

ABSTRACT

What, in the end, is money?

It slips between our fingers with the crisp whisper of authority. It gleams under lamplight with the polish of trust. Its perfume—faint but unmistakable—carries the scent of safes, vaults, and something older still: **obedience**.

We earn it. We hide it. We borrow and beg for it.

We pray to it in ledgers and spend decades chasing its fleeting shadow.

But behind the metallic thread and watermark, beneath the solemn faces and embossed crests, there lies a quieter truth. A truth most prefer not to name.

Money is not real.

Not in the way rain is real, or hunger, or grief.

It is a shared hallucination, carefully engraved, then passed from hand to hand in solemn ceremony. And this book - this careful inquiry - is an attempt to peer into that ceremony.

From the flicker of early barter fires to the industrial thunder of printing machines that echo like cannons in marble halls, these are the untold stories of money: of the hidden chemists and quiet ministers, the counterfeiters and conjurors, the dreamers and deceivers. Of those who toiled in secret to make us believe, and those who, with a practiced eye and steady hand, saw straight through the illusion—

You will enter chambers where laws are signed in ink invisible to the people. You will walk the linoleum corridors of modern mints and stand beside soot-smudged presses that breathed false hope into nations. You will meet men who forged not merely banknotes, but the very idea of trust.

This book is not merely about currency. It is about belief—and the hands that shaped it.

Meticulously researched and written with the cadence of a mystery, it is meant to be read with care, as one holds an unfamiliar banknote to the light: not to assess its worth, but to wonder, quite simply, what spell it was meant to cast.

Available in both e-book and special illustrated editions—

for those who still trust what they see.

CHAPTER SIX: MARCO POLO

In which a Venetian glimpses the future—and Europe chooses not to believe him

The year was **1295**, and the port of Genoa heaved with its usual clamor—sailcloth snapping in the breeze, ropes creaking beneath laden cranes, and gulls shrieking above the din of quarrelling merchants and barking sailors. Amid this discordant symphony, a single, unremarkable vessel slipped into the harbor—its sails stained from long winds, its hull scarred with distant salt.

There were no flags unfurled, no golden treasures set on deck. Only a few weary men disembarked with the poise of those returning from somewhere that existed more in memory than in maps. Among them stood a man of lean frame and steady eyes—neither soldier nor noble but bearing the quiet weight of something hard-earned.

His name was **Marco Polo**.

He carried no spoils, no ivory or rubies to dazzle the customs men. What he bore instead was etched in thought: observations carved into the grain of his mind, recollections not of isolated marvels, but of systems—rituals, networks, patterns—some so refined they defied description. He had crossed ridges sharp enough to tear hooves, and deserts where silence pressed like wool against the ears.

He had slept in palaces and yurts, eaten at the tables of governors and beggars, and returned not with gold—but with something far more difficult to measure.

He had seen an empire governed not by metal, but **by paper**.

Nearly twenty-five years before that return, Marco had set out from Venice with his **father Niccolò** and **uncle Maffeo**—merchants whose instincts for navigation rivaled their appetite for trade. Their journey began not in conquest, but in diplomacy: a voyage to the court of the **Great Khan, Kublai**, grandson of Genghis, and sovereign of lands that curved from Arctic ice to the shores of Java.

The route they traced was no fable—it was brutal and real. Mountains that swallowed the sun. Rivers whose names faded with each dialect. Markets that spoke in three tongues at once. When, at last, they arrived, it was not the jade towers or the choreographed armies that arrested Marco's gaze.

It was a slip of bark. Small. Mulberry in origin. Stamped with the weight of law:

Money, they called it.

But not the hammered kind. Not coin nor bullion nor metal alloy of any sort. It was paper—pressed, dyed, sealed. And it moved people.

He watched, half in disbelief, as entire shipments of silk, spice, and incense changed hands with nothing more than the exchange of these printed sheets. Caravans were bought. Taxes were paid. Soldiers were compensated. Debts vanished with the flutter of a scribe's hand. No weighing, no measuring, no clinking reassurance of silver. Just ink.

And the power behind it? Not bullion in a vault. Not even the whispered promise of exchange.

Only the word of the Khan.

Fig. 25: Kublai Khan in the Catalan Atlas (1375)

Here sits Kublai Khan—Holubeim, the Great Khan—enthroned not in palace or poem, but on parchment. Cloaked in regal green, crowned in gold, scepter in hand, he presides over a map that once attempted to compass the world. The caption declares him richer than all other Emperors combined, flanked by twelve thousand horsemen, his Empire drawn not only in blood and borders—but in ink. A sovereign of scale, imagined by cartographers, feared by kingdoms, and remembered by time.



The imperial printing houses did not resemble forges. They were more like temples. Marco later described them as quiet, deliberate spaces where bark pulp—soaked and fermented—was pressed into thin sheets, dyed in blues and blacks, and cut to precise dimensions. These sheets bore the imperial seal in red cinnabar and inscriptions that forbade imitation in the most unambiguous terms.

To forge them was not merely to deceive—it was to defy the throne. And the punishment was as swift as it was final.

What struck Polo was not the force behind the law, but the obedience it commanded. There was no hesitation. Merchants accepted the notes as naturally as they accepted sunrise. Officials documented them. Monks blessed them. Soldiers saluted them.

The very act of holding one felt ceremonial.

Europe, weighed down with ducats and suspicion, had no parallel.

The **Yuan economy** stretched from the borders of India to the gates of Siberia. And it moved not because of gold—but because of certainty. Certainty that the

note would be honored. That the seal was genuine. That the word of the Khan had weight—whether printed on metal or mulberry.

And that certainty was printed.

It was not in a palace, nor at the helm of a Venetian galley, but in a Genoese prison that Marco Polo began to speak. Captured during a skirmish between rival city-states—a petty quarrel by imperial standards—he found himself behind stone walls, his freedom reduced to shadow and routine. But the mind, once opened by distance and wonder, does not quite easily.

There, in the dim confines of his cell, he found an unlikely companion: **Rustichello da Pisa**, a writer of romances and chivalric tales, whose imagination was as unruly as Polo’s memory was precise. One had the ink, the other the journey.

Together, they formed a pact of sorts—not of escape, but of revelation.

By flickering light and amid the murmur of jailers, Marco spoke, and Rustichello wrote. The result was no dry itinerary, no ledger of ports and tariffs. It was a manuscript of marvels, shaped not merely to record, but to dazzle—to impress the courts of Europe, to intrigue merchants and monarchs alike with visions of golden roofs and paper kingdoms, of tartars and tigers, of cities lit by lanterns that never died.

But truth, as always, demands more than a mouth to speak it - it requires an ear prepared to hear.

And when **Polo** recounted the wonders, he had seen—especially the strange sorcery of paper used as coin—they smiled, politely, skeptically. Some laughed. Others whispered.

Later, perhaps with a trace of both amusement and regret, he is said to have confided to a friend:

| *“They laughed at me... so I told them only half.”*

And one wonders—which half did he keep?

But Europe was not ready.

Bankers measured worth by weight. Merchants tapped coins on stone to hear their song. The idea that paper—so vulnerable to fire, so easy to fold—could bear the same authority as gold was, to most, laughable. Even those who admired Marco’s eloquence dismissed this portion of his tale as embellishment, perhaps

a misunderstanding. Surely the Khan still kept vaults of treasure. Surely no civilization would entrust its entire economy to bark and ink.

And so, they smiled, nodded, and turned the page.

They believed the silks. The spices. Even the snow leopards.

But not the paper.

Not the future.

And yet, despite the disbelief, the evidence refused to vanish. It grew—quietly, patiently—layer upon layer, like sediment settling into history.

In the eighteenth century, **Jesuit scholars**, ever-curious emissaries between East and West, began to uncover fragments in Chinese imperial archives. One entry, penned with the careful detachment of an observer, noted simply:

“At the beginning of the reign of Emperor Hongwu, there was so little metal money that even soldiers were paid with printed notes.”

They were not banknotes in the modern sense—at least, not yet. These slips of paper were certificates, official declarations of value, issued not by banks but by the throne itself. They bore seals and commands, and the promise—ever elastic—that somewhere, silver stood behind them. Whether it did or not was, in the end, immaterial.

Because the notes moved.

They moved men.

They moved goods.

They moved the empire.

Known as *jiaozi* or *feiqian*—the latter meaning “**flying money**”—they swept across the provinces with a peculiar grace. Some were so fine they lifted in a breeze. Others were folded into belts or sleeves, hidden beneath lacquered trays or between scrolls. They traveled silently, like confidences passed in a crowded court.

And the merchants? They did not ask too many questions. They measured with fingers, weighed with instinct, and nodded.

They used them—because they worked.

And in the realm of commerce, as in politics, function has a way of silencing doubt.

By the year **1023**, in the mist-veiled province of Sichuan, the state drew its line.

A Bureau of Exchange was established—its doors carved with imperial emblems, its purpose anything but ceremonial. Paper currency, once a merchant's convenience, had grown too powerful, too tempting, too lucrative to remain unguarded.

The notes themselves were marvels—printed in layers of ink, some bearing merchant identifiers hidden deep within the swirling patterns, like signatures whispered into the design. To the untrained eye, they were simply slips of color and promise. To the initiated, they were contracts. Risks. Weapons.

But where there is value, there is imitation.

The penalty for forgery was swift and final. Death—not exile, not imprisonment—was the only sentence deemed strong enough to preserve trust. The mere possession of counterfeit notes could draw suspicion, and suspicion, in that climate, was dangerous currency indeed.

And yet, greed is persistent. Private printers—once allies of trade—began to charge more than allowed, reaping wealth in margins inked too boldly.

The state did not flinch.

It did not outlaw the practice.

It claimed it.

Control, not prohibition, was the true doctrine of power. For in matters of money—as in matters of belief—it is not the act that matters most, but who is allowed to perform it.

In the **West**, such a thing bordered on heresy.

A coin had weight. It rang when struck, glinted in sunlight, bore the face of a sovereign and the heft of something earned. A note, by contrast, was feather-light—unmoored, insubstantial. How could that possibly hold value?

And so, Europe turned away.

While the **Yuan dynasty** inked its dominion upon mulberry paper, **Venice** measured wealth in ducats, heavy and reassuring in velvet purses.

While **Kublai Khan** decreed commerce in the language of symbols and seals, **French** peasants counted in chickens, pigs, and barley.

The revelation passed unnoticed.

And yet—like a seed caught in a traveling cloak—it took root. Quietly. Reluctantly. Almost with embarrassment.

It would take centuries. The fall of kingdoms. The smoke of revolutions. The shattering of beliefs as old as cathedrals. But one day, the West would follow.

By then, Marco Polo would lie buried beneath stone and rumor, his name etched in the back pages of old maps. His voice—half believed, half forgotten - still lingered, just beneath the surface of parchment:

"I did not lie," it murmured.

"I saw the future."



Fig. 26: Marco Polo in Bronze

In the square of Campo San Bartolomeo, beneath the Venetian sun, Marco Polo sits eternally astride his steed—cloak billowing, arm raised in mid-gesture, as though still mid-tale. The statue, a gift from the Chinese government, bears the signature of Italian sculptor Pasquale Civiletti—a tribute from East to West, from Empire to Republic, from memory to legend.

CHAPTER THIRTY-FOUR: THE BANKNOTE

It begins in silence.

The fibers have been selected with care—long-stapled cottons, perhaps, mingled with linen threads or synthetic strands woven by heat rather than hand. The inks have been weighed, stirred, and steeped like dangerous alchemy. Machines—heavy, precise, and resolutely indifferent—have awakened from their slumber, their rollers turning in slow anticipation. All is ready. The hall is hushed.

And then, from the stillness, the banknote appears—not as currency, not as convenience, but as composition. A symphony scored in pigment and pressure, calibrated to the micron. Not merely printed but performed.

The banknote is not what it pretends to be.

It does not live in a wallet. It lives in a theatre of trust. It passes hand to hand with the intimacy of a whispered message yet speaks to millions in the same voice. It is born of the state but handled by strangers. And though it may seem mute, every element sings.

Listen carefully and you will hear it.

Each note, each denomination, carries within its frame the rhythm of its era—the staccato of emergency, the elegy of empire, the confident march of stability, or the fevered improvisation of revolution. Its typography is chosen not merely for clarity but for tone: austere or florid, imperial or modernist, indifferent or flamboyant.

Its portraits stare from within the paper like forgotten monarchs waiting for recognition—or perhaps forgiveness.

Even in its most ordinary form, the banknote betrays the extraordinary.

A worn five-unit note, soft at the edges, may have outlasted a cabinet of ministers. A commemorative ten, issued on the centenary of a constitution, might circulate long after that document has been repealed. A one-hundred, minted in confidence and reform, could still be passing through markets as its nation's currency collapses beneath it.

Notes lie. Notes confess. Notes remember.

Hold one to the light.

There is something beneath the surface, just where the eye is trained not to look—an iris pattern, a latent image, a microtext curling like a whispered spell along the portrait’s lapel. These are not embellishments. They are defenses. Shields in the war of authenticity. Challenges hurled at the forger: replicate this curve, this shimmer, this change of hue, if you dare.

The forger rarely wins, and yet he always tries.

For each element added - each thread, each foil, each ultraviolet confession - there is someone in a darkened room attempting its undoing. And so, the banknote is not a static document but a living organism, locked in perpetual evolution, shaped not by art alone but by opposition.

Still, the note endures. And in its endurance, it grows wise.

It learns that value cannot rest on aesthetics alone. That beauty invites attention but does not command belief. It must convince without argument, must be both dazzling and familiar. And above all, it must survive—water, folding, the warmth of hands, the coldness of machines.

A banknote, properly designed, is a diplomat.

It introduces its nation at a glance, offers a handshake before words. It shows what is permitted - what faces are honored, which monuments are sacred, which slogans are repeated until they become incantations. Some countries choose idealism, showcasing progress and peace. Others favor menace—bristling generals, severe architecture, the geometry of obedience. But each tells its own truth, even when that truth is concealed.

That is what we must now explore.

Not only what the note shows, but what it hides. The subtleties of layout and placement, the decision to print in blue rather than red, the absence of certain symbols, the lingering presence of others long obsolete. We shall follow the banknote across borders and through checkpoints, through revolutions and occupations, in peacetime and betrayal, in inflation and reform.

We shall see what happens when a regime changes, but the currency remains. When the signature belongs to a man already dead. When a denomination is recalled but still whispers in the corners of illicit trade. When ink outlives ideology.

We will place the note beneath the microscope, hold it beside its counterfeits, trace the printing marks that define its legitimacy. We shall meet the engravers, the printers, the committee men who debated whether the watermark should face left or right—and what such a choice might imply.

We will turn the note in our hand, slowly.

And as we do, something will become clear.

We are not merely examining paper.

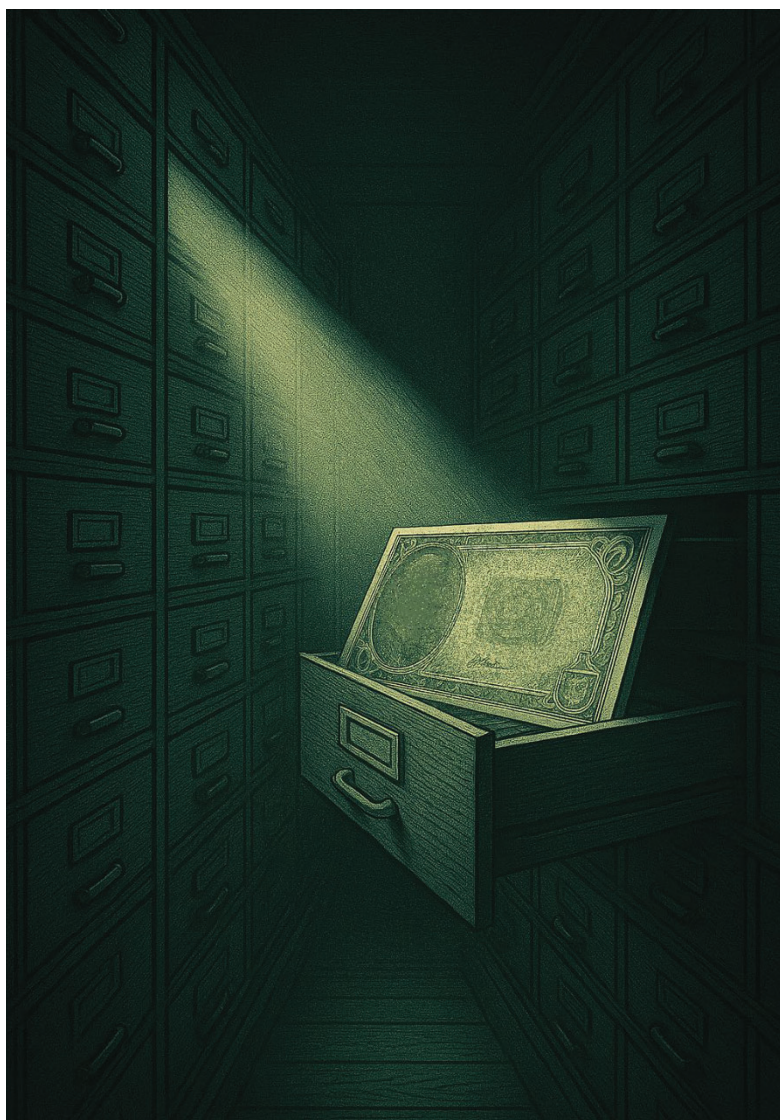
We are reading a nation aloud.

And in every line, in every fold, in every faint scent of metallic ink and dry fiber,
there is more than money.

There is memory.

There is identity.

There is history.



UNUSUAL TYPES OF MONETARY UNITS

Every case begins with something that doesn't fit.
Not a crime scene this time—but a marketplace.

And here, amid the ordinary clink of coins and rustle of notes, lie clues far stranger.

A hoofprint in dust.
A bead strung tight in silence.
A tooth grinning where no coin should be.

This appendix is not about banknotes. It is about their accomplices, their rivals, their shadows. The currencies that lived beside them—sometimes trusted, sometimes feared, always waiting in the wings.

Barter, often dismissed as primitive, was anything but. It was elaborate, deliberate—an economy as intricate as any ledger. Salt for survival. Silk for desire. Whale teeth for peace. Dog teeth for brides. Feathers, shells, cocoa beans, copper blades—each one an exhibit in the long trial of human exchange.

And yet, every exhibit tells the same story:
They did not last.
One by one, they were replaced.

Because every society, sooner or later, confronts the same mystery — not *what* is valuable, but *how to prove it*.

The answers were as varied as suspects in a crowded drawing room. Some glittered, some whispered, some simply endured. All of them left evidence.

Here, we assemble the case.
Salted fish that “rang” like coins in the Hanseatic League.
Feather coils that bound the price of blood in the Pacific.
Porcelain chips, bark cloth, squirrel skins, clay coins—each a testimony written not in ink but in necessity.

And in the modern file—souvenir notes cut from deer hide, advertising masquerading as banknotes, even “air money” traded through cell towers.

Every page is a clue.
Every object, a suspect.
And you, reader, must weigh their alibis.

So lean closer. The lamps dim. The archive door swings open with a sigh. Inside waits a line-up of strange witnesses—currencies that should never have been money yet were.

The investigation begins.

Advertising Money: A Driving Force in Commerce

There are currencies that buy.

There are currencies that borrow.

And then, there are currencies that sell themselves.

They called it “the engine of trade.” And in the 1930s, that engine purred not only in posters or newspapers, but in notes—slips of paper designed to masquerade as money, borrowing its authority, wearing its disguise.

Take Milton Bradley, the famous toy and game maker. In the Great Depression, when every penny mattered, they printed their own “banknote.” Not legal tender. Not counterfeit. But a Colonial \$8 note, dated February 17, 1776—an echo of America’s first fragile currency. It was nearly perfect, an advertising replica meant to slip into a pocket, to linger in a hand, to remind you of play in a world that had forgotten laughter.

Fig. 112: Advertising Note — Colonial \$8, 1930s (Milton Bradley; Currency Auction, 2000).



But sometimes, advertising sold something stranger.

It sold the **money itself**.

In 1929, America prepared to shrink its banknotes. The old “horse-blanket” bills were unwieldy, too large for wallets, too easy to fold into ruin. A new small-size currency was coming. And before the Bureau of Engraving released a single note, banks were already teaching the public what to expect.

Jenkintown Bank & Trust of Pennsylvania printed a demonstration bill. On its face, it carried the outline of the future. On its back, the reassurance:

“Keep this and show it to your friends... The exact size of the new money will be 6 5/16” by 2 11/16”. The Bureau of Engraving is working on the design now... Although the bills will be smaller in size, their purchasing power will not be lessened.”

A campaign not for soap, not for cigars, not for cars—
but for trust.



Fig. 113: Small Size Note Advertisement — Jenkintown Bank & Trust Co., Pennsylvania, July 1, 1929.

Advertising had slipped into money's skin. Sometimes it imitates. Sometimes it announced. But always, it sold.

And if money itself can be an advertisement— then perhaps every note in your pocket is already whispering a slogan:

Not for a toy.
Not for a bank.
But for obedience.

Because in the end, even the bills we trust most are just posters, printed to convince us that **paper is power**.

THE BANKNOTE'S SECRET

ALPHABET

Step carefully, dear reader.

For you are about to enter a chamber not of noise, but of meaning. A place where definitions do not merely explain—they unlock. Where words, once passed between candlelit printshops and whispered through gritted teeth in counterfeit circles, still echo with purpose.

This is not a directory.

It is a codebook.

A field manual. A ledger for those who wish not just to look at a banknote, but to *read* it—to peer beneath its ink, its fibers, its shimmer and silence.

Here, **jargon is camouflage**. A disguise worn by truth. A screen behind which printers hid their brilliance, forgers practiced their deceit, and treasuries whispered their warnings.

Moiré.

Microdot.

Mica.

Each term a small lantern in a fog of deception.

The counterfeiters knew this language. They spoke it with pressure, with precision. They understood the breath of a guilloche, the resistance of thermochromic ink, the rhythm of a machine that could replicate—but not invent.

And now, so shall you. Proceed.

Learn the tongue of the craft: the printers' dialect, the engravers' murmur, the slang of those who dealt in simulated trust.

Learn it not because it is curious, but because somewhere—
on a note in your palm, or a promise in your pocket—
the truth still hides.

Awaiting to be heard about.

Echo™ (The Tactile Project)

Echo™ is a system of intaglio-printed tactile marks designed to make banknotes instantly recognizable by touch, empowering the visually impaired to identify denominations without sight. Developed by SICPA with researchers and designers, it builds on the natural “banknote feel” to enhance both public authentication and inclusivity.

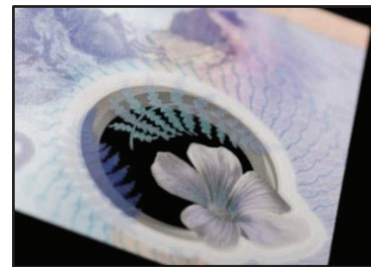


Fig. 210: Echo™ tactile marks — SICPA

Effect™ Cameo

Effect™ Cameo — A polymer banknote feature using dynamic, colour-changing inks embedded in the GUARDIAN™ substrate. Portraits within the clear window display vivid, shifting colors as the note is tilted, creating both a striking design element and a highly secure, hard-to-replicate feature.

Fig. 211: Effect™ Cameo — portrait in GUARDIAN™ substrate window. (IACA,2024)



Scrambled Indicia®

Scrambled Indicia® (Encrypted Images) - A security feature in which one or more images or texts are encoded within another image, making them difficult to detect without a decoding lens. When decoded, the hidden content becomes visible and can appear in different languages. Variants may use ultraviolet inks readable only with a UV decoder.



Fig. 212: Encrypted images (Scrambled Indicia®) — Left: Estonian 100 Krooni (1999); Right: Decoding with lens-filter applied to the main front design (Marcos Gianetto)

Hot Stamping



Hot stamping — A printing method used to apply holograms, Kinegrams, and metallized diffractive foils to a banknote. A heated relief die transfers the diffractive material to the substrate, often leaving a shallow embossed edge around the stamped image.

Fig. 237: Hot stamping (Bank of England Museum)

Left: Fragment of English £50 note (1994).

Right: Die used to stamp an aluminum foil patch (flipped, enlarged), the first to include such a patch

IGNIS®

IGNIS® — The first note of the Ex Nihilo black banknote series. Printed on the world's blackest substrate, it inverts traditional processes by printing light instead of shadow. The design celebrates fire: the sun rendered in reflective pigments, coal in white intaglio glowing under UV, blazing foil flames, and the alchemical fire symbol in SPARK®.

A secure microchip links the analogue note to the digital world, with its “denomination” set as 6000 °C — the surface temperature of the sun.

Fig. 241: IGNIS® - Ex Nihilo house note (2018) (IACA)



OVE with Polychrome Effect (AURORA®)

Optically Variable Element (OVE) with Polychrome Effect (AURORA®) - An advanced security element developed by Innovia Security as a successor to G-Switch®. Embedded within the Guardian® polymer substrate, it creates multiple colour-switching effects using semi-transparent pigments.

Under certain conditions, paired images appear the same colour, while under others, they switch to distinct hues (e.g., gold and blue). Visible from both sides of the note, especially when placed in a clear window.



Fig. 290: AURORA® — 1,000 Mauritanian Ouguiya (2014) (Innovia Security, Regula).
a — front side, Aurora element location



Fig. 290b — viewed in transmitted light; **285c** — reflected light at 45°: both elements appear similar in colour; **285d** — reflected light at 0°: left element golden, right element blue

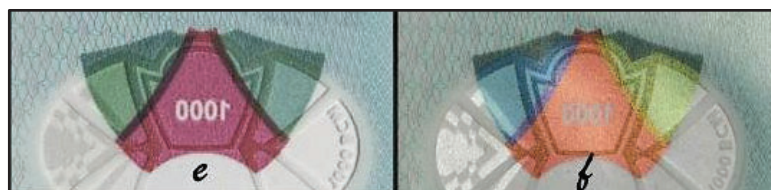


Fig. 290e, f — viewed in transmitted light

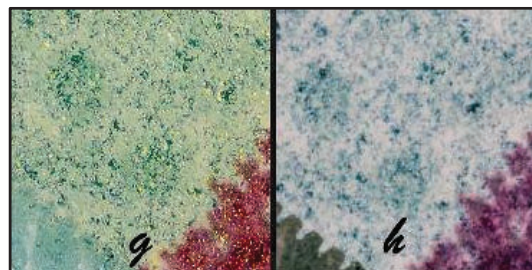


Fig. 290g — ink pigments in reflected light
290h — transmitted light view