# kohl zine

# August'19
# Issue X


Comic strip by Bernd 3

*S-O-U-L*

F.A.P manifesto 4

*Commentary on recent memetic developements*

Smash the Spermiarchy 6

*What if masturbation is bad for you?*

You should be able to solve this 10

*Food for thought*

On Common Indo-European Sexual and Scatological Profanity 12

*Our common flatulent past*

Chronicle of Brandenburg #3 20

*Thirty years war wasn't the best period to be a Brandenburgian*

Alphas, omegas and others #2 30

*On the writing systems that didn't make it*

Deepfakes for dummies 44

*Introduction to DeepFacelab*

Ad: Kc-Station13 50

*Joing bernds in the struggle for survival and gf (male)*

by Bernd
PÚP
PÚP
?
PÚP
PÚP
PÚP
PÚP
PÚPJO
!
PÚP
PÚP

# F.A.P. Manifesto

by Onionball

I'm sure most of you have seen the spermiaz/cumbrain spam those last days. The proponents of the concept try to prove that masturbation is bad for human beings alleging religious, spiritual, biological and psychological reasons. I'm not going to lie, some of the claims are reasonable.

For example, some say that masturbation as a habit is bad which I kinda agree with. But routine is bad in general and masturbation is actually one of the best and healthier things you can do in these cases (specially if you compare it with wasting your time on KC and other cesspits). In fact it can be a great way to break the monotony: fap in a new place of the house, with a genre you didn't fap before, some new actress, in a new way, at a new hour... Remember, you are trying to break the routine so try to not start a new one doing all of this.

Others claim that fapping kills the libido and destroys your will and concentration. Well, it depends. Fapping will, by design, kill your libido at a given time so if you are to horny to concentrate it will help. In fact it will help

every time you feel abnormal (lack of sleep, migraines, illnesses...) thanks to it's analgesic properties. But what about the long term? Well, I have no fucking idea. I could be something related to the previous point, tons of couples lose their passion after years of monotony but the notion of your sexuality being exclusively masturbation for years doesn't sound very healthy to me.

The religious side is very tricky. The problem here is that the interpretations here are wildly different because the bible doesn't say anything clear about the subject. If my research (I've only read the first link that has popped up on google lol) is to be trusted there are things like not spilling you seed on the ground or cutting your hands if they make you have lustful thoughts but it's never said that masturbation is bad. What looks like the actual sin is the lust that goes with the masturbation and that you can also feel without touching yourself. Not only this but we all sin all the time, in fact it can be said that we are born with sin, so what is really important it's not the sin itself but the amends. Of course this doesn't give you carte blanche to sin, it further illustrates the need for struggle to lead a virtuous life. So fap when you need to but no more nor less.

Masturbation nowadays feels like a mistake, like a lack of skills to get a gf, like a lack of tranquility, like a lack or something... This is true in the measure that training is an indicator of a lack of skill or lifting is a lack of strength: masturbation is, in all senses, proof that you are alive, that you have wishes for you and your sexuality and that you are human like everybody else.

Keep masturbating,
just be smart about it.

# Smash the Spermiarchy

by Proxyball

This is a short text which outlines a way for achieving complete withdrawal from masturbation. This will apply to most men, though it might not for a minority. A Man who masturbates is a Man who can't be religious. Baseness and religiousness are opposites, keep that in mind.

You must understand how masturbation works. In many cases, masturbation is done out of habit and not because of an actual lust, it is normally a part of a routine, and to stop it you have to wean yourself from the habit.

Most of the time masturbation happens either at nightime or after returning from the outside life, be it job or education. Either in bed, or the bathroom.

Most of the time, masturbation happens when home alone, or if not that, with privacy.

It normally happens that you get libinidous at a certain part of the daily routine out of a semi pablovian response to the fact that you habitually masturbate at that time. It also happens that you start browsing porn out of habit and only later lust arrives. In some cases it is out of actual lust.

First and foremost, the most important thing is a change of attitude. You have to break out of hedonism. If you are reading this guide with intent of following it, you probably have a part of the Will which desires to; cultivate it.

As I said, baseness is opposite yo any highness. Cultivate the spirit; practice art, read philosophy, meditate, exercise, anything.

You can do many things beyond that to break the habit, some of which I will detail here, but all of them have an underlying common thing: they break the routine environment, either by removing privacy and closeness or by changing the environment to one that you haven't associated a routine to yet.

1. Reorganize your bedroom.

It's as simple as that. Move where your bed is to somewhere else. The change of sensory image might help to break routine.

2. Remove yourself from your common environment for a moderate amount of time.

This may take many forms. You can go out in vacation to the woods, go visit your family, go live with a friend, and so on. The change of environment will help break out of the old routine. It takes a lot of shamelessness to masturbate in a borrowed bed, specially if its your grandparents'. This is very effective, specially if you combine it with the next one.

3. Remove times of privacy:

Whether by sharing a room, or by going outside, or doing more activities, reducing times where you are alone is helpful to break the habit. Unless you are a derranged sick fuck, you probably only masturbate in private, you need privacy to do it, and so removing it removes the opportunity.

Even a photo works. If you masturbate at the desk, you can place photos of your ancestors besides the screen. Your mother, father, grandparents, great grandparents, whatever, though specially the last two. You probably have enough honor to refrain from masturbating in front of their image. It removes privacy.

Idols have similar function. If you are christian put image of Mary and the Child, Pantocrator, or of a saint, and so on. If you are a Pagan, put the symbol of the gods.

The same thing works if you masturbate in bed; put the images besides you, whether hanging from the wall, or on the table, or wherever.

Just don't do it:

Finally, you have to just:

# STOP WATCHING PORN

It takes Will. If you are weak, you'll never do it. You have to strengthen yourself. Maybe you are weakwilled by nature and can't do nothing about it, but if you are reading this, if you are among the circle of people who read this, that probably doesn't apply to you.

If it does though, I wont even tell you to kill yourself because you probably don't have the will to go through with it.

# You should be able to solve this

by Pirate Martin Gardner

1. The integers 1, 3, 8, and 120 form a set with a remarkable property: the product of any two integers is one less than a perfect square. Find a fifth number that can be added to the set without destroying this property.

2. A customer in a restaurant found a dead fly in his coffee. He sent the waiter back for a fresh cup. After taking one sip he shouted, “This is the same cup of three I had before!” How did he know?

3. A man traveled 5,000 km in a car with one spare tire. He rotated tires at intervals so that when the trip ended each tire had been used for the same number of kilometers. For how many kilometers was each tire used?

4. Bernd gave a hotel clerk ₪15 for his room for the night. When the clerk discovered that he had overcharged by ₪5, he sent a bellboy to Bernd’s room with five ₪1 coins. The dishonest bellboy gave only three to Smith, keeping the other two for himself. Smith has now paid ₪12 for his room. The bellboy has acquired ₪2. This accounts for ₪14. Where is the missing shekel?

5.You have six weights. One pair is red, one pair white, one pair blue. In each pair one weight is a trifle heavier than the other but otherwise appears to be exactly like its mate. The three heavier weights (one of each color) all weigh the same. This is also true of the three lighter weights.

In two separate weighings on a balance scale, how can you identify which is the heavier weight of each pair?

6. A kitchen has an uneven floor. There are no “steps,” but the continuous random waviness of the linoleum is such that when one tries toplace on it a small square table with four legs, one leg is usually off the floor, causing the table to wobble. If one does not mind the tabletop being on a slant, is it always possible to find a place where all four legs are firmly on the floor? Or can a floor wave in such a way that no such spot is available? The problem can be answered by a simple, elegant proof.

Sopla.

# On Common Indo-European Sexual and Scatological Profanity

*"It is bizarre recompense to the scholar struggling to determine whether the Proto-Indo-Europeans were acquainted with some extremely diagnostic item of material culture only to find that they were far more obliging in passing on to us no less than two words for 'breaking wind'."*

James Patrick Mallory,
In Search of the Indo-Europeans:
Language, Archaeology and Myth (1989)

by Sloveneball

This tiny tidbit of, frankly, quite vulgar matter, is one that probably anyone who is interested in comparative and prehistorical linguistics, and who doesn't shy away from less-than-noble subjects, has heard of before. Indeed, there is deep and well-apparent similarity between the verbs used for the act – words of quite sonorant phonetic quality, clearly stemming from an onomatopoieic origin word.

Among Germanic languages, we have English *fart*, German *furzen* (hence also Esperanto *furzi*), Swedish *fjärta*, Danish *fjærte*, Norwegian *fjerte*, Icelandic *freta*. Those can be traced back to Proto-Germanic **fertaną*. There's an alternative root that planted itself into some Germanic languages, that has through *de novo* onomatopoiesis effectively 'reversed' Grimm's law – Flemish *pro-*

*tten* (in Hollandic Dutch, the verb *scheten*, cognate to *shit* instead, but separate from *schijten* of same meaning as in English, appears instead), Danish *prutte*, Swedish *prutta*, and also crossing over into French as *prouter* (where it's not the foremost used word – more on that later). In Spurdish, presumably from Stadin-slangi usage, the word surfaces as *prööt*. It is interesting also to observe another very recent *de novo* onomatopoiesis in English, that has given us *braap* (with quite anomalous spelling).

In Slavic, we have: Russian *перде́ть* (*perdét'*), Ukrainian *перди́ти* (*perdíti*), Belarusian *пярдзе́ць* (*pjarzec'*), Polish *pierdzieć*, Czech *prdět*, Slovak *prdieť*, Slovene *prdẹ́t*, Croatian *pȑdjeti*, Serbian *пр̀деми* (*pȑdeti*), Macedonian *пр̀ди* (*prdi*), Bulgarian *пърдя́* (*pərdjá*). Proto-Slavic can thus be easily reconstructed as **pьrdeti*. Latvian and Lithuanian, too, have *pir̃st* and *pérsti*, respectively.

In Latin we have the verb *pēdō*, with descendants: Portuguese *peidar*, Castilian *peer*, Catalan *petar*, French *péter*, Italian *pedere* (which is obsolete as a verb, replaced with *scoreggiare*, but the noun *peto* remains), Romanian *pârțâi*. There's also an alternate verb, not prominently used, from Vulgar Latin *visseō* present in French as *vesser*, Romanian as *băși*, and leaving a noun *vescia* in Italian.

Greek has *πέρδομαι (pérdomai)* and Albanian has *pjerdh*, and after various consonant mutations in Celtic we're left with Irish *broim* and Welsh *rhech*. Indo-Aryan languages as well know this word. Sanskrit has पर्दते *(párdate)*, and hence come: Hindi पादना *(pādnā)*, Bengali পাদা *(pada)*, Gujarati પાદવું *(pādvũ)*.

From all this, a Proto-Indo-European root can be reconstructed as **perd-*, with little doubt.

However. What happened to the **r* during development to Latin? How and why would it drop out? Why is the verb not *perdō* instead? Here enters the second word for 'breaking wind' mentioned by Mallory in the citation.

As it turns out, this is not the whole story. There's an almost lost dialecta English word specifically for farting silently, *fist*. Icelandic has *físa* of same nuanced meaning (notably, both *físa* and *freta*'s ancestor *frata* are attested in the Sagas), Norwegian has *fise* and Swedish *fisa*. We can reconstruct Proto-Germanic **fīstaną*.

In some Slavic languages, this distinction is preserved as well; Russian has *бзде́ть (bzdét')* and Ukrainian *бздіти (bzdîti)*. As well, there are rare dialectal Belarusian *бздзець (bzdzec')*, Polish *bździć*, Czech *bzdít*, Slovak *bzdieť*, Slovene *pezdẹ́t* and Bulgarian *пъздя́ (pəzdjá)*, but with the distinction not rigorous. As well, Croatian has *bàzdjeti* and Serbian has *бàздети (bàzdeti)*, but in those languages, the meaning has shifted semantically to mean 'to stink' instead. Proto-Slavic can be reconstructed as **pьzdě̑ti*, and compared to Latvian *bzdêt* and Lithuanian *bezdéti*.

From this, we can assume a parallel Proto-Indo-European root **pesd-* to the more usual **perd-*. Latin must have lost the latter and kept only the former, developing *pēdō* from it. As well, Ancient Greek had an alternative for *πέρδομαι* in *βδέω (bdéō)*, with derivative noun *βδέσμα (bdésma)* 'stench', that might come from **pesd-* as well. But how are those two related? Was the difference between the two in PIE the same as the one that Russian has preserved fully, and that is still vaguely remembered in Icelandic and some other Germanic and Slavic dialects? If the two are purely onomatopoieic, it's easy to see that **pesd-* is a more whistling sound, while **perd-* is a vibrantly sonorant one. But is there more to it?

Grands Spectateurs de la Nature,
Venez et confessez tout net
Qu'on reconnoît à ma posture
Le très salutaire Dieu PET.
Bude in. pinxit et delineavit Suo Langlois Doynel.

What happens if we take the root **pesd-* and make it an *eh*$_2$-stem noun? Why, we are left with a noun **písdeh*$_2$, that we can actually find in Proto-Indo-European dictionaries! The construction is ancient, but is fully preserved only in Slavic languages, as Proto-Slavic **pīzdà*, whose derivatives are common and copiously used in profanity: Russian *пизда́ (pizdá)*, Ukrainian *пизда (pizda)*, Belarusian *піздa (pizda)*, Polish *pizda*, Czech *pizda*, Slovak *pizda*, Slovene *pīzda*, Croatian *pízda*, Serbian *пи́зда (pízda)*, and also Romanian borrowing *pizdă*, all having basic meaning of 'vulva', but often also being more generally used as an insult for a person with bad character. The word is thus pretty much the equivalent of English *cunt*. In South Slavic languages, the diminuitive is more commonly used for the original body part meaning of the word – Croatian *pȉčka*, Serbian *пѝчка (pȉčka)* and Macedonian *пичка (pička)*, while Bulgarian uses *путка (putka)*, probably as an euphemistic replacing, as the same word means 'hen' in Slovene (*putka*) some Czech dialects (*puťka*), and German (*Pute*). In some Czech and Slovene dialects, the word can also mean 'arse' by extension (compare *fanny* which means 'vulva' in Britain, Ireland, Australia, and New Zealand, and which is considered quite vulgar but is not a profanity unlike *cunt*, but is a polite childish word for 'arse' in America and Canada).

In Baltic, we as well have Latvian *pīzda* and Lithuanian *pyzdà*, and also attested Old Prussian *peisda* which has also shifted to 'arse'. In other branches of Indo-European, we see Albanian *pidh* and Nuristani *pəṛī*, both again meaning 'vulva'. Hypothetically, one would expect Sanskrit **pīḍīkā*, but such word is unattested.

It is interesting to note that in Novgorodian birch bark manuscript, written in Old Novgorodian, a distinct Slavic language with several oddities and archaisms not present

in other Slavic languages, the word *пьзда (pizda)* features completely casually, without any hint of vulgar connotations.

Eric Pratt Hamp suggests a different construction, (Albanian pidh: Slavic peizd'ā, International Journal of Slavic Linguistics and Poetics 11, 25–26, 1968) from *$h_1$epi + *sed-, 'upon' + 'sit'. Let us see what is evidently wrong with such construction.

First of all, he proposes a direct parallel with Proto-Slavic *gnĕzdò for 'nest', with same accent paradigm, but with anomalous *ĕ in place of *i, that is usually explained with a folk etymology. The Proto-Indo-European reconstructed form is *nisdós, composed of *ni + *sed-, 'down' + 'sit'. Baltic forms have better corresponding vowels, Latvian *ligzda* and Lithuanian *lìzdas*, however with short *i* rather than long. This, along with the fact that the attested Old Prussian *peisda* exhibits a diphthong, led Hamp to suggest that the Proto-Indo-European form would be *$(h_1)$péysdeh$_2$ rather than *písdeh$_2$. But this would instead lead into Proto-Slavic *ĕ and *pĕzdà! (compare *snẽgъ from the root *sneyg$^{wh}$-, 'snow').

But how can we explain the *i present in Proto-Indo-European *písdeh$_2$ from *pesd-? Proto-Indo-European *eh$_2$*-stem nouns are generally constructed with zero grade ablaut, compare *b$^h$ugéh$_2$ from b$^h$ewg-, 'flee', or *$h_2$w$\underset{\circ}{\acute{l}}h_1$neh$_2$ from *$h_2$welh$_1$-, 'wool'. What would be the zero grade ablaut of *pesd-? With no obvious consonant in **psd- to become syllabic, we need an ephenthetic vowel – can we explain *i? Indeed, if we take the root *sed-, 'sit', and look at one of the reconstructed forms, we see the verb *sísdeti, 'to be sitting down', as a reduplicated thematic verb form. Evidently, in vicinity of *s, Proto-Indo-European develops an ephenthetic *i where needed.

Curiously, Slovene also has a rare word *pȓda*, which is a direct parallel of *pīzda* word-formation-wise, but from the root **perd-* rather than **pesd-*. As one might guess, If such etymology is correct, and the construction just as ancient but lost in other languages, the original Proto-Indo-European noun would be **pŕ̥deh₂*, and Proto-Slavic **pьrdà*. Meaning, as well, should be easy to guess – primarily 'anus', and by extension 'arse'.

As a Bernd has noticed when I submitted the early draft for peer review, similar constructions also exist in other Slavic languages, with various connotations, such as Russian *nepдáк (perdák)* (humorously vulgar) and Czech *prdelka* (affectionately). *(kohlchan.net/int/3974891)* However, those cannot be reconstructed as having an ancient origin.

If *pȓda* is easily recognisable by a speaker of Slovene to be derived from the verb *prdẹ́t*, as an abstract feminine noun meaning roughly 'that which farts', *pīzda* can be seen as the same kind of derivation from the verb *pezdẹ́t*, but in this case, the connection is muddied. But, this helps us reconstruct a possible semantic difference between Proto-Indo-European **perd-* and **pesd-*. Surely, *if it's the arse that farts, then it's the cunt that queefs.* And while Proto-Indo-Europeans have indeed passed us down two words for 'breaking wind', we have since all but forgotten the intricacy of distinction between the two types of wind one might break.

On a side note, the English *queef* is etymologically a post-Great Vowel Shift lengthening of *quiff*, a Northumbrian or Scots eye-spelling of *whiff* (with /xw/, which is a merger of /ʍ/ and /kw/ in standard English, spelled as *qu* instead of *wh*). The word is onomatopoeia for a gust.

# Brandenburg chronology #3

by Germanball

This is part three of the no longer not so small chronology of Brandenburg towards the Kingdom of Prussia. Part One and Two can be found in the zine issues 7 & 8.

Small recap: Brandenburg was gifted to Friedrich I. in 1415. In the following 200 years nine different margraves of the Hohenzollern family led the margraviate and increased the internal peace and external security. Additional lands were aquired with multi-generational efforts, mostly by political means, sometimes with force.

The Hohenzollern margraves could increase their authority over the local aristocracy and cities, e.g. with the intro-

duction of indirect taxes which the Hohenzollern successfully defended against massive protests from the cities. The margraviate Brandenburg was steadily progressing, albeit with some stagnation during the last 2-3 reigns, but the acquisition of Prussia was significant.

Things were looking good and stable, mostly. In the conflict between the Catholics and the Protestants they would always manage to appease to both sides and carefully manage the balance of their own position between them. But this conflict would reach a boiling point with the Thirty Years War, and this war would drive a deep wound into the lands of Brandenburg and showcase the weaknesses it had with zero mercy. Brandenburg entered this dangerous era utterly unprepared for the challenges it would face. A brief glimpse of these weakness could already be seen during the reign of the last margrave, Johann Sigismund. He wanted to recruit troops, did money collections and only managed to have a few thousands as troops. It showed how far behind Brandenburg was compared to Saxony, Poland or Sweden. Johann Sigismund also commanded expeditions into the Brandenburg nature to find new sources of iron ores, but without success. Brandenburg still lacked its own proper military production.

The Thirty Years War broke out in 1618, shortly after Johann Sigismund died and his son, Georg Wilhelm took over the reign.

1619 - 1640 Georg Wilhelm

Elector George William, a timid, indecisive man ill equipped to master the extreme predicaments of his era, spent the early war years avoiding alliance commitments that would consume his meagre resources or expose his territory to reprisals. He gave moral support to the insurgency of the Protestant Bohemian Estates against the Habsburg Emperor, but when his brother-in-law the Elector Palatine

marched off to Bohemia to fight for the cause, George William stayed out of the fray. During the mid-1620s, as anti-Habsburg coalition plans were hatched between the courts of Denmark, Sweden, France and England, Brandenburg manoeuvred anxiously on the margins of great-power diplomacy. There were efforts to persuade Sweden, whose king had married George William's sister in 1620, to mount a campaign against the Emperor. In 1626, another of George William's sisters was married off to the Prince of Transylvania, a Calvinist nobleman whose repeated wars on the Habsburgs – with Turkish assistance – had established him as one of the Emperor's most formidable enemies. Yet at the same time there were warm assurances of fealty to the Catholic Emperor, and Brandenburg steered clear of the anti-imperial Hague Alliance of 1624–6 between England and Denmark.

None of this could protect the Electorate against pressure and military incursions from both sides. After the armies of the Catholic League under General Tilly had defeated Protestant forces at Stadlohn in 1623, the Westphalian territories of Mark and Ravensberg became quartering areas for the League troops. George William understood that he would be able to stay out of trouble only if his territory were in a position to defend itself against all outsiders. But the money was lacking for an effective policy of armed neutrality. The overwhelmingly Lutheran Estates were suspicious of his Calvinist allegiances and unwilling to finance them. In 1618–20, their sympathies were largely with the Catholic Emperor and they feared that their Calvinist Elector would drag Brandenburg into dangerous international commitments. The best policy, as they saw it, was to wait out the storm and avoid attracting hostile notice from any of the belligerents.

Battle of Stadlohn

While Georg Wilhelm was busy wringing money from the estates, the Palatine General Ernst II, Count von Mansgeld, overran the Altmark and the Prignitz in 1626. His Danish allies were close on his heels. Chaos broke out. Churches were plundered, the town of Nauen razed to the ground. Hunting for hidden money and property, entire villages were burned to the ground. When a Brandenburg minister confronted him, the Danish envoy responded with breathtaking arrogance: „The brandenburgian elector may take it well or badly, the danish king would continue after all. Whoever is not with him, is against him."

But as soon as the Danes had made themselves comfortable in the Mark, they were pushed back by their enemies. In the late summer of 1626, after the victory of the Imperials and the League on 27 August at Lutter am Barenberg in

the Duchy of Braunschweig, habsburgian troops occupied the Altmark, while the Danes withdrew to the Prignitz and Uckermark north of Berlin. At the same time, the swedish king landed his troops in Prussia and made it his base for operations against Poland, thus completely ignoring the Elector's claims. The Neumark was also overrun and plundered. Cossack mercenaries who were in the service of the emperor fell in and plundered. The fate of the duke in neighbouring Mecklenburg shows how great the threat to Brandenburg was. As a punishment for his support of the Danes, the emperor had the ducal family deported and left Mecklenburg to his powerful commander as spoils.

It seemed the time had come to move closer to the Habsburg camp. „I will have to fight with the emperor. I have only one son. If the emperor remains, I and my son will probably remain.", Georg Wilhelm explained to his advisers, and formed an alliance with the emperor on 22 May 1626 against all protests by his advisers and the estates. On the basis of this agreement, the entire electorate was given to the imperial troops. Thus began difficult times for Brandeburg, because in order to feed, accommodate and pay its troops, the imperial troops made use of the population of the occupied territories.

The alliance with the emperor did not bring any relief to Brandenburg. When imperial troops were able to push back their opponents and at the end of the 1620s were at the zenith of their power, Emperor Ferdinand II even seemed to ignore the Brandenburg Elector altogether. In the Restitution Edict of 1629, the Emperor announced that he would reclaim, if necessary by force, all archbishoprics, dioceses, prelatures, monasteries, hospitals and foundations that were Catholic in 1555 - a declaration that would have serious consequences for Brandenburg, where numerous church properties had been placed under Protestant administration.

In 1631 the imperial troops devastated the Protestant Magdeburg, a city of 20.000, so terribly that it was to remain in the memory of the german and above all protestant population for a long time to come. The descriptions of the atrocities committed there were disseminated with pamphlets and newspapers throughout Europe.

„The soldiers ran in troops through the streets with bare arms and murdered without distinction old people, women and children, those who defended themselves and those who did not oppose them. [...] There was nothing to be seen but still twitching corpses, piled up in high heaps or stretched out naked. The death cries of the victims and

the rage cries of the murderers mixed gruesomely in the air”.

In 1630 Sweden intervened in the war, improving the situation of the Protestant states somewhat. At the same time, however, political pressure grew on Brandenburg, as the Swedish king sought an alliance with Brandenburg for lack of other alternatives. Georg Wilhelm hesitated and in view of the preceding action of the Swedish king in Prussia this is only too understandable. The swedish approach suggested that it does not make much difference whether one had Sweden as friend or enemy. Georg Wilhelm decided to return to the policy of neutrality, meanwhile there were repeated clashes between Swedish and imperial troops. The Swedes gradually expelled the imperial troops from the province and occupied the fortified cities of Frankfurt a.d. Oder, Landsberg and Küstrin.

With the success of his troops behind him, the Swedish king openly demanded an alliance with Brandenburg. Georg Wilhelm made new excuses over and over again, while the Swedish king and his troops moved ever closer to Berlin. In panic, the Elector sent the women of the family to negotiate with Gustav Adolf. They met him in Köpenick, a few kilometres outside the capital, and agreed that the Swedish king should come to the city with 1000 men for further negotiations as the Elector’s guest.

The Swedish king promised to give parts of Pomerania to Brandenburg and promised a wedding of the king’s daughter with the elector’s son. But the negotiations came to a standstill, with the result that the Swedish troops lined up in front of the Berlin city wall and aimed their cannons at the castle so that the Elector „could concentrate better”. Georg Wilhelm agreed to form an alliance with Sweden in June 1631.

The pact with the Swedes proved to be as short-lived as the one Brandenburg had concluded with the emperor. In 1631 and 1632 the balance of power shifted in favour of the Protestant powers. The Swedes and their Saxon allies attacked southern and western Germany and inflicted severe defeats on the imperial side. However, their onslaught lost momentum when Gustav Adolf died in the Battle of Lützen in the cavalry rush on 16 November 1632. At the end of 1634, after a severe defeat at Nördlingen, Sweden had lost its leading position. Emperor Ferdinand II, for his part, was exhausted from the war and tried to throw a wedge between Sweden and the German Protestant princes. He seized the opportunity and offered moderate peace conditions.

After long, painful hesitation, Georg Wilhelm decided to try his luck again at the emperor's side. In May 1635 Brandenburg together with Saxony and Bavaria signed the Peace of Prague, which was joined by numerous imperial princes. In return, the emperor promised to ensure the recognition of Brandenburg's claim to the Duchy of Pomerania.

Unfortunately, at the same time there was a shift in power in northern Germany. Sweden defeated the Saxon army at Wittstock on 4 October 1636, whereby the Swedes again became the lords of the Mark.

In the last years of his reign Georg Wilhelm tried to expel the Swedes from Brandenburg and after the death of the Duke of Pomerania in March 1637 to bring his country under his control. The result of his efforts to put up a Brandenburg army against the Swedes was a small and poorly equipped troop. As a result, the electorate was plundered not only by the swedish and the emperors troops, but also by the undisciplined troops of their own

DEATH OF GUSTAVUS ADOLPHUS AT THE BATTLE OF LÜTZEN

*Norway.*

army. When the Swedes invaded the Mark again, the Elector had to flee to the comparatively safe Duchy of Prussia, where he died in 1640.

All in all, this reign was an absolute disaster for Brandenburg. Perhaps the most meaningful testimony of all the suffering that afflicted people in Brandenburg between 1618 and 1648 are the demographic figures. The population, whose defences were weakened after years of inflation and malnutrition, had little to oppose the raging of diseases such as typhoid fever, bubonic plague, dysentery and smallpox. All in all, about half of the population died in the Mark Brandenburg. The numbers vary from district to district. Areas protected by water or swamps were less affected, while other areas such as Havelland suffered a loss of 50%. In the district of Löcknitz in the Uckermark, the figure was as high as 85%.

Some of the most important cities were hit particularly hard. Brandenburg and Frankfurt an der Oder, both in important marching areas for troops, lost more than two thirds of their inhabitants. Potsdam and Spandau lost more than 40%. In 1641, only ten of the 40 noble families who had owned the largest estates of the province still lived in the Prignitz, another marching area, and there were cities - Wittenberge, Putlitz, Meyenburg, Freyenstein - in which no human soul could be found.

# Alphas, omegas and others #2

by Poleball

Central America is, like Middle East (described briefly in issue 8) one of the original cradles of the writing. To this day, however, we are not 100% sure which of the local cultures first created the writing system.

This article will try to bring us closer to some of the most likely creators and explain their claims to fame.

## Olmecs

The Olmecs, a people often regarded as the precursor of pre-Colombian civilizations, have their roots in 1400 BC and their habitats were concentrated in the east of the Tuxtla Mountains, in today's states of Tabasco and Veracruz. It is in the circle of Olmec culture rituals were created which are now associated with later cultures such as Maya or Aztecs - bloody sacrifices or maya pelota, a characteristic local game (the courts where it was played can be foudn around most excavated cities and palaces in Central America) played with a rubber ball. It is from the rubber that comes the name given to this people by the Aztecs Ōl - mēcatl- which in nahuatl means "rubber people".

Olmecs were not very militant people if we are to take known artistic artifacts as valid sources. Or rather lack of them - there is a suprising lack of steles showing the rulers dominating conquered enemies (which in the form of, Narmer's palette is one of the oldest monuments certifying the existence of Egyptian hieroglyphics) in contrast

of neighbouring cultures. The expansion of influence was rather related to religion and art - the forms developed by Olmec painters, sculptors, regalia worn by their priests and kings were associated with prestige and enjoyed popularity among the elites in whole region. Nothing suprising, their art was impressive and they seem to be first in the region to achieve such high levels of the sculpture, reliefs and jewelry making.

Let's start in the anticlimatic way - there is not enough evidence to confirm the literacy of the Olmecs. They knew *amate* bark paper (and their heartland remained the centre of its production even in the times of the Aztecs), but no representations of scribes had been found in their art so far.

The main counter evidence to this claim is Cascajal Block - a serpentite block on which 62 signs were found, similar in form to the pictures found in the their art, depicting linearly animals or food. There are no numbers, which excludes economic or calendaric nature. Dating a block is not easy, some researchers suggested the beginning of the 1st millennium of BC, others believe that it is several hundred years younger, the difficulty in dating is due to the fact that it was excavated by simple workers and its archeological layer is unknown to us. No similarities were found between the forms found on it and the glyphs of later peoples, and the signs seem to be read from right to left, rather than columns such as the Mayan ones. However, we cannot completely exclude this, as the descebdabt culture of Epi-Olmecs, which flourished a few generations after the fall of the Olmecs, knew the writing. They could have invented the idea of writing which maybe inspired others for better attempts at it through cultural diffusion.

# Epi-Olmecs

Epi-Olmeks, were a civilization from the Olmec cultural circle, but not necessarily ethnically Olmec, concentrated on the western side of the Tuxtla mountains and existing between the 5th century BC and the 5th century AD.

We have few examples of their writing, (the earliest from the third and second centuries BC) which is already more than one like in case of Olmecs. The most known wone was La Mojarra stele. It makes them a strong contender for a title and it's structurally similarity to the Maya writing could suggest a relationship.

Epi-Olmec or Istmian text was written from top to bottom and in the case of multi-column epigraphy, after reading the first column you moved left. Words had the same width but different height. In their writing we find also numeric symbols known in other Mesoamerican cultures (who invented those is another mystery).

In 1993 John Justeson and Terence Kaufman proposed an attempt of deciphering, based on the glyphs from La Mojarra stele and the assumption that the Epi-Olmecs used the language used by the inhabitants of the region to this day. Using this method, they proposed to decipher writing as ideological-syllabic, with morphographic glyphs and about 70 syllables for pronunciation. Perhaps they were right about the structure and the nature of the writing, but the syllable mapping itself was questioned by new excavations - an unknown mask with 101 characters, 21 of which were previously unknown, could not be read using Justeson's and Kaufman's method.

## Zapotecs

After Olmeks and their epigones it's the Zapotecs who are the strongest contender for the title of inventor of the mesoamerican writing - the first traces of their civilization can be found in the 6th century BC, directly south of the land of the Olmecs, who then were slowly losing relevance. They were brave and warlike people whose statehood survived the longest of all in the region. They called themselves people of the clouds - Be'ena'a, their cousins and successors were the Mixteks, whose name in the Aztec language means exactly the same thing and who inherited Zapotecs writing tradition.

As in the case of the Olmecs, researchers might have overestimated the antiquity of the Zapotec epigraphic artifacts. Danzante - the representation of a bloodied prisoner of war signed with a number sign and a glyph, was until recently dated to the 6th century BC, but this is now being questioned. However, if we assume that it dates back to the time when Mont Alban, the capital of the Zapotec state, flourished (3rd century BC), it will be still one of the oldest reliable proofs of writing in the region. Rooms with glyphic representations of conquered and allied peoples in form of rebuses were discovered in said capital. By comparison with the toponyms known to Aztecs, researchers were able to determine the extent of the Zapotec state. A large amount of numbers and glyphs used to record dates in the early Zapotec steles, which could indicate that the Zapotec writing was first created to record time, only later developed for propaganda purposes. Zapotec names were often calendarical numbers. It seems that it was ideographic without phonetic elements, just like the writing of the Mixtecs (visible on the left in the bottom) culture which took over the baton after fall of Zapotec  in the vicinity of 1st millenium AD.

## Maya

Maya writing was until recently considered a descendant of the Olmec or Epi-Olmec writing, but quite recent (2005) discoveries of the early writing in San Bartolo, Guatemala dating back to the 3rd century B.C. could be a sign of independent development. It is certain that this is the only fully functional Central American writing system.

Early Mayan cities were already observed around 750 BC in the highlands of today's Guatemala, and in the fifth century, these cities are already highly complex. As with most civilizations in Central America, due to the jungle which greatly influenced the travel time (50 km trek could take even 8 days and this often was the distant between various polities) the Maya did not have a centralized statehood, but a network of cities connected by trade and religious ties, fighting over influence like the city-states of ancient Greece. Tikal and Calakmul would be equivalent

to Athens and Sparta of the Peloponnese War. In the past very popular was the false notion that Mayas were some kind of opposite to warlike Aztecs and were a peacefull folk.

Like in Greece or Renaissance Italy, external forces benefited from conflicts - powerful city of Teotihuacán, which became effectively a kingmaker in the region from the 4th century onwards. The 9th century brings an unexpected collapse of these Classical Maya Civilisation cities, although word “collapse” may be misleading as it was not the end of this civilization but rather a shift of its centers from the south of the Yucatán to the north and east.

Although scholars shiver at the word “collapse”, we know that large populations have suddenly abandoned the once-flourishing cities (this happened before in case of some Olmec cities). The source of this phenomenon is disputed by the proposers of hostile invasions, climate changes, ecological disasters, giant peasant rebellions or theories combining some or all of these hypotheses. Apart from the fact of mass abandonment of cities, it is also a fact that in the new centres of Maya civilization we find much less monumental steles and monumental art.

So while scholars may gett butthurt about calling it a collapse it surely was at least a material decline in comparision to wealth and sophistication of Classical Maya Period. The organized statehood and remnants of the Mayan state did not survive the contacts with the Spaniards but to this day their languages are spoken by thousands of Yucatan residents.

What were the characteristics of Mayan writing? It was quite flexible system and the scribes played with convention combining ideographs, morphemes and syllables in different configurations. In most basic form syllabes

accompanied an ideograph in order to signalise it's pronounciation, for example in case of jaguar glyph which could be two words - jix and balam. Elsewhere whole words would be composed of phonetic syllabes.The same word could be written in at least 3 ways.

Words were written in the squares composed of syllable from left to right, from top to bottom, the lines usually consisted of 2 words.

In syllabic writings all words have to be finished with vowel and as we know many words don't, it was also the case with Maya language and they often ignored the vowels of the final syllables. This feature coupled with the fact that many Mayan words were constructed from syllabes with same vowels resulted in creative solutions exploiting this feature. Because the last syllables were "empty" the last vowel became somewhat of an accent sign helping with pronounciation. For example If the last syllable had a different vowel than the previous one, this meant an extension of the previous vowel (transcription of the glyphs on the left -pronounciation on the right):

yi-tzi-na -> yitziin

The system was quite complicated and still is not fully understood today, but we know for example that different final vowels meant different readings, e.g.: u signalled glotalizations in words made up of syllables ending in a, i:

ba-ku -> ba'k

There are other rules of this kind, for more in depth explanation of this fascinating system visit:

http://www.ancientscripts.com/maya.html

Decipherement of Mayan script t was possible thanks to works of soviet scientist  Yuri Knorozov. He overcame the wrong, alphabetic approach  of many previous scholars. They erroneusly put too much trust into our most important Wectern historical document about Maya letters (transciption visible below), Mayan Rosetta stone, in which spanish monk de Landa transcribed the sounds given to him by native Mayas as letters instead of syllabes. Knorozov noticed that many of the already known scripts had mixed phonetic and ideographic elements and induced that this may be the case for the Maya too, that it can be a mix of ideographic and syllabic signs. His other, very important insight was to partially understand the pre-mentioned system of  harmonic-dysharmonic syllabes.

Even though we didn't map the whole Maya system yet there are scholars, like Carlos Pallán Gayol, an archaeologist and epigrapher from the University of Bonn who are working on it's digitalisation, hoping for the decentralised cooperation between other scholars specialised in Mayan epigraphy. So maybe in not so far future Maya script, likely written in a way similar to chinese, will be availible to us as a fully functional digital font.

Sources:


- Diringer, David - Alphabet a key to the history of mankind
- www.ancientscripts.com

Igor: “ Sorry for what? “

# Deepfakes for dummies

by Poleball

Many Bernds without programmer background feel intimidated by the perspective of touching neural network meme, for various reasons. I hope this short tutorial will help demistify this question and open a field of experimentation for new OCs

Let's make some fakes with DeepFaceLab, it gives you fair amount of control over the training process. I will be talking about the Windows version that i used personally (Linux fork below*), but principles of model creation are universal. Before we start check if all of those are true for you:

Minimum system requirements:

- Windows 7 and higher
- processor that supports SSE instructions
- 2Gb RAM spooling
- OpenCL-compliant graphics card (NVIDIA, AMD, Intel HD Graphics)

Here are the recommended system requirements:

- Windows 7 and higher
- processor with support for AVX instructions
- NVIDIAvideo card with 6GB video
- 8Gb RAM

With my 6Gb card i couldn't test all the features of the trainers because of the out of memory problems. Nonetheless with some patience and good dataset you can make great models even on your toaster.

*. https://github.com/lbfs/DeepFaceLab_Linux

First step will be to install the CUDA/OpenCL and pytorch/tensorflow (this is pretty straightforward).
There is a prebuilt Windows Release version of DeepFaceLab availible with several different builds to chose from- download one that fits your system and graphic card.** Unzip the files in designated place.

Let's go to work - you will need several hundreds of images in different lights and different angles, the best way to get them is to use a video frames.
Pick the video with the face you will want to use as a replacement, change it's name to data_src, paste it inside "workspace" folder and click on

2) extract images from video data_src.bat

If you have several videos either merge them before or backup pre-exported frames and repeat the action with another video (again with data_src name).
When the process is finished merge all your extracted frames with backups and paste all the still photos that werent part of the videos you used.

Now ou can start trying to finds  faces on those images.
You have several options to chose from: MT is faster but provides more false positives, S3FD consumes more resources but gives better results, it isn't perfect either though. Let's use all gpu and click on:

4) data_src extract faces S3FD all GPU

(You may notice that i skipped number 3 but don't worry, i didn't forget about it.)

**. https://drive.google.com/drive/folders/17a9b9zmLdnAl-ItifcGSE9ixDIDAT3YxP

Now you will have to delete false positives and shitty images with the aid of several sorting tools:

- histogram will sort images by their similarity, it helps to remove the most obvious false positives and groups of faces that don't interest you.
- sorting by dissimilar faces is self-explanatory
- sorting by blur is also quite straight forward, you should keep your blurred images number under 10%, they will be sorted at the end.
- sorting by face yawn and pitch will help you see which facial angles are too overrepresented.
- you can also sort by amount of blackness and brightness or hue.
- final sort limits whole amount of faces to a given number using a mix of previous sorters, it removes first and foremost images with too much blur and with too similar histograms.

Ok, we have our source dataset selected.

Let's move forward and cut the video on which we want to insert our source face to. The process is similar, first you paste the video into workspace folder and rename it to data_dst.
Then you should click on:

3.2) extract images from video data_dst FULL FPS

and then on
5) data_dst extract faces S3FD all GPU

Again you have similar tools that help you removed the unwanted mugs from your aligned dataset. This time you should only aim to delete the faces that dont belong to the actor you want to replace and extreme cases of

blurred frames. Again you can use several videos and still images to improve your dataset. In case of famous actors and politicians you can easily find already preselected datasets online.
Now we are good to train our model. Once again we are offered several options sorted from least resource hungry:

- H64 creates half face model in the 64 pixels resolution use it if your card has ~4Gb of memory or lower. t
- H128 is bigger brother of the first trainerl, it offers 128 pixels of resolution and requires slightly more memory (~5Gb required).
- DF offers a full face 128px resolution model that understands and ignores the background around the face (~5Gb required).
- LIAEF128, similar to DF but tries to morph into the original face which in some cases may result in bad looking images.
- SAE is the most flexible of all the models above and i suggest using it. It's de facto a mix of all previous trainers with more options to pick from, you can determine custom resolution, whether you want to use half or full face, use mask etc.

Most of the default options are ok for the first run, you can change them later with the exception of stuff like resolution or Pretrain the model  which is quite usefull thing - before training on your face your model runs through base of random people which helps later to correctly understand light and facial angles. It shouldn't be abused though, it may result in our character loosing its actuall mimics.
Of course options that grant better quality require more memory - My PC encountered problems when i tried to rise batch over 8, you will have to test it yourself, option after option.

It's a good habit to keep auto-backup, collapses of model happened to me several times, you can avoid them at the cost of the speed by chosing options like gradient clipping.
After setting up our trainer we can spend rest of our day on KC or enjoying the good weather if it's provided, check from time to time though to see if model didn't collapse.

After 20k iterations you may want to revisit your dataset and delete most blurred ones so the details that will be now beeing developed by trainer aren't distorted by bad quality photos. You can also start using options like pixel loss or face style which are more memory intensive but give you more details and "real" result by trying to understand the local light options..

Once you deem model worthy or see that training doesn't improve convert your pictures using it.

7) convert SAE

You can either do it directly on the frames or create just masked png's of the face that you can later merge with the video in video editing software if there is a need for some additional masking (often in case of profile views where nose of the original actor is bigger that of replacer).

Congratulations! After less than 24h your finished your first deep fake video! It wasn't that hard, innit?.

# A NEW SPACIAL STATION HAS BEEN CONSTRUCTED! LOOKING FOR NEW RECRUITS!

Having enough of the noise of society, a group of social outcasts known as “Bernds” has decided to leave the planet and create his own spacial station: KC-STATION 13. Because of this they are now in search of fellow F.R.ENs to seriously discuss Nazi memorabilia, *hormones* and anime.

Sadly not even in the station you can discuss the industrial output of the Ottoman empire during WW1 in peace. S-P-A-C-E is a very dangerous place, you know. One day you might be repairing the station after an asteroid shower and the next one you are taking refuge from the radiation in the maintenance corridors. And there’s also the threat of the KEIN Syndicate or the pagan cult of the “Slayer of Euronymous*”.

If after all of this you still want to apply then congratulations, you are qualified enough to be accepted**.

*in self defence

**(קוביות, الأتراك and пидорс need special authorizations)

# RC-STATION 13

*In S-P-A-C-E, nobody hears your serious discussions*

Important data:

- Starter guide: https://files.catbox.moe/p0yak9.pdf
- Server direction: byond://185.223.31.196:58855
- Discord: https://discord.gg/98QfcKj
- Riot: https://riot.im/app/#/room/#KCStation:junta.pl
- Wiki: https://tgstation13.org/wiki/Main_Page
- Source code: https://github.com/tgstation/tgstation

It is possible that in the future, if enough people joins and the infrastructure allows it, KC-station will develop its own code with new roles, mechanics, events... A KC-station repo has already been opened:

https://github.com/Dagtin/kcstation

You are the only one that can make this possible, Bernd!

Ps: Special thanks to Dagtin, without him we wouldn't be able to do all of this.

# FAQ

## How can I contribute?

You can write an article, a poem, make pictures or submit something else creative.

## Where can I submit something?

Current thread, email or discord.

## When is the next deadline?

Generally every two-three weeks, depending on teh amount of content. For exact dates see the thread or contact us

## Do I choose the pictures for my articles?

You can choose/make them yourself if you wish to, otherwise someone else can decide for you.

## Is there a lenght limit?

Generally we try to keep articles between 700-3.000 words. If necessary or justified by interesting form or content, exceptions are possible.

## What topics are suitable?

Alle, since any topic is KC-tier with the right approach.

## How do I know if my text is good enough?

As a rough measure see the already existing texts. Some are for assburgers, other are less serious. What needs to be present is at least an attempt to bring some structure into your text, since we dont want a zine made out of random thrash.
We are not grammar nazis, runglish, weird stylistic choices and grammar abuse are fine, as long as you reread your text and try to be understandable.

## Contact

kohlzine@tfwno.gf
discord.gg/juAshwD