**kohl zine**

9

from her body with a jerk. She immediately fell on her knees and pressed her begging face against his limb. His masculine scent awakened her animal side and she did not hesitate to at least try to commit his cock to disappear completely between her tender lips. A burping swallowing sound along with a surge of escaping saliva, however, ended her experiment somewhere in the middle of her neck. Not that it stopped her from sucking on the bulging cock and slowly moving it out again and then back in her mouth. Her free hand began to grab her crotch and massage her vagina.

Bernd embraced Anne's head and pressed him against him to support her in blowing. Bernd didn't warn her when he injected his first load of sperm into Anne's neck. This one couldn't possibly swallow it all and retreated. When the last piece of Bernd's tail was pulled out of her mouth, a thrust of his juice followed and splashed over her face. But Bernd was far from finished. He pulled down Anne's trousers and exposed her completely. She was not wearing any underwear and Bernd grabbed her and threw her with a strong swing on the hay bales near the two. He kneeled behind her and started with his strong tongue to penetrate into her hot and wet fissure. He skillfully spoiled her while his hand played around her clitoris. Anne moaned louder and louder than Bernd gave her without problems an orgasm that could not possibly be faked. To have her plump, crunchy bottom in front of him, Bernd animated one of his fingers to insert it. Her hole was so tight that even it could hardly find a place in it. Anne seemed to want to return something at first, but with lust and horniness, she got out nothing more than a little scream as she trembled further under the play of Bernd's tongue. This one now wandered further up to support Bernd's finger there. He moistened Anne's twitching rear entrance with his tongue, which briefly penetrated a little deeper into it. Here, too, Anne's protest ended before it began. The foreplay ended

# July'19 Issue IX

# A Farmers Life #5
# Fantastic business

by Germanball

Sweat flyes around as Anne let her red hair blow through the air. Her firm breasts rose and fell under her fast breathing. She pushed the pitchfork into the ground and took off the suspenders of her jeans overalls, exposing her transparent white shirt. She opened her eyes and smiled gently when she saw Bernd. He approached her with long steps, his upper body naked and his steel-hard muscles were a sight that Anne visibly excited. She bit her lower lip slightly and stroked her hand slightly from her left chest down to her navel. She pulled up her shirt and wiped the sweat from her face, which exposed her body up to her breasts. Bernd clearly saw the nipple attachments and his enormous limb started twitching in his tight jeans. He stroked through his long hair with one hand and through his full chest hair with the other.

Anne dropped her shirt and slowly licked the salt off her index finger as her tight body began to move towards Bernd. The desire in her sparkling blue eyes, clearly reciprocated by Bernd's fiery desire. He opened the upper button of his jeans which felt almost unbearable under the tension. Anne now seemed weak like she can't take it anymore. In her final steps, she fell for Bernd more than she went for. He grabbed her with his strong arms and pulled her up to his strong abdominal muscles with a jerk. She couldn't help but sink her tender hand immediately into his pants and pull out Bernd's big penis, which jumped towards her as she freed it from its prison. She could barely grasp it with her trembling hand. Bernd now reached into her shirt collar and tore it

# Tale of Two Cities : Benis and Bagina

by Azeriball

There are a lot of cities in the world. Cities describe first image of the country. Cities are literal monuments of the country, landmark of history and etc. Cities are like snowflakes. No city is same with another city. But however today we are gonna talk about two far but however very same cities : Benis and Bagina

Benis is a city in Guney-ye Sarqi District (Güney Şarq in Azerbaijani), Sharbistar Country, East Azerbaijani province (ostan) in Iran. In Azerbaijani it's written as Bennis. The word Benis is probably came from Bendeniz which means servant.

The layout of Benis is centralized; the village is surrounded by nearby mountains, which supply a stream that feeds into a local aqueduct. The aqueduct waters local gardens and greenery. There is a mosque, public bath, and various shops located around the village square. A main asphalt road leads south out of the village, into the rest of Shabestar County.

During the summer, the population of Benis increases significantly. Agriculture has been a local industry in Benis for many years, and continues to grow. In the 19th century, most migrations from the village were to foreign cities such as Istanbul, Baku and Tbilisi. This created massive depopulation in city Benis. After the Russian Revolution, more immigration took place from Benis across the country and into cities such as Abadan, Ahvaz and Tehran. Many workers are chiefly active in the businesses of confectionary production, and the processing of urea and paper.

Benis


Gagas river valley

Main language of the city is Azerbaijani which explains a lot of things

As of the 2011 census, its population was 1,008, including 331 families; it was further recorded as 1,609 in 2016. Benis is considered as „family city" since 331 families are deeply connected with each other.

Population drop stopped in Benis in 2014. Since that time population started to grow. Its slow but steady growth

Benis has became internet meme after Spurdo Sparde meme became popular. Even mayor Benis ackknowledged of the popularity of the name but made no „Benis in Bagina xddddddd" joke which is shame

More in depth tour in city can be found in this Youtube video

https://www.youtube.com/watch?v=KIPMQFdvCzo&feature=youtu.be

There are no much information about the city of Bagina. Bagina is village tier city in the North of India and in region of Kashmir. City is located in district of Uttrakhand. There are no population info about the city but however there are some info about city being 100% Muslim. River Gagas flows in the valley the village is located in.

These two cities brought many memes, jokes and OCs to our community. We thank population of both Benis and Bagina for such great memes.
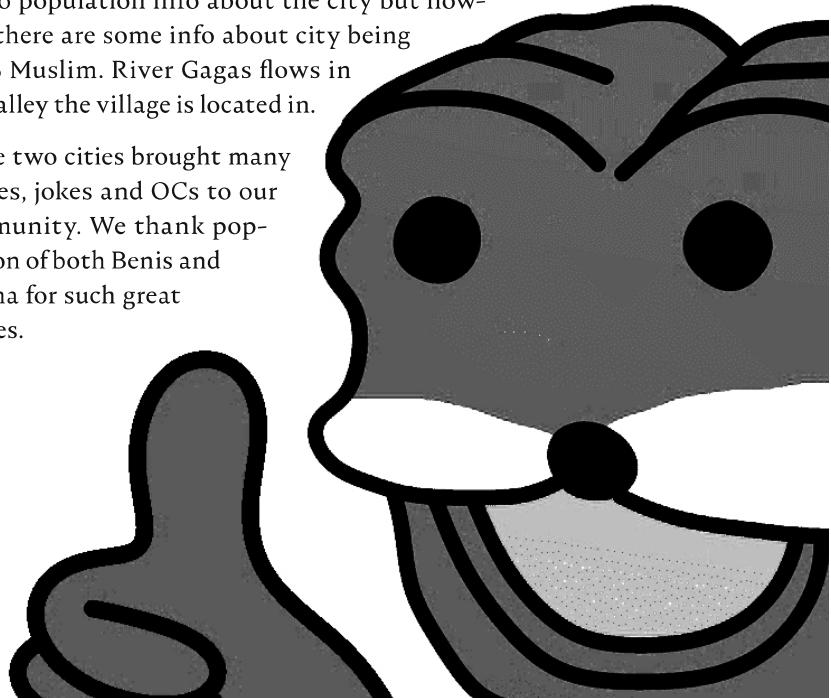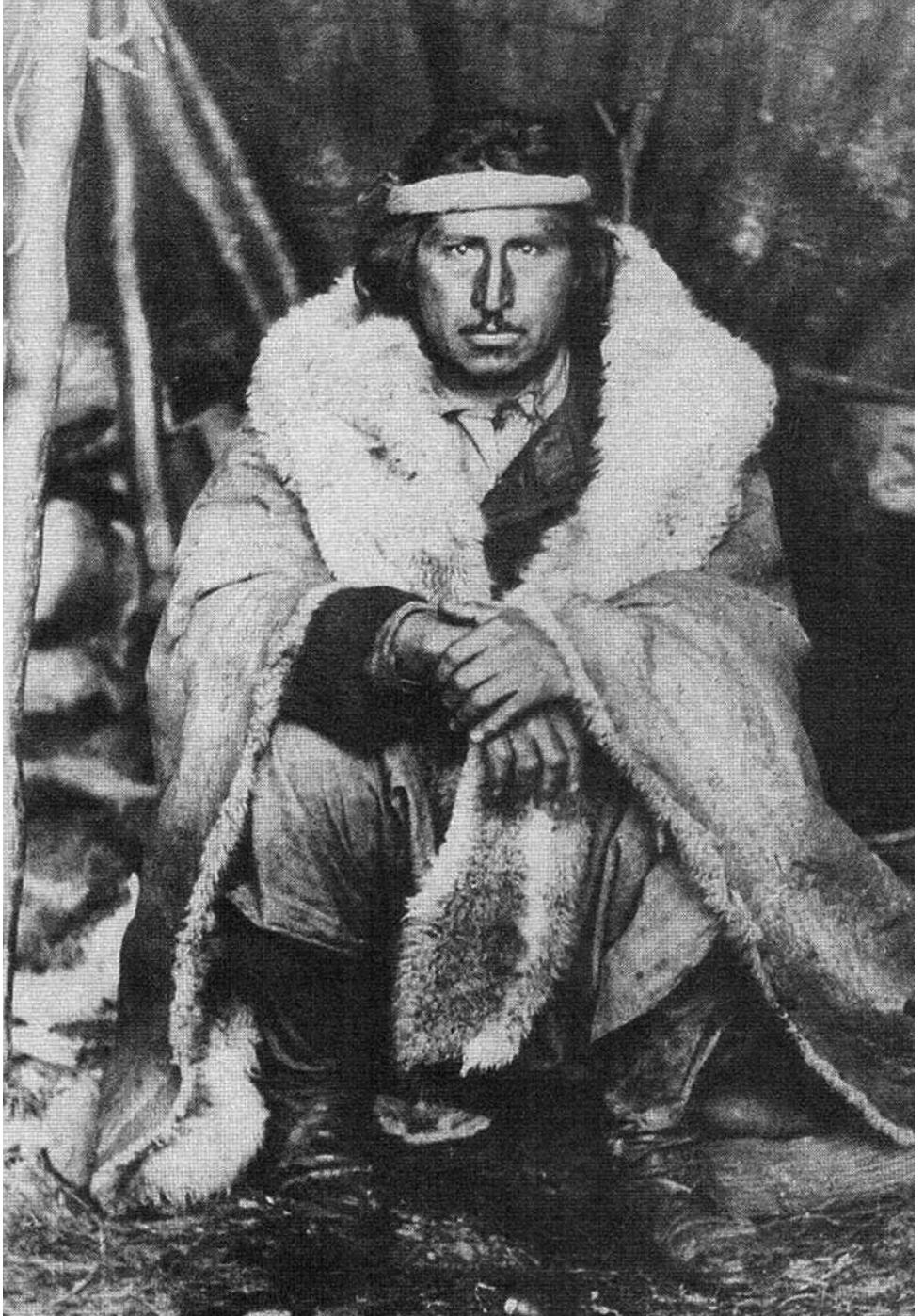
when Bernd stood up and covered Anne's lower abdomen with his strong arms. Without further help from his hands, he pushed his phenomenally large penis piece by piece into Anne's tight bottom.

Anne herself got only a drooling moan in the meantime, while her body was pulled back and forth in Bernd's strong grip. He hammered his air piston again and again into the tender body of little Anne, who looked more like a toy in his hands. Bernd pressed his cymbal close to Annes shrugging ass as he lowered his dick to the stop in this only to pull him out almost completely. Again and again he pushed it in, only to pause for a moment at the last strong push before pumping a new charge of his love nectar deep into her intestine. Anne trembled under the pressure and a load of her own juice poured out of her pleasure grotto as she came back and forth in a firework of multiple orgasms. Bernd pushed hit dick gently in and out a few more times to make sure that every drop of his sperm had left the long cock before he pulled it out of Anne. She remained completely knocked out on the hay bale. Bernd's sperm flowed in a torrent out of Anne's still strongly twitching body, which apparently didn't notice anything anymore. "I hope you liked it, my little one" Bernd said in his deep, male voice, emanating the authority that sought its equal. "Great, the horny buck did it" was answered in the voice of Walt.

"W-Walt?" Bernd blinked briefly as his surroundings disappeared and in front of him a table surface with a lake of his own saliva appeared beneath him. He blinked a little again and reoriented himself. When Bernd raised his head he realized where he was. He was still in the stable on his farm. He briefly scratched his thick belly and man tits as he looked around his barn. He must have fallen asleep. Bernd got up and went over to Walt's. "Wake up, Samurai. We got a business to run." Walt said. Bernd wasn't so sure about that. But it had

been a long time since he had a sex dream, and this one was really long and good. Even if he unfortunately forgot more and more of it again. Dette had turned back and lay next to the exhausted but happy looking Vulpix. Walt packed his camera equipment again and assured Bernd that he would know someone else who could sell the shots. Walt had apparently worked with Bernd's grandfather in this way before and earned some money. Ben would be right back to pick up the footage. The village policeman is probably supposed to know through his contacts to criminal people, some types who offer and sell many films of this kind online. Bernd had heard about it because he himself liked to be in the dark net. He didn't know if they would all earn well from it, but since Bernd only had to pay for his food anyway and still got some money from his parents in the mail, he was actually quite happy about how things were going. Walt came up to Bernd and pressed an egg into his hand. It was quite big and scored well. "Here. I have no idea how this happened, but there was an egg in the stable". Bernd was a little overwhelmed and speechless, but he accepted it and was happy that his primary task of breeding seemed to be done. All he had to do now was call the Nigger and tell him that the woman can pick up her Vulpix and the egg again. Then all you had to do was find new customers for the next sessions. Bernd was beginning to feel like a businessman.

to be continued

# The White Race in Argentina - An outline

by Argentineball

This will not be a text claiming that Argentina is 1488%, but one that tries to present an unbiased image.

First, let get this out of the way. Argentina is not a nation state in the traditional sense, as it is too diverse and is not one people. Buenos Aires is way closer in race, culture and history to Montevideo than to Salta or Tucuman which would be more at home with Bolivia and yet we are different countries for historical reasons. Race was never a core of the ideals of the state, a thing in common with other liberal states, we were just incidentally majority european and it was never considered an aspect of the country to protect, at least not intentionally, even if such a characteristic was caused and desired.

Argentina isn't one solid nation but is better clasified as an agglomeration of two or three under the same state. Here I use the most traditional definition of nation, that is, I do not refer to the liberal conception of nation, a paperwork, civic nation, a definition that essentially equals nation with state (or with culture, i.e. civic nationalism) but to the one that lists two components (with maybe a third one) to the nation, Blood and Culture, the third one being Soil (disregarding metaphysical or spiritual elements to it).

These two nations are the Northerner and the Southerner/Riverplatean. The first one can arguably be said to be in fact two, northeasterners and northwesterners, given how

# Comic



by Bernd

Anawrahta  Saw Lu  Kyansittha  Sithu I  Narathu Naratheinka Sithu II  Htilominlo  Kyaswa Uzana

1050  1100  1150  1250  1250

Age of Pioneers   Age of Conquests   Age of Comerce   Age of Affluence   Age of Intellect
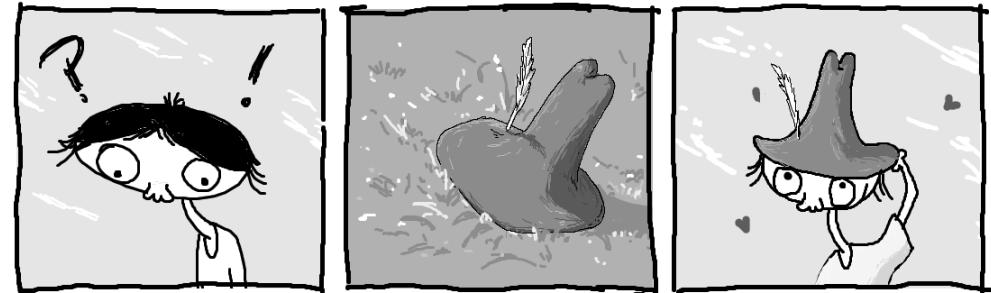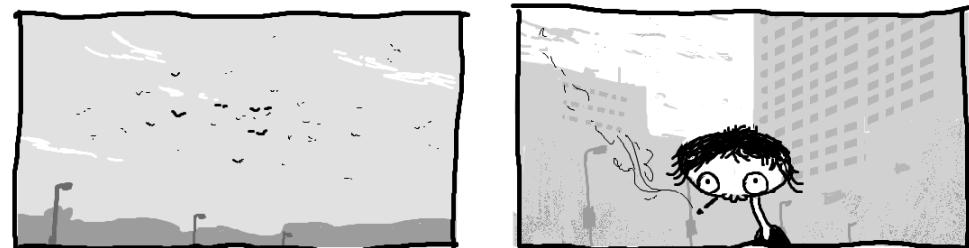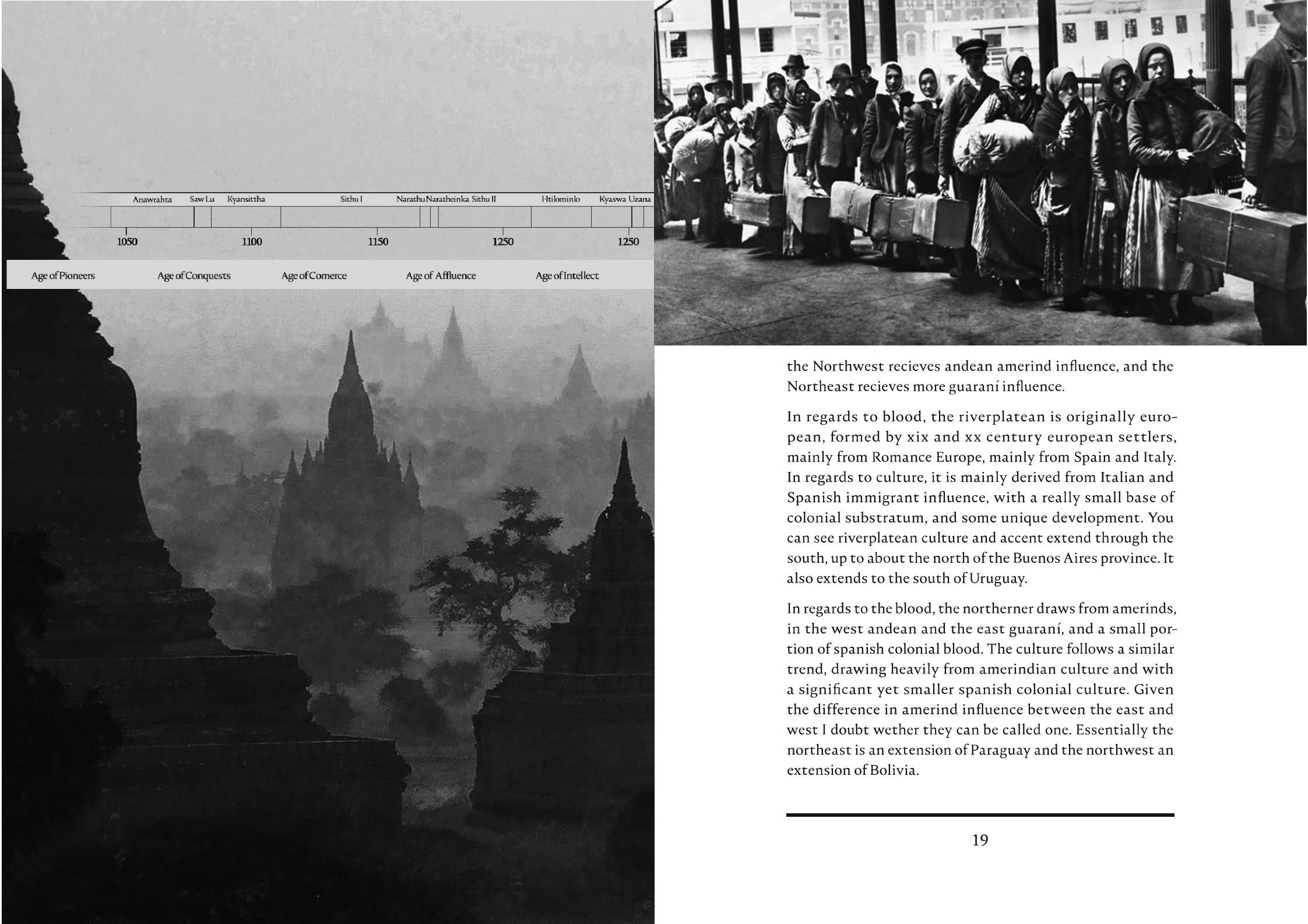
the Northwest recieves andean amerind influence, and the Northeast recieves more guaraní influence.

In regards to blood, the riverplatean is originally european, formed by xix and xx century european settlers, mainly from Romance Europe, mainly from Spain and Italy. In regards to culture, it is mainly derived from Italian and Spanish immigrant influence, with a really small base of colonial substratum, and some unique development. You can see riverplatean culture and accent extend through the south, up to about the north of the Buenos Aires province. It also extends to the south of Uruguay.

In regards to the blood, the northerner draws from amerinds, in the west andean and the east guaraní, and a small portion of spanish colonial blood. The culture follows a similar trend, drawing heavily from amerindian culture and with a significant yet smaller spanish colonial culture. Given the difference in amerind influence between the east and west I doubt wether they can be called one. Essentially the northeast is an extension of Paraguay and the northwest an extension of Bolivia.

The Southerner nation, as I said, developed from european immigrants, pioneers, who came in the xix and xx centuries. It is the part of current Argentinian society that can be called white, and what is made reference to when it is said "Argentina is white".

This immigration which composed it was a result of both external, world factors, and by internal promotion. Some parts of Europe were in a rather poor shape economically, or going through a post war crisis, and Argentina needed people, civilization building people. A convergence of internal will and external factors permitted it. At the time, Argentina was inhabited by mestizos and indians mainly, with an upper class of criollos. The first were seen as barbarous and uncivilized, while the european man was thought as the opposite. There was the idea of Civilization versus Barbarism. Sarmiento, a criollo, is known to have had a deep distaste for the indian and gaucho, based clearly in racial grounds, seeing them as not fit for building civilization. He saw the european man as racially superior to them, capable and hardworking. This was probably the opinion common to the upper class, as it was common to the whole european world at the time.

> Descendants of Guarani races, wild Indians and slaves who act instinctively for lack of reason. In them the primitive and colonial barbarism is perpetuated. They are ignorant dogs of which one hundred and fifty thousand have already died. Their advance, captained by degenerate descendants of Spaniards, would bring the arrest of all progress and a retreat to barbarism … […] It is providential that a tyrant kill all that Guaraní people. It is necessary to purge the earth of all that human excrescence: lost race from whose contagion it is necessary to free oneself.
>
> Sarmiento in a letter to Mitre, 1872



This anecdote ends this short outline of the history and current situation of the white race in Argentina, and Argentina's racial dynamics. I'll end it with a quote from a Brazilian bernd:

> Argentina is weird in some ways. Brazil is way worse racially, but it's like here people with half a brain managed to hold on tight to management of essential things, like electricity, even though we still have niggers roaming the streets and being niggery. Still, especially when you consider that around the 20s or so Argentina had a higher quality of life than most european countries, they are COMPLETELY fucking retarded. I think it has to do with the explosion in mestizo and jewish numbers who on top of it like to take credit for the succesful country which was created by whites 100 years ago and doesn't even exist anymore. For an example of their retardation, look at the Falklands episode.

from the internal north, the earliest time period being the 50s, and later, since the 90s, from the northern bordering countries, brought indian blood to the south with them. This led to two things, first, a slow mestizing of the european population, and second, the forming of an amerindian and mestizo underclass, that is, villeros, cabecitas negras or negros cabeza. These are thought of as lazy, incompetent, crime prone and so on, quite similar to the description that Sarmiento gave of the gaucho and indian.

This mestizing was a rather slow process. If you analize cultural products of the south, you'll only start to see the amerindian influence very late. For instance, „El Eternauta", a comic drawn in the sixties, which is protagonized by a group of three Argentinian middle class men. These, and their families, are markedly drawn as european descended. Mafalda, a comic drawn throughout the seventies, depicts middle class children as fair-skinned and commonly blond, with italian and spanish surnames. If one looks at nineties ads of the south, one can see that most actors chosen are white, though amerindian influence is starting to appear. Only in the 2000s and onwards is the amerindian influence really strong. Perhaps it is a sign that the process accelerated. Now, I calculate the white population to be around 30% of the total, or 14 million.

In 2013, there was a police strike, demanding the betterment of working conditions. It consisted in the cessation of services and the taking of various public offices. This resulted in widespread crime. „The looting was carried out by criminals who organized themselves on motorcycles or on foot and entered neighborhoods to take everything they found. They were equipped with firearms, sticks and other blunt elements." It was a latent thought, not manifested, that the malón, the roving bands of indians which terrorized the european settlers at the frontier, had come again.
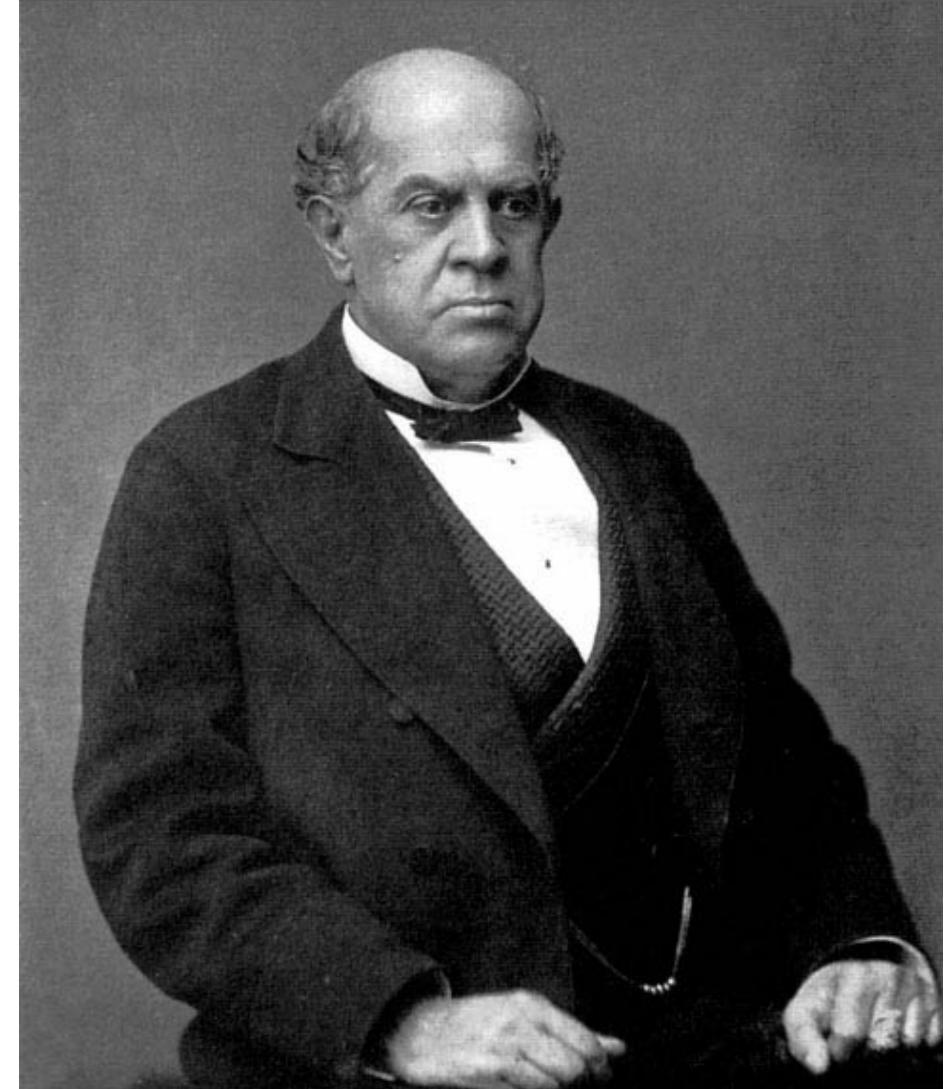
Do not try to economize blood of gauchos. This is a subscription that must be made useful to the country. The blood of this Creole rabble, uncivil, barbarous and rude, is the only thing they have of human beings.

Sarmiento in a letter to Mitre, 1861

Pass the roto, the gaucho, the cholo, elementary unit of our popular masses through all the transformations of the best system of instruction; in a hundred years you will not make him an English worker who works, consumes, lives decently and comfortably.

Manuel Alberti[1]

From this attitude stemmed the laws which promoted european immigration, promising land and prosperity to the immigrants. So formed the so called „Pampa Gringa", a recently conquered pampa inhabited by european immigrants. This immigration helped form the middle class, along with the forming of the rioplatense culture. The situation of the children of poor european immigrants graduating from universities and gaining a high position in society was so widespread that it was a common image in the popular culture of the time.

Don Giuseppe is happy;
he has left the thumbtack,
his son has graduated.
With the money he made
he has put a sign on the door,
the hall has been arranged,
a comfortable office.

A fragment from the tango „Giuseppe el zapatero", which talks about an italian shoemaker working to fund his son's studies

This newly formed middle class transformed the city landscape which it inhabited. Much of the architecture built at

1.(Alberdi, a member of first national argentinian goverment, was an anglo- and franco- phile, he believed the spanish were not fit for building a republic. This attitude probably was limited to him)

the time has italian surnames as the author. The europeans are thought of as building the theatres. Much of the public and cultural edifications, wether libraries, monuments, theatres and so on, were built with fundings provided of National (i.e. Spanish, Italian) Cooperation Societies. The south was built by immigrants. This is the period of time in which Argentina was thought of as rich and influential. The rioplatense culture was blooming. The civilized man dreamed by Sarmiento had arrived and was thriving. At this point, the south was majority european, though, following the trends of the world, the racial thought which made Argentina so had faded away.

While this happened in the south, the north was untouched. It remained mainly amerindian and with a culture steming from such inheritance, with a strong influence of spanish colonial society.

With various complex internal changes in Argentinian society, immigration towards the south, from the north started happening. Subsequent immigrations from the north, first
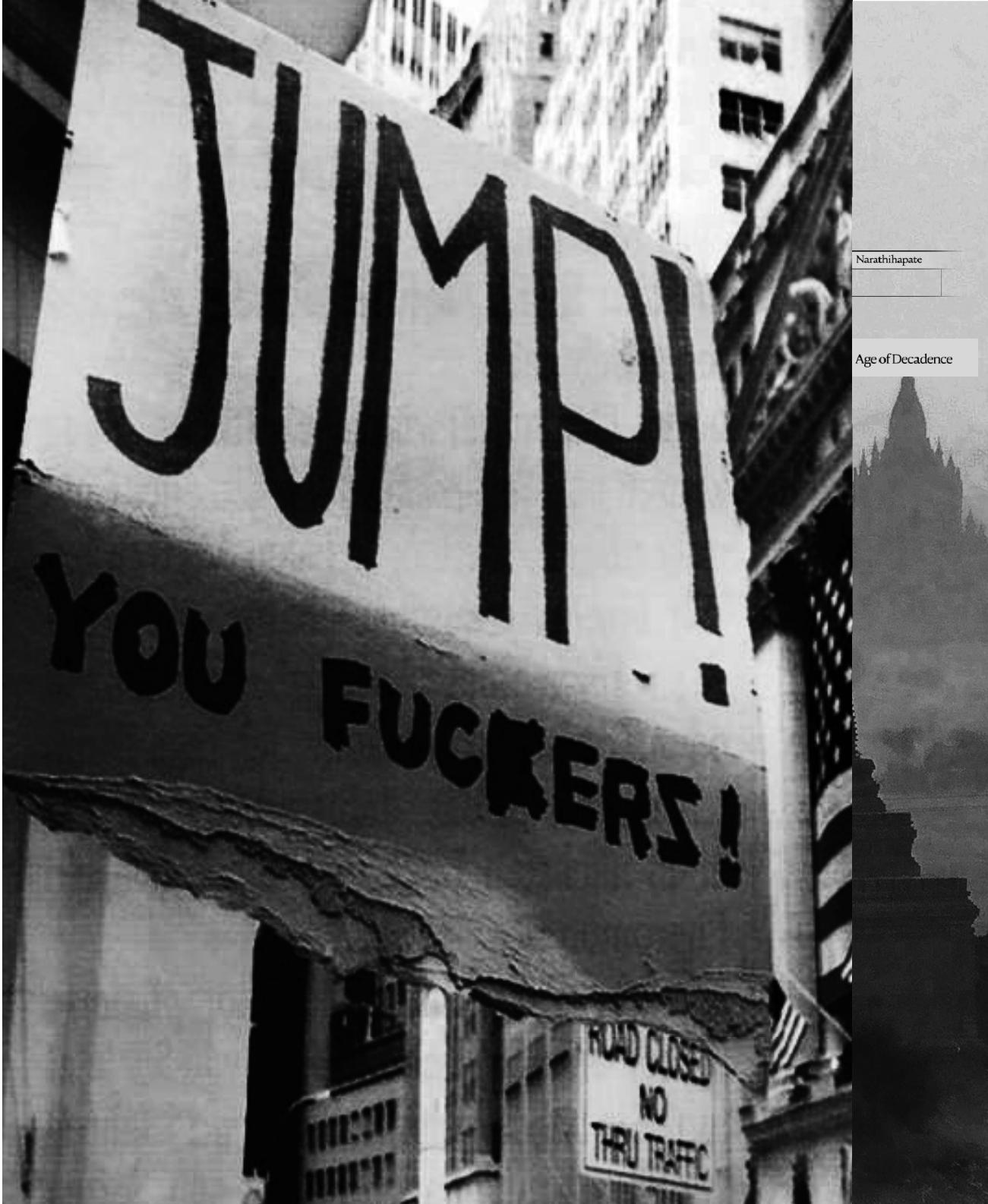
# Bagan Empire: A Glubbian Case-Study

Narathihapate

Age of Decadence

by Sloveneball

*Required reading: The Fate of Empires and Search for Survival. Sir John Bagot Glubb. Blackwood (1976)[1]*

As observed time and time again, there are certain patterns in dynamics of societies throughout history which repeat themselves, transplanted in all different societies and systems. One such pattern we can observe is how out of the struggle of various smaller states large hegemonies emerge – empires, so to speak – only to be dismantled in a couple centuries. This pattern has been cyclical in some regions, most notably the serial dynasties in Egypt and China, where periods of prosperity exchanged with periods of turmoil, but a feeling of continuity and divinely mandated right to rule was preserved from one cycle to another; but in other places, empires once dismantled became merely a note in history.

One such empire, in a region generally out of the spotlight, was the Bagan Empire, at its peak exerting control over roughly the borders of modern-day Myanmar. It was during this period that Bamar culture became the dominant in the region, thus laying the foundations of the modern nation (though, peripheral regions still belong to distinct ethnic groups).

The city of Bagan was first established as a fortified city by Pyinbya in 849. While traditional chronicles hold that Pyinbya comes from a long lineage of local kings, it is more likely that the chronicles were a fabrication to establish legitimacy of the empire, as the city belongs to Bamar ethnicity, and not the Pyu of other city-states in the region. It is thus more

1. http://people.uncw.edu/kozloffm/glubb.pdf

Bagan's area of influence at the time of Anawrahta's ascension.

likely that Bagan was established as a colony of Nanzhao to the northeast in modern-day Yunnan, who briefly vassalised the Pyu city-states during 9th century. It was from this fusion of Yi culture of Nanzhao (where linguistic ties are apparent) with local Pyu traditions that Bamar culture emerged.

Bagan gradually grew in prominence for the following two centuries, being a regional powerhouse on the lowlands of Upper Burma, but not yet displaying true expansive ambition. This changed with Anawrahta seizing the throne from his adoptive brother in 1044 (his father, Kunhsaw Kyaunghpyu, on taking the throne, married the previous king's wives, two of which were pregnant) by taking advantage of a rebellion and using it to challenge him to personal combat. He ambitiously started organising the territory over which Bagan exerted influence into a centralised state: he constructed weirs and canals to form backbone of an irrigation system, established new villages and organised his army. This is the Age of Pioneers of Bagan Empire.



As with many other empires, the Bagan Empire exhibits the approximately 10 generation, 250 year long cycle, through which a previously insignificant state quickly rises to great prominence, accomplishes prosperity, but collapses once its expansion starts stagnating onto itself. There were exactly 10 generations of rulers of Bagan Empire, from Anawrahta to Narathihapate, though the 3rd generation was skipped. Bagan Empire can be thought of as emerging with Anawrahta's seizure of the throne in 1044, and perishing in 1287, existing for 243 years. Despite the fact that Bagan Empire wasn't even mentioned by Sir John Bagot Glubb in his 1976 essay, it fits remarkably well into the mould proposed as the standard life cycle of an empire.

As always, with economic situation of an empire worsening, the disillusionment grows and thus starts the Age of Decadence. Kyaswa left the administratory duties to his nephew and son-in-law Uzana, but Uzana didn't care much about the day-to-day problems of governing a falling empire either. He reportedly spent more time hunting elephants and drinking. He was to be succeeded by Thihathu, born to him by Kyaswa's daughter Thonlula. However, he was removed from succession by a conspiracy of Chief Minister Yazathingyan (it is said that the young prince would have spat on the chief minister when he didn't have it his way), who had him arrested and put to death.

His other son, Narathihapate, born to a concubine, was not much different. He was remembered for being arrogant and wrathful too, as well as incapable of solving his empire's economic situation. In order to construct a pagoda to mark his rule, he even resorted to forced labour, having no means to fairly compensate construction workers, something no ruler of Pagan has done before.

In 1277, Bagan Empire was first raided by Kublai Khan's army, after twice rejecting to pay tribute to Yuan Empire. After again refusing to pay tribute, Kublai Khan launched a full-scale invasion in 1283, forcing Narathihapate to flee to Lower Burma, for which he is remembered in chronicles as The King Who Fled The Mongols. Pegu and Martaban in the south soon revolted, and in late 1285 he sent an envoy to negotiate terms of vassalisation. Two years later, Kublai Khan agreed to the terms and withdrawn his troops, but the state fell apart when he was forced by his son Thihathu to death by poison. Thus, the Bagan Empire was completely dismantled. Some of the now-fractured Bamar kingdoms, however, continued to be ruled by scions of the Bagan dynasty, until a next Empire emerged in the region, Taungu – but that's a story of its own.

The Age of Conquests followed shortly thereafter, starting during the 1050s. He started by expanding into Shan hills to the northeast, establishing forts in the region and demanding local chiefs to pay tribute. This was followed by a southern expedition, seeking to vassalise the Mon states in Lower Burma. In 1057, Anawrahta's army seized the city of Thaton, then a major city-state. By demanding tribute from Mon states further to the east, he came in conflict with then well established regional power, Khmer Empire, and successfully defended against a punitive expedition. He also ventured west into Rakhine, raiding its capital Pyinsa, and a northern expedition in 1060s into Dali (successor state of Nanzhao), to secure the northeastern border. After his death in 1077 the conquests came to a stop; his successors Saw Lu and Kyansittha were preoccupied with internal Mon uprisings instead, Saw Lu meeting his end at the hands of one in captivity.

The religious foundations of Bagan Empire were also laid down by Anawrahta, when he converted to Theravada Buddhism. That way, he took direct control over clergy, taking away power from Ari Buddhist monks, as well as being able to invite scholars from conquered Mon states, and also Ceylon and mainland India overseas (where Buddhism was at the time losing prominence). He has begun construction of the famous Bagan Pagodas, in a display of wealth, power, as well as Buddhist relics plundered from Mon and Rakhine. Kyansittha and his successor Sithu I continued with economic development of the realm, building colonies and forts to further the influence, expanding irrigation systems to increase land productivity, and supporting religion by constructing further pagodas. Sithu I also took on many travels, visiting Malaya, Bengal and Dali. This was the Bagan Empire's Age of Commerce.

After that came a brief period of rule by Narathu, who murdered his father and elder brother to claim the throne, only to be assassinated by the orders of a tributary king whose daughter he had killed in a fit of rage. Naratheinkha was also replaced soon after his brother Sithu II sent a retainer after him, after he took one of his wifes as his queen, thus claiming the throne and stabilising the situation.

Sithu II started his reign by establishing a standing army for the first time, to become the core of the still mostly levy-based army. He has solidified the eastern border, which stretched to Salween valley, but also including some localities further east, the easternmost being ethnic Lawa cities Kengtung and Wiang Nopburi (modern-day Chiang Mai). This was the largest extent of Bagan Empire – covering roughly the territory of modern-day Myanmar, from Bengal in the west to Mekong watershed east of Shan highlands, and from Naga Hills in the north all the way south into northern Malaya. If during previous periods Pyu and Mon



Bagan Empire's core area and full extent at its zenith around 1200.

were still prominent cultures, Bamar language and script completely took over during his reign. The common law system was first codified under Sithu II in vernacular Burmese – Mranma, rather than Mon which had before been the prestige language. Assimilation of Pyu was practically complete in the next 50 years. Pouring immense wealth into the clergy and constructing more and more pagodas, Sithu II's reign is generally regarded as the zenith of Bagan Empire's prosperity. If not during Sithu I's reign, Sithu II's reign can definitely be generally regarded as the Age of Affluence.

Sithu II's successor, Htilominlo, was a scholar and a devout Buddhist. His reign definitely marks the Age of Intellect, started during Sithu II's reign. Apart from construction of further pagodas, he barely did any day-to-day governing, leaving those duties to the Hluttaw, a council of senior officials. The expansive efforts of colonisation and irrigation stalled during his rule, but the grants to the clergy didn't. More so, the grants to the clergy started by Anawrahta, were tax-free, so the income to royal treasury started declining. This came to spell an economic disaster. His successor Kyaswa, a scholar as well, could not even afford continuing construction of pagodas. He attempted to save the situation by seizing some lands from monasteries not belonging to the officially sanctioned Theravada sect; but he faced serious backlash against such action and was forced to rescind it.
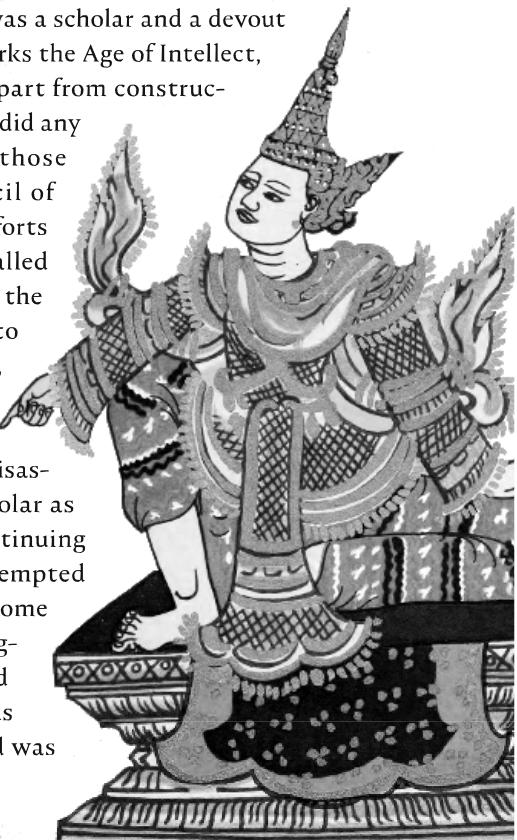
# Moral Damage

by Finnball

In the days of the financial crisis there was a concept called 'moral hazard'. It was a concern that bailing out the banks that had indirectly caused the great recession (as it was and would become known as) would in effect signal that authorities would both clean up the messes of irresponsible individuals and institutions if they had become large enough to be systemically dangerous, as well as let go unpunished, or even reward, such actions. In the United States, the Federal Reserve via QE, and the federal government via TARP, sucked up hundreds of billions of dollars in toxic assets, socialising the private losses of the richest people in America. The banks that were seen to be teetering on the brink of bankruptcy returned to profitability within months. Barely had the ink dried on the paperwork before yearly bonuses were paid out at Goldman Sachs and J.P. Morgan again. This, as unknown hundreds of thousands of US homeowners were foreclosed on by those very banks, despite having mismanaged the contracts and land titles to the point of fraud and beyond, forcing out of their homes the newly unemployed and the working poor despite having no capacity to prove their ownership of the properties in question in a court of law.

Until this point, the same narrative is seen and understood the same by all. The intervention to turn the financial bust into an economic boom, however, did not end then. The central banks around the World continued easing for a solid decade afterwards. The balance sheet of the Federal Reserve alone expanded by some 3.5 trillion dollars in that time. The ECB's by 3 trillion dollars. The BoJ's by a staggering 4 trillion dollars. BoE's balance sheet by a relatively modest 500 million dollars. The PBoC's balance sheet also grew by 2 trillion

dollars[12]. This all in addition to zero-to-negative interest rates around the globe, as well as a tsunami of fiscal stimulus and turbocharged credit growth courtesy of the Chinese government. If such a thing as moral hazard ever existed, then surely it can be said to have occurred and be visible. So where can we see the once predicted negative effects of the bigggest bailout ever orchestrated?

Firstly, let's look at the numbers. The stock market has had a riot since the recession. From a low of well under 30 trillion USD of global market cap in 2009[3], it hit a top of a gargantuan 90 trillion US dollars in 2018[4]. The bond market has also been partying hard for the past decade. World debt-to-GDP has risen from circa 270-280% in 2008 to over 320% in recent times[5], some $240 trillion in nominal terms[6]. In addition, the interest on that debt has gone down substantially. Some 12 trillion dollars worth of bonds have a negative yield and government bond interest rates are down to a third of what they were prior to the crisis[7]. While it might be counterintuitive, this is actually good for bonds, because of how they are discounted. The market price of a bond is relative to its date of maturity. If you want to sell a bond today that pays out a long time from now, it will be worth less as it has risk of default associated with it. The price of a bond is inversely correlated to its yield. Today even debt that was once considered extremely risky, like Greek covernment bonds, has low yields and is hardly discounted at all. While global debt has grown only moderately over the past decade, it would be safe to say that its mark-to-market, market-cap-equivalent value has grown explosively. It would not be a bad guess to say that the value of the bond market has more than doubled in real terms since the financial crisis. Perhaps tripled. Similarly, global real estate is estimated to be worth another 200 trillion dollars on top of all financial wealth[8]. Needless to say, had there not been a massive intervention to save the world

1. https://www.yardeni.com/pub/peacockfedecbassets.pdf

2. https://tradingeconomics.com/united-kingdom/central-bank-balance-sheet

3. https://www.businessinsider.com/global-market-cap-is-about-to-hit-100-trillion-2017-12?r=US&IR=T

4. https://www.world-exchanges.org/storage/app/media/uploaded-files/WFE 2018 FY Market Highlights FINAL PDF VERSION 12.02.19.pdf

5. https://www.businessinsider.com.au/6-charts-that-show-the-evolution-in-global-debt-levels-and-whether-its-reason-for-concern-2017-6

6. https://www.zerohedge.com/news/2019-06-20/global-negative-yielding-debt-hits-record-123-trillion

7.https://www.bloomberg.com/news/articles/2019-01-15/global-debt-of-244-trillion-nears-record-despite-faster-growth

8. https://fortune.com/2016/01/26/rea-estate-global-economy/

9. https://www.desmogblog.com/2019/06/23/former-shale-gas-ceo-says-shale-revolution-has-been-disaster-drillers-investors

10. https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html

very low to begin with, it's obvious that World's countries could absorb much more oil at a higher price point than had there been a protracted depression. This contributed to much greater government income to Russia, Syria, Iraq and Iran, the main players trying to put down the regional Sunni revolt.

Many, many more examples could be thought of given time, good, bad, ugly, but greater in importance to any amount of single events is the aggregate social impact of the global bailout regime. Political structures around the World were on the verge of collapse. Existing orders were about to be overturned. Personal priorities were being checked and re-evaluated. The behaviours, goals, hopes, fears of billions, that had reached the end of their useful lifespans, were all in the process of evolving into something that had more in common with reality underlying society. It cannot be denied that society as practiced then and today, even more so, has degenerated into a post-civilizational morass that is slowly being crushed under its own failure. Low birth rates, disappearing ethics, narcissism, total atomisation, celebration of mental illness. Physical and mental weakness. Escapism. For all the suffering, the Great Recession promised civilisational renewal. A chance to find a chink in the armour of the powers that be to plunge a dagger into. That chance was snuffed. With "whatever it takes."[10]
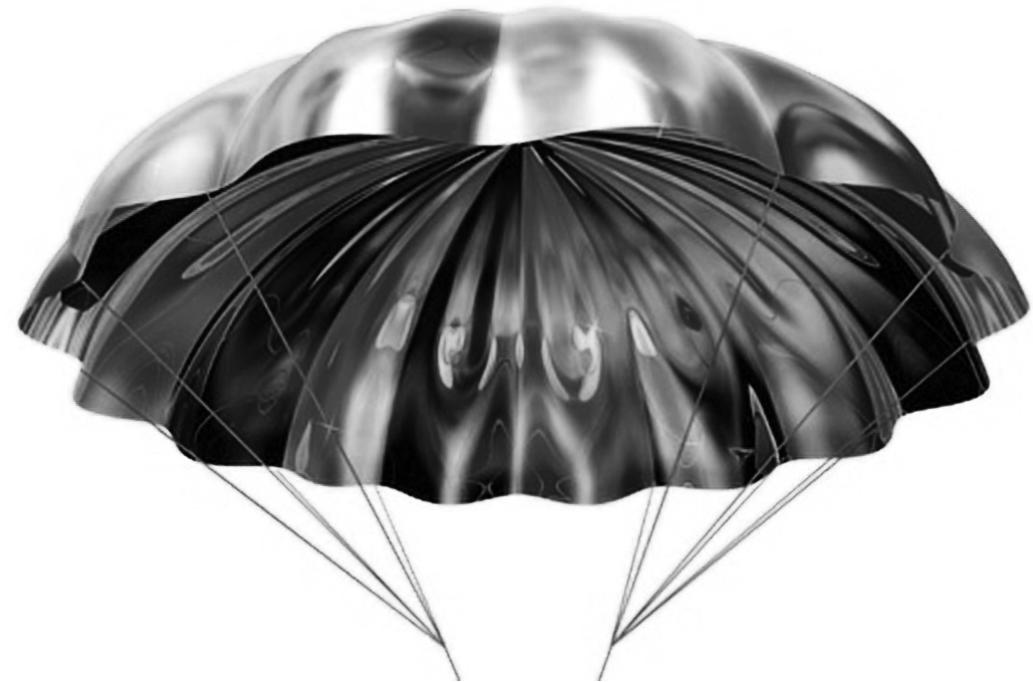
from a protracted economic downturn, global real estate would be worth much less today.

The total 'wealth effect' from the unprecedented worldwide intervention to save the economy, the financial system and marketplaces everywhere can be roughly estimated to be to the tune of 200-300 trillion United States Dollars. The global citizen can be now thought to behave, speak and spend as if he is twice as rich as he would have otherwise been. But was the money spread evenly among the population? Of course not. Stocks (equities) are mostly owned by the wealthy. Whatever part of it owned by the common man can be considered insignificant. The pension funds, government funds, etc.where working people own a piece of the pie are not actively managed funds that trade the billions in bonds they own. They buy and hold, and low yields have absolutely decimated returns for low risk appetite savers such as pension funds. Now, even regular people own property, but most of the price appreciation has happened in metropolises, where land is mostly owned by large investors and com-

panies, while normal folk rent. Rents have coincidentally exploded. Because most of the money printed since 2007 has gone into assets, not goods or wages, blue collar and low level white collar workers have been treading without much gain at all. Income has stagnated for all but the wealthy and the truly poor of the 3rd world… We shan't linger further on this matter as much has already been written about the ever growing wealth gap, but needless to say, the deck is stacked against a 1st World working man.

As the big picture has been broadly touched upon, let's examine some specific examples of large events of global importance that would have definitely not happened had there been no global, coordinated bailout.

1. Zombie unicorns. In the 90's many companies became incredibly valuable on paper despite making no money. It was called the dot-com bubble. When the free money tap shut, those companies folded. Many investments lost 100% of their value. Today, there are mega-startups like Uber, Tesla, Netflix, that burn through hundreds of millions every quarter, assuring their investors every time that just by ramping up volume by just a bit more, they will gain an impervious market lead and can begin charging unsubsidised prices from their customers without them all running away. Over the past decade zombie companies such as these have destroyed possibly hundreds of billions of their investors' wealth. Not that they will know that until the other shoe drops.

2. Shale oil. Perhaps the greatest zombie-industry of all is shale oil. The promise of untapped oil and gas reserves under the US created a modern day gold rush. Companies couldn't drill fast enough. US once again became World's largest oil producer. The price of natural gas, available in even greater quantities, is now essentially nothing. Energy importing developed economies couldn't be happier. The catch? At such



(relatively) low prices, fracking is simply not profitable. One of the leading CEO's in the industry called shale oil effectively a wealth transfer of hundreds of billions from shale investors to the rest of the economy[9].

3. Assad's Syria. When Russia intervened in Syria on the side of the government, she was very much tied down in Ukraine. Sanctions were placed on Russia, causing something of an economic downturn. In addition, people all over the Near-East were filled with rebellious spirit. A depressed global economy for longer would have stirred up the locals to greater resistance. Instead, the gradual normalisation of affairs quietened fronts and villages, as people could achieve some kind of a livelyhood within the chaos. While it is impossible to say whether the shale revolution and the retaliatory Saudi production increase would have happened had oil prices been

at the time was at 480p and, while still watchable, it was not great. I thought that its also particular art style would lend itself pretty well to a remastering with stuff like Waifu2x (which I'm going to talk about further in the text). This is how my odyssey begun.

## Image treatment

An image can be two things: an x amount of pixels or an x amount of vectors. Vectors are sets of coordinates so if you maintain the correct relations between those vectors you can scale the image all what you want without loosing any detail. Sadly this is not the case for pixel images. Instead of giving you info about the position and the relations between the elements of the picture, a pixel image it's just an array of points. Those points are set in stone so if you want to make the image bigger you either make the pixels bigger (which destroys the detail of the image) or you find a way of changing the pixel count while trying to maintain the original detail. In order to mitigate the detail loss some solutions have been developed to create those pixels you would "lose" when increasing the resolution (https://en.wikipedia.org/wiki/Comparison_gallery_of_image_scaling_algorithms). Sometimes the image has also weird artifacts produced by the compression or put there because of more dramatic effect. This is known as noise (if it's involuntary) or grain (if it's voluntary).

The more ISO, the more noise. (ISO is a photographic term and I will not be discussing it here)
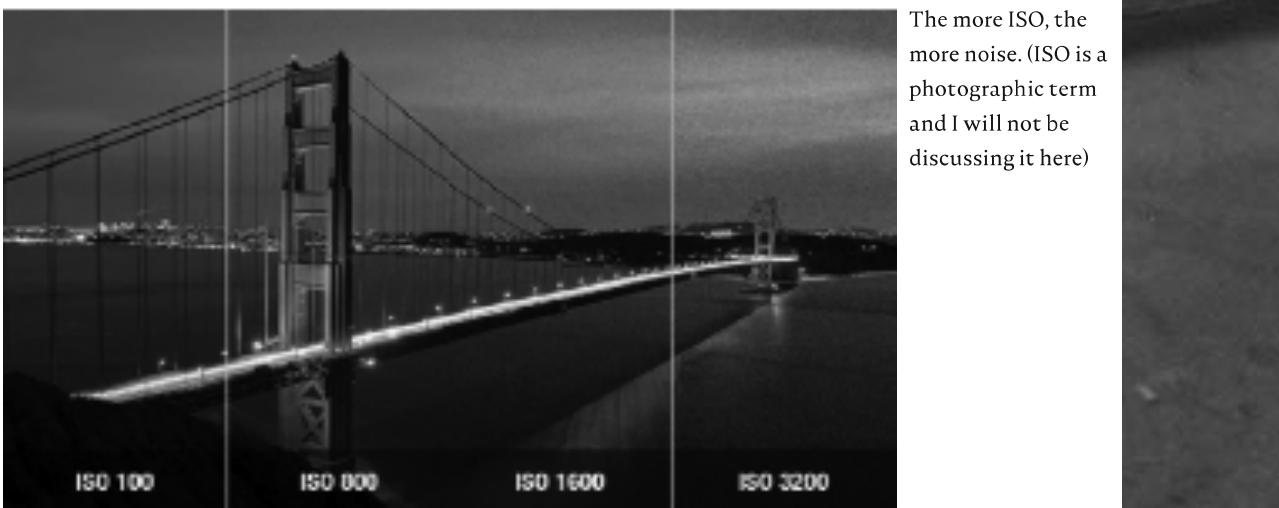
# Quote... unquote

by Poleball

Typography is a translation of language into visual form. It is the art of composing a text in a given space. Mostly it is treated as a pure functional design in service of legibility. However, it could become an independent form of artistic expression. In both cases, not only the first impression is important, but also the attention to details such as correct punctuation. This part of typography  is less and less respected in the digital era, despite the fact that there is no need of being a  professional graphic designer to take care of its proper usage.  It's a question of education and awareness.

Quotation marks are an example of such a punctuation mark which, due to the current layout of the computer keyboard, is very often used incorrectly.

Currently, we distinguish two types of quotes: straight ("...") and typographers' with two variants: curly ("...") and angular (« ... ») ,  the use of the former is considered a typographical error.

So why straight quotes (also called "dumb" or "typewriter quotes") posssed our typographical awareness and can be found both in digital, as well as in print? This problem did not exist at the time of the manual typesetting, because the glyphs of the opening and closing quotation marks had their own types - " and ". The change came with the appearance of typewriters, which construction forced the simplification of the curly marks. Replacing two different glyphs with one that can be used at the beginning and the end of a quote saved a key in a keyboard layout.
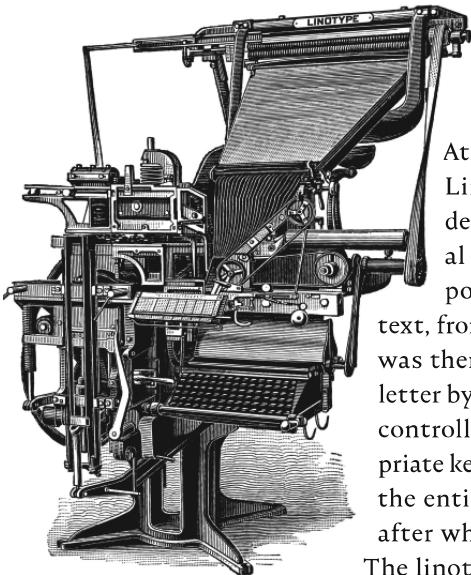
At around the same time of typewriters, Linotype machine appeared. It was a device that revolutionized the traditional hand typesetting. Linotype made it possible to quickly cast whole lines of text, from which the composition for printing was then created (until then it was arranged letter by letter by a printer). The machine was controlled by a keyboard: pressing an appropriate key would select the desired letter. Once the entire line of letters was set, it was cast, after which the matrices returned to the tray. The linotype keyboard contained a full set of characters used in a given language - including our beloved curly quotation marks.

So it was the first moment when both types of quotes began to live side by side. The typewriter was used for fast writing, which did not need a beautiful composition and typographical details. However, the professional printed version always took care of them.

Despite this, straight quotes, which in its single version , is a symbol of the minute, and in its double version „ - of the second, has become a permanent fixture in the typographical consciousness. Also the keyboards of our computers are based on those from the typewriters, so their layout does not give a direct access to the curly quotes. In order to use the correct version of this character, you need to set the automatic change from straight to typographic in the preferences of text editors.

It is also important to accord the language settings with the one we write in. Each language has its own punctuation's rules. In each country we quote in different ways - three main trends can be traced in English, German and French.

# Upscaling adventures

by Catalanball

Have you ever thought "Huh, that image is far too small" or "This movie looks like shit"? Well complain no more because I have some solutions. The aim of this text is to relate mt adventures and misadventures and show Bernd some stuff he might find useful. Read this if you are interested in AI, image processing, anime and other types of animation, remasterizations and programming (object oriented or at least I think it is object oriented in python). Some knowledge of Python is recommended but not necessary.

Keep in mind that this chronicle (if you can call this a chronicle) is not trying to be a tutorial. I will try to be as comprehensive as possible and to remember every step, but I'm only human so expect plenty of mistakes. I'm also writing this while still testing and investigating so don't expect this text to be that cohesive. Be intelligent: the sources I provide are excellent for extra info so be intelligent and use all my research effort. This is actual as of 22/06/19 and I'm pretty sure it will get obsolete although I don't know when. And the last important detail: you will see how stuff fails on me a lot of times but that doesn't mean it bad or faulty so don't be shy and try all of this by yourself.

So a couple of days ago I was bored. Like the sad soul I am, I started roaming YouTube, searching my libraries: likes, music, watch later,... After some time I stumbled upon Arzak Rhapsody, a cartoon series based on the adventures of the guardian of the Desert B. It was created by the highly influential Moebius (a french comic artist) and has a very particular style. In other words, you need to have a very high IQ to understand it. Sadly, the version of the series that I had found

## English – "…" i '…'

In English we use upper quotation marks, the shape of which results from the glyph of the comma. Typographic quotes are available in double and single versions – these two variants are often used to nest the quote in the quote. UK English prefers single quotes, while the US and Canadian English prefer double quotes. Similarly, in the UK, double quotes are used as a second degree, while in the US, a single one is used as an extract in someone's utterances. However, both versions are correct, and their use in texts may depend on the author's personal preferences. The most important is to apply them consistently and in the same form throughout the publication.

## German – „…" and ‚…' or »…« and ›…‹

In German-speaking countries (except Switzerland and Liechtenstein) we use double quotation marks (upper and lower). There is also double angle quotation marks facing inwards (the so-called German speaking marks - do not confuse them with the French version, where the chevrons face outwards). Single versions of both variants are also used.

There are two options for quotes inside the quote. For the consistency of the text it is worth to use single versions of both curly and chevron characters inside the quote:

»…›…‹…«

„…‚…'…"

However, such a rendering may become unreadable if the opening or closing quotes are placed next to each other. To avoid this confusion, the quotes can be set by the rule of the most possible contrast between them:

„… ›…‹ …"

»… ‚…' …«

As a designer, I prefer the second version of maximal contrast, which allows a clear distinction between the quotes. Anyway, the most important is as always the consistency throughout your whole text.

## French « … »

In French, angle quotes are used with chevrons facing outwards (do not confuse with the German version: »…«). As there is a space in front of some punctuation marks in French, you should remember to add a space in the case of quotation marks. The correct way to write it will be:

« text »

In traditional manual typesetting so called thin space was used to separate punctuation marks from text. This smaller gap between the letters and characters looks nicer than regular space. However, in Word, Open Office, Pages or others text editors, it is not easily possible to insert a thin space in its unbreakable version. Therefore usually we use a regular unbreakable space (abbreviation: Cntr+Shift+Space). Using this space prevents a situation in which opening quote mark is left alone at the end of a line or closing one jumps to a new row.

Quotes are also used to mark dialogues, but in the case of longer talks between characters, we use the following notation:

« Avez-vous un rendez-vous ?

– Oui, à 10h30.

– Parfait, asseyez-vous, je vous prie. »

The opening chevron appears at the start of the dialogue. The next statements beginn with dashes and the last sentence is closed with a chevron.

Three ways are given to show nesting of the quotes. First is to use the English curly marks

When you select a quote in the quote, there are 3 ways to mark such nesting. You can use apostrophe quotation marks in the English version: " … ". However, these quotes are sometimes used as so-called irony marks (guillemets d'ironie). Most often, there is no difference in first and second level of quotation. Although it is a variant recommended also by the French National Printing House and of course it is a correct writing, it loses its legibility with more chevrons in the middle of the sentence. That is why sometimes single angle quote marks are in use. This version is especially popular in Switzerland, where French quotes are always used regardless of the official language.

« … "text"… »

« …« text »… »

« … ‹ text ›… »

## *Apostrophe

The topic connected with the question of quotes is an apostrophe, which is also inserted from the keyboard in its incorrect form: , . In this case, however, there is another problem resulting from automatic replacement of straight quotes with typographical ones in text editors. When inserting an apostrophe character, it happens that the text editor reads it as a single quotation mark opening the quote and inserts it in a form: ' . While an apostrophe must always look like this: ' .

movie,...) will increase frame processing time and, as you can see, 5 shitty seconds can make a big difference.

Sadly, after spending all that waiting I realized that the program had stopped processing frames. I don't know if that was supposed to happen or if it just crashed but the result is that I've ended up waiting for 30-ish hours for nothing. This must be the epitome of a Bernd's life. Thank god we have other options.

## Dandere2x[6]

This is practically the same than Video2x, although a bit more amateur. But what it doesn't have in experience it has in attractive. So attractive in fact that I get a boner every time I see it needs 8 (maybe a little more, I didn't count it) hours instead of 44 hours to do the test.

But what is the trick that Dandere uses in order to leave Video2x biting the dust? Easy, it takes two consecutive frames and analyses the differences between them. The scripts then can use this info to only upscale those parts, saving you a lot of time. I think you can also resume a previously started video but it didn't work when I tried it so it might require more testing.

This one it's a little more difficult and unpractical to run than Video2x, instead of running a line of code you need to set some variables manually in the config.ini. The first thing you want to set is file_dir with the route of your input, I always put the files inside the video folder but I suppose there's no problem if use any other route that doesn't require special permissions. You can also change work_space, this will set

6. https://github.com/CardinalPanda/dandere2x or
   https://www.reddit.com/r/Dandere2x/comments/
   bq8f1u/073_release_moving_to_beta

## Waifu2x[1]

Waifu2x is a program developed by some chink (or some weaboo, hard to tell the difference these days) that uses any image as an input and outputs a higher resolution using the power of deep learning AI. As the name indicates it's specialized in upscaling anime and cartoons but it can also work with real-life pictures. It can also denoise, which takes care of the grain and those weird artifacts you can get when compressing video.

You can visit the git or just make a quick google for more examples.

I also made a bunch of examples here (https://kohlzine.booru. org/index.php?page=post&s=list&tags=waifu2x_photograph_comparison_series). Just go to any image and look at its children. To see the settings of every transformation just go to edit (under the image) and look at the title. Yes, I know the titles are not consistent, the autism got me and when I realized that I could just have pasted the output name it was too late for some pictures. What a shame lol.

I actually take issue with this one (https://kohlzine.booru. org/index.php?page=post&s=view&id=128). It just fuck my whole shit up. Literally the shoa all over again. This only has happened to me with Cunet so keep that in mind.

As you see, this filter is capable of taking low quality and small sources and improve them in a notable way. Still this stuff can't make up new details and, in fact, will destroy some, specially if you also use the noise reduction. Waifu2x's output generally looks more round and soft than the input and might blend colors in a way that wasn't present in the original image (just look at the letter of the box or the diagonal line under the camera). Still, it's acceptable when talking

1. https://github.com/nagadomi/waifu2x

about cartoons and anime. You can also try to mitigate this by taking images with less noise and more resolution, even if this kinda defeats the purpose all of this.

Some bullet points (based on the offline version):

- The weight of the image increases exponentially with every resolution increase and so does the processing time.

- Denoising will make the images weight less, although not by a lot.

- TTA will improve the image output but will make processing longer.

- Denoising will also make processing longer but not always improves the pictures.

- It will never sharpen the image so if your input is blurry so will be the output.

- Getting a x5 resolution increase from a 256×144 image is still faster than a x2 resolution increase from a 1920×1080.

For some reason this picture just gets all fucked up when being processed. Maybe this inanimate program hates me for some reason? Very likely knowing the luck of the Bernd.

You may wonder if this marvel of technology requires an insane amount of preparation and know-how to work. Truth is that Waifu2x is extremely easy to use. Just go here (waifu2x.udp.jp/index.es.html) or here (https://waifu2x.booru.pics/) and follow the steps. If you want to have a little more control go here (https://github.com/lltcggie/waifu2x-caffe/releases) if you have an NVIDIA card or here (https://github.com/DeadSix27/waifu2x-converter-cpp) if you have AMD.

does everything I've explained with only one command line (or not even that if you download the executable). I had problems with the executable see the foreshadowing with CUDA and using the command line makes me feel more 1337 h4x0r[5] so I chose the light option. It shouldn't really matter what you choose. You will need Python in order to execute the scripts tho so you can get it here:

https://www.python.org/downloads/windows/

You don't need to download Waifu2x nor Ffmpeg, Video2x also takes care of that.

Now we have automated the process. Is there any other problem? Well, actually, yes. Video2x does exactly what their creators advertise and what we have explained, nothing more. Let's take my case: turns out there was already a full HD version of Arzak Rhapsody on Youtube but I was too engaged in this venture already so I decided to go for 8k experience to test all this tech.

I had an input of 5280 frames at Full HD (1920x1080) and wanted an 8k (7680 x 4320) output. This is 4 times the original resolution. A bit overkill but that's how tests work, right?

At these settings Video2x spends between 30 and 35 seconds per frame which means this motherfucker must be working for 44h at best and for 51h at worst. This shit must be running without any interruption (it really needs a function that allows you to pause and resume the process at any point) during 2 straight days, without counting the time ffmpeg uses to extract the frames and make the video again which can be another hour or two. Yea, it's not great. CUDA also helps, but remember that it uses the GPU so anything that steals resources from it (a game, Youtube, watching a

5. https://www.youtube.com/watch?v=H-mQHPIhBzU

## Ffmpeg

This bad boy is basically a video editor that works trough command line. It does a bunch of shit you might find useful but what interests us is the fact that it can take a video and extract all its frames. For the ones that have lived all their lives under a rock and have no idea of what a frame is I bet you have seen at least once in your life someone drawing in a notebook a bunch of cartoons and then flipping the pages quickly, making the illusion that the drawings where actually moving. Well, that's essentially what a video is and every different cartoon making the illusion is a frame. Yes, all movies are a bunch of photographs passing very quickly in succession and we will take advantage from that.

So let's say you take your video, process it and obtain its frames. Let's say that video is 10 minutes long at 60 frames per second. This makes for 36000 frames you need to manually pass trough Waifu2x. It's just not practical.

## Python

No, it's not a snake nor a KARA BOGA joke. This is a programming language and it's used a lot due to how intuitive it is. It allows for a bunch of things, from videogames to resolving mathematical problems. It also can call programs and scripts if a determined script specifies it. Beyond the application that we are discussing here I think it's worth to learn some Python since it can be extremely useful for personal projects or as stepping stone for other, more complex languages.

## Video2x [4]

The purpose of Video2x is to make all this process automatic and simpler while using Python, or what's the same: bundling the programs with a bunch of Python scripts. It

4. https://github.com/k4yt3x/video2x

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The offline versions allow you to pass the resolution limits further and to use some special functions.

(You can ignore this paragraph if you don't have an NVIDIA card but read it anyway if you have nothing better to do)

The reason you need to choose between 2 different programs it's the fact that the caffe (and the original actually) version uses NVIDIA's CUDA, a language that allows the GPU to use its processing power to fuel the AI, which makes the process a lot faster. In order to benefit from this though you will need to download CUDA[2] and its library ccuDNN[3] requires registration. If you have any trouble installing CUDA (it's just an executable, you fucking pleb) go here:

https://docs.nvidia.com/cuda/cuda-installation-guide-microsoft-windows/index.html.

What you actually need to follow is this:

https://docs.nvidia.com/deeplearning/sdk/cudnn-install/index.html

 which tells you the paths where you need to put the cuDNN files. Now, I'm not a 100% positive about this but you should also paste cudnn64_7.dll in the folder where the waifu2x executable is located. In order to see if it works as it should go to

task manager → performance → GPU

and select CUDA to see if there's any usage. The Waifu2x executable also has a neat feature that allows you to see if cudnn is usable.

Ok, so we can upscale images now. Great. But how can this help us improving videos?

2. (https://developer.nvidia.com/cuda-zone
3. https://developer.nvidia.com/cudnn

Original
265x190

2x original resolution using GIMP (Cubic)
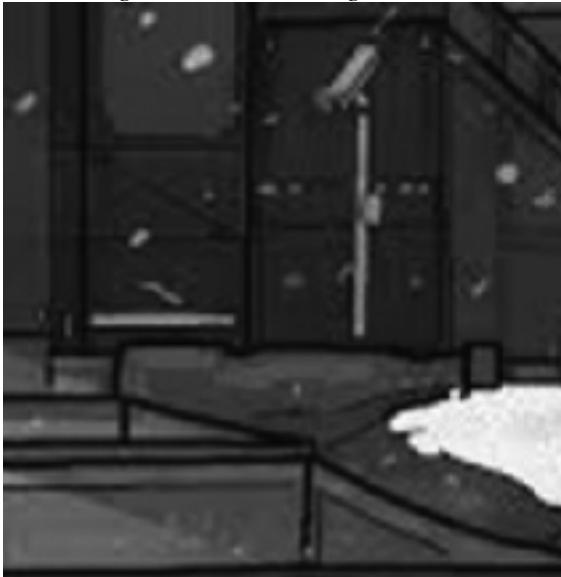
2x original resolution using Waifu2x

2x original resolution using Waifu2x + Highest denoise filter

the folder path where the program will move the images and all the info it needs to do its thing. Waifu2x_type decides what you will use: caffe or cpp. Same drill as before, caffe for Nvidia and cpp for AMD.

The session setting is interesting. Time_frame allows you to set from which part of the video the program needs to start working. This works in tandem with duration, allowing you to make clips of any video. You can get the framerate and the resolution if you right-click the video archive, go to properties and details. Customization is where we start to control the process. What Dandere does (or I think it does) is dividing every frame into a grid and tries to see differences and predict stuff using vector magic. This block_size is what determines the size of the squares of the grid, hence it needs to be a common factor between the width and height. The rest of the options should be changed only if you have a very specific necessity (like having the frames in png instead of jpg) or I don't change them because I don't have a flying idea of what they do c'mon, it's not like I'm going to spoonfeed you everything. Waifu2x customization is what it sounds and you already know how it works. After it finishes working you need to go to cmd and execute the commands you will find in the specific workspace (first the top one and then the second one).

After all this research I was able to make a video with it (https://www.youtube.com/watch?v=0MuH2oNcm4Y). Read the description, there's important info there. So my reasoning is as follows: You make the block_size small so for more precision. This will also reduce waifu2x work since it needs to process smaller images. This makes the scripts work more but I think is a good trade off since waifu will always be slower. The problem is, this seems to introduce artifacts since the amount of replacements is proportional to the block_size. I also don't know if it's quicker to process a

big image with waifu or process said image divided in 10000 parts with waifu, I would put my money in the latter tho. To what degree the AI needs the context of the image? Would dividing the image make waifu's filtering worse?

I have no idea.

After some more testing I've found that lowering the block size enough breaks the video process, bringing results like this (https://www.youtube.com/watch?v=Rij4ADTEM5k). I think it's because this makes computing the difference between every frame slower which allows waifu2x to surpass that process and start processing the wrong frames. I've theorized that step_size marks how many frames need to be computed for waifu2x to start working but changing that value has yielded no results.

Anyway, fuck this noise. I want it out. I don't know if its worth it to try to denoise with Waifu2x, specially if there are other options

## Vapoursynth[7]

I bet you have seen those ching-chong-pop GIFs and WEBMs on some threads. What I get from my research is that they have probably come from this one. A successor of Avisynth, Vapoursynth is almost the same as Ffmpeg, the only difference I can point out being that it's able to use plugins and python scripts for more flexibility and versatility. I other words, while ffmpeg tries to be the tool Vapoursynth tries to be the executor. And, lucky for us, turns out it has denoising capabilities. They might have technical differences that I don't understand so I will let the creator explain himself (http://www.vapoursynth.com/about/). First of all you should read this (http://www.vapoursynth.com/doc/) in order to start familiarizing yourself with this esoteric knowl-

7. https://github.com/vapoursynth/vapoursynth

edge. So there are two possibilities now: you are the pleb (but smart) one and go download this (https://forum.doom9.org/showthread.php?t=175529) with a lot of plugins, scripts and documentation or be the autistic guy you really are and download it from here (https://github.com/vapoursynth/vapoursynth/releases) so you can write your own scripts while searching the plugins that serve your needs best. Every plugin has his own command line so you also need to have that info. Thankfully you can visit go to the plugin section of the documentation and get all the necessary info. Your script should load vapoursynth as core first thing always and then call any function, plugin or script you need to do whatever you want to do. Don't forget to also load the video and end the script in the proper way. Having VSEdit (which is included in the doom9 link) helps a lot and it's in fact what I recommend. For more info visit these links:

http://www.l33tmeatwad.com/vapoursynth101

https://hackmd.io/@Se1ry_ZUSminEO7QQyVHAQ/HJwt-Y1WV7

https://iamscum.wordpress.com/_test1/

http://vsdb.top/

https://kageru.moe/blog/article/grain/

Following all these setups should give you a denoised and dandere2x 'd video.

Some examples:

http://www.youtubemultiplier.com/5d169cfd90a11-hoku-to-no-ken-2-opening-upsacaling-comparison.php

http://www.youtubemultiplier.com/5d169f1805951-city-hunter-scene-denoising-and-up-scaling-comparis.php

http://www.youtubemultiplier.com/5d16a1bda6ce0-krautchan-int-thread-simulator-enter-the-tier-upsc.php

By the way, when processing videos with Vapoursynth they will lose the sound. Don't know why, maybe I need to put that command in the shitty executable. Doesn't matter, you can put it with a video editor or whatever. Maybe looking at the commands Dndere2x makes you execute after processing the frames might show you the way.

## Other programs (Bonus!!!)

## Waifu2x-ncnn-vulkan[8]

I was so slow writing this than new alternative using Vulkan has appeared. Caffe is still the king but it looks like this might be almost as good so maybe this can substitute cpp or even be desirable as it can be better under certain conditions. I would keep an eye on it, even if it uses Tencent's aka evil chinese overlords tech.

## Aegisub[9]

My project of "improving" Arzak Rhapsody was, to some degree, also fueled by the fact that I couldn't find subtitles. Thanks to the collaboration of Bernd (shout-out to Pol Pote) I was able to get a translation. But that was just half of the work. Searching for ways to make the subs I found out this program. Now, I know this kinda sounds like shilling but it really helped me with the timings and allowed me to not waste a lot of time. So, you know, if you need to make subtitles this can be a good option.

8. https://github.com/nihui/waifu2x-ncnn-vulkan
9. http://www.aegisub.org/

## The anime AI community rabbit hole

If you have visited any of the references I've posted you will see how autistic the weaboo community gets about watching anime the proper way. And, trust me, this is only scratching the surface. But what really impacted me was that I also found out a whole other community devoted to use AI to fit their chinese cartoon needs. For example, look at this piece of art (https://dcp.booru.pics/) by deeppomf. How could I live without knowing this existed? Turns out a lot of people is trying to train AI to generate anime on the fly, with fascinating results (https://vimeo.com/342523600). Lurking around deeppomf's twitter I saw a twitt where he said that it could be possible in the future for just take a trained AI in a pen and then generate your own pornography. While I believe this will never delete the human element it has the potential to be highly disrupt the entertainment industry and make an exponential jump in terms of general information processing. But alas, I think you already know more or less what this stuff is about.

## Conclusion

Ok, after all of this I can say it is not as great as I expected. I even would say that it was a fucking waste of time. A fun one, but a waste nonetheless. The upscaling worked really well on some images and didn't make much on others, the video was alright but with artifacts I haven't been able to erase and I've wasted a lot of hours waiting for video2x to do its thing. But who cares, if I really have to take a lesson from all of this is how pleb I actually am. How can I be a proponent of the serious discussion when I don't even know how to encode my own videos? Too little time to learn too much autistic stuff!

I hope that this text has been at least educational and at most very entertaining.

Adieu!