

# HYPERINFLATION

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“Inflation is an integral part of modern culture and intensifies and condenses the experience of modernity in a traumatic way.”

Bernd Widdig (2001)

As an economic category, hyperinflation is being studied as an extreme, out of control inflation. It is a sign of a severe breakdown of the value of money. Hyperinflation provokes distrust in government, requires day-to-day solutions and generally alters the sense of value, order and authority within society. Its factual history can be traced back to the Roman Empire, where it was one of the contributors to social collapse (Temin). In *The Monetary Dynamics of Hyperinflation* (1956), Phillip D. Cagan described hyperinflation as an economic problem, which occurred 55 times in the 20th century. Yugoslavia's hyperinflation of 1992-94 was the last case of such an extreme inflation in Europe to date, with the highest monthly rate hitting 313,000,000% (Hanke-Krus).

I have personal memories of Yugoslavia's hyperinflation and it took me some 25 years to find a suitably large hyperbole delve back into this phenomenon and my own related memories. In the meantime, an omnipresent obsession with theories and conspiracies, explaining the collapse of Titoism and the following civil wars, created an inflation of statements and memories. It certainly convinced me to keep my own point of view, akin to hard-currency savings during the time of crises – buried deep under the pillow.

It was only when I came across *Disorder and Early Sorrow* (1925), Thomas Mann's story about the life during the hyperinflation in Germany (1921-23), that I (re)discovered an aspect of my own experience and was capable to offer a more holistic vision of what really happened. Thomas Mann speaks about a collapse of the perception of reality, which became distorted in a carnival-like manner as soon as money lost its ability to represent value. It is exactly how I remember Yugoslavia's hyperinflation from a child's perspective, namely as a suddenly twisted social logic.

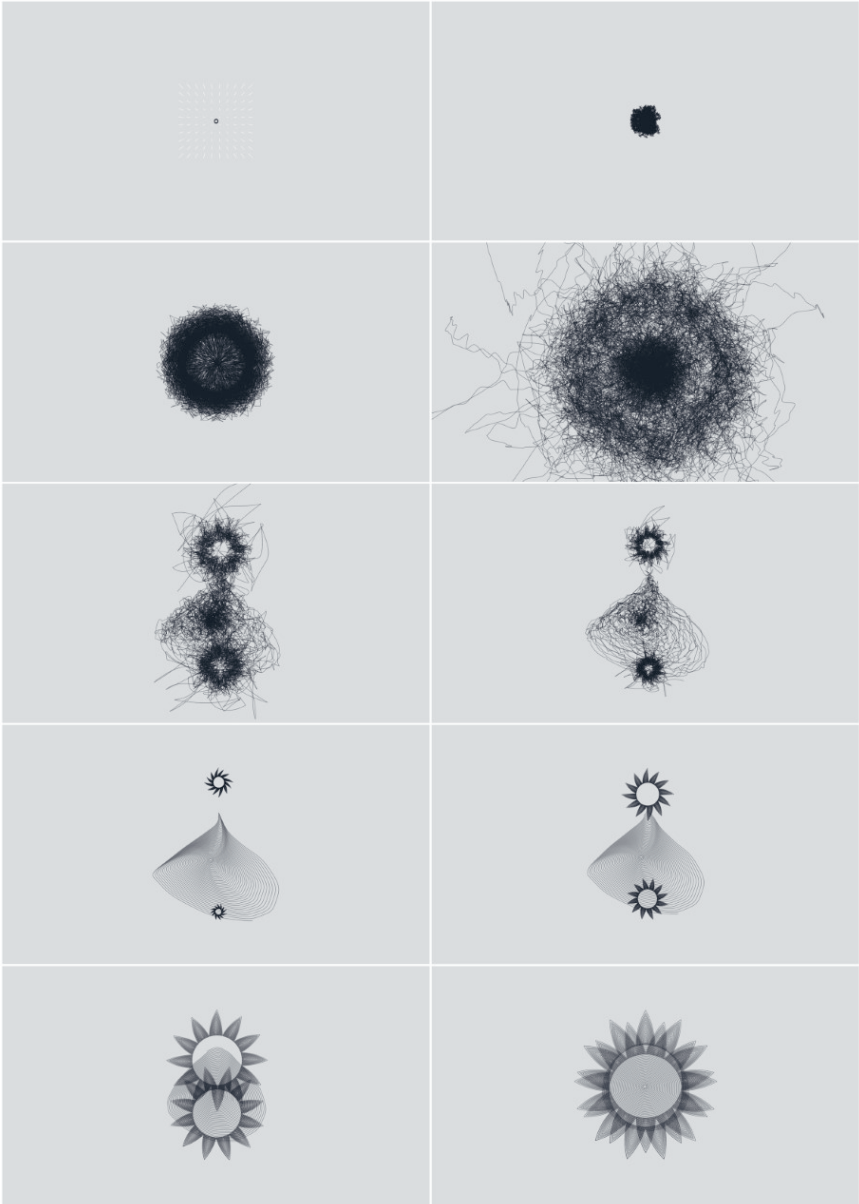
Tracing the imagery left on the banknotes published during the 24 months of Yugoslavia's hyperinflation, I started locating those sudden cultural mind-shifts. In an initial art-research started in 2017, I approached those banknotes as visual gateways, bringing us to an altered, distorted universe, where everything is offset. It is a universe in which fluidity and fragility of the value representation system became obvious and its imagery and logic dissolve.

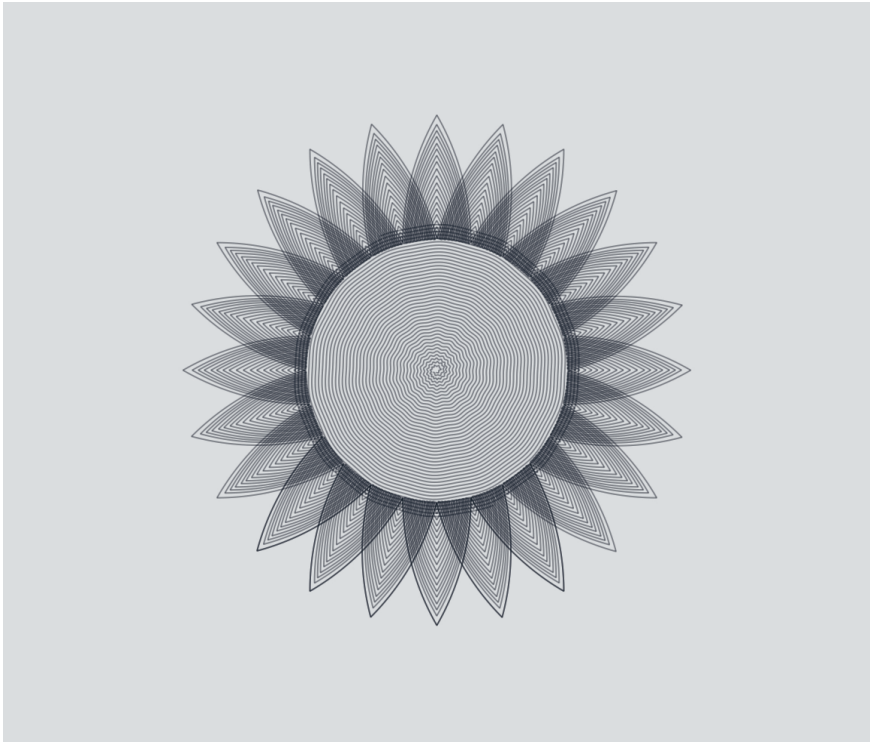
In the context of this *Documenta* portfolio edition, I have prepared a quick, emblematic voyage through the territory I started to unveil: an inter-text/image of the work in progress, in the form of seven short chapters.

### **I - Inflation**

There are many theories and speculations on how it really happened. Maybe it bounced off of something. Maybe it was computed, conceived to happen, or maybe entropy itself had something to do with its origin. Nevertheless, once it happened, it brought depreciation of the value of everything, constant, never-ending price depreciation and again rising entropy. The epic fight and mutual destruction between matter and anti-matter ended in anti-matter's genocide and since then, the surviving matter keeps on expanding... and cooling down. Order and disorder are relative concepts. A state of high entropy does not imply greater disorder, like we tend to assume poetically. It just opens more possibilities, more space and time for thought to rise up from the chaos of colliding particles.

This dance of matter and energy brought us solar systems, celestial objects, liquid water, rocky landscapes and, finally, the mind itself.

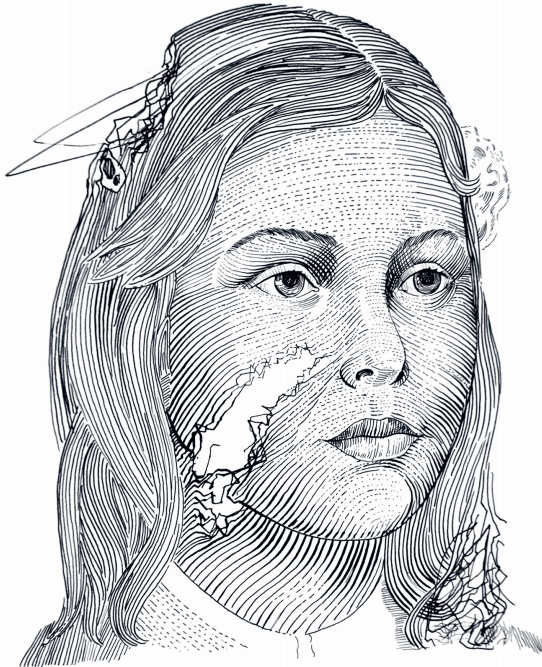




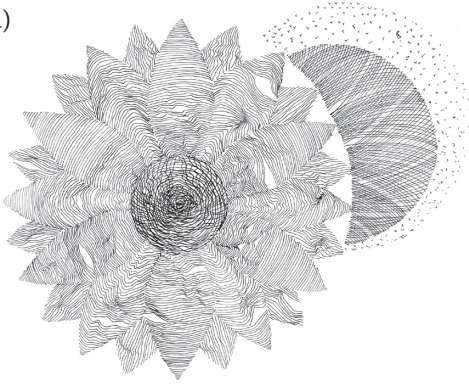


## II - Banknote

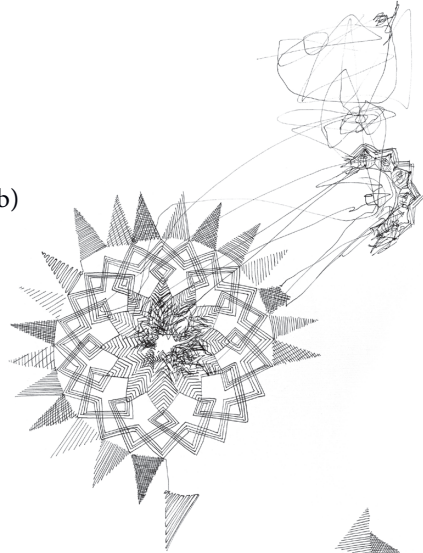
We speak of our known Universe, but we will also speak about another type of inflation and entropy: those of a monetary currency. What you have seen on the previous page is not a representation of the sun, but the security bank-note rosette, which came with a Yugoslav dinar published in 1989. The sunflower-like geometric lathe ornamented the banknote. It also came with a portrait of a girl on the front side and depicting mathematical equations, letters, logic and geometry on the backside. The banknote was originally valued at 100 thousand dinars but was revalued four times to its final value of 1 000 000 000 (one billion) in 1993. A solid, warm red color of the Girl's first edition has dimmed to brown, then cooled down to pink/gray, ending in a pink/light blue design.



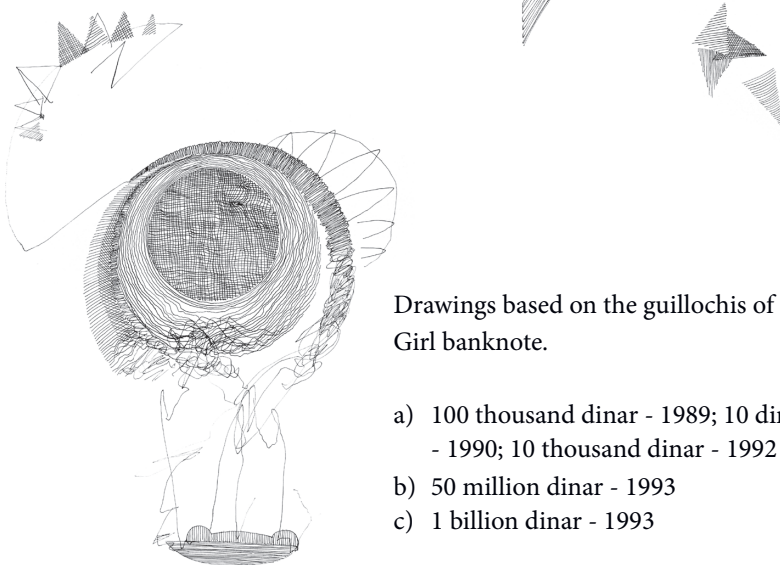
a)



b)



c)



Drawings based on the guillochis of the Girl banknote.

a) 100 thousand dinar - 1989; 10 dinar - 1990; 10 thousand dinar - 1992

b) 50 million dinar - 1993

c) 1 billion dinar - 1993

In this very last edition of the Girl, the sunflower-like pattern has been partly eclipsed by a bunch of spherical shapes. The genius of the artist has sublimed the message of decadence and the dark times ahead. The banknote tried to stand for curiosity, reason, knowledge, wisdom, life and energy. All of this finally ended in an embrace of a hyper and over-inflated environment.

### III - Mint

The mint of the Yugoslav National Bank has designed and printed 32 new banknotes during the 24 months of the hyperinflation. Because it was the period in which the state was changing its official ideology and economic system (Yugoslav socialism to Milošević's nationalism), we have a remarkable opportunity to follow this transition on those 32 "frames" in a visual way. It became evident how the banknotes' graphical environment could be a fertile ground to dig for a better understanding of sudden cultural mind-shifts and social reconditioning, as the persons and buildings depicted on the banknotes changed from socialistic ideals to national heroes.





Those banknotes became a survey for tracing the origins of the Serbian (dinar) banknotes' design, as a direct precursor to the Yugoslav dinar. The first banknote was published in 1884. It was made on the basis of a reserve 100 francs' banknote cliché, held by the National Bank of Belgium. This is how the creation of the Yugoslav dinar can be considered as an "offspring" of the Belgium franc and its parallel life-story. As the Belgian franc took part in the Latin Monetary Union (1865-1927) at that time, we become aware of how extended historical and social narrative can be accessed. The imagery of banknotes serves as a vehicle to uncover a landscape of the value representation, its history, its collapse and its challenges.



At the place in Bosnia where I grew up, we had our own dinar. The dinar of the Republic of Srpska was entangled with Yugoslav dinar. On the first edition in 1992, the shape above dominated the banknote's design. It represents nothing in terms of identity or philosophy of the culture; it just sits there, like a strong gravitational force, pulling us into nothingness beyond a black hole's event horizon.



## IV - Value

Why did they entangle the value of the two dinars? Because of the value's unpredictable behavior, we need to call for theoretical physics in order to understand such an over-inflated system. The value in such a system has certain probability levels, a capacity to simply disappear from one place and reappear in another. Moreover, Yugoslavia was like an atomic nucleus with six protons bent together, just as it is the case with the carbon atom – a building block of life. And you don't need particular imagination to understand what is going to happen when you split an atomic nucleus: it explodes...

### Problem I

If you were paid 1 dinar for one second of your work in February 1992, how long you would need to work for one dinar in January 1994?

### Problem II

You pay 1 dinar for the whole planet Earth in February 1992. How much of Earth could you buy for one dinar in January 1994?

### Problem III

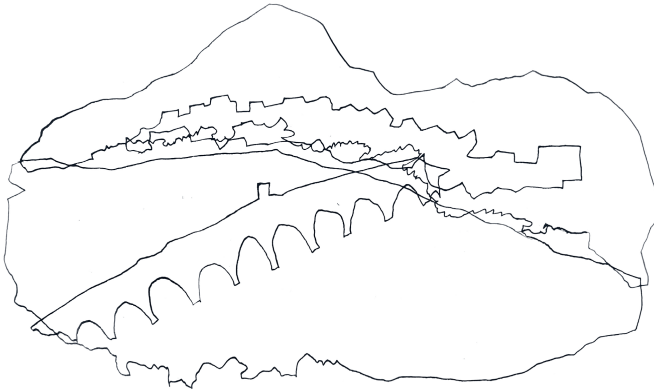
If you pay 1 dinar for a 1 meter long USB cable in January 1994, how long a USB cable could you buy for the same dinar back in February 1992?

-

*Constant: during the 24 months, between February 1992 and January 1994, the price level rose by a factor of  $36^{21}$ .*

## V - Value shift

Subsequently, they made a second edition of the dinar of the Republic of Srpska. The same design for all of the banknotes. There is an identity appearing, that of Petar Kočić, that of proud, intellectual patriotism. National heroes and monasteries started to dominate the banknotes' design in our still entangled rest of Yugoslavia. It was clear that we had passed through the wormhole into a different universe. In this new Universe, banknotes were no longer like flyers addressing some universal cultural values, but more like a ticket to enter the new Universe of the national cult as a value itself.





My beloved geometrical lathes and patterns are just floating around with no particular idea. The designer has lost interest in sacred geometry; he found no motivation to struggle with abstract meanings. Up until that point, everyone had already lost faith in money having any kind meaning.





## VI - Finale

My grandmother gave me her whole salary to pay three days of renting the Terminator 2 VHS tape. I will probably never feel so concretely ambivalent again, walking down with trillions in my pocket, bringing back the video tape. This geometrical progression of hyperinflation went so far, that in December of 1993, the government printed a single 500 000 000 000 banknote, which you could barely buy two liters of milk with. Deutsche Mark was used as a hard currency. In January of 1994, we switched back to Yugoslav dinar again, the new super dinar that tried to be entangled with German mark. It kind of worked for a short period of time, at least in terms of slowing down the freakish hyperinflation.



## VII - Irrational number

We may ask ourselves how is it possible to stop hyperinflation just like that. A mystery of irrational numbers, maybe? Or is it a confirmation that we entered a very new, extraordinary low entropy state of the Universe? Few years after the war ended, a peaceful and developed West had created a new type of money for us – the convertible Mark, which is now artificially fixed to the Euro at a ratio 1 to 1.95583. Yes, this really sounds like an irrational number and sadly, it's a very short irrational number indeed.

Hence, no wonder why the Bosnian economy is going absolutely nowhere. It's being locked in and spinning within that short irrational value with no real capacity to deliver any creative inflation.



Solutions to the problems:

- 1) You would need to work 31,709 billion years, it is some 2315 times more than the age of our universe. In 2013, Planck measured the age of the universe at 13.82 billion years.
- 2) You could have 1.658944444 kg of the Earth, a rock that can fit into your hand. The current best estimate for Earth's mass is  $M = 5.9722 \times 10^{24}$  kg.
- 3) You could buy a cable long enough to connect to a device anywhere in the Andromeda galaxy, i.e. 2.5 million light-years away from Earth. Your cable would be 3.5 million ly long (1 ly = 9,461 trillion km).

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## **Pictures**

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*Hyperinflation*, video-essay stills, HD video, 00:08:36, 2018

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*Hyperinflation*, video-essay still, HD video, 00:08:36, 2018

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Based on portrait engraved on the Girl banknote, *Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (detail), 12x3m, Indian ink, 2018

[Page 206 – more info already on the page]

*Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (details), 12x3m, Indian ink, 2018

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*Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (view), 12x3m, Indian ink, 2018

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*Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (view), 12x3m, Indian ink, 2018

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*Hyperinflation*, video-essay stills, HD video, 00:08:36, 2018

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Detail based on Mehmed-Paša Sokolović Bridge in Višegrad (BiH), illustrated on 5 thousand dinar banknote from 1991, *Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (detail), 12x3m, Indian ink, 2018

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Detail based on guilloche of 5 million dinar banknote with Karadorđe Petrović, *Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (detail), 12x3m, Indian ink, 2018

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Detail based on guilloche of 500 thousand dinar banknote with Dositej Obradović, *Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (detail), 12x3m, Indian ink, 2018

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*Offset matrix for portrait and guillochis for the 500 000 000 000 banknote (December, 1993)*, lasercut engraving, 30x21cm, 2018

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*Visualization of inflation of dinar banknotes (1884-1994)*, drawing installation (view), 12x3m, Indian ink, 2018