign and co-operative social role, some Islamic scholars, such as Syrian born Bassam Tibi, call on Muslims in Europe to integrate into democratic society.19 Tibi, however, is not popular among radical Muslims, to put it mildly. But to understand the radicalization of Islam, one must not underestimate the role played by the West, in particular the United States, in interfering with Near Eastern states. Some would say that the troublesome situations mentioned so far, the recurring topics of media headlines, are only the surface of our world’s ‘disarray’. Deeper and more systemic problems include the breath-taking speed of technological development that may very easily run out of control. One trend is digitization that potentially threatens millions of jobs (see Sect. 1.11.4). Another trend or development can be observed in the biological sciences and technologies. The enormous acceleration of genetic engineering through the CRISPR-Cas9 technology20 is causing fears of monster creation or the extinction of species or varieties not seen as valuable under human utilitarian criteria. Generally, a non-specific feeling is spreading that ‘progress’ has scary sides and that the genie may already have left the bottle (see Sect. 1.11.3). No doubt there is a need to analyse and understand the symptoms and roots of the variety of crises, political, economic, social, technological and environmental. It is also important to recognize the extent to which people perceive the various phenomena of disarray and feel disoriented, and to recognize that the reality and the feelings of disarray have a moral and even religious dimension. 1.1.2 Financialization: A Phenomenon of Disarray An important part of the disorientation relates to financial markets. Historians will look back at the last 30 years with concern, when looking at the explosion in bank balance sheets, backed up by declining levels of equity and massive borrowing. One of the results was a temporary private-sector-led boom. The other was a massive increase in the world’s financial sector (finance, insurance, real estate – FIRE), often called financialization, and subsequently the financial crisis of 2008–2009. Excessive risk-taking developed into a crisis that was close to bringing the whole financial system to a halt. When the bubble burst, many governments were forced to step in with broad support programmes. Governments caught by the new mind-set (see Sect. 2.4) were intimately involved in all of this. True, there are many examples of serious malpractices within the private financial sector. But had it not been for the systematic deregulation of the banks by governments, with the purpose of stimulating economic growth by issuing more debt, the situation would have been radically different. The causes behind the crisis were many and varied: – Excessive lending by the banking industry – Lack of action on the part of regulators and central banks to stop (i) excessive lending, (ii) the spread of exotic financial instruments (synthetic assets and bonds, collateralized mortgage obligations/CMOs, structured debt issues, etc.) and (iii) pure speculative transactions – Opaque tax havens, and the absence of a binding legal framework that is accepted and implemented by the international community, in general, and the major jurisdictions and financial centres – Securitization and distribution by investment banks and other financial actors of mortgage-related assets and investment vehicles transferring the credit risk from the original lender to the ultimate bondholders – Failure by some rating agencies and auditing firms to properly assess and report the inherent risks posed by many of the financial products A deeper analysis is presented by economists Anat Admati and Martin Hellwig21 about the main causes behind the financial crisis. Western banks borrowed far too much with far too little equity in their balance sheets to act as a buffer if things went wrong in their business – from trading in the multitrillion-dollar derivatives markets to often reckless lending on real estate. In the decades following the Second World War, banks operated with between 20% and 30% of their liabilities as equity. By 2008, that had shrunk to just 3%. Banks obviously believed that they had invented instruments that removed the risk, allowing them to run their banks with a tenth of the buffer they had before. It proved to be very unrealistic. But they counted with the state to underwrite their risks. Bankers have enriched themselves spectacularly in the process. They made themselves ‘too big to fail’ – and too big to jail. The 2008 financial crisis was mostly caused by that irresponsible greed.22 Yet, in 2009, not only did bankers avoid criminal prosecutions and receive hundreds of billions in government bailouts, but some still paid themselves record bonuses. At the same time, almost nine million households in the United States had to abandon their homes when the value of their houses plummeted and they could no longer service the adjustable-rate mortgages – the so-called foreclosure crisis.23 Financialization refers to the dominance of the financial sector in the global economy and the tendency for accumulated profits (and leverage) to flow into real estate and other speculative investment. Debt is an intrinsic element in this process. In the United States, for example, both household debt and private sector debt more than doubled relative to GDP between 1980 and 2007.24 The same is true for most OECD countries. At the same time, ‘the value of financial assets grew from four times GDP in 1980 to ten times GDP in 2007 and the finance sector’s share of corporate profits grew from about 10% in the early 1980s to almost 40% by 2006’.25 Adair Turner, chair of the UK’s Financial Services Authority in the years following the 2007–2008 crisis, regards unchecked private credit creation as the key system fault that led to that crisis with its devastating consequences.26 From this follows that the financial sector constitutes a significant and increasing risk factor in the economy. The degree of financialization varies from country to country but the increase in the power of finance is general. The current finance sector evolved in the context of the deregulation that gathered pace from the late 1970s and expanded dramatically after the 1999 removal of the separation between commercial and investment banking in the United States.27 This barrier had been put in place in 1933 by the Roosevelt administration in response to the Wall Street Crash of 1929, when a period of rampant credit creation and financial speculation collapsed. Similar speculation preceded the crisis of 2007–2008: The face value of financial products reached US$640 trillion in September 2008, 14 times the GDP of all the countries on earth.28 Lietaer et al.29 compare speculation with ordinary money transfers paying for goods and services: ‘In 2010, the volume of foreign exchange transactions reached $4 trillion per day’, which does not even include derivatives. In comparison, ‘one day’s exports or imports of all goods and services in the world amount to about 2% of those $4 trillion’. Transactions not paying for goods and services, almost by definition are speculative. Such financial products and transactions, the authors continue, lead regularly to monetary crashes, sovereign debt crises and systemic crashes with an average of more than ten countries in crisis every year. One of the consequences of this development is that a significant part of economic growth has been distributed to the wealthy, as mentioned with the new Oxfam figures in the previous subchapter. Practices within the financial sector demonstrate a disregard for the impact they have on both people and the planet. That includes a distinct short-termism, the ratio of banks’ reserves to their loans, the ratio of banks’ lending that support the real economy versus speculation in property and derivatives, unchecked credit creation – in fact money creation – and the failure to account for long-term climate and environmental risks. In the words of Otto Scharmer at MIT,30 ‘We have a system that accumulates oversupply of money in areas that produce high financial and low environmental and social returns, while at the same an undersupply of money in areas that serve important societal investment needs’. The failure to account for environmental risks means that the pressure on already scarce natural resources accelerates – trees are felled, waterways polluted, wetlands drained and the exploitation of oil, gas and coal accelerating, as long as there is demand. It also means that huge savings, among them pension funds, are locked into investments in fossil-based assets. Such assets are increasingly looked upon as high-risk assets (see Sect.

#### 2008: white men all around the Western world fuck with the help of viagra, while racialized bodies die of malaria with no treatment. What is a sickness anyway?

Preciado 2. Paul Preciado (Spanish philosopher, queer theorist, and king), 2008, “Testo Junkie,” translated by Bruce Benderson, I have a pdf, if you need it, sean!

Within the context of biocapitalism, an illness is the conclusion of a medical and pharmaceutical model, the result of a technical and institutional medium that is capable of explaining it discursively, of realizing it and of treating it in a manner that is more or less operational. From a pharmacopornopolitical point of view, a third of the African population infected with HIV isn’t really sick. The thousands of seropositive people who die each day on the continent of Africa are precarious bodies whose survival has not yet been capitalized as bioconsumers/producers by the Western pharmaceutical industry. For the pharmacopornographic system, these bodies are neither dead nor living. They are in a prepharmacopornographic state or their life isn’t likely to produce an ejaculatory benefit, which amounts to the same thing. They are bodies excluded from the technobiopolitical regime. The emerging pharmaceutical industries of India, Brazil, or Thailand are fiercely fighting for the right to distribute their antiretrovirus therapies. Similarly, if we are still waiting for the commercialization of a vaccine for malaria (a disease that was causing five million deaths a year on the continent of Africa), it is partly because the countries that need it can’t pay for it. The same Western multinational companies that are launching costly programs for the production of Viagra or new treatments for prostate cancer would never invest in malaria. If we do not take into account calculations about pharmacopornographic profitability, it becomes obvious that erectile dysfunction and prostate cancer are not at all priorities in countries where life expectancies for human bodies stricken by tuberculosis, malaria, and AIDS don’t exceed the age of fifty-five.43 In the context of pharmacopornographic capitalism, sexual desire and illness are produced and cultivated on the same basis: without the technical, pharmaceutical, and mediatic supports capable of materializing them, they don’t exist. We are living in a toxopornographic era. The postmodern body is becoming collectively desirable through its pharmacological management and audiovisual advancement: two sectors in which the United States holds—for the moment but, perhaps not for long—worldwide hegemony. These two forces for the creation of capital are dependent not on an economy of production, but on an economy of invention. As Philippe Pignare has pointed out, “The pharmaceutical industry is one of the economic sectors where the cost of research and development is very high, whereas the manufacturing costs are extremely low. Unlike in the automobile industry, nothing is easier than reproducing a drug and guaranteeing its chemical synthesis on a massive scale, but nothing is more difficult or more costly than inventing it.”44 In the same way, nothing costs less, materially speaking, than filming a blowjob or vaginal or anal penetration with a video camera. Drugs, like orgasms and books, are relatively easy and inexpensive to fabricate. The difficulty resides in their conception and political dissemination.45 Pharmacopornographic biocapitalism does not produce things. It produces movable ideas, living organs, symbols, desires, chemical reactions, and affects. In the fields of biotechnology and pornocommunication, there are no objects to produce; it’s a matter of inventing a subject and producing it on a global scale.

#### And September, 2021: I’m standing here, pretending to be a “man” and play acting as a member of a biocapitalist government? Fuck that. The role of the ballot should be to vote for the best strategy of body-centric praxis – material structures of anti-state revolution and care

Preciado 3. Paul Preciado (Spanish philosopher, queer theorist, and king), 2008, “Testo Junkie,” translated by Bruce Benderson, I have a pdf, if you need it, sean!

In her 1967 SCUM Manifesto, Valerie Solanas had seen things with a certain precision.2 More than forty years have gone by, and one element seems to have changed: all the grotesque characteristics that Solanas attributes to men in capitalist society at mid-twentieth century seem to have spread to women today. Men and women are the bioproducts of a bifurcated sexual system with a paradoxical tendency for reproduction and self-destruction. “To be male is to be deficient, emotionally limited . . . egocentric, trapped inside himself, incapable of empathizing or identifying with others, of love, friendship, affection, of tenderness.” Men and women are isolated units, creatures condemned to constant self-surveillance and self-control by a rigid classsex-gender-race system. The time they devote to this brutal political arrangement of their subjectivity is comparable to the whole extent of their lives. Once all their vitality has been put to work to reduce their own somatic multiplicity, they become physically weakened beings, incapable of finding any satisfaction in life and dead politically before they have taken their last breath. I do not want the female gender that has been assigned to me at birth. Neither do I want the male gender that transsexual medicine can furnish and that the state will award me if I behave in the right way. I don’t want any of it. When I take a dose of testosterone in gel form or inject it, what I’m actually giving myself is a chain of political signifiers that have been materialized in order to acquire the form of a molecule that can be absorbed by my body. I’m taking not only the hormone, the molecule, but also the concept of hormone, a series of signs, texts, and discourses, the process through which the hormone came to be synthesized, the technical sequences that produce it in the laboratory. I inject a crystalline, oil-soluble steroid carbon chain of molecules, and with it a bit of the history of modernity. I administer myself a series of economic transactions, a collection of pharmaceutical decisions, clinical tests, focus groups, and business management techniques; I connect to a baroque network of exchange and to economic and political flow-chains for the patenting of the living. I am linked by T to electricity, to genetic research projects, to megaurbanization, to the destruction of forests of the biosphere, to the pharmaceutical exploitation of living species, to Dolly the cloned sheep, to the advance of the Ebola virus, to HIV mutation, to antipersonnel mines and the broadband transmission of information. In this way I become one of the somatic connectives through which power, desire, release, submission, capital, rubbish, and rebellion circulate. As a body—and this is the only important thing about being a subject-body, a technoliving system—I’m the platform that makes possible the materialization of political imagination. I am my own guinea pig for an experiment on the effects of intentionally increasing the level of testosterone in the body of a cis-female. Instantly, the testosterone turns me into something radically different from a cis-female. Even when the changes generated by this molecule are socially imperceptible. The lab rat is becoming human. The human being is becoming a rodent. And as for me: neither testo-girl nor techno-boy. I am a port of insertion for C19H28O2 . I’m both the terminal of one of the apparatuses of neoliberal governmentality and the vanishing point through which escapes the system’s power to control. I’m the molecule and the state, and I’m the laboratory rat and the scientific subject that conducts the research; I’m the residue of a biochemical process. I am the future common artificial ancestor for the elaboration of new species in the perpetually random processes of mutation and genetic drift. I am T. The Devil in Gel Form After the fifth dose of Testogel, I began to make out variations in the range of excitation, muscular tension, the tendency for outward expressions of my body. All drugs are poisons. The only difference between a poison and a medicine lies in the dose. But what is the right dose of testosterone? The one that yields my body, or another? What would hormonal justice be? And if there is a hormonal justice, should I apply that justice to myself? Testosterone is the devil in a colorless gel. The cutaneous administration of fifty milligrams of testosterone in gel form twice a week for three months isn’t easy to detect with the naked eye in the body of a cis-female, in my body. It is changing the hormonal composition of my body substantially. Modus molecularis. It is a matter of a potential transformation of my own endocrinal ontology. The changes are not purely artificial. Testosterone existing externally is inserted into a molecular field of possibilities that already exist inside my body. Rather than rejection of it, there is assimilation, incorporation. Mit-sein. Being-with-testosterone. Testosterone does not radically alter the perception of reality or the sense of identity. This particular dose of testosterone isn’t strong enough to produce in the body of a cis-female identifiable exterior changes labeled as “virilism” by mainstream medicine (beard and mustache, noticeable increase in muscle mass, changing of the voice . . . ). It does not change the way others decipher my gender. I’ve always had an androgynous body, and the microdoses of testosterone that I’m giving myself don’t alter that situation. However, they produce subtle but decisive changes in my affect, in my inner perception, in my sexual excitation, in the odor of my body, and in resistance to fatigue. Testosterone isn’t masculinity. Nothing allows us to conclude that the effects produced by testosterone are masculine. The only thing that we can say is that, until now, they have as a whole been the exclusive property of cismales. Masculinity is only one of the possible political (and nonbiological) by-products of the administration of testosterone. It is neither the only one nor, over the long term, the one that will dominate socially. The consumption of testosterone, like that of estrogen and progesterone in the case of the Pill, do not depend on any ideal cultural constructions of gender that would come to influence the way we act and think. We are confronted directly by the production of the materiality of gender. Everything is a matter of doses, of melting and crystallization points, of the rotary power of the molecule, of regularity, of milligrams, of form and mode of administration, of habit, of praxis. What is happening to me could be described in terms of a “molecular revolution.” In detailing this concept in order to refer to the revolt of May 1968, Félix Guattari certainly was not thinking of cis-females who self-administer testosterone. On the other hand, he was attentive to structural modifications generated by micropolitical changes such as the consumption of drugs, changes in perception, in sexual conduct, in the invention of new languages.3 It is a question of becomings, of multiplicities. In such a context, molecular revolution could be pointing to a kind of political homeopathy of gender. It’s not a matter of going from woman to man, from man to woman, but of contaminating the molecular bases of the production of sexual difference, with the understanding that these two states of being, male and female, exist only as “political fictions,” as somatic effects of the technical process of normalization. It’s a matter of intervening intentionally in this process of production in order to end up with viable forms of incorporated gender, to produce a new sexual and affective platform that is neither male nor female in the pharmacopornographic sense of the term, which would make possible the transformation of the species. T is only a threshold, a molecular door, a becoming between multiplicities. For a body accustomed to regulating its hormonal metabolism in terms of the production of estrogen, the intentional increasing of the level of testosterone in the blood constitutes an endocrinal reprogramming. The slightest hormonal change affects all the functions of the body: the desire to eat and to fuck, circulation and the absorption of minerals, the biological rhythms regulating sleep, the capacity for physical exertion, muscular tone, metabolism, the sense of smell and taste—in fact, the entire biochemical physiology of the organism. None of these modifications can be qualified as masculine. But of all the mental and physical effects caused by self-intoxication based on testosterone in gel form, the feeling of transgressing limits of gender that have been socially imposed on me was without a doubt the most intense. The new metabolism of testosterone in my body wouldn’t be effective in terms of masculinization without the previous existence of a political agenda that interprets these changes as an integral part of a desire—controlled by the pharmacopornographic order—for sex change. Without this desire, without the project of being in transit from one fiction of sex to another, taking testosterone would never be anything but a molecular becoming.

#### Any method of material praxis is offense under the ROTB + indicts to our method. You weigh by making arguments for which method is better and you can make framing arguments for what “better” means. Theory matters but we can weigh against it.

#### Debate must create new forms of critical pedagogy – in an age where technology controls subjectivity, it also controls communicative forums

Wark 16. McKenzie Wark (McKenzie Wark is an Australian-born writer and scholar. Wark is known for her writings on media theory, critical theory, new media, and the Situationist International, August 31 2016, “New knowledge for a new planet: critical pedagogy for the Anthropocene,” Open Review of Educational Research, <https://www.tandfonline.com/doi/pdf/10.1080/23265507.2016.1217165> sean!

MW: If one takes the long view, the democratizing of education is usually seen as flowing from new technologies, but these tend to end up subordinated to other objectives. Let us not forget that mass print, radio, and television were all hailed as great democratizers. When Adorno was set to work studying radio when he came to America he was supposed to be showing what a boon to musical literacy it was to play classical music over the radio. He did not last too long in that job, as he naturally concluded that over AM radio you really could not hear the music at all, but the static was potentially interesting! Still, if one was to study the rise of the hacker class (in the narrow sense) in the United States, it is a curious story. If one looks at the engineers who went on to fame at Bell Labs and MIT, they were often from fairly humble Midwestern backgrounds. The start out tinkering with farm equipment. They excel at mathematics and sciences at school, get spotted by teachers and sent off to good colleges on scholarships. They succeed in things you did not need cultural capital to get into. The hacker class has very mixed origins socially, but one interesting strand of it is self-creating through knowledge and makes good use of democratized education where and when it exists. PJ: In A hacker manifesto, you call for a new pedagogy of the oppressed, and one not just aimed at making the subaltern feel better about themselves as subjects in an emerging vectoral world of multicultural spectacle, but which provides the tools for struggling against this ongoing objectification of the world’s producing classes. (Wark, 2004, p. 64) As a critical pedagogue, I am immediately reminded of Paulo Freire’s Pedagogy of the oppressed (Freire, 1972) – and of dire struggles associated with reinventing his thinking in the age of the network. Could you please outline historical connections between the analog and the digital pedagogy of the oppressed? What does it mean to think critically about human learning in the network society? MW: I have not read Freire for a long time, but yes, he was the example I had in mind there. The problem is that the ruling class of our time, what I call the vectoral class, is building an information infrastructure that is about anything but free and autonomous learning, subaltern community creation, distributed and self-organized innovation. It is much more about commodifying all forms of social activity, keeping human agents isolated as consuming nodes but also an unequal exchange of information in which they give up data to surveillance but never get to see the metadata. The new modes of exploitation and alienation are based on unequal information exchange, but more crucially on subordinating the form of information always to the general equivalent, to exchange value – in short to the money form. So to think critically about human learning today one has to think critically about the form of the communication vector itself.

#### Fuck a patent, this community will be just fine without them – commoning science works and is the only way to have a true community of care

Fragnito 20. Maddalena Fragnito (Maddalena Fragnito is a cultural activist exploring the intersections among art, transfeminisms, critical theory and technologies – focusing on practices of commoning social reproduction. At the moment she is a Doctoral Student at Coventry University’s Centre for Postdigital Cultures), October 2020, “Commoning Molecules: Decolonising Biological Patents by Gender Hacking Protocols,” Journal of International Women’s Studies, <https://vc.bridgew.edu/cgi/viewcontent.cgi?article=2348&context=jiws> sean!

On the one hand, the endless negotiation around what (and to whom) is accepted as natural and what (and to whom) is not-acceptable because it is considered unnatural, informs cultural structures and dynamics at play, defining the relationship between purity and toxicity. In fact, the social organisation of the normative, places purity at the top of the scale of cultural value and toxicity or pollution at the bottom. Into this binary moral order, humans are discouraged from claiming full purity but, simultaneously, some elements of the unclean, polluted and toxic are strictly taboo (Douglas 1966). On the other hand, artist Mary Maggic’s question “Why is it normal for capitalism to poison our bodies with xenoestrogens without our consent, but trans bodies who want to choose estrogen are policed every step of the way?” (2019) is crucial to this text when raising the inquiry of the accepted versus the unacceptable. These contradictions show how, during the last decades, our understanding of – and reaction to – hormone-disrupting pollution have been guided by contradictory framings which tend to emphasise some aspects of such pollution while dismissing others. This framing becomes evident when, for instance, in western cultures, transgender people are unacceptable since they are considered culturally unnatural and polluting (therefore haunting common sense and its normative organisation); and, at the same time, the biochemical excess of commercially used hormones, is somehow deemed acceptable by the same populations. (Trans)Sex Panic Every man sitting in this room today is half the man his grandfather was. (Lou Guillette 1993) In the context of a pervasive molecular invasion, it is relevant to notice how the mainstream media narrative, rather than addressing equally the many risks associated with hormone-disrupting pollution, such as increased rates of autoimmune diseases, cancer, or loss of habitat (United Nations Commission on Human Rights – Commission Resolution 1995/81, U.N. Human Rights Council Resolution 36/15 2017), has overrepresented toxicity in terms of its disruptive effects on the social-biological construction of sex. General media has described toxicity as responsible for the perversion of the natural sexual order (Di Chiro 2010) by publishing headlines such as “Transsexual Frogs” (Royte and Ledner 2003), “Silent Sperm” (Wright 1996), “Sexual Confusion in The Wild” (Cone 1994), and many others. Also, several progressive organisations and environmentalist NGO have campaigned against the “feminisation” of animals and humans as a threat to masculinity (ETUI 2016). Moreover, most of the scientific research on hormone pollution has primarily focused on the effect of pollution on sex changing. Books and articles such as “Our Stolen Future” (Colborn et al. 1997), “Altering Eden” (Cadbury 1999), “Hormonal Chaos” (Krimsky 2000), and many others, by aligning with the Wingspread Conference Statement (1991) on chemically-induced alterations in sexual development, have analysed human health problems through the perspective of a threats to masculinity. Human sex, particularly the male sex, has been described as threatened because its feminisation has been depicted as an abnormal deviance, capable of perturbing the natural reproductive processes, as well as of threatening the social order (Daniels 2006:69). This clear overall focus on the sexual ambiguity, variability and changeability consequences of biochemical environments has contributed to a general sexual anxiety. Within this (trans)sex panic, the brilliant work of Malin Ah-King and Eva Hayward suggests how the effects on the environment produced by our behaviour become part of a process of “sexing”, that is of the need to “understand sex as a dynamic emergence with environment, habitat, and ecosystem” (Ah-King and Hayward 2013:1). Authors propose that, instead of considering sex as a nature-given dichotomy, is better to conceive it as a responsive potential, capable of changing both over an individual’s lifetime and in interaction with environmental factors. Thus, rather than investing on or “reasserting a politics of purity” (2013:2), it is necessary to understand how to reorient the debate away from essentialism, sexism and normativity. Like many other species that change regularly sex as part of their histories (Munday et al. 2006), the effects of endocrine disruption redefine the limits of other species’ sex determination. Consequently, our bodies are likely “shared interdependent transsex” entities, “constant processes, relations and adaptations” (Kier 2010). Works like Ah-King’s and Hayward’s can shift the perspective on what is seen as a "biological emergency” (Hird 2006) and a threat for the organisation and reproduction of socially acceptable heteronormativity: the becoming multiple of humans through trans-sex dynamics. By doing so, and without avoiding critiques on the different responsibilities and effects of organic pollutants, they are able to frame toxicity within a responsive potential. This perspective is crucial when analysing DIWO biohacking workshops dealing with hormone knowledge, awareness and production. Sexual life, as we know it, is changing through the transformation of toxicity and biochemical materiality, by “metabolising pollutants” (Ah-King and Hayward 2013:7) which, together with cultural movements, are testing the cultural supremacy of dualistic models of sexual difference. In this section I will look at two bio-art practices dealing with hormones, Mary Maggic’s and Power Make us Sick’s participatory workshops, both connected with a wider international network of communities and hackerspaces dealing with open-source biohacking and autonomous healthcare practices, such as hackteria4 . Questioning the mode of production of molecules and the ways they promote awareness and knowledge on the topic, I will point out how the creation and sharing of open-source protocols and the organisation of DIWO biohacking workshops can be understood as a practice of commoning science, meaning a way for everyday citizens to make decisions and take action to answer the healthcare needs of their communities, rather than being locked into the profit-driven mechanics of the market, or being merely dependent on governments’ prescriptions. The work of artist Mary Maggic aims both at reformulating the concept of toxicity and challenging the hormone market’s rules and politics. Maggic’s non-profit hands-on workshops are characterised by creating and redistributing scientific and chemical knowledge among participants. By doing so, radical access and inclusive approaches are needed, as well as the use of participatory methods. The result is a collective re-appropriation of means of production, of knowledge and awareness about scientific healthcare practices and dynamics. “Open Source Estrogen”5 , one of the several art collaborative workshops led by the artist, has the ambition to develop DIWO protocols for the domestic extraction and synthesis of hormones from urine, as a response to the restrictive control by governments and institutions over our bodies. The project hacks estrogens present in the human body creating non-commercial access to them, which is arguably a collaborative, decolonial intervention through DIWO protocols to “openly” extract and synthesise hormones6 . By the re/contextualisation of a closed biochemistry laboratory into an open-source domestic protocol, “Open Source Estrogen” challenges the predominant toxicity consensus by detecting and extracting both “xenoestrogens” present in our bodies we are not aware of, and endocrine ones. From detection to extraction, through synthesis, these domestic protocols offer forms of social resistance, awareness tools, DIWO therapies that put gender hacking into practice. Moreover, the extraction of the estrogen hormone from urine tackles several issues. Firstly, the effect of industrial pharmaceutical and petrol-chemical invasion, by raising awareness of our being “open system bodies” (Maggic 2019) that must negotiate the desired dose. Secondly, it engages with the issues of gender politics behind the hormones, definition per se, hormonal therapy access and, therefore, the increase of self-sovereignty and embodied agency. It does so by promoting practices whose aim is to collectively experiment with bodies, by participatory workshop methods which are understood as a form of collective bodily selfdetermination. Thirdly, it deals with the relation between closed biotech laboratories and the open community fields through the releasing of open-source protocols and the activation of offline participatory workshops, organized and promoted within online networks of communities of interest. Indeed, in these collective workshops, people come together to co-create and coproduce the body/world they want to live in, rather than depending solely on outside forces to sell you what you need or to provide a pre-scripted path forward. Another significant project on trans healthcare autonomy is led by Power Makes us Sick (PMS)7 , a feminist collective focusing on autonomous healthcare practices and networks. PMS collective develops free tools for solidarity, resistance, and sabotage “to understand the ways that our mental, physical, and social health is impacted by imbalances in and abuses of power” (2017). Through the dissemination of several anti-copyright publications (zines) produced within participatory workshops, their aim is to redistribute scientific and healthcare knowledge within autonomous communities and to support movements for health autonomy. In particular, “Towards an Autonomous Trans Healthcare” (2018) is a publication compiling historical trans healthcare notes, interviews, healthcare and essential self-defence support, food and herbal tips, a hormone info summary “for those self-medicating, searching for information, gender hackers, interested allies and health practitioners” (PMS 40), basic hotlines lists, and the address of one secure webmail through which to contact transgender communities who are hacking hormones. Also, here, radical access, inclusive approaches and the use of participatory methods are fostering the increase of bodily self-determination and hormone agency through the re/appropriation of scientific knowledge and collective healthcare practices. These participatory workshops draw on a network of relationships made under the expectation that we will each take care of one another and demonstrate a shift in thinking from the ethic of “I am on my own” to “we are in this together”. In fact, if institutions and exclusive patents produce “biopolitical fictions” (Preciado 2013) determining how bodies should be divided by gender and on how they should reproduce, heal and die; these practices of inclusion and care confront the becoming molecular mutants as a form of bodily liberation. Moreover, by resisting the dominant paradigm of modern life, which insists that what is bought and sold in the market is the only way to provide meaning and sustenance in our lives, commoning hormone molecules is a way to draw on our imagination by bringing out different ways of living. Following Hil Malatino’s words, “while trans bodies are routinely theorized as a prompt for cis folks to reconsider the ‘nature of nature’ (Barad 2015, 392) and, by extension, the nature of embodiment, we have not thought very much, or very carefully, about whether and what form of an ethics might spring from such a reconsideration” (2020). Image: “K.A.T. PHARMACY” by PMS In conclusion, Mary Maggic, PMS, as well as other biohackers, artists and activists, such as Open Source Gendercodes8 , Transhackfeminists9 , Gynepunk10, Aliens in Green11, EpathOff!12, and many others, are challenging cultural and pharmaceutical monopoly’s gender politics by commoning scientific knowledge and healthcare practices, starting from the demand that there should be “Nothing About Us Without Us!” – a slogan which was first used by the disability rights movements to communicate the need to include patients in the co-design of solutions that are sought. The assumption asks for thinking-with those/we who will be affected by these solutions for their/our entire lives. People’s Science Within the participatory workshop practices analysed above, digital (as well as nondigital) technologies are strengthening the possibility of including non-conventional subjects into scientific research practices, such as citizens, patients, and general web users. They challenge the ways through which research and the organisation of knowledge production can be prioritised, by pursuing the idea of the Web 2.0 as a possible democratic, participatory and commoning digital spaces (Scholz 2016). However, it is essential to remember that the principle of including non-conventional researchers into science, which has been called by different names, such as citizen science, open science, peer-to-peer science, is nothing new. Indeed, people’s science has always been entwined with both scientific knowledge and its modes of production. As opposed to closed science, where communicative dynamics are limited by institutional walls or restricted by patents, copyright and paywalls, open science has been defined as a way to produce scientific knowledge by sharing its results and removing obstacles to circulation. However, the relation between closed and open science is the result of complex historical dynamics, none of which are external to the political and economic needs of their times. From medieval knowledge to modern molecular patents, phases of closedness and openness followed by characterising science history as a modes/ regimes of knowledge production based on different ways to finance, valorise and appropriate common pieces of knowledge. Silvia Federici argues that violence against women from the beginning of capitalism till now can be understood as a war, waged through privatisation and knowledge enclosures, against the capacity of keeping communities together and defending non-commercial conceptions of healthcare, wealth and commons (2018). Furthermore, as Valeria Graziano suggests in “Rebelling with Care”, the ability of healthcare social justice movements to autonomously organise their knowledge and practices on care and assistance systems (even before the digital turn) has to be intended as a struggle that “have often led them to clash with managerial classes in state bureaucracies and private corporations” (Bria et al. 2019:38). From the 1940s to the 1970, governments became the major funders of public scientific research in exchange for both collective and national purposes and a contribution to the advancement of military technologies. In 1980, the US “Bayh–Dole Act” was approved (followed by similar laws in other countries) representing a fundamental change that opened the way for the new rhetoric of innovation to transfer public science discoveries to private corporations for the latter's profit (Delfanti 2013). Within this rapidly transformed context, research, even that carried out in public universities, became proprietary and functional to industries and governments (Ziman 2002). Today’s forms of participating in science are many and different: from online forums to crowd-funding platforms; from Wikipedia and collective books to common data-gathering platforms. However, the possibilities offered by these digital tools are not always related to effective democratisation of scientific knowledge production. Indeed, the Web 2.0’s purposes to restore a democratic and creative commoning of knowledge and its benefits, and to get it out from behind paywalls, contend with the reality that most technologies and platforms in use are exactly the point of contention between for profit and participatory processes. For instance, there is an abundance of platforms held by private companies, which are promoting the commoning of biomedical data to be sold just afterwards (i.e. 23andWe). Thus, we navigate an area where issues related to privacy, redistribution, and exploitable free labour are evident (Terranova 2004). Consequently, this mode of popular scientific knowledge production via digital platforms is not the alternative to the market it portrays itself as, but an integral part of it, which guarantees mediatized exposure and capital accumulation (Rajan 2006), and free-market competition (Hope 2008). In Marxian words, we are not divorced from the means of production, which are indeed more and more widespread and pervasive, yet, the fruit of our cooperation is routinely expropriated by companies through increasing management, data capture and knowledge control. Moreover, digital platforms, while revealing the extent to which social cooperation (and reproduction) is at the core of capital accumulation and economic control, are also proving that fluids and cells are the matter through which capital is fed. At the same time, digital tools have also transformed how we cooperate and reproduce ourselves and our communities within monopolistic property regimes, time management, normalisation of social relationships, and subjectivation processes coinciding with data profiling systems. Therefore, it is crucial to try answering at least two questions. The first is about what happens when digital tools are not sustained by commercial interests, meaning they can create more autonomous and common environments, through an infrastructural design that stimulates the redistribution of shareable knowledge as the wealth produced through cooperation. The second question, instead, would be about our possibility to strike against the machine, a “strike because we care” (Women’s Strike Assembly 2020) to better understand the specificity of how the reproduction of life and social relations, through digital technologies, impacts on ourselves. In synthesis, the question is whether a disruptive intervention in the procedures and protocols in which we are involved can allow us to critically re/appraise the relationship between knowledge, power and institutions – together with an understanding of new uses of the machine as a process for strengthening social bonds and self-determination. It follows that commoning science implies the redesign of technologies as well as the embodiment of collective scientific practices, which resist the coloniality of commercial patents and knowledge monopolisation and give back centrality to self-education and “praxis of care and response” (Haraway 2016) within communities that are already in place, enabling their capabilities to resist the push to reduce knowledge to what can be bought or sold. Commoning science (and molecules), therefore, is not just thinking of scientific knowledge and data as a common good that needs to be shared freely through the hacking or re/design of technological tools. It is also the use of participatory methods able to strengthen mutual healthcare practices within autonomous communities of care. Since there are no fully autonomous infrastructures because they depend, for instance, on already existing mainstream companies’ communication networks and technologies, the selected practices attempt to conceive more autonomous communities, and, from here, the conditions for the creation of more autonomous infrastructures based on collective values, governance and principles, instead of individual profit. This attempt is conceived not only through the design of open-source protocols and tools but also by the use of participatory workshop methods, which are fostering time together and are giving back centrality to collective practices of healthcare self-education.

#### Thus, I affirm that the people ought to take control of medicine and its intellectual property rights away from member states of the World Trade Organization

#### With these rights, I, alongside the members of my community who so choose, will engage in the process of voluntary auto-intoxication – this performative act of communal self administration of chemical prosthesis both preserves liberation strategies in bodily practices and disrupts biocapitalist control over subjectivity

Preciado 4. Paul Preciado (Spanish philosopher, queer theorist, and king), 2008, “Testo Junkie,” translated by Bruce Benderson, I have a pdf, if you need it, sean!

The first principle of a trans-feminism movement capable of facing porno-punk modernity: the fact that your body, the body of the multitude and the pharmacopornographic networks that constitute them are political laboratories, both effects of the process of subjection and control and potential spaces for political agency and critical resistance to normalization. I am pleading here for an array of politics of physical experimentation and semiotechnology that (in the face of the principle of political representation, which dominates our social life and is at the core of political mass movements, which can be as totalitarian as they are democratic) will be regulated by the principle that—in accordance with Peter Sloterdijk’s intuitions—I will call the “principle of the auto-guinea pig.”12 In China, in 213 BC, all books were burned by order of the emperor. In the fifth century, after a series of wars had ransacked and decimated the library at Alexandria, it was accused of harboring pagan teachings contrary to the Christian faith and was destroyed by the decree of Emperor Theodosius. The greatest center of research, translation, and reading disappeared. Between 1330 and 1730, thousands of human bodies were burned during the Inquisition, thousands of books were destroyed, and hundreds of works related to the expertise and production of subjectivity were relegated to oblivion or to the underground. In 1813, American soldiers took York (now Toronto) and burned the parliament and legislative library. A year later, the Library of Congress was razed. In 1933, one of the first actions of the Nazi government was the destruction of the Institut für Sexualwissenschaft (Institute for Sexual Research) in Berlin. Created in 1919 by Magnus Hirschfeld, this center had for years played a role in the research and dissemination of progressive ideas and practices concerning sex and sexuality. Twenty thousand books from the Hirschfeld Institute were burned on May 10, 1933, on Opernplatz on a gigantic pyre whose flashing flames were imprinted on the camera film of Hitler’s reporters. On the night of March 9, 1943, an air raid on a library in Aachen destroyed five hundred thousand books. In 1993, Croatian militia destroyed dozens of libraries (among them, those in Stolac). In 2003, American bombs and Saddam loyalists sacked and destroyed the National Library of Baghdad13 . . . The theorico-political innovations produced during the past forty years by feminism, the black liberation movement, and queer and transgender theory do seem to be lasting acquisitions. However, in the context of global war, this collection of scholarship could be destroyed also, as fast as a microchip melting under intense heat. Before all the existing fragile archives about feminism and black, queer, and trans culture have been reduced to a state of radioactive shades, it is indispensible to transform such minority knowledge into collective experimentation, into physical practice, into ways of life and forms of cohabitation. We are no longer pleading, like our predecessors in the 1970s and 1980s, for an understanding of life and history as effects of different discursive regimes. We are pleading to use discursive productions as stakeholders in a wider process of the technical materialization of life that is occurring on the planet. A materialization that each day resembles more and more a total technical destruction of all animal, vegetable, and cultural forms of life and that will end, undoubtedly, in the annihilation of the planet and the self-extinction of most of its species. Alas, it will become a matter of finding ways to record a planetary suicide. Until the end of the eighteenth century, self-experimentation was still a part of the research protocols of pharmacology. Animal experimentation was not yet called into question, but an ethical precept dictated that the researcher take on the risk of unknown effects on his or her own body before enacting any test on the body of another human. Relying on the rhetoric of objectivity, the subject of scientific learning would progressively attempt to generate knowledge outside him- or herself, to exempt his or her body from the agonies of self-experimentation. In 1790, the physician Samuel Hahnemann self-administered strong daily doses of quinine in order to observe its effects in fighting malaria. His body reacted by developing symptoms that resembled the remittent fever characteristic of malaria. The experiment would serve as the basis for the invention of the homeopathic movement, which, based on the law of similars, maintains that it is possible to treat illness using minute doses of a substance that, in much larger amounts, would provoke the same symptoms of that illness in a healthy body, in the manner of a therapeutic mirror. Peter Sloterdijk, inspired by Hahnemann, will call the process of controlled and intentional poisoning “voluntary auto-intoxication” and will sum it up as follows: “If you intend to be a doctor, you must try to become a laboratory animal.”14 In order to transform conventional frameworks of the “cultural intelligibility”15 of human bodies, it is necessary to evolve toward practices of voluntary autointoxication. From Novalis to Ritter, the romanticism from which Sloterdijk draws his inspiration for a counterproject to modernity will make autoexperimentation the central technique of the self in a dystopian society. Nevertheless, romantic autoexperimentation carries the risk of individualism and depolitization. On the other hand, two of the discourses around which the critique of modern European subjectivity will develop—those of Sigmund Freud and Walter Benjamin—will begin under the form of the invention of new techniques of the self and repertories of practices of voluntary intoxication. But the dominant discourse of disciplinary modernity will brush them aside; the process of institutionalization that both psychoanalysis and the Frankfurt School will experience will go hand in hand with the pathologizing of intoxication and the clinical industrialization of experimentation. “It would be a good thing if a doctor were able to test many more drugs on himself,” declared the young doctor Mikhail Bulgakov in 1914, in “Morphine,” a text in which the protagonist describes the effects of morphine on his own body.16 Likewise, it seems urgent today, from the perspective of a trans-feminist project, to use our living bodies as biopolitical platforms to test the pharmacopornopolitical effects of synthetic sex hormones in order to create and demarcate new frameworks of cultural intelligibility for gender and sexual subjects. In an era in which pharmaceutical laboratories and corporations and state medico-legal institutions are controlling and regulating the use of gender and sex biocodes (the active molecules of progesterone, estrogen, and testosterone) as well as chemical prostheses, it seems anachronistic to speak of practices of political representation without going through performative and biotechnological experiments on sexual subjectivity and gender. We must reclaim the right to participate in the construction of biopolitical fictions. We have the right to demand collective and “common” ownership of the biocodes of gender, sex, and race. We must wrest them from private hands, from technocrats and from the pharmacoporn complex. Such a process of resistance and redistribution could be called technosomatic communism. As a mode of the production of “common” knowledge and political transformation, the auto–guinea pig principle would be critical in the construction of the practices and discourses of trans-feminism and the coming liberation movements of gender, sexual, racial, and somatic-political minorities. To echo Donna J. Haraway’s expression, it will consist of a positioned, responsible corporal political practice, so that anyone wishing to be a political subject will begin by being the lab rat in her or his own laboratory

#### Our method is a form of radical amateurism that gives the power to the people – biocapitalism has erased lower class knowledge and power, placing an arbitrary caesaura between medical care and the people receiving it – only our method creates patient-focused communities of care that can disrupt global capitalism and biopolitical pharmaceutical institutions

Hester 18. Helen Hester (Helen Hester (United Kingdom, 1983) is associate professor of media and communication at the University of West London. Her lines of research include digital technologies, reproductive policies and the future of work), 2018, “Xenofeminism,” I have a pdf, sean!

The American second-wave self-help movement explicitly framed its activities as a means of restoring bodily autonomy to people who felt disenfranchised by their interactions with the medical establishment, and who were excluded from active decision making regarding their own care. As Ehrenreich and English put it, ‘When we demand control over our own bodies, we are making that demand above all to the medical system. It is the keeper of the keys.’12 The relationship between the providers and recipients of professionalized medical care in the 1970s was both highly gendered and deeply unequal, with service users ‘dependent on the medical system for the most basic control over their own reproductivity’.13 This was in the face of the threat of involuntary tubal ligations, unnecessary hysterectomies, and under-tested or unethically tested contraceptives. Initially developing out of the consciousnessraising activities of the second wave, ‘feminist self-help involved women meeting in small groups, sharing information and stories, educating themselves about their bodies and the medical establishment, and looking for remedies to minor bodily problems’.14 Its focus was on developing lay knowledge not only as a means to assert immediate agency over one’s own body – to more fully understand its workings – but also as part of a shareable process of self-enfranchisement and a first step in agitating for more patient-focused practices of care. Arguably, however, it is the movement’s attempts to wrest control away from the medical establishment for which it is most famous. This DIY approach spawned initiatives such as the seminal women’s heath book Our Bodies, Ourselves (OBOS) – first published in 1971 as the proceedings of a small self-help workshop that later became the Boston Women’s Health Book Collective. The collective faced many barriers to finding information about gynaecology and the reproductive body; it was often difficult for lay people to even get into medical libraries, and the writing process ‘involved the clandestine borrowing of library cards from bona fide medical students’.15 Much of the material included in the original edition of OBOS was the result of painstaking individual research in the face of scant information and resources – the sidestepping of medical gatekeepers and university librarians alike! Given the difficulties in obtaining even the most basic information about human health, the barriers in providing and accessing care beyond the professionalized medical establishment were remarkable. This was particularly the case when it came to procedures widely restricted by legislation. It was radical enough to include a chapter on abortion in OBOS (considering its publication two years before Roe v. Wade), but the need to widen actual access to abortion in the early seventies was particularly pressing. The feminist response to this was to set up abortion counselling and referral services, such as Jane in Chicago. Originally established as one of a number of networks in the US intended to connect people with so-called ‘backstreet abortionists’, the group’s activities later took a quite distinctive turn: At first the women in Jane concentrated on screening abortionists, attempting to determine which ones were competent and reliable. But they quickly realized that as long as women were dependent on illegal practitioners, they would be virtually helpless. Jane determined to take control of the abortion process so that women who turned to Jane could have control as well. Eventually, the group found a doctor who was willing to work closely with them. When they discovered that he was not, as he claimed to be, a physician, the women in Jane took a bold step: ‘If he can do it, then we can do it, too.’ Soon Jane members learned from him the technical skills necessary to perform abortions.16 Through witnessing and assisting with the performance of abortions beyond a professionalized clinical environment, members of Jane developed a new understanding of and attitude towards the procedure: ‘The techniques were very straightforward. [. . .] They were skills that, with practice and care’, any lay person could learn.17 With abortion thus demythologized, members of the service came to the conclusion that ‘the barriers that the medical establishment erected between patient and practitioner were not a function of either a woman’s needs or the needs of the situation’.18 Instead, they were a function of disciplinary power and a means of hoarding both institutional authority and useful knowledge. The group set itself a mission to further feminist reproductive sovereignty by making service users active participants in their own care – a process intended to denaturalize the condescending treatment that many received at the hands of doctors. Initially and primarily, Jane relied upon dilation and curettage abortions – a procedure in which the cervix is opened and the contents of the uterus are scraped out. Later, however, some members switched to a manual aspiration model using cannulas and syringes, which they learned about via the inventors of the Del-Em. Whilst Jane used methods related to menstrual extraction, rather than deploying the Del-Em itself, the accounts of those involved with the service remain useful to us for their critical engagement with medical instruments. Laura Kaplan organizes much of her history of Jane around the necessity of gaining ‘access to the tools and skills to affect the conditions’ of technomaterial existence – that is, she frames the circumnavigation of gatekeepers as a process of seizing technologies.19 Again, we see that the development and appropriation of technology was a crucial part of the feminist movement’s efforts to challenge medical sexism and profiteering. The Del-Em itself, as a technology designed by feminists to route around the juridical and medical restrictions upon access to abortion, demands to be seen in just these terms. In this case, there is another level to the general tendency towards free information exchange and the bypassing of gatekeepers. The Del-Em arguably represents an engagement with the principles of free and open source design as a means of ensuring the equitable dissemination of tools and technologies. Whilst the device was patented by its original designer (Lorraine Rothman), it was always intended to circulate in a free and non-commoditized fashion. The formal turn to intellectual property was not about securing individualized ownership of menstrual extraction and its instruments, but was in fact a concerted attempt to ensure that the Del-Em would remain freely available, protected, and shareable amongst those who might need it. This is important when contextualizing the emergence of the device, which was designed in California during the 1970s – a time and space associated with considerable innovation in software development. The emphasis on shareability associated with self-help in general, and with menstrual extraction in particular, can be thought of as ‘analogous to modes of shared and circulated production that gave birth to software such as UNIX, and later LINUX, as well as the open-source patent’20 – developments which some contemporary commentators see as suggestive of the rise of a new economy of contribution, grounded upon participatory knowledge exchange. An emerging interest in free and open source design and dissemination was characteristic of the Del-Em’s historical moment. In its commitment to non-market mechanisms, and its focus on information sharing and voluntary cooperation, the feminist self-help movement arguably demonstrates an ethos akin to that of what we now call the Creative Commons; this was one key prong of feminist efforts to work around oppressive pathways of healthcare. The xenofeminist manifesto touches upon the link between medical technologies and free and open source platforms in a different context – namely, healthcare for trans\* people in the twenty-first century. Paul B. Preciado is amongst those who have discussed the bypassing of gatekeepers within trans\* communities. His ground-breaking book Testo Junkie: Sex, Drugs, and Biopolitics in the Pharmacopornographic Era describes his self-experimentation with Testogel – a synthetic androgen administered through the skin. As he remarks, whilst some people choose to use the drug ‘as part of a protocol to change sex’, others are ‘self-medicating without trying to change their gender legally or going through any psychiatric follow-up’.21 Preciado positions himself within this latter camp, taking testosterone outside of the narrowly defined territories of its institutionally sanctioned usage. He is not taking it with the permission of doctors in order to transition from ‘female’ to ‘male’; he is illicitly self-administering it, appropriating and repurposing specific molecules in an act of autoexperimentation without preconceived goals or ideal outcomes. The decision to not seek an official diagnosis is in part a refusal to submit to the policing gaze of medical and juridical authorities. As Joshua Rivas observes in his engagement with Testo Junkie: Before a transgender individual can generally be prescribed a course of hormone replacement therapy (and in France have its associated costs covered by social security), the trans-person must first meet certain minimum eligibility criteria set forth in the Harry Benjamin International Gender Dysphoria Association’s Standards of Care, including diagnosis with a gender identity disorder by a mental health professional or physician. Preciado in this way situates herself [sic] within a biopolitically constructed space of clandestinity and non-recognition . . . .22 Some commentators see this dynamic as characteristic of wider tensions between trans\* communities and disciplinary powers in the Global North, arguing that trans\* people ‘seek access to surgical, hormonal and psychotherapeutic treatments, but seek to avoid pathologisation and stigmatisation – this is a defining characteristic, perhaps the central dilemma, of their relationship with clinicians’.23 This dilemma is one reason why some people with the means to do so might choose to sidestep an official diagnosis as a means of accessing treatments and technologies. As with feminist self-help in the 1970s, a fractious relationship with healthcare infrastructures drives people to find different ways of accessing care, often tied to self-experimentation within politicized support networks. The grasp of gatekeepers upon both knowledges and technologies has loosened significantly in recent years, however, as reflected by clinical guidelines. The Royal College of Psychiatrists notes that ‘Hormones and hormone-blockers are readily available via the internet. The medical practitioner or specialist must consider the risks of harm to the patient by not prescribing hormones in these circumstances.’24 The guidance, therefore, is that GPs or other non-specialist medical practitioners ‘prescribe “bridging” endocrine treatments as part of a holding and harm reduction strategy while the patient awaits specialised endocrinology or other gender identity treatment’.25 We can see that having alternative means of accessing information, peer support, and pharmaceuticals has forced profound changes in the way the medical establishment conceives of treatment. This represents a new means of resisting those institutions that have historically fought to restabilize the disciplinary grid of gender in the face of biotechnical innovations that might unsettle it. By taking testosterone in an unsanctioned fashion, Preciado uses technical intervention within and upon the body as a means of contesting the pharmacopornographic regime that constitutes him. He expresses this quite forcefully at times, insisting that ‘your body, the body of the multitude and the pharmacopornographic networks that constitute them are political laboratories, both effects of the process of subjection and control and potential spaces for political agency and critical resistance to normalization’.26  In a move that clearly resonates with self-help’s privileging of the lay healer, Preciado explicitly frames auto-experimental engagements with embodiment as part of a tradition of radical amateurism. This is associated particularly with herbalists, midwives, and witches – practitioners who were deliberately excluded from medicine in order to enable its simultaneous professionalization and masculinization. Preciado claims that the coming of modernity involved a widespread ‘process of eradicating knowledge and lower-class power while simultaneously working to reinforc[ing]e the hegemonic knowledge of the expert, something indispensable to the gradual insertion of capitalism on a global scale’.27 Networked communication technologies, however, have made it increasingly difficult to continue stockpiling knowledge in exclusionary ways.

#### I didn’t give out zines for no reason, baby: I want y’all to heal, learn, and be supported. Open up these pages and you’ll find trans words, histories, and stories – let my people’s text heal your soul

Raha 21. Nat Raha (Nat Raha is a trans/queer poet, activist, and scholar living in Edinburgh. Her third collection of poetry is of sirens, body & faultlines (2018), and her creative and critical writing has appeared or is forthcoming in the South Atlantic Quarterly, LIES: A Journal of Materialist Feminism, Third Text, and the Verso blog. Nat is currently a research fellow on the Life Support: Forms of Care in Art and Activism project at the University of St. Andrews, and she completed her PhD on queer Marxism and contemporary poetry at the University of Sussex in 2019. She coedits the zine Radical Transfeminism), May 2021, “Embodying Autonomous Trans Health Care in Zines”, Transgender Studies Quarterly, I have a pdf, sean!

Over the past five years, a number of transfeminist zines have emerged in the United Kingdom and Europe that have elaborated and amplified radical perspectives on transgender health care. Zines such as Dysphoria, PMS (Power Makes us Sick), Radical Transfeminism, and Wages for Transition—and the articles, interviews, poems, illustrations, manifestos, and memes contained within them—constitute a significant intervention into popular dialogues and perceptions around trans health. In particular, they use the print medium alongside virtual distribution as PDFs to make arguments that connect trans-specific aspects of health care (such as accessing hormones and surgeries, pathologization, transition, and other treatments) with the broader material conditions of contemporary Europe, including but not limited to regimes of economic austerity, migration and borders, housing and mental health provisions; and ableism, racism, sexism, and transphobia in health care, public services, and culture more broadly. Emerging from practices within trans, queer, and feminist communities of mutual aid and collective care, these zines have developed an important discursive space for the elaboration and expansion of trans imaginaries and the assembly of collective power over trans and queer bodies. In a moment when, in the United Kingdom, accessing state-based trans health-care provisions involves long waiting times and subjection to psychiatric power within conservative gender clinics,1 these zines propose the importance of activating agency and building bodily autonomy among trans, nonbinary, and genderqueer people through community and collective practices. These positions emerge out of material necessity, as trans survival under devastating economic conditions and within the context of the gender binary as a regime of oppression remains challenging and at times exhausting. They understand that trans, nonbinary, and gender-nonconforming lives are built through mutual support and that gender expressions and embodiments manifest more fruitfully under collectively supported conditions, and they propose communalizing the forms of care labor, technology, and discourses that facilitate trans life. Infused with the spirit of “gender hacking” elaborated in Paul Preciado’s Testo Junkie (2008, English translation published in 2013)— to experiment with one’s body and gender expression through chemical and physical prosthesis— these zines reflect the communalization of this ethos within the discussions, work, and praxis of the present moment, as one means among others toward trans liberation. Trans zines are inextricably linked with queer (and) feminist zine culture, which has typically involved producing independent, photocopied publications, from a do-it-yourself (DIY) or do-it-together ethos, often on little budget, outside institutional contexts, or within their undercommons.2 Queer zine culture is typically herstoricized in connection with the Riot Grrrl, Queercore, punk, and third-wave feminist subcultures of early 1990s North America.3 Self-styled transgender zines have been produced in the UK at least since the mid-1990s— with 1990s publications including the activist, culture, and theory zine Genderfuck, later renamed Radical Deviance: A Journal of Transgendered Politics, and the drag punk zine Girly: A Transgender Zine. 4 The 2010s has seen the spread of queer zine fairs, distros, presses, and individual publications across the UK and Europe emerging from LGBTQI, feminist, and leftist community and activist infrastructure; this has developed alongside the significant online resources of the Queer Zine Archive Project (founded in 2003) and the POC Zine Project (founded in 2010). Activist organizations (such as the UK trans liberation organization Action for Trans Health),5 politicized community spaces, and zines (such as Dysphoria zine) operating either physically or virtually as collectives have been key sites for the development of radical perspectives on trans health care, perspectives that have been forged through the production, circulation, and reading of zines alongside internet forums. However, forums like Reddit and Facebook groups tend to be given more importance for the spread of these discourses than zines.6 Distros and events have used the internet and social media to spread the word, from advertising wares to calls for contributions. Focusing on Anglophone writing either produced in the UK or produced elsewhere in continental Europe and explicitly in dialogue with UK activist work, this report from the field on the cultural production of zines brings together some of the perspectives articulated in an array of publications from the last five years. I address a few of the key arguments made within them and the concepts and imaginaries that drive them, such as of trans autonomy, social reproduction, and liberation. I argue that the zines, as an embodied, collectively produced print media, enable the spread of ideas, practices, and wider knowledge that give rise to liberated forms of trans embodiment. My perspective emerges from dialogues and practices that I have been a part of as a radical transfeminist, queer activist, and coeditor of the zine Radical Transfeminism—although these dialogues and practices reach beyond Anglophone transfeminisms. In interrelated Hispanophone, Francophone, and Italophone contexts, transfeminist discourses have developed since the late 1990s through activist conferences, workshops, discussions, zines, and other avenues.7 Deploying transfeminism as a political alternative to Anglo-American formulations of “queer” that abstract from the body, a politics of alliance has been built under its banner that emphasizes the materiality of bodies and the material conditions of embodied life under capitalist heteropatriarchy.8 Furthermore, it might be argued that the politics of Anglophone transfeminism has been limited by its own monolingualism and has been challenged in the UK by transfeminism(s) centering migrant perspectives, but I refrain from developing this argument here. Embodying (through) Trans Zines Presumably owing to ease of production, most of the zines named at the opening of this article (see fig. 1) are produced as A5 (5.8 · 8.3 in.), stapled publications, featuring scanned illustrations and handwritten sections alongside text formatted on desktop publishing software. Power Makes us Sick is, however, produced as 4.0 ·8.3 in. and printed on multiple colored papers (bright yellow, red, pink, salmon, and white). Dysphoria is printed in color throughout, with black, blue, yellow, and turquoise pages dotted with slugs, jellyfish, other life forms, and human chests. Radical Transfeminism features grey, lavender, pink, red, and yellow visuals on its covers; its front features a shaded, anxious face with scruffy black hair, dark brows, eyes without pupils, and cheeks tugged by hands with short, red fingernails; and its inside covers feature a rich claret-colored background. Wages for Transition has an off-white card cover, illustrated with a multitude of arms gripping onto each other in a complex circuit, some hands holding syringes, razors, coins, tubes of lipstick, and hammers, at points snapping the chain that surrounds them.9 These two cover illustrations echo each other, with arms reaching out from the latter to relieve the anxiety written on the face of the former. In comparison to the prevailing, long-term campaigns of transphobia in UK newspapers (and to a lesser extent, television), collectively authored and produced zines create a space and platform for a polyphony of trans perspectives.10 Combined with writing that foregrounds personal experience, often written from a first-person perspective, trans zines allow for the telling and discussion of intimate experiences and stories that are often belittled or ignored by dominant, normative society or the medical profession, including sexual experiences, experiences of violence, and traumatic medical encounters. Speaking personal truths to an imagined community of empathetic readers, who are often other trans, queer, or intersex people, establishes and develops discourses that reveal the oppressive workings of psychiatric, medical, or otherwise institutional power.11 It also gives space to the intersections of trans and intersex health experiences with the dynamics of racism, sexism, ableism, xenophobia, and sanism. These personal experiences may be situated within wider historical contexts of the operation of these oppressions and the Western colonial project more broadly, linking trans health care to anti-imperialist struggles for bodily autonomy (such as legacies of the work of the Young Lords Party within the United States, struggles against virginity testing of South Asian women in Britain in the 1970s) and against religious clampdowns against proto-feminist healing practices (such as with witch trials in the sixteenth century) (Edinburgh Action 2017; PMS 2018a, 2018b; Qasim 2017). They connect the struggles of poor trans people, who cannot easily procure access to medications or clinics owing to their expense, to the need for a transformative politics rooted in collective social change as a means to forestall despair. In particular, writings by trans people of color within the zines emphasize the need to problematize Eurocentric formulations of gender and gender transition, while recognizing that discourses around trans and health care in the UK don’t tend to factor in the maltreatment of Black and brown people, migrants, disabled people, and working-class people within institutional health-care settings.12 In a context in which the World Health Organization has formally announced the depathologization of trans—although, in the UK context, the gender identity clinics, which are responsible for state provision of trans specific health care, remain overseen by psychiatrists— these zines and their producers envision possibilities of the health, embodiment, and being of trans, nonbinary, and other gender-nonconforming people as separated from biopolitical regimes of state management and the ongoing colonial legacies of these states. These zines attend to the extremities of mental and physical distress faced by many trans people—including that caused by the pathologizing practices of trans-specific health care, and the legacies of forced sterilization practices, past and in places ongoing. Refusing the separation of the Cartesian mind/body divide, these zines attended to and detailed experiences of transphobia, harm, and the mapping of wounds, grazes, and brokenness (Dysphoria Collective 2017; Radical Transfeminism 2017).13 These affects are situated in the context of political power struggles between neoliberals and ethno-nationalist neofascists on one side, and the antiracist and left-wing social movements on the other. Writing in Trans Reproductive Justice, Mijke van der Drift (2019: 8) situates contemporary “debates” regarding the forced sterilization of trans people as part of legacies of eugenics in Europe and Europe’s drive toward progress—within this logic, “what is not seen as better must be repressed, removed, detained.” This holds for the repression of trans reproductive rights and the lives and opportunities of migrants within Europe (8). Also emphasized is the importance of healing practices, which are supported through collective care and accountability. Describing “the DISPOSSESSION of knowledge of healing, and the distancing from a desire to commit to healing above all—from the earth, from elders, from friends and loved ones, from the teachers of our trauma,” PMS describes healing knowledge as “a life force because it is literally what remains within us from our lived experiences, provided that we are able to survive” (PMS 2018b). Identifying the prevalence of chronic pain alongside other physical health conditions among trans people, Edinburgh Action for Trans Health writes in its manifesto (originally published online but widely reprinted in zines), “We believe that the epidemic of chronic conditions in our communities is a consequence of the war of attrition waged against us over centuries.” 14 By rooting trans experiences within wider historical struggles of minorities against institutional and colonial powers, these zines hold the memory of the (at times traumatic) harm experienced by trans people as a means toward healing and material transformation.15 As self-produced media used by marginalized groups, zines manifest what Alison Piepmeier (2009: 58) describes as “embodied communities”: “Zines instigate intimate, affectionate connections between their creators and readers, not just communities but . . . embodied communities, made possible by the materiality of the zine medium.” While these trans zines exist in both printed and digital mediums—which, as Brouwer and Licona (2016: 78) theorize, are “distinct and distinctly affective domains, with dis/similar affective possibilities and constraints, coherences and incoherences, and intensities”— their existence as physical and virtual objects forge and affirm embodied communities of trans and gender-nonconforming people. As printed matter and digital publications, these zines enter different means of circulations, tapping into audiences beyond the reach of their print runs of four hundred to seven hundred copies. Whether in real life or via the internet, the affective and political urgency of these publications has had a transformative impact on the people who encounter them. The zines are creative spaces for the sharing of trans expressions and discussion of cultural production, sex, relationships, and social life more broadly, and questions and issues facing various trans communities with regard to material deprivation—all of which are made possible by their existence as small-scale, personal productions. The stories and experiences discussed in their pages, reflected also in the personal tone of the writing and the illustrations and patterns that surround the words, provide solidarity and reflection for readers who may have experienced similar harms or struggles. The knowledge contained within these zines works to expand the consciousness and practices of their readers in claiming agency over their bodies, encouraging the development of autonomous community health care. For instance, PMS regularly reports on mutual aid groups and self-organized health-care projects, while offering herbalist approaches to manage particular stresses and experiences faced by trans and queer bodies. Wages for Transition and Transitional Demands offer poetic and grounded accounts of the work that goes into caring, supporting, and advocating for trans people (including ourselves) (Giles 2019; Cohn 2013). Developing in dialogue with writing and theorizing social reproduction from a queer and trans perspective (Raha forthcoming-a; Cohn 2016; Pitt and Monk 2016), Wages for Transition adapts the rhetoric of Marxist feminist manifestos on social reproduction to reveal the relation of trans caring labor to waged labor— that it is unwaged and necessary for the survival of lives in-between capitalism’s hegemonic gender binary and moreover aspires to undo the gender binary as a central pillar of organization of capitalist social life, labor, and the nuclear family. This is work that is additionally complex for nonbinary and genderqueer people refusing this binary while transitioning. Giles (2019: 8) writes: “When we seize workers’ control of the production of our genders, we are struggling towards a transition beyond capital, and kin beyond the family. When transition is taken away from the administration, exploitation and custody of health care institutions, it emerges as a form of collective resistance.” “Transition,” Giles continues,“is the protest of life against capital, the revolutionary productive force for humans” (8). Transition becomes a means to work collectively, to overcome the individualization of trans narratives and social atomization once prescribed to transsexuals by the gender clinic (that is, to disappear into cisnormativity through going stealth). The zines invite their readers to embody their printed substance— to reflect and consider the political underpinnings of the physical, biochemical, and gendered lives, with the promise that alternative practices might make these lives more possible, livable, and supported. Drawing on Sylvia Rivera and Marsha P. Johnson’s Street Transvestite Action Revolutionaries (STAR)—a group of brown, Black, and white homeless youth trans women sex workers who housed, fed, and supported each other in early 1970s New York16—calls for autonomous trans health care are echoed, and sometimes critiqued, across these zines: for trans-led clinics, for research regarding trans-specific health care, such as research into the long-term physical effects of hormone therapy, including on reproductive organs; and for the power of clinics to work for their users (Edinburgh Action 2017; Drift 2019; Giles 2019). Some writers within their pages are careful to acknowledge the importance of collectivity in supporting the decisions of individuals regarding what they do with their bodies, knowing that these decisions are not made in isolation and require community and collective support (Drift 2019: 15). These zines are assembling new dialogues on trans reproductive justice, connecting issues such as the cost of accessing technologies to store gametes, abortion rights and access, and the decriminalization of sex work while critiquing the relationship between models of informed consent and the lack of knowledge around long-term research into biological reproduction for trans people (Drift 2019).17 The gender binary may not simply fall at the hands of trans printed matter, but the embodied consciousness and forms of organizing that might bring about its obsolescence are readily available among these pages.