

what nylon means

the moon and the factories

May-June 2014

a trip with images and words

on planets Fil and Yarn of the Radici galaxy

celebrating 50 and 40 years of terrestrial activity

this is not the usual company yearbook

no highfalutin sentences or glossy pictures here,

what you get instead are fragments, relics of inner dialog, broken sentences

and partial, transitive, crude, out-of-focus, liquid, blurry visual impressions

it is a paradox-attempt to express the reserved personality and deeply rooted

sentiment of this community-mentality, which has always put facts before words,

things before images, and tangible results before sweet promises,

this is a tale of two great factories

dedicated to the petrochemical production of nylon;

the narrative technique is a synthetic distillation

a kind of semiotic polymerisation:

from thousands of pages and images,

we extruded a new yarn

durable, lightweight, readable

like a new genre

of photo novel

Leone Belotti e Virgilio Fidanza

what nylon means

the moon and the factories

like two sisters, two factories, just few miles away,
ten years between them, two ways to do things:
one without interruptions, the other methodically,
two mentalities, two environments,
but one unique character
like the river
serio(us)

one valley
two factories
and three generations
which I will tell you about in three sentences:
my father worked in a factory,
when I was a kid I wanted to go to the moon,
my son does not yet know what he will do when he grows up

my son never heard a well spun discourse from me
nor did my father and grandfather speak much
but things and facts spoke,
once children would watch you,
they would see you work, now
our children watch
TV

my father
even after he got married
lived in his father's house,
three generations under the same roof
when my son started going to school
his mother and I, his parents, had already separated

he'll be eighteen soon, and I think I'll never see him again
not even a couple of Sundays a month:
the idea came to me while reading the news
open day Radici Yarn and Radici Fil,
40 and 50 years in business,
respectively

4 or 5 years ago, but it seems like yesterday, my father was still alive,
my son with the new mountain bike, bigger than him,
my father would point out the great factory to him,
and he would say, I'd like to go inside,

go up on top of the towers,
climb the ladders,
and see what they do inside, in those tubes,
it would be just like going into a videogame

I will tell him, Sunday I'll take you to see the factory
where grandfather worked, and we will go into
the departments where production is done
and he will then tell his mother,
Dad has gone crazy

if he were still that kid
I would tell him a comic book story
a trip on planets Fil and Yarn of the Radici galaxy
where the indestructible aliens nylon pa6 and nylon pa66 live

but he's already taller than me, eats more than I do, and he's hungry for knowledge
I will have to amaze him, excite his interest, make him think and have fun too,
take him on a trip back in matter and time
show him that this is a valley that spins,
and that the factory is still a well spun discourse

we'll start from the end, the final product,
from his sweatshirt, the dashboard of my car,
half of the things around you are made from synthetic fibres
produced in these two factories, using as raw material
the oldest and most natural, rock oil, petroleum

microscopic organic parts of unicellular creatures
that for millions of years have settled on the sea floor,
carbon atoms and hydrogen atoms, hydrocarbons

from the deepest resource, the strongest fibre, nylon
the most lightweight, artificial and also eco-logical,
and sustainable; you can use the soil to make flour, not cotton.





















what nylon means

what nylon means perhaps you already know,
I mean precisely the word nylon,
it is the acronym of "Now You Lose, Old Nippon"

it's a simple story, 75 years ago
just when your grandfather was born,
America feared losing the war in the Pacific,
thought to win easily with invasions of paratroopers,
but tonnes of silk were needed to make the parachutes
and the Japanese had closed the silk route, thus: what to do?

war unleashes genius, this always happens, from Leonardo
to Nobel, an overwhelming invention is never for noble purposes,
later on military technologies become affirmed in peacetime
and this also happened with the new artificial silk
called Nylon, synthesized in the Dupont laboratories

perhaps NYL originally meant New York + London,
and -ON the fibre ending, like rayon and cotton,
but then someone jokingly said, "Now You Lose, Old Nippon"

from that moment on, though apocryphal, that became the meaning
of the nylon acronym, marking the beginning of a new world
a new technology of artificial synthetic fibres
and the end of the old, elitist world of silk

in the postwar period, nylon meant nylons,
the modern woman was born with pantyhose
and man went to the Moon

in the same years, in Valseriana, the Radici family opened these two polymerisation plants RadiciFil in Casnigo and RadiciYarn in Villa d'Ogna, names that are now nylon production leaders in Europe

I know, the place is impervious, the scenery is difficult, closed, folded on itself, the factory is gray, grim, distressing, with rough, tough, laconic people but it is in places like these, and not in tourist villages, nor on television, that a smile, or even just a glance, has all the value of truth

if there are still factories like this, which do not close, it means that to date they face and solve more problems than they create or attract; the seventies, the strikes, the oil crisis, inflation, the new millennium, the ecological, environmental emergency, the social, political, economic, identity crisis

here is work, production, it is a strategic sector, but today no one would have the strength to set up a factory like this, not only financially, but with entrepreneurial belief, social courage

today no municipality would give you the permits, no entrepreneur would have the desire to invest, and perhaps young people no longer want to work in a company like this, but it is thanks to companies like this that in a few decades we have become a modern country

the history of these two factories, of these 40, 50 years is the story of how the work of a few thousand people has changed the way of life of billions of people worldwide, everyday objects, textiles, houses, cars, furniture, clothes.





















monomer and polymer

now we go in, but you have to put on shoes and helmet,
make sure people can see your visitor badge and always stay close,
and do not walk away, do not touch anything, and keep your eyes open

look at those big tankers, holding a liquid at 80° C
it is called caprolactam, it is an acid derived from oil
it is the raw material for the production of nylon

it's like making pasta, but instead of flour
you use caprolactam, which occurs in crystals
and is colourless, odourless, tasteless, just like vodka

from the autoclave the caprolactam goes in the polymerisation towers
then the spider from which the thread comes out, a tour de force during which it is
pumped, boiled, cooled, extruded, spun, stretched and finally rolled up

but above all it is polymerised, the monomer becomes polymer,
the hydrogen and carbon atoms form stable chains
that make the nylon perfect for ropes and wires

washing, drying, oiling, ironing,
crimping, heat setting, cutting, packaging,
and first of all: the cogeneration of electricity,
and at the end: the treatment of waste water, and fumes

the nylon filaments exit the spinneret like invisible hair,
they have a diameter ranging from 0.2 to 0.35 mm
300 °C is the temperature at which they are extruded
200 bar is the spinning pressure in the spider
250 Km/h is the winding speed

the degree of orientation of the polymer chains
determines the names, performance and use of the yarns
LOY is low oriented yarn
POY is partially oriented yarn
FOY is fully oriented yarn
HTY is high tenacity yarn, the strongest
BCF is bulk continuous fibre, for carpeting

RadiciYarn is
30 production lines
2000 winding positions
80,000 kg of coiled yarn a day
approximately 12 million kilometres of yarn
equivalent to 24 trips to the moon

in the finished product, there is only one way to distinguish
a nylon thread from a thread of silk: burning it.
If it condenses into a ball, it is nylon;
if it catches fire, it is silk.





















now you saw, now you know,
if you work at the factory, you are not flashy
you don't show off, like in other jobs, but you have more dignity,
and this means a lot, although it is difficult to tell,

there are seemingly two places, and even physically,
right side and left side of the valley,
but in reality they are one, it is one

years, decades, centuries,
the landscape, the mountains, the forests,
the soil, the water, the air we breathe, the people,
and the first word that you find in every résumé
before honest and worker, is the river, serio(us)

and like a joke, or an outlet, an escape,
mid-course through the river serio(us), at ponte nossa, is the valley of the river rice,
but it's not funny, because going to nossa, in the middle ages,
meant selling oneself into slavery to pay off one's debts,
now you know the etymology of nossa, the place name

this is a valley that works, and spins, always, for centuries,
if you go to the Basilica of Gandino museum, you can find things
that they can only dream of in the fashion district

but limiting ourselves to modern industrial history
we must start from the late eighteenth century, with the legendary Rudy,
a German, a soldier who, between a Napoleonic war and the other,
brought to the Gandino valley the cotton-jute scrap technique
which makes a gray, rough *coérta* or blanket with minimal warp and weft

from *coérta* came *coerti de Lef*, blankets from Leffe, with their *scötöm*, nicknames,
Pistrì, Scegolì, Pédrèt, which went through Italy, the wars,
misery, decades, techniques, looms, fibres, trade
cotton, silk, hemp, viscose, rayon, nylon

Capponi, Gelmi, Martinelli, Pezzoli, Servalli, Radici,
from the loom in the house and the cart to the global markets,
from the small workshop to the big factory

today we control the entire chain:
it is the story of a valley that for centuries
in everything, in every enterprise
has been showing the same nature
it's all in two words:
serio(us) business.





















roots that speak (45-56)

in the Twenties Pietro Radici was a blanket peddler,
in the Thirties he opened his first store in Monza, then another in Milan,
in the Forties he took over from Capponi the best weaving mill in Leffe,
in the Fifties he opened his first carpet factory, more would follow,
in the Sixties the most coveted recognition: Knight of Work

his son, Gianni Radici, began working at seventeen, he marked
the turning point of industrial development, artificial fibres, nylon
in Valseriana: RadiciFil was inaugurated in 1964, RadiciYarn in 1974

Gianni Radici used to say, *I need money to create jobs*, and followed a very simple principle: in everything that you do, even a race between friends, you have to compete, because from that comes wanting to improve

his son Fausto Radici would come into the factory and say,
we have three minutes to plan the next five years
but Fausto Radici for me as a child was a champion skier, a myth

reactive as a cat, very fast, the most nervous of the slalom skiers,
in Campiglio, how wonderful to make it to the finish line before Thoeni, Gros,
and before the one god of modern skiing, Ingemar Stenmark!

he could contemplate a starry sky, the sunrises and the sunsets,
and used to say, *surely I am a big optimist*, but that sensitivity that was his wealth at some point pushed him against an insurmountable wall

you die in so many ways, due to misfortune, an illness of the body, or soul: when we remember those who died, we do not want to remember their death, but their life and ideas

*ecology is a concept inherent to economic optimisation:
my ambition would be to make a book, not a catalogue, but a book,
trying to learn something more from this experience, some thoughts*

you know, I talk about Fausto Radici to tell you about a precise season
an idea, a vision of social, cultural, shared enterprise
and that idea, that quest for a more advanced balance,
has now become an urgency, a need for all

having a broader vision, local and global,
has become the way of development of the Radici Group,
first horizontal diversification, products, markets,
then vertical integration of the nylon chain, and therefore
entry into new sectors, from textile machinery to energy

controlling the supply chain means being responsible
for the entire lifecycle of the product, from raw materials to recycling,
from respect for the environment to correct communication

*being a European leader means paying attention not only to the budget
but also to the social, ethical, energy and environmental budget*

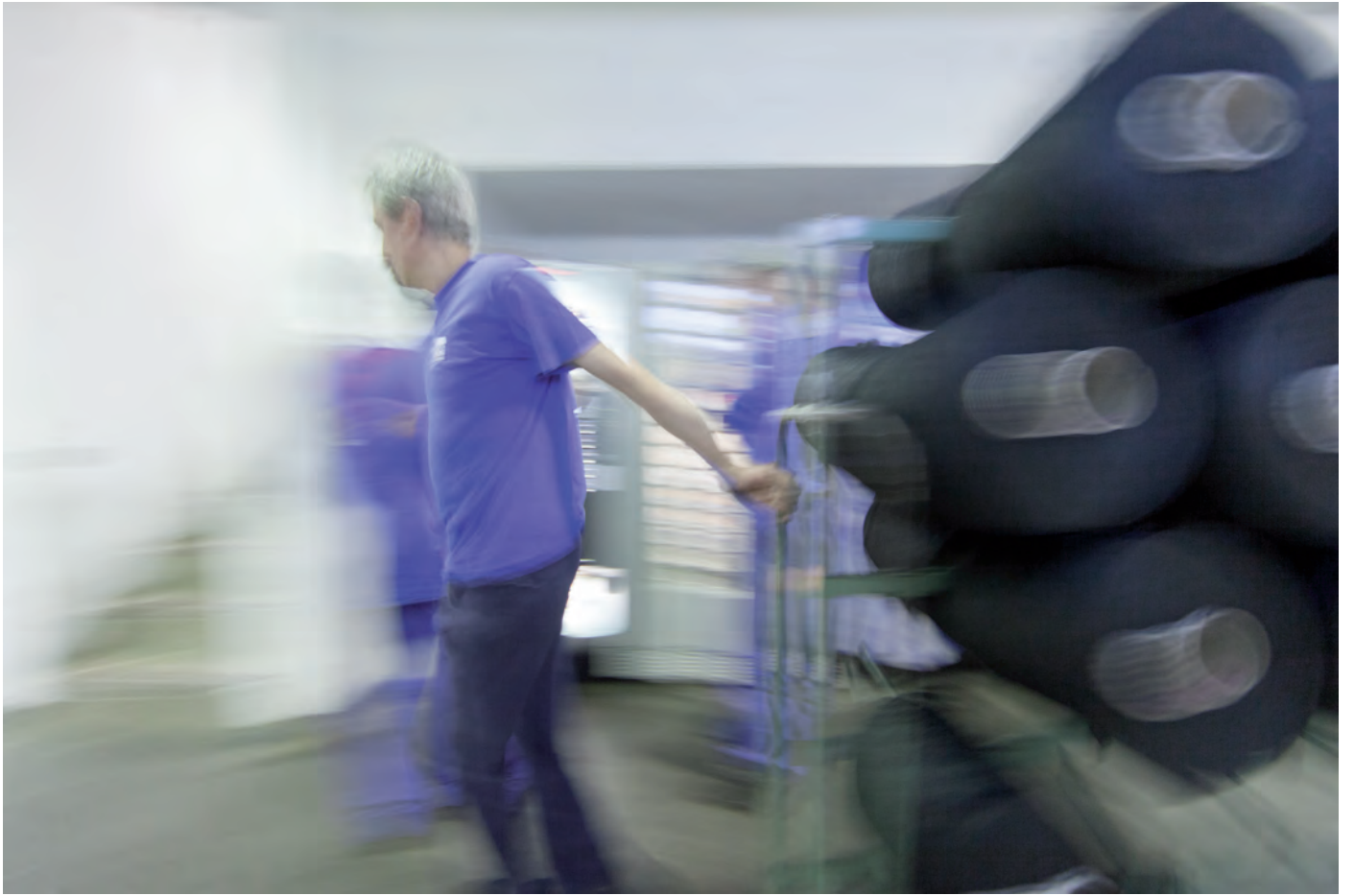
*the universe, nature are made up of chemicals
the earth is a system of limited resources and complex reactions
we are the first aware proponents of a sustainable world-economy*





















words that stay (57-70)

to understand a story
there are places to see
people to listen to
and things to read

3000/three thousand BC
*Téchne loved Tyche
and Tyche loved Téchne.*
(Agathon, Nicomachean Ethics)

Téchne is calculation, rational control, construction, technology
Tyche is randomness, wild gambling, dissipation, fire,
they love each other to death, and eventually Tyche dies for Téchne
and the history of Western philosophy begins,
and the triumph of technology without love.

400/four hundred years ago Galileo Galilei wrote, *the universe is a book
that is open before our eyes, which one cannot understand
if one doesn't learn the language and characters in which it is written.*
*The universe is written in the language of mathematics and geometry
without which we wander around in a dark labyrinth.*

200/two hundred years ago Denis Diderot said:
*the chance of generating the universe fortuitously
is extremely small, but the difficulty of the event
is compensated by the almost infinite number of probabilities.*
In 1995, C. Guaita engraved these words by D. Diderot in a brass bar
15 metres long, which he then embedded in the square of the factory.

50/fifty years ago, A. Warhol said, *I would like to be a machine.*

20/twenty years ago, A. Barzel wrote, *aversion to any polymer, without really knowing its inherent qualities, has perhaps some relationship with aversion to contemporary art.*

20/twenty years ago, talking about workers, M. Bettineschi said, *what is special, daring, difficult to an artist is a matter of daily life for workers: moving, cutting, assembling, transforming materials with simplicity.*

20/twenty years ago, F. Iona said, *a factory is a place of perdition, where ability of expression is denied, but that is what allows you to conquer yourself.*

20/twenty years ago in Villa d'Ogna Japanese artist H. Nagasawa established the average weight of a human soul to be 21 grams and calculated the net weight of the soul of the factory to be 800 kg (equivalent to 40,000 persons calculated over 40 years)

he then designed 4 large 200 kg steel plates and bolted them in the edge of the office building, actually supported by the balance of forces given by the shape which makes them in fact devoid of weight as if they were floating filaments from a spinneret

this work is called *Gap in time*,
you perceive both the strength and lightness
of those plates, like monomers turning into polymers

and looking at this work, you can even think that
Nagasawa's filaments are lifting Japan back up
Nagasawa's Yarns Lift Old Nippon
as an acronym: nylon

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