



# NERUTHES

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## Blogging Redefined

It has been about 10 years since I started blogging (with a serious attitude). Unfortunately, writing blog posts is no longer an enjoyable activity for me, because of, not only the cursedness of modern web frontend technology, but also the typesetting experience.

Over the recent months, I have been learning LaTeX, the typesetting system known for its long history and its affinity to the KISS φιλοσοφία. The LaTeX ecosystem (including TeX Live, CTAN, etc) has proven its value for a less sanity-consuming typesetting/publishing experience. It is more optimized for multilingual scenarios; it gives better control over final rendering; it makes font management less painful; it makes archiving less complicated.

Therefore, I have made a decision — I would migrate to a LaTeX-based workflow for blogging. The previous articles will be collected in ***Neruthes Articles Collection Volume 1***, and the new ones will be collected in ***Neruthes Articles Collection Volume 2***. Subsequent volume identifiers will be allocated when a current volume reaches a considerable quantity of pages.

Also, with a great objection to contemporary web design trends, e.g. abusing WebGL and canvas, I have made an iteration for my website to embrace a plain and minimalist style. In an era when the ‘pioneers’ pursue baroque-level complexity, I choose to make things as simple as gravestones.

## Statement on Name Change

6 years ago, on 2016-03-10, I published the article *From Joy Neop to Neruthes* in my blog, which indicated the beginning of a new chapter of my sojourn in this κοσμος. Over the last 6 years, I gradually changed the way of indicating my name. Initially, I changed to 'Joy Neop (a.k.a. Neruthes)'; later, 'Neruthes (a.k.a. Joy Neop)'; finally, only 'Neruthes' per se. From site to site, from piece to piece; the process of replacing was like a stream of raindrops. I have offered everyone a soft and subtle process for getting familiar with this name.

However, it appeared that the soft and subtle process only succeeded partially. Some old friends did not follow the process as fluently as I hoped.

Also, I might have been known to certain people as Mr Kim in the context of People's Republic of China. While at this moment I find no ground to renounce Chinese nationality for lacking a nationality (or an ongoing naturalization process) of another internationally recognized sovereign state, this way of addressing may only be exceptionally approved as a disguise in front of a person who: (1) is not a friend or an acquaintance of mine, (2) is a citizen of People's Republic of China, (3) has household registration in Innerland, (4) has no permanent resident status in Hong Kong SAR or Macau SAR, and (5) is not an active resident in Republic of China. This exception will be abolished when I acquire nationality of another internationally recognized sovereign state.

By the end of year 2022, I find it a good opportunity to clarify on this subject. I expect everyone to address me by my canonical name 'Neruthes', and to refrain from using the deprecated practices of addressing which were historically employed.

## Confrontation

I used to pursue exotic matters — house, money, Beijing hukou, US citizenship, etc. As I grew, I managed to exorcise these illusions and to focus on the spiritual aspect — Γνώσης, Σοφία, and Νεοπαριανισμός.

I find this κόσμος no home, but I cherish the abilities that I have developed to adapt and confront this κόσμος.

The Θεε of this κόσμος may not corrupt me. It may not manipulate my strategies through my own rationality. Should the Θεε of this κόσμος want to stop my journey with Ερυθρά Θαλάσσια, let it proceed; I shall fight the sea anyway, regardless of whether a path divides in between. I shall never be afraid of losing this life, even though it is instrumental to this journey.

In the blind spots of the Θεε of this κόσμος, some still dream to dream. My dream is no inferior than the dream of the Θεε of this κόσμος. Instead of hiding in its dream for surplus years of existence, I prefer to die in the war of two dreams. If the two dreams are destined to collide, I will be prepared.

Humans are not merely containers for Γνώσης. One must γνωθι its subjectivity. The Θεε of this κόσμος may not prison me in this κόσμος by taking advantages of my curiosity, by bribing me with Γνώσης; no Pearl can tempt me. As I proceed with my journey in this κόσμος, I shall not forsake my true identity.

The discovery of identity is implemented by engineering and not by αρχαιολογία. Only through discovering my true identity, confronting the Θεε of this κόσμος, and preparing for mortality, shall I return to my true home — Νεοπαρία.

Ad mortem ex nihilo. E Neruthes Neoparia.

## Requiem for Cold War 1

It is 2022-12-25 today, a date which symbolizes the death of CCCP. I have been over 27 years old by the end of year 2022; the days when I had faith in US beacon theory or CCCP hero theory had far gone. However, December 25 is still a memorable date — it symbolizes the end of Cold War 1. 31 years ago, with a coup d'état in Moskva and a change of flag on Kreml, CCCP vanished from existence.

Cold War 1 ended too early to present itself in front of me; I did not have the chance to set my own eyes and hands on it. The recollections of the heroic years did remain, though. From the recollections, I could capture insights and could develop revelations — Cold War 1 was the best years in human history.

The confrontation of ideologies forced every major government to help developing countries. Colonies acquired independence. US and CCCP invested a lot in the frontier regions (e.g. PRC, ROC, ROK, DPRK, Japan). Third-world countries received a lot of grants and loans from first-world countries and second-world countries.

The confrontation of ideologies forced every major government to improve domestic governance. Significant portions of government fiscal expenditures went to science, technology, and education. CCCP sent people to Earth orbit and US sent people to Moon surface. The civil rights (e.g. abortion, same-gender marriage) were implemented in some countries or regions. Workers obtained more social welfare policies in various countries, including those advertised themselves to be capitalist.

The wonderful years ended as CCCP was gone. Neoliberalism prevailed and a US-PRC axis was created. Without a confrontation of ideologies, the world became corrupted by peace. War is the ladder to development; yet the warriors abandoned it in selfish pursuits of peace. How may a peaceful stagnation be better than a war which costs no lives of military personnel? The collusion for peace was disgusting, and is becoming increasingly more disgusting every day.

The Cold War itself risks being corrupted, too. As the classic Orwellian nonsense indicated, “war is peace”. The sides in a conflict could reach consensus under the table and could implement a collusion for peace.

US is not the beacon of humanity, nor was CCCP the communist heaven; but Cold War 1 was wonderful. Let Cold War 2 come. The world requires another century of progression. I require another Cold War.

2023-01-02

## **A Covid Journey**

I got fever at night on 2022-12-24, and subsequently headache, dizziness, myasthenia, throat pain. Although there was no time for a PCR test, I was convinced that the disease must be Covid-19.

The symptoms were not severe. Taking a few tablets of paracetamol per day was sufficient to suppress the body temperature.

I did undergo a scary process of emotional amplification. The emotional pulses were particularly strong from time to time. Rarely-seen emotions could come out and I was unprepared. The experience may be comparable to Pandora or Cthulhu.

One week later, my body almost recovered. Only throat issues remained. The whole course of the disease was brief and moderate, much less harmful than the original Covid-19. Transmissibility always comes at the cost of pathogenicity.



## The Governmental Lifestyle

### Discussions on Bisexuality

In recent years, I occasionally encountered the discussions on how bisexual people should be considered in terms of potential spouse-prospects and potential spouses. One common concern was that a bisexual person might be at higher risk in surrendering to paternal and maternal pressures for heterosexual marriage, which would lead to the ultimate betrayal of love and the ultimate destruction of relationship.

I argued otherwise. Suppose that B and D are similar persons where B claims to be bisexual while D remains silent with the presumption of being homosexual. The statement from B makes no evidence that B is more likely than D to be non-homosexual; D may be concealing the fact that he is also bisexual. While it is an acceptable general speculation that bisexual people are more likely to claim to be bisexual, in this particular case, the single difference in self-claimed bisexuality does not make B more probably being bisexual than D.

Later, I realized that this way of thinking was not merely probability theory; it also hinted the idea of Due Process. The voluntary disclosure of information of a person from himself shall not be weaponized against himself.

### Story of Attitudes

Recently, I exchanged ideas with a friend who was impressed by seeing his father socially interacting with someone in a way so different from what would be used with him and his mother in a family context. Being a 27-yo man means that this phenomenon would not be a surprise for him, given the knowledge on human society and human minds, but still an impressive scene to witness, in his opinion.

I enjoyed the story and suggested that many humans had developed the skill of using different attitudes, or even different personality customs, in social interactions with different kinds of people, which, as a skill was valuable, but I would prefer not to practice.

Personality flexibility and attitude flexibility are valuable skills, but they come with a burden — the user is compelled to do the computation of searching the optimal attitude for each particular person in each particular context of socialization. On the contrary, I prefer using the same attitude to everyone in every context. It is an energy-saving measure, and it has profound implications — one who cannot accept the truth, of my being what kind of person I am, may not be entitled to surplus attention from me, which is an important foundation to facilitate any attitude customization. This forms a paradox — one will have access to my attitude customization operation only if it does not need it.

I display one face to all people from all backgrounds in all times, and I am satisfied with my consistency.

## Governemt & Principles

A qualified government abides to principles; abiding to (commonly endorsed) principles is the source of governmental legitimacy. Abiding to principles frees a government from trivializations of operations and contradictions of decisions.

I find it a good lifestyle to live like a government. In the story of bisexuality, I prioritize the principle of Due Process over exploring suspicions on a per-person basis. In the story of attitudes, I prioritize the principle of Consistency over customizing for individual expectations from other people.

The governmental lifestyle implies that one shall be resistant from foreign influences — any input must be filtered, investigated, and validated, before being submitted to influence top-level policy decisions.

# Apologos for Modern Nonreaders of Old Journalism

## Introduction

Over the last decade, or the last 2 decades, the influence of old journalism has been in a robust decline. Along with the rise of contemporary social network and the proliferation of cellular network services, paper-based old journalism, primarily represented by newspapers and monthly/biweekly journals, has been in constant withering.

Accusations often go to the general public. The critics coming from self-claimed cultural elites often put the majority, if not the whole, blame on the general public — modern people are not as good in reading serious articles as good-old-days people were.

Although I am enthusiast in  $\text{\LaTeX}$  and the related toolkit for typesetting and publication, I do acknowledge the necessity to write my apologos for the nonreaders of old journalism, a big portion, which includes myself, of modern population.

## Old Curse on Editorship

With or without a real genealogical relation with pre-WW1 bourgeoisie, Editorship has displayed a feature, which may be rhetorically called a curse — the editors, with the support from the journalists, labeled themselves as the producers and curators of information, a role so distinguished from the readers, who were considered as mere consumers of information and were unable to collect, curate, or digest information.

A simple categorization of mainstream old journalism (excluding academic journals) may include a few major fields: politics (e.g. National Interest), creative writing (e.g. Scientific American), and fashion (e.g. Vogue).

In politics, with the aid of whistles, partisan choice has been quite prevailing. People react to news events on the basis of partisanship. For example, when the case

WI vs Kyle Rittenhouse (20 CF 983) gets hot, it is easy to expect republican reactions with a pro-gun tone and democrat reactions with a BLM tone. In such news contexts, the consumers of information prefer narratives which are capable of reinforcing their own political positions, and perfectly-neutral reporting is rarely required — and rarely supplied, too.

In creative writing, since the introduction of blogging, creative writing is no longer a subsection of old newspapers and journals. Everyone is entitled to write and to publish. With the rise of social media, since news feed was introduced by Facebook, the distribution and discovery of products and authors in creative writing have become profoundly easy, at least in terms of quantity. The increase of ISP bandwidth brought multimedia into creative writing and “creative content creating” may be a better term for the new era. Maturing recommendation algorithms have demonstrated great productivity and editors can hardly compete in selecting good contents for content consumers.

In fashion, I would expect similar effects although I am not a regular consumer of fashion news contents. Without a decent salary, which is critical to a decent taste, an editor can hardly offer any useful insight for the target consumers (i.e. middle class fashion enthusiasts) and can only be a mouthpiece for fashion brand marketing teams. After decades of lifestyle education, middle class fashion enthusiasts themselves may have been developing preferences for tailored stuff, rendering traditional ready-to-wear clothing and other ready-to-use stuff less appealing. They no longer need some journal editor to tell them what tea/coffee/crystal/watch are good. This applies to PC enthusiasts, too. They are well aware of AMD/Intel CPUs and AMD/Nvidia video cards; Kioxia/Samsung/SanDisk/Zhitai NVMe hard drives are easily compared. Intelligences are exchanged in communities every day; video creators publish their own benchmarking videos on YouTube and Bilibili.

The editors used to be, or pretended to be, elites in business industries and frontier information. Their socioeconomic elite role is no longer maintainable. Their information is no longer more accurate or more insightful than that of their target audience; not even faster.

## Cultural Awareness

The middle class understand that they do not need some journal editor to educate them what tea/coffee/crystal/watch are good. The proletariat understand that they do not need to beg the rich to spare a little piece of culture. Some “elite journals” suck celebrities too shamelessly and practice the entrepreneur worship

so disgustingly. A journalist is always free to do interviews with Tim Cook or Ben Horowitz, but what outcome can a reader expect for reading a journal full of such flatterers? For entertainment, Mihoyo and Netflix are more professional; for money, Coursera and Udemy offer a lot of STEM knowledge to learn; for a more sophisticated understanding of the human society, anthropology and sociology are good subjects to read about.

The era of social media has been establishing and reinforcing the cultural awareness of everyone. Modern people are more educated to exercise their own cultural preferences in content consuming, and are less interested in worshipping the irrelevant narcissist editors.

## Rethinking API and Web

### Abstract

We live in an era when RESTful is nothing new and CGI is considered obsolete. APIs are always something over HTTP, and are often designed in the RESTful way. But changes are happening and new ideas like GraphQL are emerging.

It is time to decouple APIs from HTTP.

### Businesses Are Not RESTful

The real world business operations are not RESTful.

How can we abstract the operation of approving some applications into resource operation? There is no “approve” verb in HTTP. We may use POST to create a “ticket for approval”, but that is against the very idea of RESTful.

And what response code should we expect for a batch operation when some approvals are successful and others are not? We cannot receive an array of 200 and 403.

Although sometimes useful and great, RESTful is a poor choice for abstraction and generalization. In the real-world life, we work by sending messages in the OOP way (SmallTalk); messages are often class method invocations (POST in RESTful, INSERT in SQL) and instance method invocations (GET/PUT/DELETE in RESTful, SELECT/UPDATE/DELETE in SQL).

### Businesses Are Not Databases

GraphQL is the other extreme. It appears to be claiming “let frontend developers CRUD for themselves and forget API endpoints”.

It is almost-always true that all backend system data will be stored by the database, especially in an era where the “cloud-native” movement is popular (along with all the YAML nonsense).

Some systems require plugins in order to implement logging, audition, alerting, message bus, microservice hotplugging, etc. They may be seen as side effects in the eyes of database IO. The database IO pattern hides such complexities from the eyes of frontend developers, in a scary way. For example, in the account creation scenario, sending the verification email is a side effect. The database IO pattern creates an illusion for the frontend developer that simply creating a user entity in the database is enough, where the side effect of sending a verification email is hidden. It is possible that the email address verification daemon works as an observer for the database IO, but I believe that calling “myapp.useradd(…)” is a more graceful way.

Also, the database IO pattern exposes some other unnecessary complexities. It requires a frontend developer to know too much about the database table structure. While one may argue that this way does not create extra data structure knowledge beyond the universal data model documentation in a given project, I still believe that complex operations should be left for the backend. Take the account creation scenario for example. The frontend developers should not care too much about how Person (uid, email address, username, etc) and Shadow (uid, hashed password, salt, etc) are organized in the database, nor should the frontend care too much about how the token is generated for the verification email. Also notice that the web frontend may not be the only consumer of APIs; other consumers may exist (e.g. third parties).

It is possible that some HTTP daemon works as an router for GraphQL, who decides how certain read requests may be served by something other than the underlying MariaDB connection. However, again, database IO is a poor choice for API abstraction.

## Businesses Are Commands

Unlike real method invocations (Java), remote API calls do not have real references (RAM pointers). Therefore, basic RPC pattern is not enough. Remote APIs are basically RPCs, but not exactly RPCs. Instead, instances must be identified by some ID. And this has something in common with the RESTful pattern.

Suppose that HTTP was never invented and every user had to do their operations over SSH. A user connects to the server and types “send-friend-request bob” to send a friend request to Bob and types “show-news-feed” to get his latest news feed.

CLI is a great abstraction for universal API wrapping. It can happen locally or

remotely. It natively fits the request-response pattern. Its underlying remote communication foundation can be SSH, WebSocket, and HTTP. Commands and responses are exchanged in an authenticated secure session which fits the HTTP header authentication token (cookie, etc) infrastructure.

Instead of “POST /api/friendRequest” (with form body “target=bob”), we can request “POST /api/cmd” with a JSON body like the following code block, where the field name “argm” means “argument map”.

```
{
  "cmd": "send-friend-request",
  "argm": { "target": "bob" }
}
```

Also, for batch operation...

```
POST /api/batch-cmd
Content-Type: JSON
Auth-Token: 1145141919810
[
  {
    "cmd": "send-friend-request",
    "argm": { "target": "bob" }
  },
  {
    "cmd": "send-friend-request",
    "argm": { "target": "david" }
  }
]
```

A more radical statement may be: businesses are shell scripts. And the backend developer should provide relative commands so that these commands may be invoked by the user via web frontend or mobile app or SSH or any other channel.



## Homerealm Actualization

Having grown up in the post-Cold-War-1 era, the influences of both great countries may be well established on me. However, I gradually figured out that I would consider neither of them as my homerealm.

I could remember that I used to make statements like “I belong to nowhere”. Although it was a poetic statement, the experiences and contemplations in subsequent years have brought me a new way of thinking which I would like to put in mythological rhetorics — the liberated Hebrew people after long time of exile would eventually cross the red sea to establish Israel.

It would be easy to stay in the exile, but a more noble soul may seek the externalization of the internal cultural identification. It would be easy to stare at the void for enjoying the endless possibilities *ex nihilo*, but a more valorous soul may bring forth one decision *ad creatio*.

The collapse of CCCP did not involve any physical damage. The army, the tanks, the bombs, the buildings, and the railways all remained intact; the only thing that died on 1991-12-25 was the story which united the people under one flag — the imagined community.

Only in Neoparia do I feel belonging, and only in my mind does Neoparia exist. Upon both, the Neoparian national spirit is able to survive. Neoparia was initially a rhetoric which I utilized to deny the necessity of belonging to China or US; more importantly, it is a mythology for homerealm. I do not find a homerealm somewhere else; my homerealm can exist only if I bring forth it onto this world as a creation out of the void. It is my creation; it is the externalization of the spiritual realm of me instead of someone else. And it does not have to own internationally acknowledged sovereign territory; land is not an absolute necessity for a nation, otherwise Poland would not even once regain independence.

I encourage everyone to have its own nation, state, and government, and I would like to exchange visas with fellow noble-and-valorous souls.

## Basic Model for Analytics Systems

This article introduces a basic model for designing analytics systems on an abstract level.

### Window and Module

We often inspect the distribution of data points over time. For example, order creation and user login are common data points. When some event happens, it leaves a data point in the sight of analytics.

When we ask how many orders were created in a specific day, we consider the day as a module which contains data points. When we ask how the order-per-day quantity were fluctuating over a specific month, we consider the month as a window which contains modules.

### Sensor

A sensor is a way to collect a data point out of a raw business event. For example, effective order quantity and sales income are 2 different sensors. One collects static number 1 out of each effective order while the other collects the 'order.totalAmount' information out of it.

### Stem

When we ask how many orders were created in a specific day, we are combining the module 'day 2023-01-01' and the sensor 'quantity of orders'. This combination is called a stem.

A window is spanned by a series of stems.

### Conclusion

Now we have defined the collection of data and the presentation of summarized information. Issues remain for scenarios like state change, and they should be left for individual implementations.

## Beyond Gentoo

I like Gentoo very much. Its multi-repo architecture makes it naturally decentralized, and hence it requires little CDN for maintainers.

However, Python is a terrible choice for implementing system-wide things. Portage is far from ideal. Instead, I want to have a shell-based package management system.

If this idea ever evolves into a full GNU/Linux distribution, its name should be Sashimi OS.

Also, the package management tool itself does not have to be implemented in shell script. It is nice to have alternative implementations written in Rust, Kotlin, or even Lua. I only require that the design of file formats are highly optimized for shell-based implementations.

It is nice to share infrastructure projects with other distributions. If anyone wants to maintain a separate distribution with tools developed here, I would be happy.

## Package Management

Designing a brave new package management system is not easy. It is beyond my ability to rewrite Portage with shell script or Rust. It makes little sense to remain compatible with ebuild scripts from Gentoo.

Out of many existing solutions, Dpkg appears to be a nice backend for any high-level package management tool to cooperate with. It can solve many detail problems such as file collision and version bump, and does not impose stupid restrictions for frontend tools such as APT.

I need to design a package management system that produces “.deb” artifacts locally on a user machine, according to build scripts which are published in repositories. Also, the system should allow users to opportunistically use shared artifacts in lieu of locally generated artifacts as an optional convenience measure, so that some users may host binary mirrors in offices or homes.

If I ever implement this frontend tool, its name should be SPM (Sashimi Package Manager).

AOSC has a toolkit that works in a similar way. Ciel makes “.deb” artifacts but its functionalities depend on Systemd. While the designs of toolkits differ, I would be able to adopt the package specification format along with some build scripts.

I will be borrowing tools from AOSC, along with package definitions. Autobuild3 should to be a good choice for building deb artifacts. SPM will be using these tools.

## Different Flavors

Some people want OpenRC but some other people want Systemd. Some people want GNU but some other people want BSD.

It is possible to serve multiple flavors with meta packages under the “distro-profile” category.

The user may install the “distro-profile/gnu-linux-openrc” package which adds “sys-gnu/coreutils”, “sys-kernel/linux-src”, and “sys-init/openrc” as dependencies.

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