

Industrial town Futurism: The Return of Meshworkⁱ Markets

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It's an honour to be with you this evening as part of your Industrial Town Centenary Celebrations here in Nowa Huta

And thanks to the organizers Jakub Szreder and Martin Kaltwasser for inviting me to participate.

Looking back, it was the collapse of the General Agreement on Tariffs and Trade (GATT) trade talks in 2006, that was the beginning of the end of a competitive global market. After five years of intense negotiation developing countries were outraged at the way in which the interests of Europe, Japan and the US were being used to intimidate them into singing up to a viciously unfair, new round of 'Free Trade' agreements. The competitive Global marketplace (The Market) exploited the poorest people and expropriated their resources, while GATT's enforcement arm the Multinational Trade Organization (MTO) - known colloquially as the Free Trade Police (FTP) - enforced its agreements with extensive global powers and brutal trade sanctions. Most sub-Saharan African Trade ministers walked out in disgust, citing the coupling of a 'development agenda' to the opening of their local markets to the competitive global 'Free Trade' market, as simply corruptⁱⁱ.

In theory the World Trade Organization (WTO) through GATT was supposed to prevent protectionism - the manipulation of financial prices through import tariffs and reproduction subsidiesⁱⁱⁱ - in The Market by the rich trading nations, while granting a degree of protectionism to developing nations markets^{iv}. The principle makes sense, The Market had vast capital, power, experience and economies of scale, so to let The Market compete with small local markets was not competition, it was like learning to swim in a flood, and local markets drowned. Yet the ideological drive of The Market's advocates could not tolerate even limited protectionism, and so the last great global trade negotiations collapsed. It was becoming obvious, that for all its rhetoric The Market did not transfer, distribute or even circulate wealth; it concentrate power in monopolies.

For instance, in 2006 the merger of Acelor and Mittal Steel into Acelor-Mittal produced the world's largest global steel company, with annual shipments of 75.2 million tons and revenues of over 38.6 billion US dollars. They owned steel-making facilities in 46 countries, spanning four continents and employed 500,000 people. Acelor-Mittal Steel consolidated (read monopolized) the world steel industry through a range of acquisitions, many through purchasing formerly public sector-owned companies. And I'm sure that you are all only too well aware, that they once owned the Heritage Steelworks near to where I'm speaking to you from today. Nowa Huta was one of only two Soviet (Soviet used to mean state dominated anti-market economies) 'ideal cities' ever to be constructed, and it was built around the gargantuan 'Lenin' steelworks. Which, after the introduction of The Market and the move out of public ownership, became the Sendzimir steelworks. Acquired by the Mittal group in 2004, steelmaking ceased in 2010 and production moved to Rangoon to be closer to Chinese and Indian demand. Although the Steelworks re-opened in 2014 as a part of Nowa Huta's re-branding as an 'event' city, and it became a UNESCO protected 'communist' World Heritage site in 2016 with former steelworkers performing surrogate labour for visiting tourists.

In many ways, it's the revitalization of this redundancy by our meshwork – and Now Huta is almost a micro-model of global trends, it could equally well be applied to Nanjin or Wolfsburg^v (another perfect example), or Lucknow - that we are celebrating today.

Although perhaps the clearest example of the powerful monopolizing forces at work in The Market, was the extraordinary financial profit generated through deregulated trading in the momentary price differences between various currencies. Currency trading enabled billions of US dollars of financial speculation to roam the globe looking for competitive advantage. Released from the post World War II, Bretton-Woods^{vi} agreement in 1971, and devolved of national political management during the unprecedented 'free market' ideology of the 1980's, financial trading exploded in size, ubiquity and liquidity. The scale of financial trading was truly staggering. For example the turnover in the currency market alone was estimated at 2.4 trillion US dollars a day in April 2008^{vii}, which meant that in two months the financial profit from traded currency dwarfed the annual financial turnover from manufacturing and retail of the entire planet. That's more financial profit in two months than that generated from the production and consumption of every material thing on the planet in a year. And currency trading was but one of the five principle 'money' markets, the other four being bonds, stock, derivatives and commodities. Its worth me reminding you that %75 of currency trading was dominated by five brokerage firms^{viii}.

It was in a mid-nineteenth century nation called England, a satellite of Old Europe, that the social experiment to emancipate economic life, The Market, from social and political consequence began. In a city called Manchester, they pioneered a new form of social exchange they named the 'Free' Market, it was an economy - of money, labour, material and processes - from which financial profit could be generated without regard to its wider effects on society and its resources. It's the origins for what used to be called the 'global' economy, a worldwide 'free' market dominated by trading monopolies. In this Market, the varied experiences, languages, exchange practices, and the diverse economic systems of all cultures were to be superseded by a new, universal community founded on the logic of financial competition. The Market was the last great Enlightenment project.

Prior to this, rather like today, economic exchange practices were conducted in cooperative social markets — markets that were embedded in a community, and sensitive to environmental resources. These cooperative markets encouraged social cohesion, they operated within a wider calculation as to what constitutes a profit and loss; they functioned more like ecologies. The goal of the Free Market experiment, delivered through a raft of the transnational organizations – of which GATT was the most powerful- was to eradicate these cooperative social markets. And for almost one hundred and fifty years the US-Japan-European vision of the global, homogenous, competitive, 'free' Market dominated world-wide exchange.

No one would want to deny The Markets role in the development of legal and economic instruments – like the mortgaging of assets- that perfected aspects of competitive trade. And no one would want to deny the benefits competitive markets can bring in the development and delivery of certain goods and services. The ideological mistake was to see The Market as a universal technology, and, consequently to reconfigure the whole world ecology as its plaything.

To imagine the world as a Market was to invite our own alienation from it.

Ultimately the clash of ideologies that GATT intended to manage, managed itself. Ideological faith in The Market as a force for good, enabling billions of people to escape poverty, bring social harmony and provide the best use scarce resources was exposed as an abject failure. The Market was not a passive medium, it was actually responsible for the widening gulf between the minority that manipulated its effects, and the majority that were subject to its force.

Its hard to comprehend now, but the competitive Market manipulated by trading monopolies - under the illusion of competition - forced nations and their citizens into destructive antagonism.

Mega-corporations shaped peoples lives from the cradle to the grave by providing employment, goods, services, entertainments and ideologies; they controlled peoples wages, expenditures, savings, debts, pensions and investments^{ix}. These corporations could develop or destroy whole communities by closing energy repurposing plants, steelworks or manufactories and move production elsewhere. And in their place encourage low wage outlets, service centers, heritage sites, tourist destinations and 'event' cities^x. Again, Nowa Huta is a perfect example of this trend.

World-wide, citizens had to be protected from the power of the mega-corporations that manipulated The Market.

In the teens of our millennium a vast Human Rights coalition formed under the ethos of the 'Multitude', composed of the remnants of the United Nations and the more recent founded World Development Organization, Consumer and Employment Rights agencies, environmentalists, local market makers and grass roots activists. Citizens had to be protected from financial audit failures, fraud and criminality of mega-corporations, their pathological avoidance of tax continually drained money from the public purse; through their funding of think tanks, lobbyists and political parties they shaped public policy to maximize their interests at national and international level; they incited cultural and religious terrorism (and terrorism of course eventually devastated the trust necessary to facilitate Market activity) through ideological homogeneity; they destroyed social welfare projects (where they existed) such as health care for all, state pension schemes, reliable public services (like water, electricity, transport and communication) and free state funded education; they ruthlessly expropriated natural resources by plundering the worlds energy and mineral wealth, while through the 'tipping effect' of global warming and the failure of carbon trading, simultaneously polluted vast tracts of the globe. We needed protection because, quite simply, The Market was killing us. The single financial economy was also a monoglotal language environment (a variant of US English), and a global disease pool; a disease pool seething with Creutzfeldt-Jakobson disease, myriad 'product' triggered carcinogens and pandemic immune system failures (the 'escaped' genetic hybrid of avian flu being one, and the modified HIV/aids virus another) and of course chronic 'consumer' obesity. Their complete lack of social responsibility made The Market a liability to world sustainability; simply, their financial profits were societies loss, and this was a cost we could no longer afford to bare.

Of course these world-wide public 'protections' - like equality of employment, of health and safety conventions, or minimum wages, or consumer and environmental protection - were always portrayed as 'regulation' stifling the dynamic Market, and posing a threat to creativity, profitability and efficiency.

Immaterial 'property' and The Market

The late 20th century drive to expropriate ideas, creativity and innovation by The Market, under the sign of property was in many ways 'the straw that broke the camels back'. It seems obvious now, but The Markets continual impingement on crucial humanitarian issues, for instance the impact on scientific and cultural innovation, grew so stifling that it became an ethical imperative to break the replicating copyright, patent and the emerging Intellectual Property (IP) regimes. It was these legal regimes and their enforcement that supported The Markets dominance, with their collapse - and the concomitant failure of trust necessary for exchange (I'll say more about this later) - The Market began to fracture into the myriad local meshworks that we might begin to recognize today.

Knowledge 'belongs to', or more properly 'can be claimed by' communities near and far: the near one of its producers - local enthusiasts, embedded practical know-how, practices of everyday life, networks of academics, etc - and the far one of a universal beneficiary; humankind^{xi}. Similarly cultural products, like artworks 'belong' to a near community of

enthusiasts, artists, art critics, curators and collectors, etc, that make up the local arworlds, and a far community we refer to as culture, or world heritage. And we could imaginatively model plant, animal, and mineral resources in a similar way, and of course exchange practices too. How is it possible therefore, to have exclusive rights over resources that are already shared by all? Knowledge, artworks, life-practices, natural resources, and much else besides, are all able to exist as nonexclusive distributable resources, outside of regimes of Marketization. Diverse strategies of cultural production, within and across specific cultural contexts, between individuals and across assemblages of interests cannot be forced into a simple model of property and Market. As Ishmael observes in Herman Melville's *Moby Dick* "It's a mutual, joint stock world"^{xii}.

The former Patents law for example granted monopolies of use to the patent holder for life plus 70 years. And these patents could be applied for, and enforced, on any modified plant, mineral and animal modification, or the process that lead to the modification^{xiii}! The monopoly was justified by the Pharma-giants, because of the high financial cost of research and development, and the need to recoup their financial investment. The prices set by the Pharma-giants, in The Market, for their branded products excluded many citizens of the developing nations^{xiv}. And so to provide for poorer people, generic products were reverse engineered by local producers from branded pharmaceuticals and traded in cooperative markets. Concerned by the loss of revenue and breach of Patent protection, the Pharma-giants lobbied the Uruguay round of the WTO talks(1986-94), to frame new legislation to protect their 'intellectual property'. The notorious Trade Related Aspects of Intellectual Property (TRIPS) agreement was the result. TRIPS required all WTO member nations to bring their patent, copyright and intellectual property regimes into alignment with The Market and its manipulators interests. Essentially to close local generic markets and vigorously prosecute intellectual 'pirates'. TRIPS was an all embracing agreement, including all genetic materials, plants, micro-organisms and organisms and their DNA sequences, material processes, technologies, all compiled information, all expressions of knowledge, and every image, text, and sound sequence. From this moment on, there seemed no end to the plethora of new immanent or immaterial entities, subject to claims and restrictions based on ownership rights. It was as if the only legitimate relationship between persons or corporations and the world, were those constituted as property. And constituting the world as property suggests a specific reification (turning a thing into an object), where the objectified possession – and an objectified possession is an artifact perfected for trade - becomes the only value recognized as having value; a marketable value.

The date set for full TRIPS compliancy was 2016. Fortunately mass cooperative 'piratization', supported by the Multitudes Public Interest legislation overrode the desire of The Market. TRIPS collapsed well before its implementation date. Medical discoveries, treatments and drugs were some of the first 'properties' to be freed from The Market. Pharma-giants were banned from being able to profit from the life and death of their 'customers' and their expropriated IP was returned to the 'near' and 'far' communities, where it 'belonged'. Material and immaterial knowledge, as well as creative expressions quickly followed. Knowledge and creativity ceased to be commodities for trade in the Market, and were returned to humankind as recognizably, the very source of life itself, a basic need and a human right. And as we know, far from stifling innovation and creativity, the collapse of IP regimes encouraged a golden age of science, technology and culture. Constant collaborative development, the free movement of knowledge and creativity resulted in many of the treatments, practices and technologies that have become our contemporary *everyday*.

I should just remind you, because now it's so ubiquitous we tend to take it for granted, that the inspiration for IP resistance was the simultaneous development of Free Software and the Free Culture movement. It was the early software movement that produced the GNU/Linux, operating system; because for the twenty years before GNU/Linux, there were competing operating systems, all incompatible, and all privately owned. Eventually GNU/Linux ran the 'backbone' infrastructure for version 2 of the WWW, and it erased proprietary OS systems

when information-devices became thoroughly embedded and distributed. The necessary Open Content licenses that developed to protect software from IP regimes also enabled Open Knowledge, Commons-based and Free Culture practices to take-hold. If the Free Software movement challenged conventional practices of authorship, ownership and distribution with user-driven innovation, peer-to-peer and non-proprietary (meaning non - Market) models of cultural production, these innovative practices quickly spread to art, visual culture and cultural production in general. Eventually, large-scale cooperative efforts—peer production of information, knowledge, and culture encouraged fifty million volunteers to successfully coauthor, maintain and use the multi-lingual *Wikipedia*, (then) the largest alternative to proprietary encyclopaedic knowledge. And 4.5 million volunteers contribute their networked computer downtime to create the most powerful supercomputer on Earth, SETI^{xv}. Of course the story from then on is fairly well known, educational practices were slowly transformed by commons-knowledge projects, sciences returned to peer sharing and public review, and so on, through news reporting and distribution, then entertainment ceased being something you consumed and returned to a participant practice, and finally local ‘open source’ democratic organizations joined the recombinant ‘Multitude’ to refresh political engagement. The experience of participation in everyday life, its organization, representation and communication, was being re-appropriated from The Market by the people who produced it.

The Return of Meshwork Markets

An ecology is not controlled by a genetic program – like a species - it integrates a variety of animals and plants, food and energy into a web of related interests, interlocking them as a network. The result, a decentralized assemblage of heterogeneous components closely mirrors the dynamics of our cooperative local (and true) meshwork markets. Cooperative markets allow the interaction of people, animals, plants, goods, products, knowledge, resources, energy and waste to be interlocked by complementary interests. These markets are sustainable, self-organized and decentralized structures: they arise spontaneously without the need for central planning, and evolve through a kind of creative drift, through following the convergence of resources, needs and desire. Cooperative markets are based on mutuality. They operate agonistically, meaning that the aim of participants is not to destroy one another (antagonism), but like wrestlers wrestling, recognize the reciprocity necessary in any exchange.

As we have seen, the logic of competitive practice in The Market is to accrue the power to ‘set’ the financial price of inputs and outputs. ‘Inputs’ would be the materials, labour and process of production, ‘outputs’ the means of distribution and point of demand. Mega-corporations, monopolies (in all but name) and oligopolies are price setters: the financial cost of their processes has never reflected the rhetoric they use in describing The Market – the rhetoric of supply dynamics, user demand, social costs or environmental consequences. Financial prices are ‘set’ at a level that reflects their own power to control market share and maximize financial profit^{xvi}.

In absolute contrast in our local collaborative markets, everybody involved recognizes themselves as simultaneously, a producer, distributor and end-user. And everybody recognizes the codependency of those practices, and how those practices sit within wider social and ‘natural’ resources; a network of interests, an ecology. Networks of networked interests, convened as markets, we learnt to call meshworks. And in meshwork markets, monopolization loses its logic. The best financial price is no longer that which is set by monopolies to maximize the difference between cost of production, distribution, and the price paid by the end-user - what used to be called, in a rather patronizing term, the consumer. Now, the ‘best’ financial price is that which reflects the co-dependency of the network of networked interests that make our markets. Meshwork markets therefore, transform financial competition into financial cooperation.

And perhaps as importantly, local meshworks create a growing pool of embedded practical knowledge. And because this pool has not been internalized as a property by a mega-corporation, it cannot be expropriated, and so knowledge remains and enriches its locale. Hence regional, local cooperative markets will not suffer the fate of so many Industrial company towns – like Nowa Huta, or Nanjin or Wolfsburg, or Lucknow I mentioned earlier - which die after the mega-corporation that feed upon them, move elsewhere.

“Exchange”, wrote sociologist Georg Simmel in 1907 is “one of the purest and most primitive forms of human socialization; it creates a society, in place of a mere collection of individuals.”^{xvii}

As I mentioned earlier, a market is not designed, and yet there is a recognizable coherence between the ancient bazaar^{xviii}, the 19th C Marche au Puce, the 20th C flea, thrift and street markets, peer-to-peer digital exchanges, and contemporary meshworks. We might recognize elements of this description of a late 20th C European flea market

‘In Brick Lane, as in markets everywhere, an adjacency of products evolves. Stolen bicycles for instance, their various parts and sub parts - and the feral youth that traffic them - accrue to one another near the edges of the market, where lines of vision and routes of escape are relatively accessible. Stolen goods, counterfeit perfumes, and pick-a cup touts, share these easy-access border zones with milling groups of Albanians offering crumpled packets, while muttering “cigarettes, cigarettes, cigarettes”. Further in, out of date-stamp comestibles, food without provenance, bizarrely named sweets, piles of rotting or misshapen vegetables, damaged delicacies and mountains of cakes, stick together in a sick parody of the supermarket aisle. A milling crowd of men browse stalls piled with new and old tools, and tools for tasks long forgotten, so long forgotten the implements take on the patina of museum artifacts from cultures long deceased. Household goods merge with an array of furniture – from broken rubbish to high-design collectibles, are all washed-up on the market from capsized businesses and sinking domestic arrangements. Pirated software, games and pornography, compete with carelessly copied DVD’s - their presence in the market so premature, they precede the official product release - cell phones, sim cards and ‘instant unblocking’ (a guy with a laptop) merge into piles of ‘remotes’, black goods and TV’s, to form a recycled silicon valley.’

That was an extract from a book about London, Old Europe called *Downriver*, by Ian Sinclair published in 1991.

Cooperative markets are networks of interrelated interests, and interrelated interests can only function (obviously) in useful combination with others. Markets therefore –as Simmel so perceptively observed - are social mechanism that enable people to swap, trade, bargain, compete and cooperate. It enables them to transact complex resources, needs and desires, through a medium of exchange. Which makes exchange, first and foremost a communication praxis; and a market a communications technology. Peoples come together to transact, perhaps for quite different reasons; they do not need to exchange equitably, or even communicate in the same language; all that is required is that they have some ‘goods’^{xix} to transact, and social conventions to enable the transaction - a cooperative market.

That the values attached to ‘goods’ in a given transaction, are not the values received is unimportant, transactions are possible without equivalence. Because of course, the possibility of two desires finding their exact reciprocal equivalent in an endless chain of transaction is an impossibility; barter therefore has always been a severely limited social practice. Money, or some other agreed currency has always been useful for deferring the differences exposed in transaction. Money offsets the need for transactual reciprocity. It mutates the simple chain of

barter into a network, no a network of networks, a meshwork of exchange through space and time. Money connects transactions to all other desires, everywhere.

Transactions are also clearly possible without ownership. All that is necessary – like the foundation of language itself - is that one value can be substituted for another, and that interested parties can apprehend the substitution. Therefore when 'goods' are transacted, relations between people are also exchanged. Values, values of all kinds – including cultural, political, emotional, libidinal and financial - can be made present, substituted and transacted. A transaction is not tied to the goods transacted, it's the ability to make present or real, relationships between people. Social relations as subtle and complex as this; convened in meshwork markets, can never be subsumed by The Market.

Although a market is not designed as an aesthetic object, there is a beautiful logic of practice at work: (as we have seen already) markets are self-regulating networks that evolve a familiar structure from heterogenous desires. And yet those desires are never 'set' – 'set' in the old Market sense of the term, meaning fixed or controlled. In cooperative markets desires are always in the process of becoming. Transactions confer temporal assessments of value that continually have to be remade. Meshwork markets function **in** the moment of transaction.

Forgive me for my indulgence, I'm sure I don't need to lecture the audience here this evening of the workings of a market.....

I'm sure you're anxious to continue the celebrations. So in closing, I would just like to loop back with you, almost to the birth of your organization in 1939 and wander with (the then) two famous artists through the vast 'marche au puces' of central Paris, a former capital in Old Europe. Imagine those radical 'surrealists' artist Andre Breton and Alberto Giacometti as they scoured the markets looking for 'object sauvages'^{xx}. Object sauvages' is an Old French language term meaning 'savage object', by which they meant to designate objects that were stripped of the aesthetic glamour of advertising. Things that had fallen from The Market, abandoned by the dead logic of retail, and plunged into the world of need and desire. The surrealist artists sought-out objects, that would enable them, in the moment of transaction, to decode their unconscious and libidinal desires. For them, street markets were like vast material maps of the collective unconscious, a psycho-pathology of everyday life and a reservoir of all that is lost in the banality of shopping, and The Market.

Breton, and the Surrealist instinctively understood, as we do a hundred years later, that transactions convened in cooperative meshwork markets are a celebration of 'real' life.

Even more than that, such market transactions don't result in our alienation from life; they are the foundation of life itself.

Archaic yet hyper-modern (as we all know only too well) cooperative markets endure, and life prospers.

Thank you for being so patient,

Thank you so much for inviting me, goodnight, and enjoy the celebrations.

ⁱ 'Meshworks' was a term coined by a 20th century cultural theorist Manuel De Landa in book entitled **A Thousand Years of Non-Linear History** Zone Books New York 2000

ⁱⁱ In West Africa in 2006, in some of the poorest countries on the planet – Mali, Liberia, Gabon and Burkina Faso - the annual debt repayments (repayments negotiated by Non Government Organizations NGO's on their behalf on debts for loans enforced on them by the World Trade Organization WTO) exceed the countries total Gross National Product GNP; the total marketization of the nations tradeable excess.

The World Bank will only deal with – meaning extend loans to; or en-debt – countries without trade protections, therefore 'Free' markets.

ⁱⁱⁱ In 2004 the United States spent \$4 billion dollars per annum subsidizing its 25,000 cotton farmers, more than the entire economic output of Burkina Faso. The subsidies exceeded the value of the cotton produced, lead to overproduction and distorted the prices in the market. Subsidies stifle local markets, and deprive developing markets of the only advantage they have, low costs and high quality.

^{iv} One of the many cruel ironies is that no market was ever 'free'. As a form of exchange between interested parties markets are always convened through convention, rule and restriction.

^v Wolfsburg, in the former Germany of Old-Europe was founded in 1939 around the Volkswagen corporation car factory. The city and corporation prospered for sixty years until production was moved to cheaper zones in The Market. Oil droughts (brought on by a succession of middle east conflicts) rendered cars luxurious, and eventually the brand was absorbed by a Market rival in 2007. For some time during this period, the city perpetuated a fiction that the car corporation was still supporting the town – including a series of auto themed projects to compete the tourist fiction; for example **Auto Stadt** - a theme park and museum for car and car fetishism; the **Phaeno** a destination 'event' museum concerned with mobility, science and innovation; and following the expropriation of knowledge through IP regimes a Mobile Life Campus, known locally as the 'auto-uni'.

^{vi} The Bretton Woods system of international economic management established the rules for commercial and financial relations among the major industrial states in July 1944. The agreement anchored national currencies to the US dollar, linked the value of the dollar to the price of gold thereby facilitating the first truly global market. http://en.wikipedia.org/wiki/Bretton_Woods_Conference

^{vii} The Wall Street Journal Europe, (2/9/08 p. 20).

^{viii} Wall Street Journal Europe ibid

^{ix} Personal debt in Europe broke through the 2 trillion (2,000,000,000,000) barrier in 2010 and was increasing by £1 million every four minutes; the interest paid on this debt was running at £8 billion every month. <http://www.creditaction.org.uk/debtstats.htm>

^x To paraphrase the 17th C English philosopher Thomas Hobbes in place of simultaneous war between all men, there was competitive trade between all men. Hobbes, Thomas **The Leviathan** (1651) <http://www.thomas-hobbes.com/works/leviathan/>

^{xi} Free access to knowledge and information (article 34) was added to the amended **Universal Declaration of Human Rights** in 2010. *Adopted and proclaimed by General Assembly resolution 217 A (III) of 10 December 2010*

^{xii} Melville, Herman **Moby Dick**, Collectors Library edition 2004 (1851) p.108 <http://www.bibliomania.com>

^{xiii} The Indian Neem tree (***Azadirachta indica***), used for centuries by local people to produce remedies for everything from snake bites to high blood pressure was in 2004 the subject of 70 patents by Pharma-giants. In an extraordinary grab for resources companies claimed ownership of maize, potato, basmati rice, wheat sorghum, and all vegetables. Patents were also granted on tea, soya, coffee and cotton. The struggle in the early years of our century was over the ownership of life forms, and their reproduction. By 2012 all property claims on life processes were overthrown, although the developing world spent over 60bn US dollars a year fighting the new 'inventions', processes and products of the pharma giants and their resultant intellectual property claims.

^{xiv} For example in May 2003, branded Zidovudine capsules, used in early HIV/Aid's treatments (before its cluster mutation), cost 198 OE euros, generics 24 OE euros. (prices recorded by Medecins Sans Frontieres)

^{xv} It was the SETI project that processed the gene sequencing necessary for the fist i-commons databank in 2013

^{xvi} The top ten monopolies in 2008, Citigroup, General Electric, Altria Group, Exxon Mobil, Royal Dutch Shell, Bank of America, Pfizer, Wal-Mart Stores, Toyota, Microsoft

^{xvii} Simmel, Georg **The Philosophy of Money** Routledge London 2010 (1907)

^{xviii} A **bazaar** is an ancient word for a market, the word derives from the Persian *b_z_r*, whose etymology goes back to the **Pahlavi** word *baha-char* meaning "the place of value".

^{xix} By using the unfashionable term 'goods' I'd like to signify anything that can be transacted; material or immaterial.

^{xx} The incident is retold in Andre Breton's book **Nadja** (1939) <http://www.site-magister.com/nadja.htm>