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Creative Food Cycles Experience

Goa CFC-festinar: a virtual banquet
for an innovating research celebration

PhD course in
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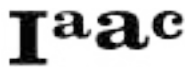
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#3 | Creative Food Cycles Experience

Goa CFC-FESTINAR: a virtual banquet for an innovating research celebration

CFC (Creative Food Cycles) covers different scales and levels of action (and a socio-cultural activism) from production to distribution, from distribution to consumption, from consumption to disposition (and re-production) trying to promote a **strategic integration**, innovative and fresh at the same time, from the territorial and urban scale to the scale of the creative-social celebrating event or creative-design product, in which the factor “**food**” as a **productive** indicator takes on a priority meaning as an inducing agent of new **sustainable and innovative processes** at the same time.



Università
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***I
INTRO
APPETIZER***

***The CFC
Background.
Celebrating Food
as a new creative
matter***

CFC–MULTISCALAR CHALLENGES

Celebrating Design, Enjoying Research: an experiential Creative Food Research

The new contemporary multi-city, the fractal, irregular and networked *poly-polis* (Gausa, 2018), needs the landscape, as a new operational and relational ecoand infrastructure, beyond the old topic of the “green gardening open space”. This “in-between” transversal landscape needs, in turn, agriculture as a mixed-use activity and food as a virtual hyper-matter, both able to preserve the landscape itself.

Keywords:

Geo-urbanity, Multi-Cities, Operational Landscape, Land-Links, New Agriculture, Hyper-Food, Proactive Sustainability

Agriculture (especially that developed in low or medium intensity situations) requires, in fact, a new multi-level definition capable of going beyond its Primary Condition (a programmatic and diversified mixed-use associated with its goods and crops, but also with agro-tourism, km0 hospitality and/or gastronomy, energy generation, digital manufacturing, technical research, etc.) to ensure its own resilient livelihood capacity.

And these multi-programmatic condition needs evidently FOOD understood not only through its basilar alimentary (and eating) function but as a multi-productive matter; a hyper-matter linked with new circular processes.



0– CFC, *CrEATing* Framework

CFC (Creative Food Cycle) covers all these scales and levels of action (and a socio-cultural activism) from production to distribution, from distribution to consumption, from consumption to disposition (and re-production) trying to promote a strategic integration, innovative and fresh at the same time, from the territorial and urban scale to the scale of the creative-social celebrating event or creative-design product, in which the factor “food” as a productive indicator takes on a priority meaning as an inducing agent of new sustainable and innovative processes at the same time.

In this context, on December 11, 2020, the first Creative Food Cycle Festinar was held; an event conceived as a menu of experiences, sensations, opportunities and shared stimuli so similar to our contemporary diversified multi-urban contexts.

This event culminated three years of works, meetings, researches and exchanges developed in a really complex and hard time; the time of the COVID pandemic, the forced confinement and, often, the involuntary isolation.

Just the opposite of what the CFC Project (and the Creative Cities European Program who has financed it) wanted to favour: a project designed for a joyful and shared, technical, sensorial and creative co-participated innovation; in which the collective global exchange would have to be as important as the local complicity or proximity; the pleasure of experimenting as much as the pleasure of enjoying; the distance meeting as well as the interaction in synergy; the virtual as well as the real... and of course, of the sensual.

All of this related to the ability of FOOD to acquire important multiple and, also, “multi-urban” dimensions (understanding urban not only from a new strategic urbanism but also from a new sensible urbanity).

A new dimension related with the territory, with the ecoand agrosystems; with the new spaces for economic and social exchange; with the new collective scenarios (and social behaviours) and, at last, with a new design, multi-programmatic, multi-processual and multi-scalar at the same time.

The CFC Festival had to be the playful, experiential and experimental culmination of this long *crEATive* trajectory, picking up a term coined by Emanuele Sommariva (Sommariva, 2015).

An Event in which Design should be celebrated and Research enjoyed together, near and close.

A multiple experience with conceptual installations, selected prototypes, innovating design models, participated workshops, enriched with the varied contributions of keynote speeches, artistic performances, stakeholders’ interviews, exchanges with visitors and social network feedbacks, in an intense open-source interaction, mixing real and virtual formats.



It was not been possible to do ALL OF THIS physically. Therefore, it was done on-line, without losing all our ambitions and vocations oriented to show (and creatively express) varied and experimental shared researches... from a clear desire of a social and transversal interconnectivity.

We have pointed out the complex combination of innovative systems and experiences that have mobilised the CFC project; from agro-urban research to bio-technological innovation; from the economic dynamics of circular exchanges to a new social interactive capacity; from the design of new scenarios to the design of new processes; from the domestic scale to the territorial scale.

In effect, the new contemporary and territorial multi-city itself, those fractal, irregular and networked *poly-polis*, needs a new interpretation for an operational landscape understood as a new eco-systemic infrastructure (beyond the old topic of the “green or semi-natural open space”).

This “in-between” *transversal-landscape* needs, in turn, Agriculture to ensure – many times – its own positive and relational preservation, conservation and dynamization.

Agriculture (especially that developed in low or medium intensity situations) needs a new programmatic and innovative diversity associated not only with its “primary” definition – with its uses and crops – but also with a new secondary – and tertiary – potential.

A potential linked with new roles, functions and mixed-programs, able to ensure its resilient capacity (km0 agro-tourism, hospitality and/or gastronomy; energy generation; digital manufactures; new technological production; green-industry and circular economy; research and innovation, etc.).

And these new multi-programmatic agro-urban dynamics need, evidently, FOOD as a prime matter; not only as an alimentary (or eating) matter but as *hyper-matter*, linked with the second life reuse, the agro and food waste recycle, the new bio-production, the permaculture (evidently) but also the techno-culture, the new fab-labs capacities, the 3D printing and the smart performances, etc.

The CFC (Creative Food Cycle) program has covered all these scales and levels of action (and activism) trying to promote a more complex, informational and strategic integration and interaction; innovative, rigorous, and fresh also.

Scales in which the factor FOOD has been interpreted as a productive and qualitative factor (and indicator) able to induce a new *Wise or Advanced Urban and Design Prospection* (beyond the simple Smart topic) alluding to this conjugation of systems and sub-systems (safety, water, health, mobility, economy, environment, tourism and evidently food...), called to orient and manage, in an integrated way, the sustainable development of our new *multi-, interand* transurban – and *rurban* – hybrid scenarios.

it is on these scales that we want to reflect now.



- ◀ Parco Agricolo Sud Milano, 47.000 ha, 61 comune, 2005.
- ◀ Barcelona, Strategic Director Plan, 2011. Green agro-corridors. Ajuntament de Barcelona (Barcelona City Council)

1. *Multinter* approaches: fractal multi-city, meshed territories and operational landscapes.

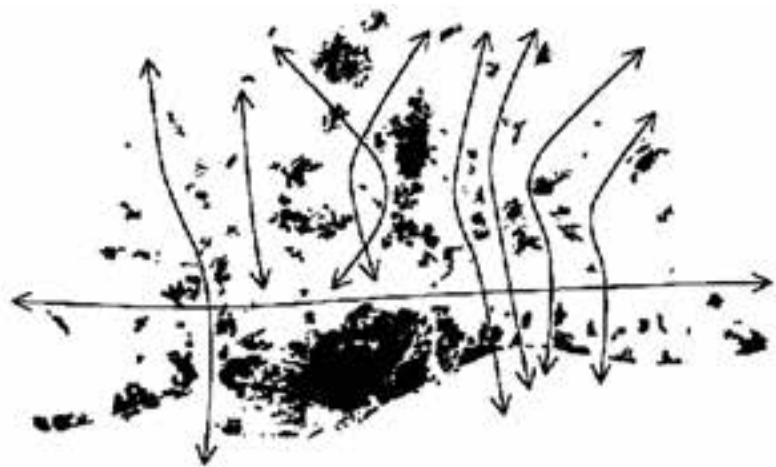
The last decades have experimented the emergence of a double equation based, on the one hand, on an increasing anthropization and the competitive positioning of cities and territories in a global economic framework – associated with the growing increase in mobility and internationalization of the soil market (Muñoz 2008) – and, on the other hand, on the appearance of a new cultural and environmental sensitivity, which required the need both to reflect on the new urban reformulation processes, and to initiate “significant”, innovative and qualitative identification operations in these global “circuits of flow and exchange.

The definition of possible *Multinter* strategies – *multi-level* and *inter-networks*, *multi-scalar* and *inter-nodal*, but also *multi-urban* and *inter-territorial* (Gausa 2009) – for the great challenges that arise in this exchange scenario, obliges to contemplate some of the great transversal themes associated with the key <re> factors (re-naturalization, re-environmentalism, re-cycle, re-structuring, re-activation and re-information) which today tend to mark the new urban-territorial agendas in this beginning of century (Ricci 2012, Carta et al. 2017, SCHRÖDER et al. 2018)

Focusing on European realities, and especially on the Mediterranean, this *geo-urban condition* (Gausa 2003, Gausa 2009) is even more explicit when it is influenced by strong values of a differentiated geography: rich in people and in dense spaces, and directly linked to huge spaces of living and exchange (antique *nodal centres* or new *intense cores*), particularly near, real, and interconnected, not only ‘virtually’(by the different digital communication networks) but also ‘materially’(by large infrastructural networks) and ‘environmentally’ (by new eco-systemic networks).

In this context it is necessary to re-consider the implicit and propositive quality of the dynamic potential offered by this urban-territorial scenario of mobility and exchange; as well as to link it with a new idea of landscape as an articulated and enhanced “field of forces” and “field of relations” (Muñoz 2008).

Barcelona Fractal City. Agricultural space as empty and sewing or joint in-between. Urban building plot sewing and geo-urban landscape grids interweaving





How can the disciplines of urban design and territorial planning operate in this new transversal and polyphonic scenario?

1. Proposing the implicit propositional quality of a new type of urban and interurban connectivity, addressed and balanced at the same time (Gausa 1997); diversified, articulated, and necessarily asymmetric in terms of values, structures, and land-uses that requires a relational and differential economic and urbanistic conjugation (Puig-Ventosa 2011);

2. Re-defining, consolidating, strengthening, and/or renewing (re-activating) the cores and the nodes of existing densities (*urban textures*), re-cycling and reinforcing their urban and nodal character, by providing new spatial and programmatic formulations, functional and—why not—morphological recycling operations;

3. Instrumentalizing the idea of landscape not only as *interstitial void*, as a leftover or as a pseudo-bucolic natural reservoir, but as an *operating system*: a field of movement and forces; a productive space— intra/in-between—for individual and collective uses and activities; landscape in this sense not only as a *characteristic space* but as a possible eco-systemic infra-structure *in* and *of* the territory (Gausa 2000, 2000a);

4. Understanding the new *glocal* city as a flexible structure of networked dense spaces, of articulated flows, and of intertwined landscapes. A possible structure, *infra-structural*, *intra-structural*, and *eco-structural*, but also *informational*, connected to a new dynamic and spatial *sensorisation*, and to an integrated management of flows, transport, energy, water, etc. linked with a new *intelligent logic*, bound to the new sensitivity of an *eco-advanced-smart* approach, able to connect and correct the resilient future of cities and territories (Gausa 2013).

In this ambitious context, the proposed contribution of landscape recalls a transversal and interdisciplinary vision, led by a strategic-sustainable spirit.

A comprehensive approach associated to the new challenges for the open space, the public space, and the *interactive space* (social, environmental, and cultural); to the active revaluation of cultural and natural heritage as host and entertainer at the same time; to urban-territorial planning and to the articulation of the contemporary *multi-cities* and their *trans-scalar* integration. The landscape contribution understood, therefore, as an active dimension of the contemporary city, where architectural, infrastructural, geographic, and environmental dimensions tend to exchange different conditions, situations, and ‘natures’; in a new strategic and systematic dimension of the city that is, today, *Natur*, *Rur* and *Urbs* at the same time—and that needs to re-inform its textures, and to re-naturalize its varied structures (Gausa 2012).

2. Land-Links, ReCitying

The new urban and territorial approach appeals today to a new mutable, dynamic, complex, evolutionary and networked *systematiCity*, more relational (transversal) intelligent (holistic) and imaginative (creative), which tends towards a new conceptual logic (more strategic and informational); a logic where the ancient “urban-sewing” or “urban-needlework” would not be only based on the continuity of the building plot(s) but on the capacity of a new integrating and interweaving network models (Gausa et al. 2003)

A logic capable of facilitating an interwoven orientation for areas of development, and for nuclear as well as for transfer points; but also, a more effective relationship with and of the landscapes (overcoming the limits between natural and artificial); and – in any case – a qualitative (re)definition of its main nodal tissues, this means a reuse and recycling of urban pre-existences, through a commitment towards a spatial, programmatic, and social *mixité* (Gausa et al. 1998).

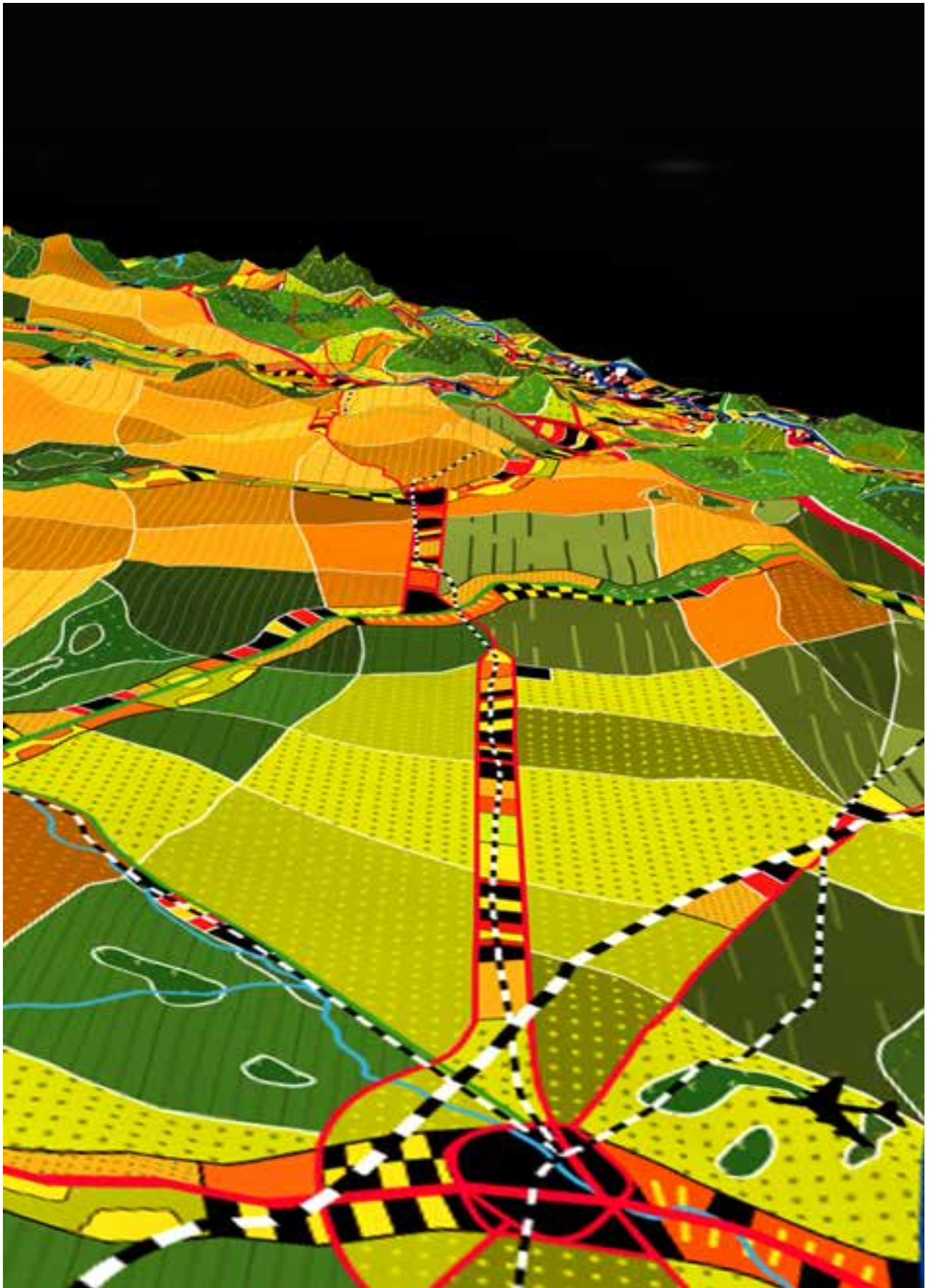
Models associated with the more and more active importance – programmatically intense in the exchanges – of a natural and (above all) semi-natural (agro-productive) landscape capable of promoting (coordinated in synergy with the different territorial mobility links) an interlaced orientation of the large *meta-politan* development areas (Asher 1995) with urban reinforcements and interurban conjugations.

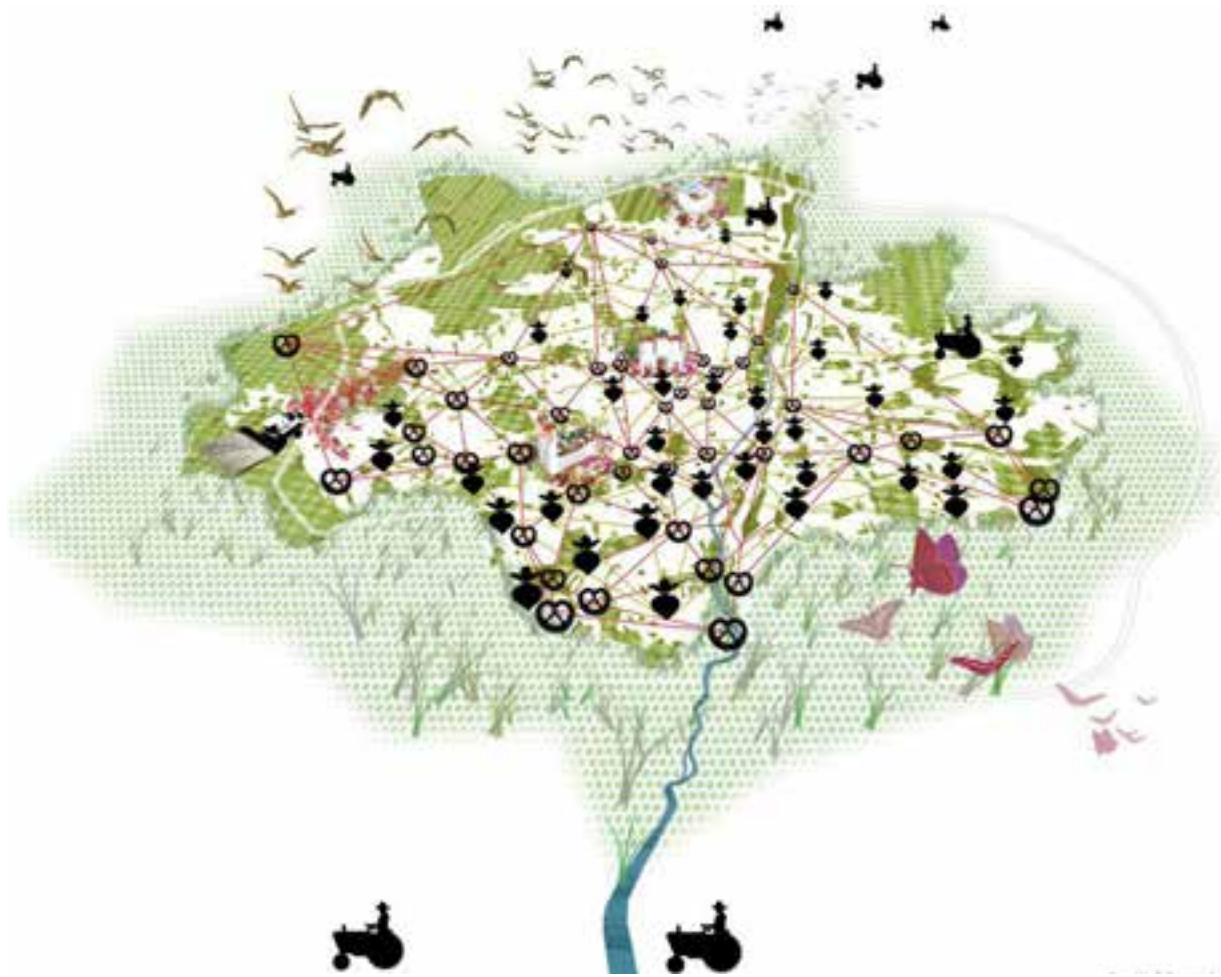
This type of new multi-urban governance (Puig Ventosa 2011, Gausa 2011), obviously requires a reinforcement, an enhancement and a qualitative (re)definition of its main nodal tissues and centres and, therefore, the reuse and recycling of urban pre-existences, through pondering strategies aimed at favour a spatial, programmatic and social diversity; but also, requires a more effective relationship with the landscape, and between landscapes, on the limits of encounter between natural and artificial.

Some recent works in territorial redefinition are articulated in this context of thinking and research, aiming to envisage new “operating systems”, that converge with the complex realities of *polyphonic* connections in which the actual territorial systems can maybe inscribed.

We have used, on several occasions, the terms *Land-Links*, *Land-Grids* or *ReCitying* (Gausa 2014) associated with these new dynamics. Terms susceptible to define possible strategies, integrated and interdependent, intended to ensure local and global developments, coordinated qualitatively at the large territorial scale and at the intermediate or intense (urban) scale: developments in which the new *multi-city* (Gausa 2019) would no longer interpret itself as a large “building extension” linked to a single mono-central, mono-referential or pseudo-radial reality, but as a possible multi-central (or polycentric) structure (Nel.lo, 2011); strategically adjusted, properly recycled, sensibly reoriented and intelligently re-informed.

BCN.CAT, Catalunya Land Grid. Barcelona / Catalonia, an integrated model of urban and territorial development (Hicat-Actar Arquitectura, 2003). General view and detail of the big agricultural central plane. ►





Jörg Schroeder & Research Team. Agropolis
München, 2010

The current urban prospection and its horizons of development need to reflect on this dimension of complex discontinuities, intertwined in a by a new relational geography: a networked *geo-urbanity* associated with a necessary inter-laced, inter-wined or inter-mesh concept – structured and evolutionary open – bound to combine intense movements and extensive developments (systolic and diastolic): from an ‘extra-urban territory’ we have to move towards an ‘intra-urban’ territory; from a “background” territory towards a network(ed) territory, from a passive territory to an active territory.

- Reinforcing the landscape(s) and consolidating the existing urban fabrics and nodal abbs.

- Connecting the landscape(s) and re-naturalizing the cities themselves.

- Articulating and coordinating the different infrastructural (and programming) links and networks.

- Meshing, in short, the various knitting and knotting “patch-matrices” of our existing territories in new planning models of integrated, multi-dense kaleidoscopic mosaics (Llop,2008).

Today it is a question of interpreting landscapes as infrastructures (and even infrastructures as landscapes); or, in other terms, infra-structures such as eco-structures and eco-structures such as, infra-, intra-, infoand trans-structures.

In any case, the territorial city can therefore be proposed as a “non-linear” structure of places and in-between-places; a complex set of conditions, situations, solicitations and information(s) combined in arranged or *agenced* (*agencés*, that is combined and conjugated) spaces (Deleuze-Guattari 1980) – more or less intense, more or less nodal but definitively poly-central – related to effective *inter* and *eco* landscapes combined with varied intertwining meshes: we are talking about a combinatorial and evolutionary dynamic system with conflicts, risks, stresses and threats, but capable of promoting a new and rich network scenario of multiple exchanges, interrelations and mixed-uses, offering also a possible multi-level “interconnections” between potentials, capacities, latencies and operative strategies.

It’s not more a question of compact models, neither of “poly-diffuse” models, but of possible “interlaced” systems, focused and articulated; intensive and extensive; capable of combining, within new territorial networks, density structures (urban centres, nodal fabrics), interweaving structures (connective links) and relationship structures (active landscapes) able to establish new urban-geographies or “*geo-urbanities*” (Gausa *et al.* 2003, Gausa 2009) that is, discontinuous multi-networked structures, aimed at spatial, functional and social mixtures (local and global), associated with a differential and assorted ways of organization for thus physical and virtual hyper-place (or place of places) that defines the complex metabolic, metaphoric and meta-morphologic definition of the n-City itself.



3. AC+. Agro-cultures, Agri-cities: The potential for a new *rurban* proactive development

In this sense, the evolution of these new urban-territorial city and the mutation of our own environments has produced in recent decades, in Europe (and in particular in the Mediterranean areas) a complex set of questions and research topics going beyond the traditional relationships “City-Landscape, Landscape-Nature and Nature-City”.

To the growth of the informal and informational city has corresponded, paradoxically, the sprawl diffusion of settlement spaces – more or less tending towards a dense and intense but discontinuous rhizomatic and fractal geometry – and, therefore, the necessary articulation, prevision and projection of corrective, concealer and resilient landscapes in which the role of agricultural and forest spaces can be interpreted as a fundamental (and as a potential founding) force of a new sustainable form of *dis-dense* (discontinuously dense) multi-city model (Gausa et al. 2003, Gausa 2009).

Consistent parts of the reflection of urban disciplines and territorial sciences have been dedicated, in these years to the reinterpretation of the role of open spaces (free spaces, semi-natural spaces, in-between spaces), closely related to agricultural production (active and/or in decline) and how they can become (re)generative elements for defining new paradigms in the construction of the new urban forms/formulations (Ricci 2012, Carta et al. 2017).

This change of perspective is consolidated and expressed in the growing awareness that agricultural and forestry landscapes have to play a role of plural, structural, articulated and polyfunctional character; for the work on this role, different competences and disciplines have to be involved, as well as various forms and sectors of policies.

The transfer from an oppositional reading between city and countryside to an integrated and intertwined reading, in which the *periand paraurban* territory can assume a vital and active role, with a *n-productive* function associated to creative of complex add-values, supposes a new kind of holistic approaches to land-use governances in these new *geo-urban* definition (Gausa et al. 2003, Gausa 2009); questions – and challenges – that arose in these patch-territory linked with new ways of planning and derived policies for a potentially *inter-urban* and *para-rural...* or *rurban* (Guallart 2014) development; challenges that require a new type of structural land-spaces necessarily called to combine primary and tertiary activities; agricultural production and technological production; environmental sensitivity and tourist attraction; private spaces and public spaces, etc.

The role of agriculture, in this interpretative framework, is hence fundamental, being one of the most decisive and transcendent uses of the soil – linked to the concept of “landscape” and basic for its conservation and for the efficiency of these new urban-territorial dynamic, multi-meshed and multi-matrix, integrated and interlaced systematicity (Gausa et al. 2017)

In the case of the most paradigmatic zones of the Mediterranean Latin Arch, agriculture generally represents an average of 35% to

◀ PABLL-BCN+, Agricultural Park of the Baix Llobregat, Barcelona: a park of parks (Actar Arquitectura-Gic-Lab, 2014). Territorial relations with the Big Natural Parks of the Pre-Coast.

◀ Albenga Glass City, Mixed-Used strategies and Agro-Urban structures.

65% of the geographical area, occupying only 1% to 5% of the working country's active population (AA.VV., 2006)

The importance of understanding agricultural spaces as operational landscapes – not only as productive landscapes but as multi-productive landscapes – supposes a new urban-rural vision of the contemporary (natural and artificial) city-mosaic and of the possible multifunctional and multi-programmatic condition of these agricultural spaces no longer conceived solely as “primary” spaces but as “complex spaces”(“green infrastructures”, “ecological corridors”, “natural matrices”, “wellness environments”, “innovative production scenarios”, “agro-touristic attractors”, etc.); spaces able to understand the landscape as a “system of eco-systems, in plural interaction” (Buonano 2012).

A condition linked to its basic agricultural-food component (Sommariva, 2015) but also connected to the social well-being, to the economic development, to the environmental and resilient urban quality and to a (new) technological and operational dimension, that is, to a consideration of agricultural spaces as possible *smart-landscapes* (CARRABBA et al, 2013) or “*advanced landscapes*”(Gausa 2012).

The conveyance of a new intelligent urban and *rurban* approach (beyond the pure “Smart-Planning” or “Smart Management”) alludes to a set of integrated systems and subsystems (safety, resilience, water, health, infrastructure, economy, environment, food, etc.), called to guide, oriented and manage, in a coordinated manner, the development and the sustainable growth of these new *multi*and *interurban* scenarios (Ratti 2016).

In this resilient and intelligent framework, urban and interurban agriculture can contribute to ensuring not only healthier and more efficient nutrition processes (related with algorithmic data-optimization of environmental and economic parameters) but also linked and shared dynamics associated to the energy and waste cycles, the water and matter consumption, as well as with a better management of environmental resilient answers, as well as to new playful-social interactions and to a patrimonial or cultural communicated identity: integral and integrated factors of a new multilevel approach to the capacities and potentials of these emergent *multi-level* and *land-linked geo-urbanity*; but also important keys of a diversified and plural strategy, oriented towards the creation not only of agricultural, but also of recreational, restorative and agro-touristic developments through a new projection of the pre-existing environmental and socio-cultural values (Sommariva 2014, Gausa et al. 2016, Tucci 2016).

In this sense, some basic research questions can be formulated around this new prospection linked with the agricultural spaces, their local tradition and their ability to survive and to adapt their role and characteristics according to the current transformation trends of this *glocal* and *rurban* scenario in which rural and urban are no more strictly separated:

1. Which could be the roles (and new identities) of the large (or sequential) agricultural landscapes (and land-spaces) according to their different definitions, characteristics and structures in these

new meta-metropolitan (or post-metropolitan) contexts, how could they be better linked with the big natural systems and how could they be designed according to their eventual definition as key elements of a “natural-artificial” multi-urban re-naturalization and of its infra-, intra-, eco-, info and transterritorial articulation?

2. In which way could be rethought the diversified neighbouring zones (functional, residential, commercial, eco-recreational and industrial), existing today within and around the edges of these areas, to encourage new positive interactions between agriculture, social recreation, leisure and innovative production, new mixing operations and users?

3. How could the different and varied flows related to the large and middle infrastructures (that delimit, cross or surround these spaces) be exploited, redirecting these flows in strategic, sensitive or slow ways able to configure new strategic eco-circuits and qualitative interventions?

4. How could these areas (of evident aesthetical, patrimonial and environmental values) be conjugated in the diverse equations between *interactive* scenarios (*ambiental*, social, and cultural), *active* scenarios (economical, material, and industrial) and *attractive* attractor-scenarios (touristic, recreational, experiential)?

5. How would be possible to maintain their agricultural vocation and their landscape values and, at the same time, how to “project” these spaces toward a new, innovative and operational condition – eco-industrial, eco-touristic and eco-resilient at the same time – interpreting this one as a catalyser of new urban and territorial processes of re-naturalisation and reactivation (ecological and economical)?

6. How could be reformulate and reinterpret the old notion of “food” as a primary product, combining it with other secondary and even tertiary levels of definition, related to the recycling of waste and productive discards but also with its reconversion (or re-use) oriented to the innovating research in pharmaceutical applications, cosmetics, chemistry, new biomaterials, bio-object designs and/or three-dimensional manufacturing, items associated to the increasing of new technologies and a new eco-construction and eco-design industry oriented to possible bio-temporary facilities and habitats, etc.

7. What would be, in conclusion, the evolutionary horizon of these different *in* and *in-between* agri-cultural and agro-territorial (semi-natural and semi-artificial, fragmented or extensive, highly productive or socially oriented) dynamic fields, considering their different socio-cultural mixed potentialities, capacities and identities in the framework of these new *Multi-City* and *Geo-Urbanity* that we have pointed out?



4. Prospection and Innovation: creativity in the centre of a (pro)active research

These questions have guided multiple researches associated to the prospective planning and social design laboratories of the UNIGE, from *AC +*, *Agri-culture*, *Agro-cities*, *BCN Llobregat multiAgro Park* to *Albenga Glass City* or *Med.Ned Agro.Coast.Cities* (Gausa *et al.* 2017, Canessa 2020, Tucci 2018, Tucci 2020) and recently the innovating actions linked to the *Creative Food Cycle* program (*Creative Cities European Program*, 2018) framing a set of urban perspective projects on contemporary multi-city and its relationship between different equation city-territory-landscape-architecture and resilience at the Mediterranean coastal territory as paradigmatic scenario of a new city/inter-city relationships that needs to systematize a proactive and referential set of prospections, strategies and concrete boarding operations.

All these researches have deepened the interactions between agriculture, city and coast in the littoral Mediterranean territories as paradigmatic keys for new territorial relations in *agro-metropolitan* and Mediterranean scenarios (*agro-med.nets*), with the aim to systemize the different key-studies in a virtual and prospective “atlas” oriented to formulate efficient strategies of development and of intelligent integrated planning, in these urban and rural areas where agriculture, environment, heritage, tourism (and other territorial potentials) can be integrated in holistic strategies: comparative analysis, evolutionary cartographies or operational programs form the basis of this evolved and recorded process able to be transferred to other metropolitan areas.

From the Costa del Sol to the Costa Almeriense, from the Costa Blanca to the Costa Dorada, from the Costa Maresme to the Costa Brava, from the Côte Camargue to the Côte d’Azur, from the Costa Ligure to the Costa Tirrenica or the Costa Palermitana, a seriation of varied and similar territories of middle cities (where old patrimonial backgrounds, lateral and tangential hydric courses, touristic offers and agro-cultural patterns are creating a virtual schematic and *dis-dense* (discontinuously dense) sequence of realities (and cases of study) in the Arco Latino, analyzed through the research *MedCoast AgroCities*; a prospection research that has permitted to propose new operational and integrated systemic strategies for the development of these Mediterranean *agrourean* and/or *rurban* areas” (Gausa, Canessa, 2018; Tucci, 2020).























































The transition from a strictly taxonomic reading between “city” and “countryside” to a more integrated and intertwined interpretation for complex urban and territorial developments, in which the old human-centred scenarios of mix-use communities, consolidated, essential and identity areas, and cultivated spaces (at all the levels) are giving the floor to more and more polycentric and anthropic scenarios of exchange (multi-dense, discontinuous and fractal with *in-between* built and empty matrixes), acquire a new holistic dimension that poses the need to question the current planning and the traditional 2d territorial zoning policies for

◀ MVRDV & The Why Factory “Common Ground”, Biennale di Venezia 2012

Giorgia Tucci & GicLab: Med.Net. Agrocities.
Atlas of middle mixed-agro-urban conditions

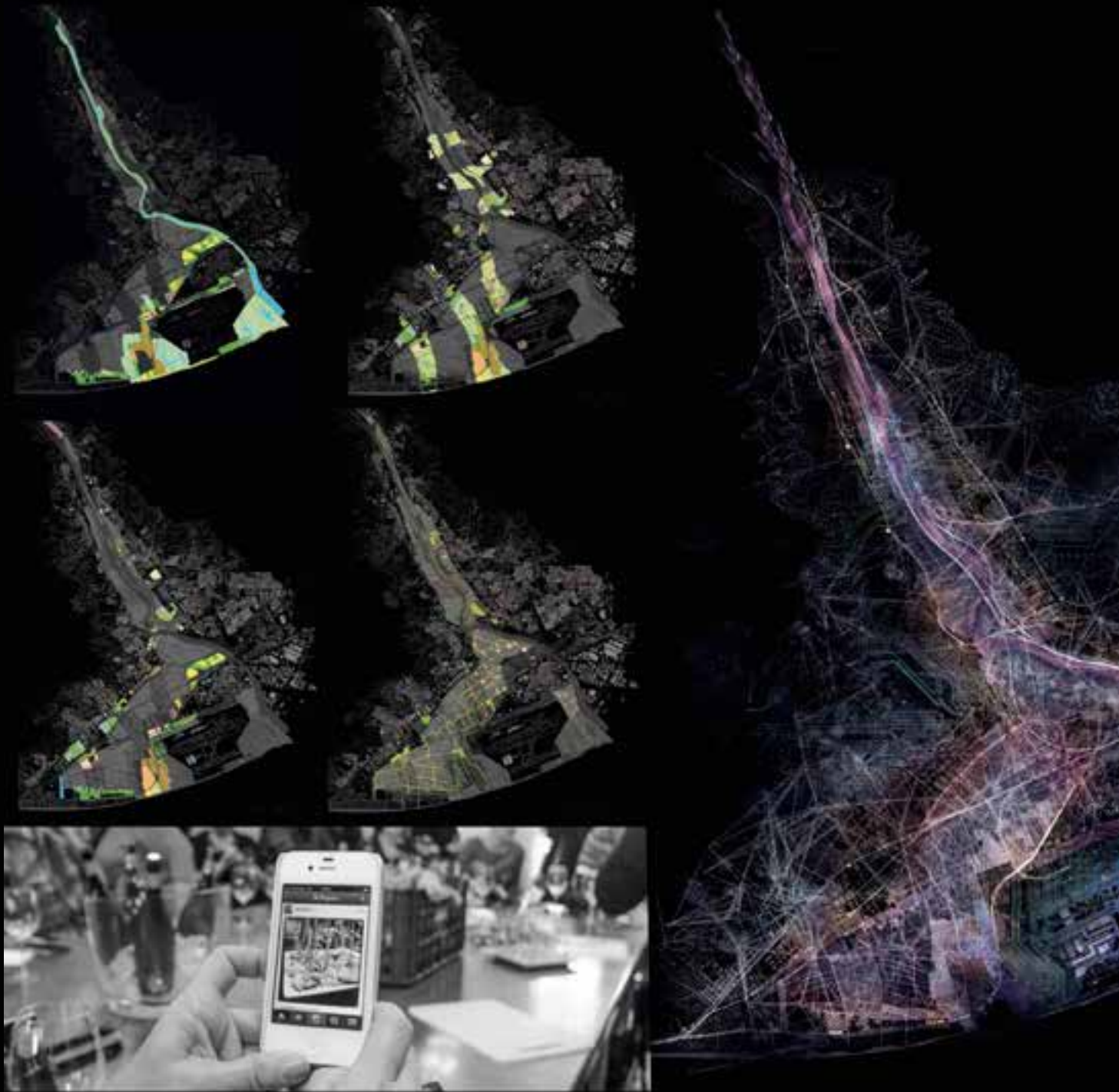




STUDY CASES	REGION/STATE	AREA km^2	INHABITANTS	DENSITY	AGRICULTURE	PATTERN
1. Adra 	Almería/Spain 	90.05 	24,670 (2011) 	273.9 ab/km^2 	ortofrutticola pomodoro "La Calada" IGP	
2. El Ejido 	Almería/Spain 	227 	95,560 (2011) 	420.9 ab/km^2 	ortofrutticola pomodoro "La Calada" IGP	
3. Duriana Nules 	Castellón/Spain 	47.2  50.5 	34,783 (2014)  13,442 (2014) 	736.9 ab/km^2  266.2 ab/km^2 	ortofrutticola alcornoque Castellón viticoltura vino de Callos	
4. Viveros Benicarló 	Castellón/Spain 	95.5  47.9 	28,337 (2014)  26,521 (2014) 	296.7 ab/km^2  553.7 ab/km^2 	ortofrutticola carfoglio di Benicarló DOP viticoltura vino de Callos	
5. El Prat de Llobregat Gual Castelldefels 	Barcelona/Spain 	31.4  30.9  12.8 	62,866 (2014)  46,405 (2011)  63,255 (2014) 	2002.1 ab/km^2  1501.8 ab/km^2  553.7 ab/km^2 	ortofrutticola carfoglio "Prat" IGP Benicarló del País IGP Llobregat del País IGP viticoltura vino "Penedès" DO floricoltura	
6. San Andrés de Llovaneras Prensa de Mar Alicia 	Barcelona/Spain 	11.5  2  9.58 	10,493 (2011)  28,163 (2014)  9,660 (2011) 	912.4 ab/km^2  1501.8 ab/km^2  1008.4 ab/km^2 	ortofrutticola Nagios "Prensa de Mar" DO viticoltura floricoltura	

communities, consolidated, essential and identity areas, and cultivated spaces (at all the levels) are giving the floor to more and more polycentric and anthropic scenarios of exchange (multi-dense, discontinuous and fractal with in-between

7. Blanes Malgrat de Mar	Girona/Spain	17,68 	39.293 (2014) 	2222,5 ab/km 	ortofrutticola fagioli "Montgat" DOP fragole "Fruas del Marisme" DO	
8. Sérignan Vias Agde Mézis	Hérault/France	27,45 32,56 50,82 34,59 	6.785 (2008) 5.354 (2008) 24.457 (2008) 10.898 (2008) 	247,2 ab/km 164,4 ab/km 481,3 ab/km 315,1 ab/km 	ortofrutticola viticoltura vino "Cibou de Thau Cap d'Agde" IGP	
9. Pérols Mauguio	Hérault/France	6,01 49,51 	8.939 (2011) 16.385 (2013) 	1487,4 ab/km 1818,3 ab/km 	ortofrutticola viticoltura	
10. Frioux Saint Raphaël	Draculnari/France	102,27 89,59 	53.039 (2011) 29.361 (2008) 	518,6 ab/km 1818,3 ab/km 	ortofrutticola viticoltura vino "Maurel" IGP vino "Côte des Prévost" AOC olivicoltura olio d'oliva AOC	
11. Abenga	Savona/Italy	36,58 	22.560 (2011) 	616,9 ab/km 	ortofrutticola albicorno "valentini" IGP cavolfiori "apennini" IGP primodori "Cuore di Rea" IGP zucchine "biondetta" IGP viticoltura floricoltura olivicoltura olio extravergine DOP	
12. Follonica	Grosseto/Italy	56,02 	21.741 (2011) 	388,1 ab/km 	ortofrutticola viticoltura vino Maremma Toscana IGT vino "Montepulciano" DOC olivicoltura olio extravergine toscano IGT	
13. Mondragone	Caserta/Italy	55,72 	28.471 (2011) 	510,9 ab/km 	ortofrutticola fagioli "Mondragone" viticoltura vino "Tafelberg" DOC	



PABLL-BCN+, Agricultural Park of the Baix Llobregat, Barcelona: a park of parks
(Actar Arquitectura-Gic-Lab, 2014).

Main vectors for four crossing and overlapped park-structures.

Smart Agro-Parc. Network Activations and App Cycles.

**A ■ APP
CYCLES**



defining new integrated criteria of 3D actions necessarily called to combine globally and locally (not only “in set” but even “in situ”) primary activities, secondary activities and tertiary activities; agricultural production, eco-industrial production and technological production; living spaces and leisure interspaces; dynamics of relationship and dynamics of growth: environmental sensitivities, and socio-cultural sensibilities, etc.

This new holistic dimension calls for questioning territorial planning and policies, derived from geo-, periand inter-urban, as well as neo-rural paradigms. The complex territorial structures are linked to environmental and resilient qualities of the ‘Eco-Multi-City’, but also to new polyvalent processes of economic and social growth, to a technological innovation and operative productivity, proposing urban-rural linkages

A condition linked to the complex environmental and hybrid quality of the new *eco-multi-city* but also to the new multivalent processes of qualitative, economic and social developments; and to a more innovating technological and operational emerging dimension able to convert these urban/agricultural spaces into new *Resili(g)ent-landscapes*, that is “resilient” and “intelligent” landscapes (Gausa 2020) oriented to correct exponential stressed land-use and increasing climatic threats.

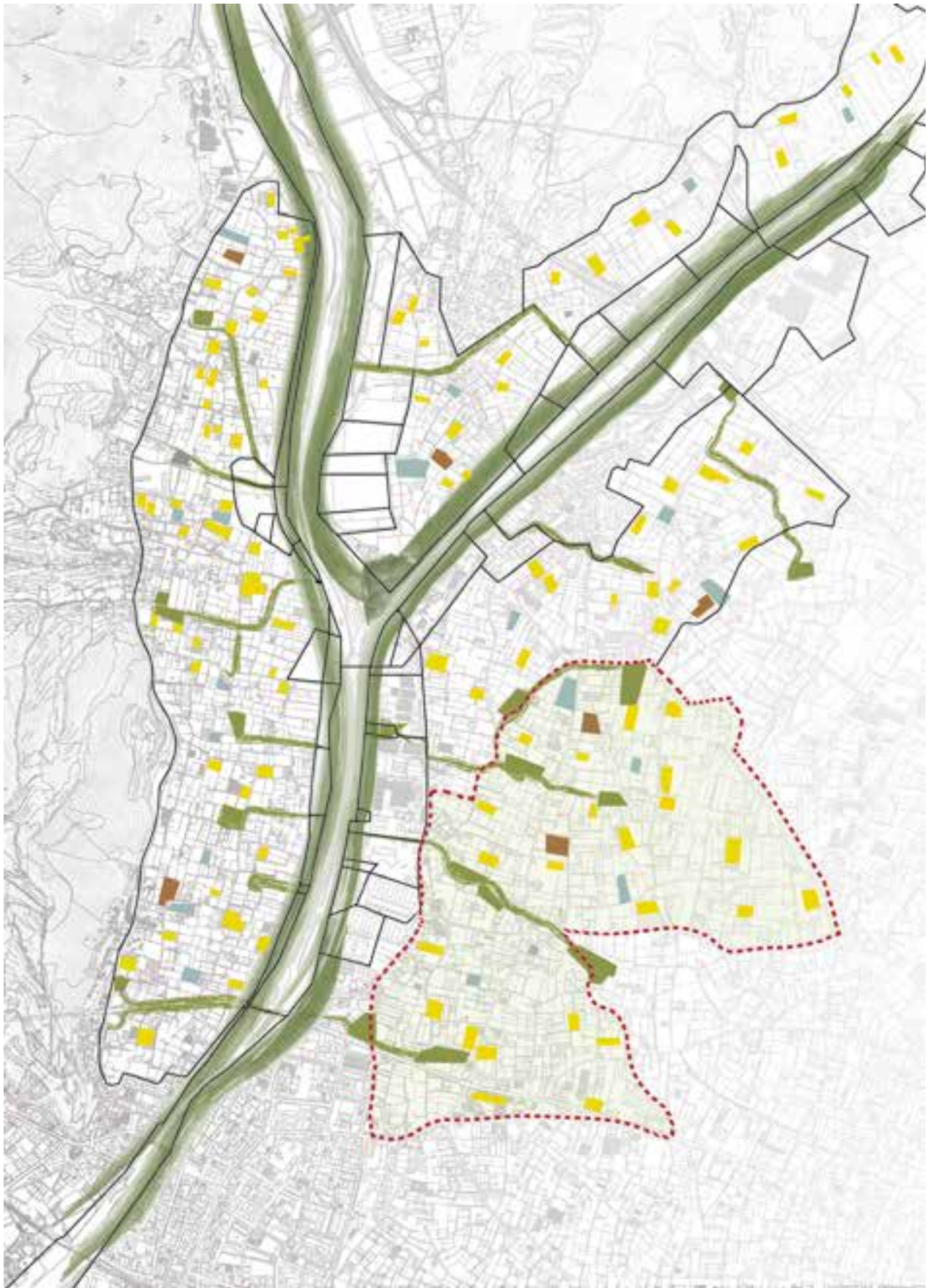
The aim to combine complex analysis and flexible prospective approaches is tackled with the specific and differential analytic and strategic mapping of the inherent potential conditions present in these new *rural-urban* structures. The two main case studies presented here call for recognizing a current scenario of ‘hyper-agricultural’ contexts in the Mediterranean metropolitan and cost areas, and their different strategic implications (urban, rural, cultural, economic, social, landscape)—from the point of view of high territorial and environmental value as well as connected to urban-touristic-productive dynamics.

The conveyance of the concepts “Intelligent Cities”, “Resilient landscapes” or “Smart Contexts” is, hence, combined with the terms “Trans-productive Lands” and/or “Advanced Planning” (alluding to the ability to make sets of integrated informational systems and subsystems interacting among them (security, safety, closed cycles of energy, water, matter, waste management, health, infrastructures, economy, environment, food, etc.), called to guide and manage, in a coordinated way, the development and sustainable growth of these new multi and inter-urban scenarios. The approach towards this new type of multiple spaces (and/or multiple territories) and of the movements and evolutions that define and delimitate them, demands (for an efficient recognition) the elaboration of *n-dimensional scenarios* of registration and projection, as well as the definition of possible associated strategies: *n-differential* strategies, understood as criteria of action – “collective horizons of consent” or virtual, but oriented “rules of the game” – fundamental for securing a qualitative orientation of their own global system(s) (Gausa 2013). The digital world and the information technologies (*Internet of Things*, *Smart-cities*,

Greenhouses sea in Almería.
A new artificial food landscape







and Smart-citizens, etc.) have exponentially increased the potential of exchange between situations and requests, but also their own ability to program and/or to re-program, to process and/or to re-process – in the form of parameters and conditions that are recognized with algorithmic precision; recorded, re-orientated and re-edited, as maps, trajectories, configurations and/of multiple and variable formats.

In general, the approached cases of study have tended to recognize the new contexts in which a possible *hyper-agricultural* scenario (and its different strategic repercussions, urban, cultural, economic, social, ecological, aesthetic) could be developed from the point of view of qualitative and innovative spatial and environmental values and their (inter-)connection with *urban-touristic-productive* dynamics.

The different readings have been oriented towards urban and regional analysis (structural and morphological conditions and relations between scales, potential connectivities of settlements and landscapes, intentional strategies and programmatic guidelines, SWOT analysis, etc). A methodology able to combine ICT analysis (*Inter Cities & Territories*) with L.G. operations (local and global), through intentional mapping processes (*datascares*, *datascans*) and strategic vectorizations (*diagrammaticities*, *diagram-cities*) associated with an intentional gaze to the inherent structuring conditions (and potentials) present in these particular scenarios : historic maps, thematic cartographies, georeferenced data – re-drawn as schemes (structures), diagrams (criteria), and ideograms (concepts and strategies) – acquire a progressive strategic and dynamic “intentionality” (Gausa 2014a).

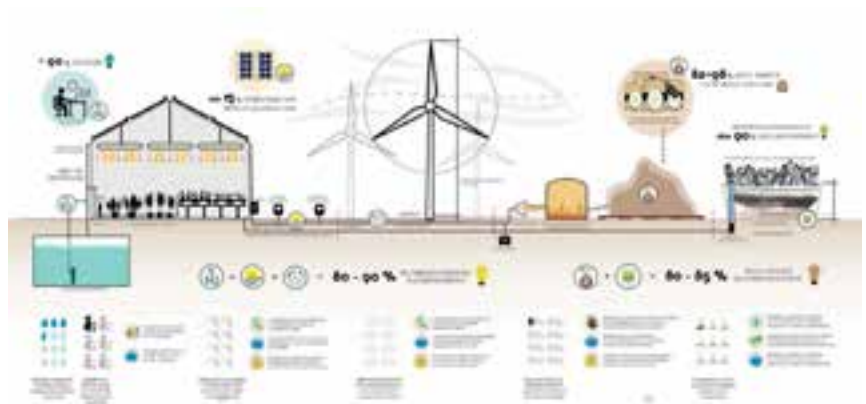
Systems of analysis and projection, open and polyvalent, adaptable to the very conditions of the new fluctuating urban forms generated beyond the traditional metropolitan definitions, swallowing them and conforming heterogeneous “inside/outside spaces”: *dis-dense* fields of activities and functionalities, not necessarily contiguous or continuous, univocal or unimodal, in their relational, topological and mixed definitions.

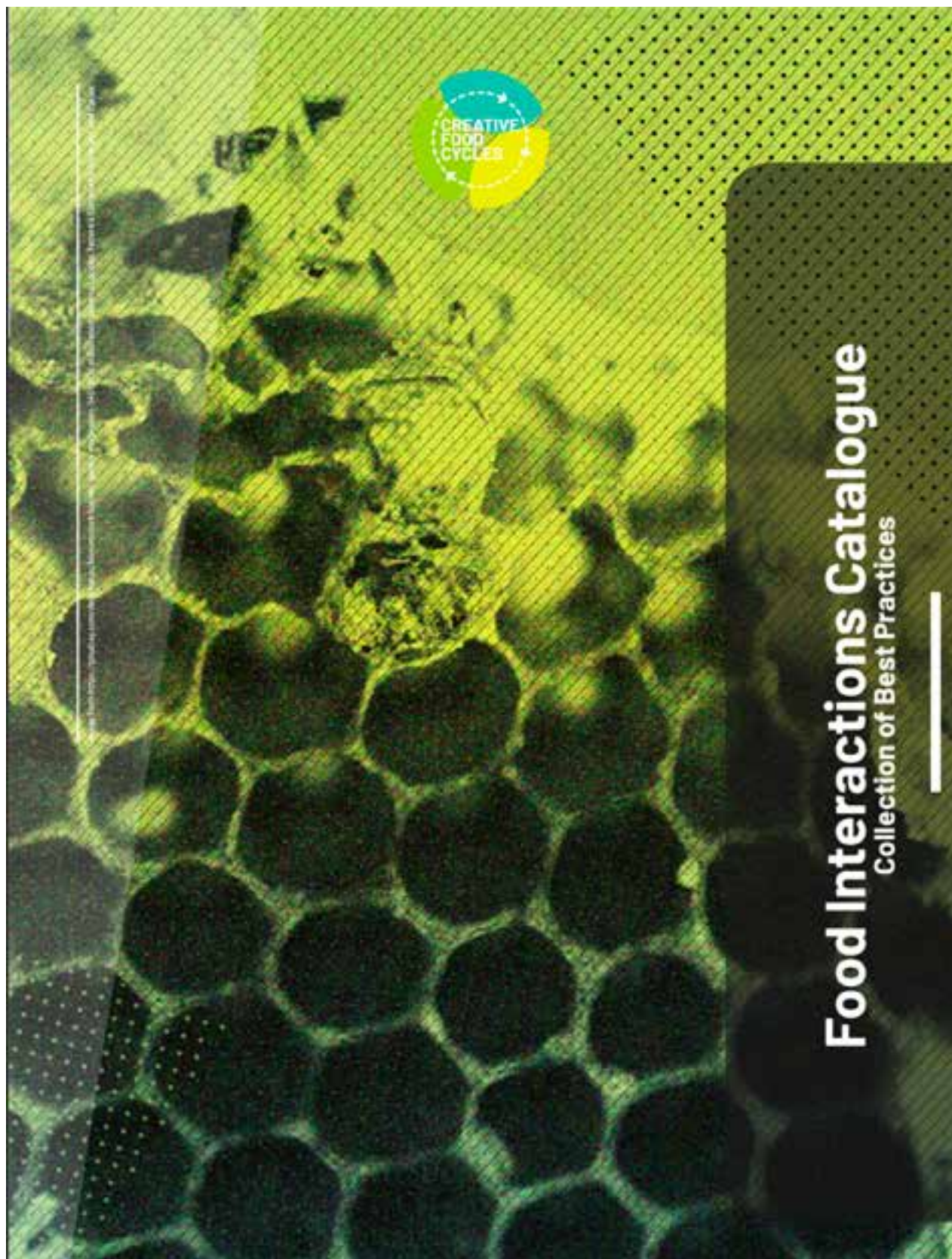


▲ Albenga Glass City, Mixed-Used strategies and Agro-Urban structures. Aerial vision of the huge greenhouses area. Ph. Luciano Rosso

◀ Tucci G. (2018), Albenga GlassCity, Mixed-Used strategies and Agro-Urban structures. New infiltrated operations and networks in-between greenhouses, urban fabrics and the river park as a transversal axiality.

Tucci G. (2018), Albenga GlassCity, Mixed-Used strategies and Agro-Urban structures. New technological and circular approach.





5. Food not only as Eat-Matter but as Hyper-Matter

In this sense, the main case studies presented with more detail throughout these pages and associated to new types of approaches to Food Cycles (production, distribution, dispositional-consumption, shared celebration) and its creative transformation and re-information are called to recognize the current context of some of these potentially hyper-agricultural scenarios in these new polycentric and meta-metropolitan contexts... and their different strategic repercussions (urban, natural, cultural, economical, social...), from the point of view of the high territorial and environmental values: values connected to our “living-working-resting... enjoying and visiting” own habitats.

Mixed programs and mixed products and Food understood as a new multi-programmatic matter – allude to a new transversal condition in this new complex and simultaneous meta-polis in which situations related to the infrastructural, the environmental, the social, the sensorial and the digital are connected and combined, through a new informational definition, semi-natural and semi-artificial at the same time.

New urban and territorial systems need to be animate to propose holistic solutions to multi-level problems related to society, environment, health, food, landscapes and cities. This new (and possible) *agro-urban* (and *agri-logical*) evolution of the equation “*ruralities/urbanities*” (not bucolic but functional) renews – through new creative ways – the whole system, from the re-naturalised design of public spaces to the domestic behaviour capacities, with new needs, new potentials and new opportunities.

Remembering again:

- the new irregular and fractal multi-city (or *n-city*) needs the landscape as an operational and relational ecoand infrastructure;
- the landscape needs, in turn, agriculture as a mixed-use activity, able to preserve the landscape itself; the agriculture needs a new multi-level definition capable of going beyond its Primary Condition;
- and these multi-programmatic condition needs evidently FOOD understood not only through its basilar alimentary (and eating) function but as a multi-productive matter; a hyper-matter linked with new circular processes.
- “*Et ainsi de suite*” or.. “*et sic in*” ...

Cycles that close and open, at the same time, in a qualitative and evolutionary way, not so as strict closed cercles but as spirals that, returning to the origin, don't remain there but are creatively re-launched up, to new innovative returns.

The CFC project has approached this complex sequence of simultaneous levels, addressing the term FOOD in 360 degrees: from production to distribution, from distribution to consumption, from consumption to instruction and disposition: structuring the project in these three main steps, maintaining crossing objec-

tives, contents and methods in the exchanges set up by the three partners involved in this Creative-Food-Cycle research (GAUSA NAVARRO, Manuel, PERICU, Silvia, CANESSA, Nicola, TUCCI, Giorgia, 2020)

– The IAAC, Institute for Advanced Architecture of Catalonia, in Barcelona, has been more concentrated in the experimentation with the food production phase through the use of new technologies and new generative fields; experimenting also new indoor bioprocesses, for domestic and industrial production.

– The Leibniz Universitat of Hannover worked on the intermediate phase – Distribution – imagining pop-up markets able to favour new exchanges between small or spontaneous producers to easily commercialize – and diffuse – their products; but at the same time creating spaces of multi-level objects and new platforms for relationship, linked with the generation of a new sociality.

– The UNIGE with the Department Architecture and Design has been involved in the consumption and the disposition phase, in particular in relation to the food (and food-packaging) waste's re-use by the prototyping of new products and materials, obtained from a second life food-capacity.

Recovering and reinterpreting, also, the popular models of food consumption and interaction, present in variated open formats, so characteristics of the Mediterranean atmospheres of sharing experiences and conviviality and so close to the notion of Festival itself.

6. The *CFC Festinar* as a festive celebrating and multi-sharing experience.

A Festival is a mixture of exchange, communication and celebration.

A “festive moment” of collective interactions, expressions, expansions and demonstrations or manifestations (understanding these last, also, as manifestos, that is to say – sometimes – as possible proclamations of ideas and convictions).

At every historical moment of change in logics and thoughts – scientific, technological, cultural, economic and socio-political – the celebration of ideas has been as important as their own theorisation, materialisation or dissemination (GAUSA, Manuel, FAGNONI, Raffaella, GALLI, Giovanni, BILANCIONI Guglielmo, FALCIDIENO Maria Linda, PRATI Franz, VANNICOLA Carlo, 2015).

This is how it was during the transition from the world of the late medieval Renaissance to the new exuberant, absolute – and absolutist – “*universal universe*” of the Baroque Power-State, with its symbolic and scenographic (spectacular) effects and the great artifices of its dances and palace parties.

1931 Beaux Arts Ball:
Architects with replicas
of modern buildings.



1922, Oskar Schlemmer:
Bauhaus de Weimar, Das
Triadische Ballet (Le Ballet
Triadique)



Old gravures by Israël
Silvestre and Jean Lepautre:
May 7th to 13th, the court
of Louis XIV arranged a
feast and a festival of Les
Plaisirs de l'Ile Enchantée
(Pleasures of an Enchanted
Island) in honor of the
Queen Anne of Austria.





image of sculptural design and architecture : by Luis Alan

Or in the passage from the neo-classical era – or the *eclectic-beaux-arts* era – of the first industrialisation... to the impact of the Modern industrial Movement, functionalistic, rationalistic and positivistic.

With its avant-garde vocation in the plastic arts, in theatre, in dance and in the emerging cinematography itself and its radically abstract and experimental materialisations and manifestations.

Or now, in the contemporary transition from the post-modern tardo-industrial age to a new interactive digital time, of eco-, infoand xenologics more and more networked... and involved with an expanded knowledge and an informal relational condition, at all levels: socio-cultural, geo-political and techno-logical.

A new dimension in which the combination, the hybridisation, the contamination or the impurity are no longer seen as a defect, as a deficiency or an imperfection but as a strategic interactive capacity... and potential.

The celebration of this possible global interaction, between medias, means and mediations, proclaims its operative, proactive and often provocative (and reactive) vocation, in which the physical and the virtual interrelations between thinks and links, nets and sets, spaces and times, natures and conditions, volitions and definitions... between communities and individualities... appears conjugated in multiple, hybrid and synthetic combinations.

A celebration of the complexity that, once again, translates us into new repertoires called to propose more open and carefree formats of narrations, expressions and unexpected configurations.

The *CFC Festinar* – this term, hybrid itself, conceived by Chiara Olivastri in a rich and synergetic brainstorming – compresses in a single word the voices Festival and Webinar, alluding also (in



◀ IAAC – IAAC-CFC, “Myco-Scape”, 2019, a modular system which supports the growth of edible mushrooms in the urban environment (public space/facades/rooftops), producing both food and construction materials.



a curious metalanguage effect) to a triple implicit combination between Festival, Seminar and Webinar.

A synthetic “barbarism” that exclaims voluntarily and literally a new format that complements the traditional physical Festival with a new online relational event.

If the notion of Festival combines the Fiesta, the Fair and also the Temporary (the “*estival*”) the notion of *Festinar* does not want to renounce to these concepts but implicitly link them with the on-line world (the world in which, in these recent times, we have moved in an accelerated manner).

The Latin suffix *aror al*(from *aris*) implicit in the neologism *Festinar* continues to indicate that “place where not only something but multiple things ... abound”.

This is that the suffix *ar* signifies

It's true that perhaps the big hugs, the elbows, the intense density of the proximity, of the collective profuse experiences will not abound in our *CFC Festinar*.

But the aim of stimulating “encounters” continue to be there, in this new place and a new stage for productive exchanges and joyful interactions; in which the parquet and the market, the fair and the show, the celebration and the transmission, the communication and the diffusion, the senses and the sensations, the food and the drinks (these last virtual and metaphorical) continue to be mixed. In fact, it is about food and its new holistic approach that is proposed at the center of the meeting itself

FOOD... Not only research but sharing experience.

That part of every great event that cannot be renounced.

Above all because FOOD must be understood, remembering the popular *adagio*, as “a festival, also, for tastes”.

The gastronomic celebration of food (lunch, dinner, coffee or working breakfast) is – in every kind of festival or big meeting – an “Event within the Event”; an Event in which shared exchanges, business and pleasures are also celebrated, in common.

This is the greatness of a shared FOOD, as a paradigm of our social and human exchange and inter-change.

Obligated by the pandemic on-line format, in the first *CFC Festinar* it was not possible to have physical food-meals, eaten and shared, but we will talk (and a lot) of *FOOD-MATTERS*... as nutrients, as fares but, also, as hyper-substances... with substantial potentials and capacities.

All this has been possible thanks to the enormous effort – in this Final Event Kitchen – of the amazing Master students of the DAD-UNIGE Design Area – who (and whose researches) we will be introduced later – and who have been joined by the students and researchers of the IAAC and Hanover with their tutors and instructors in charge... with Jörg Schroeder and Chiara Farinea or Areti Markopoulou, in front; but, also, with Emanuele Sommariva, Sabrina Sposito or Mohamed El Atab in the quartermaster's and logistics offices; and

◀ *CFC Creative Food Cycle. A participatory banquet in the Hannover CFC Symposium (18th September 2020)*

◀ *Gic Lab, Barnum Workshops 2015: Food-scapes and architizers*



thanks, also, to the contribution of our special guests who have generously collaborated with us today: from Luca Mazzari to Giulia Soldati, from Elio Micco to Davide Rapp, here, on this great background stage that is the Albergo dei Poveri, where Marco Sinesi and Anna Maria de Marini are officing as our magnificent hosts.

*Sharing food and eating in a convivial festive
traditional Mediterranean atmosphere*

And, of course, all of this has been (will be) possible thanks to the tireless efforts of our Orchestra Director Silvia Pericu who, together with our incomparable Masterchefs, the shining Giorgia Tucci, the dynamic Chiara Olivastri and the great performer Alesia Ronco Milanaccio, accompanied by Nicola Cannessa, Matilde Pitanti and Francesca Vercellino as members of the Gic-Lab, have orchestrated and prepared this great Food-Festinar. We will see Food-Dishes, Food-Fashion, Food-Happenings and Food-Performances... Many of Food-Items.

The CFC Festinar has permit, at last, to structure the publication that is presented in these pages, a scientific and rigorous work mixed with a fresh and expressive imaginary where the different sequences and dishes of a virtual or metaphorical food-banquet would be degusted: from the appetizer components that permit to introduce the own background and the different partnership approaches of the CFC project to the variated cosmopolitan starters, understood as a rich menu of crossing toasts... for taste. Main first plates and second plates are presented as different atlas of managed references and innovated UNIGE creative designs, research project-sheets and developed prototypes.



The description of parallel stakeholders and meeting activities are evidenced in the side of this food celebration that culminates with the moment of desserts and coffee, and its possible outcomes understood in socio-empathic and interactive terms.

An ending “Final de Fiesta” with artifices and pyrotechnic variations and graphic contributions closes this publication that, as a banquet itself, is pointed by different break-performances and shows given by history-tellers, dancers, scenographers, fashion-models and film makers.

The publication is finally a serious research work and a ludic visual book that wants to celebrate research and enjoy creation, as the qualitative innovative production, the implicated educational transmission and the shared creative communication are, in fact, themselves.



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INTEGRATED APPROACH TO URBAN FOOD PRODUCTION

Introduction

Today, we have accessibility to food products coming from anywhere in the world, all year round. However, it is questionable whether the quality of these products is healthy, and whether the food chain is sustainable, like food production, distribution and disposal involve a complex set of economic activities, exchanges and human behaviours that all sharply affect the living conditions of the planet and its inhabitants.

Aiming at supporting initiatives targeted to enhance food sustainability through circular design, the Creative Europe Programme of the European Union has co-financed the Creative Food Cycles Project, which focus on three phases of food cycle, namely: Phase 1 - Production to Distribution, Phase 2 - Distribution to Consumption, Phase 3 - Consumption to Disposal. Each phase is curated by a project partner: Phase 1 – Institute for Advanced Architecture of Catalonia, Phase 2 – Leibniz Universität Hannover, Phase 3 – Università degli Studi di Genova.

The project main objective is capacity building through training and education in the field of architecture; to this aim several activities have been performed, as the development of workshops,



installations and project mock-ups, exhibitions and conferences. This essay describes the activities carried on within the Production to Distribution phase, aimed at sharing with the participants an approach to the development of urban food production systems focussing on the study of the ecosystem services that can be associated to cultivation.

Integrated approach to food production in cities

Cities occupy only 2% of the global land area, but account for 70% of GDP, 60% of energy consumption, 70% of greenhouse gas emissions and 70% of solid waste (UN-Habitat, 2018). The urban population by 2015 had reached 3.96 billion (54% of the world population), it is expected to total 5.06 billion by 2030 (60% of the world population) (UN-Habitat, 2015), and 6.3 billion (66% of the world population) by 2050 (Angel et.al., 2016).

The world population is rapidly increasing and the World Bank says the world needs to produce 50% more food to feed its population by 2050, but climate change could cut crop yields by over 25% (Financial Times, 2017).

These data reflect the need to find innovative urban development paradigms, decreasing the pollution generated by cities and ensuring healthy food availability for all.

The New Urban Agenda (UN-Habitat, 2018) points to the need to use urban spatial frameworks, urban planning and design to strengthen food system planning and urban resilience. It calls for an integrated approach to urban food policies, connecting the economic, social and environmental aspects locally. In particular, it notes the scope for urban and peri-urban agriculture to protect and integrate biodiversity into city landscapes, thereby contributing to synergies across food and nutrition security, ecosystem services and human well-being.

According to the Millennium Ecosystems Assessment (2005), the Ecosystem Services that nature can provide are divided into four main categories: life support, such as soil formation and oxygen production; procurement, such as the production of food, drinking water, raw materials or fuel; regulation, such as climate control and tidal waves, water purification, pollination; and cultural values, including the aesthetic, educational and recreational values.

As stated by Bonanno (2015), agricultural areas should no longer be conceived as primary space but as complex ones: green infrastructures, ecological corridors, natural matrix, eco-systems services, and production scenarios. They become “eco-system of systems in plural interaction”.

Moreover, Gausa (2018) underlines the need to integrate agriculture in cities generating multifunctional spaces, and developing the existing neighbouring residential, commercial and industrial zones to promote new positive interactions between agriculture, recreation and production.

Production to Distribution phase

Production to Distribution phase applies the use of latest technologies in the field of design and architecture in order to facilitate the creation of physical environments that can passively control the parameters that affects plant growth (e.g. temperature, humidity and solar radiations), enhancing the quality and quantity of ecosystem services provided and developing multifunctional urban areas.

The participants to the activities have been provided with lessons on Ecosystem Services functioning and about computation design and digital fabrication.

Computation design allows to simulate the environmental conditions affecting plant growth (e.g. shading during different hours of the day, surface temperature, water flow along the surfaces) and to optimize the design of the cultivation systems, while digital fabrication allows the production of non-standard elements, customized for specific environmental or social needs. Moreover, sensors and apps are used to monitor the system evolution and eventually inform citizens about the actions that can be carried out to maintain the system and share the products that it is generating.

These concepts and methodologies for the development of food production projects for cities have been applied to the Creative Urban Farming Workshop and the Mycoscape Installation.

Creative Urban Farming Workshop

The Creative Urban Farming Workshop was held on the 4th, 5th and 6th of May 2019 at the Institute of Advanced Architecture of Catalonia in Barcelona and hosted 20 students. The educational methodology applied was “learning by doing”: the students were requested to produce a 1:1 scale functioning prototype in order to test the project performances.

The projects developed by the students are:

Playponics - students: Fabiana Cerruti Rossetti, Giulia Bertoldo, Demi Pradolin, Matias Gatti, Emily Whyman.

Food production is integrated in a public space installation aimed at production, leisure and education, creating multifunctional urban areas. The word PlayPonic derives from a crash between the words playground and hydroponic. It is a multilevel structure that can be used by neighbours to grow and cultivate vegetables and herbs and by children to climb and play in contact with nature. The system is thought to be implemented in Barcelona, a city characterized by scarce water availability, therefore it is based on hydroponic cultivation which allows water savings. The prototype was fabricated using digital tools, eco-friendly materials and sensors to monitor the plant growth.

un-EARTH - students: Oana Taut, Elvin Demiri, Michel Grandörf
Un-Earth aims to integrate plants in cities exploiting all their production possibilities: it consists of a roof gardening structure allowing to generate food and textiles using plant roots. It is a modular digitally fabricated system including different layers: the bottom part is a mold aimed at control the root growth while shaping specific patterns; the upper part hosts a layer of soil to allow the growth of vegetables and herbs. As a result, the system produces food and a natural digitally designed textile that functions as a noise and pollution filter to replace the existing architectural balustrade/facade. Computation design is used to control the textile design and to shape the roots mold, in order to create a product responding to specific local conditions, thus enhancing its efficiency.

Parasitizing Urban Voids - students: Lara Del Valle, Melina Peholtz, Nikoleta Mougkasi

Parasitizing urban voids is a green urban design solution that provides insect connectivity exploiting and reusing urban voids, thus enhancing biodiversity in cities and helping to increase ecosystem productivity. It is a façade system made from digitally fabricated modular hexagons that function as insect hotels. Each module consists of multiple hole patterns depending on the type of insects to be hosted. It is used to activate abandoned urban



spaces: Parasitizing Urban Voids provides pollination hubs in the cities allowing communities to engage with biodiversity by raising their awareness and introducing new farming habits.

The Algae of Everything - students: Cecilia Gonzales Torres, Emmanouli Vermisso, Janine Philippe, Nadina Iona Jurat

The Algae of Everything is an installation that consists of an algae bioreactor to be installed on building facades, generating super-nutrients (Algae Spirulina) and energy through a bio photovoltaic system. The installation is equipped with sensors detecting the algae conditions and sending data to citizens through an app. It is aimed at activating public space: people are involved in the system maintenance (they are required to touch the structure bags in order to mix the algae that tend to deposit on the bottom part of the system) and in change they obtain food and energy. The structure design uses computation design to maximize solar exposure.

Mutualism - students: Giovanna Bartoleschi, Evanthia Beristianou, Paula López Barba, Maher Mansour

The word Mutualism refers to the ecological interaction between two or more species where they both benefit from each other. The aim of the project is to create a modular system aimed at production of herbs, mushrooms and mycelium acoustic panels, where the system design, herbs and mushrooms cooperates to create in hostile urban environments a microclimate where mushrooms and herbs can grow. As mushrooms need



low temperatures to grow each module of the system is made of two different surfaces: the external surface, which is exposed to sunlight, is targeted at the growth of edible plants, in order to mitigate the city heat island effect and to narrow down the temperature, while the internal surface, which is shadowed, is targeted at the growth of mushrooms. When mushrooms fruit, they are harvested and the substrate which is left is removed, baked and used as an acoustic panel.

Mycoscape Installation

The Mutualism project has been scaled creating the façade mock-up installation Mycoscape (Image 2). It consists of modules to locate the mushroom substrate (straw and mycelium) and an external surface, parametrically designed, tailored to control the environmental conditions supporting mushrooms growth.

The implementation of Mutualism allows for urban landscape enhancement in neglected urban areas while creating new products and value that local population can benefit from. As agriculture is a labour-intensive sector, it can provide employment to groups who find it hard to access conventional jobs.

Therefore, Mycoscape regards urban agriculture as a potential resource to create urban prosperity and employment in situations where significant added value can be achieved, adapting urban surfaces to agriculture production.

Conclusions

The outputs of the Creative Urban Farming workshop and the Mycoscape installation have been disseminated through conferences and an itinerant exhibition, in order to contribute to the creation of a body of knowledge related to the optimization of urban cultivation systems, in order to integrate nature in cities, transforming buildings and public space in systems to live, produce and rest restoring the environment at the same time.

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*PorTable. Design: Julia Theis, Anna Pape, Josephine Arfsten, Michel Grändorf, 2019.
Photo by Mohamed Hassan for LUH Regionales Bauen und Siedlungsplanung.*

CREATIVE FOOD CYCLES: FOOD NODES AS ACCELERATOR FOR URBAN TRANSITION

A bright light is thrown on the relevance of food supply in these months of crisis caused by Covid-19: for example, the moment when London had to fear about food carried through the Channel tunnel, closed in December to prevent the transmission of a new variant of the virus; or the trains chartered by Barilla to transport pasta across the Alps to Germany.

An increased role of local and regional supply for households can be stated, a run on local and regional production and small shops by many people, or an increase of delivery services combined with rediscovering cooking and meals as delightful social practice, and of new forms of supporting the weaker in the city, such as the “panaro solidale” baskets in Naples connecting to the upper floors of houses. Critical viewpoints on current trends, such as the fact that one fifth of British households no longer features a dining table (Express 2020), have been turned into the discovery that four fifth do have the table. Everywhere tables are entertained as stage for “self-production” not only of meals, but of a whole material culture in manufacturing and recycling connected with food raw materials.

Enhanced by the situation caused by Covid-19, the fragility of supply and social divisions seen through the lens of food became evident – but also the role of food to trigger social bonds,



to carry the desire for community activities and public space, and to connect to digitisation in organising our lives, expanded to every and all angle of society and economy. Hence, the dependency on very large volumes, global networks and even politics, but also bottom-up social and economic innovation can be observed – and a public and political debate to address these topics not only in terms of resilience in critical situations, but also in terms of resilience as future-oriented capacity towards sustainability. In fact, the policy field “Farm to Fork” (European Commission 2020) as a part of the *European Green Deal* is foreseen as important element for the transition to decarbonisation, opening up new economic possibilities and counteracting social division.

The *Creative Food Cycles* project, in this context, can provide as roll-out a new perspective on the interaction of several components and of agency in the complex issue of food economy and food culture. The overall concept to address “closed loops” towards *Circular Economy* (Ellen MacArthur Foundation 2019) – as expressed in the title – is proposed to be articulated in a creative and cultural approach to research and innovation, through cooperation between design, architecture, urban planning with multifold interdisciplinary linkages and with actors from civil society and entrepreneurship. The move of the project to enter the topic through 3 phases of *Food Cycles* (production, distribution/consumption, disposition) has been

Manifesto Market Prague. Design: reSITE, Radka Ondrackova. Prague, Czech Republic, 2018. Cultural events in the evening at the Manifesto Market.

Photo by Jakub Červenka.

methodologically developed in 3 consequential steps: (1) to sharpen innovation pathways in each of the phases, (2) to detect and formulate innovation circularity along the cycle, and (3) to develop innovation linkages to sustainable urban transformation and for a resilient future of cities and territories.

1. Innovation Pathways: New Roles for Places of Exchange

Exemplarily for the creative exploration and sharpening of innovation pathways along *Food Cycles*, the phase of distribution and consumption emerges not only as a major field of new cultural expressions, but offers most interesting access and starting points to reshape systemic and processual aspects of *Creative Food Cycles* in everyday life. In this sense, the concept behind the selection of good practices (as shown in the Food Interaction Catalogue; see Schröder 2019A) for this phase highlights spatial manifestations in the city – moving, temporary, permanent. They innovate urban practices of conviviality and at the same time innovate urban space. Bound to and inspired by food safety, biodiversity, organic production, regional production, urban-rural linkages, health, food knowledge and education, the selected projects focus therefore on the material, spatial, and performative experience of *Creative Food Cycles* in the city.

The research aims at exploring success factors for processes of this creative and cultural approach: how they start from and push forward civic engagement and social awareness of sustainable foodsheds (supply and distribution chains) and how they foster knowledge and strategies towards urban metabolism as material and immaterial manifestation of resilience and circular economy. Furthermore, the selected projects aim also to enhance multi-actor approaches towards Food Cycles, with particular attention to new roles of architects, designers, and cultural actors in novel constellations between professionals, civil initiatives, entrepreneurial stakeholders, city governments, and active city society.

2. Food Nodes for the Invention of New Circularity

Creative Food Cycles shows how innovation in *Food Interactions* (Schröder 2019B) – interactions along the cycles and in general between food, city, and society – as new expressions of sharing and circular economy and of conviviality is gained with creativity. Hence, the aim to trace, explain, and push forward innovation is strongly bound to a design and research approach. Cultural action not only as expression but as driver, influencer, and distiller of societal processes targets different



steps, disciplines, and scales of design: initiating, enfolding, rooting innovation in and between product, communication, service, architectural, urban design, and in scales of objects, urban contexts, and new urban-rural networks. Innovation for the phase of distribution and consumption in *Creative Food Cycles* therefore is seen as the result of an interaction of three major fields:

Fish market Bergen. Design: Eder Biesel Arkitekter. Bergen, Norway, 2012. The fish market as public space between the old town and the harbour. Photo by Norbert Miguletz.

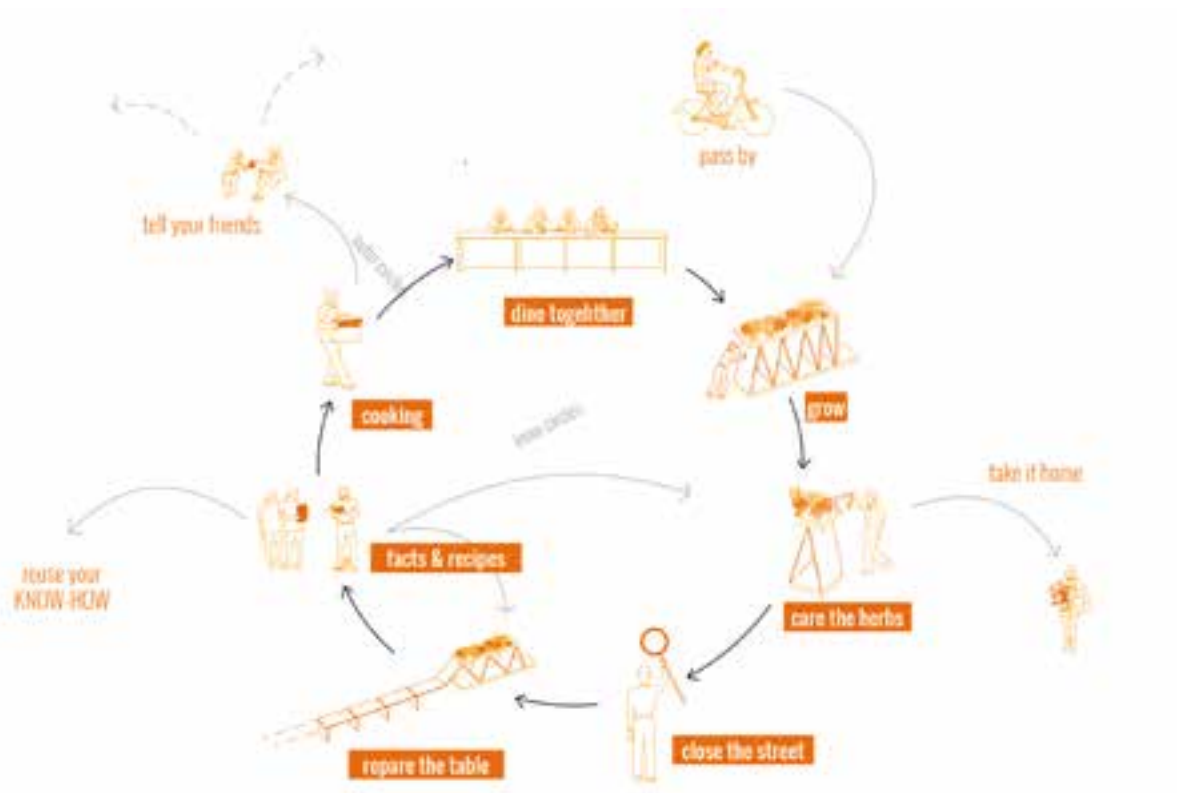
- new forms of **urban commons** can become new places of sharing that enhance positive urban change;
- the invention **urban rituals** connected with initiating and performing these new places of sharing can foster inclusion and creativity;
- **technological and digital inventions** supports the organisation, financing, performance, and upscaling of places of exchange and distribution processes.

As spatial manifestation of food in the city, **Food Nodes** in the form of markets have been the origin of cities. Today, on the

one hand, advanced forms of **Food Nodes** can be described as places of exchange in the city, that re-invent existing structures and are part of a revival of community cooperation. They are energised with a new role for sustainability, also by means of an added digital dimension – not only in information, but particularly in interaction, e. g. participation in organisation of distribution, or in manufacturing and harvest. On the other hand, digitally co-created initiatives as *new commons* are observed to setting up on site spaces of material encounter. This spatial-digital interaction, driven by civic engagement, entrepreneurial vocation, and idealistic spirit, can be seen as characteristic for the new role of food in the city, with its material value of nutrition and its sensual value charged by cultural, social, and economic meaning. As manifest and experienceable spaces, **Food Nodes** offer new forms of social encounter, education, culture, experience, delight, and draw their mission from a perspective along the whole cycle, to close cycles and to invent new circularity, in ecological as well as economic and socio-cultural terms.

3. Food Nodes and Networks as accelerator for Urban Transition

Food Nodes not only improve liveability in the city and strengthen resilience in terms of food security and in terms of future-oriented change to sustainability in food economy and culture, but can transfer innovation to other urban topics and places, along novel material and immaterial networks (Schröder 2020). Challenges are remarkable towards a substantial transition, depending from immaterial, cultural, and behavioural patterns. The two most interesting fields for an impact of innovations in *Food Cycles* on urban change and its governance can be seen as bound to all phases along the cycle, production, distribution, consumption, disposal. First, in terms of networks: to modify a modernist understanding of heavy and hierarchical networks towards more flexible and adaptive networks driven by new forms of platforms, hubs, abilities, and cultural spirit; recognising the influence of points of spatial and programmatic densification of networks in **Food Nodes** to sustain several levels of connection; and not at least, valorising micro-networks and alternative forms of transport and its organisation, bound to new sustainable mobility and its expression in space. Second, in terms of manifest space: the possible role of **Food Nodes** for the revival of public and community space and for the future of centralities, not only in the sense of supply (to prevent food deserts), but also in a cultural and social sense, and in a sustainable recycling approach for existing town, neighbourhood, and village centres; in the new role of production in the city in terms of functional mix, increased autonomy, and a broader set-up of economic



bases; and in extension to a new awareness for regional *Food-sheds* (Schröder, Hartmann 2017), *Agro-Cities* (Gausa, Canessa 2018), and urban-rural cooperation (Schröder 2015; Schröder Carta Ferretti Lino 2017). Thus, creative spatial-material as well as digital-virtual expressions, experiments, and new networks in *Creative Food Cycles* can play a major role for the initiative, processual evolvement, and upscaling of projects of urban transformation: how they succeed to become new cultural practices but also how they influence urban change and urban space towards resilience and sustainability.

PorTable: new circularity in the neighbourhood.
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// STARTERS

Crossing voices

Cosmopolitan together toasts

FOOD AS A TOOL FOR TERRITORIAL PLANNING

Food, or better the agricultural production and the enogastronomical heritage of a territory, are part of a heritage, both tangible and intangible, which can be not only an engine for new economies (rediscovery of ancient vineyards, tourism, etc.), but also a starting point for redesigning a valley, a series of municipalities, a territorial and environmental area, just like what happened in many parts of Europe with the wine routes.

Rural tourism and agritourism, in recent years have been the subject of various multidisciplinary investigations. The international academic world notes a certain degree of confusion regarding the coincidence between the two terms. Agritourism is also the most characteristic form of accommodation and catering in rural tourism: as is the case in Italy and France which, albeit with different solutions, have built structured facilities for the analysis of rural tourism. With respect to the Italian case, the theoretical approach is bottom-up and finds its first legislative reference in Law 730/1985: agritourism was born out of the need of Tuscan farmers to also offer hospitality and the supply of products, in addition to production activities. The reference to the city-countryside paradigm is now consolidated in the study and analysis in terms of territorialisation, landscape and evolution of agricultural activity. This

approach is the basis of this contribution, starting from the assumption that the changes undergone by the agricultural sector in Italy, albeit with strong differences on a regional scale, have produced the current configuration of the landscape and its territorial structure; effects that in the case of rural tourism have favored the birth, first, and then the development of agritourism. Sharecropping, which gave an imprinting to the landscape of most of Central Italy, laid the foundations for the birth of agritourism. However, also in the rest of the country and, in particular, in South Tyrol, the historical evolution of the agricultural landscape is at the basis of forms of rural tourism receptivity: “the atrocious concept of the centuries-old border”, that is, the tradition tied to the indivisibility of the farms, was incorporated into agricultural legislation already prior to the Unification of Italy, creating a necessary condition for the birth of South Tyrolean agritourism and the generation of a lasting and, therefore, sustainable source of wealth (Celant, 2001). Rural tourism implies a different consideration of the concept of rurality linked to territoriality, as opposed to the widespread conception of rurality as synonymous with backwardness, including cultural backwardness and economic backwardness. Rural tourism is specificity and peculiarity of a territory, including the recovery of the relationship between historical-geographical region and agricultural region. For this reason, starting from the relationship between agritourism and typical productions, we want to: first, deepen the aspects of the relationship between tourism and agriculture in terms of identity characteristic of the territory; second, understand if this relationship can be an opportunity for growth and local tourism development. Food and wine is culture, based on the knowledge of the territory through the set of its tangible and intangible resources. Food has a central role, as a privileged means of communication of enogastronomical culture, traditions and experiences, which contribute to the generation of value and richness of the territory. Italy has a unique agri-food heritage, not completely known, which are real “gastronomic deposits” (Paolini, 2009). Rural tourism consists in the ability to exploit this wealth, putting the heritage of typical productions to good use, in terms of attracting tourism in its broadest sense, especially with reference to international tourist flows. The typical product can be considered an element of attractiveness and characterization of the territory. Given these considerations, the link between the primary sector, rural tourism and agritourism is at the basis of the dynamic preservation of the landscape and tradition, in the same way that various authors refer to the relationship between culture and the past (Dallen and Boyd, 2007). Developing forms of tourism simplistically defined as “minor” from an economic point of view means growth and employment. Italy enjoys an excellent enogastronomical image at a worldwide level, an important and unavoidable factor for the development of the tourism system.

Analyzing its relations and localization dynamics is the condition to create policies and strategies for the valorization of this heritage, to spread its knowledge at an international level and to improve the way typical productions are a determinant factor for the development path.

The receptive form of agritourism is an inspirational model widespread in Italy, even capillary, with different organizational solutions. The valorization of typical productions necessarily passes through a modality of fruition of the territorial offer suitable and coherent with the territory: the agritourism, at the same time structure of offer and vehicle of promotion, even if this happens only with the restaurant, leaving aside the receptivity; and, therefore, it must be framed in the global system of tourist offer. The specificity of Italian tourism is traditionally based on aspects linked to the culture of reception and the role of hospitality. "A new hospitality lies at the base of territorial attention strategies" (Dallari, 2006). The relationship between accommodation and enhancement and protection of the basket of typical products is configured in the territory that represents the synthesis in terms of image of made in Italy. Starting from these considerations, the aim of this contribution is to analyze rural tourism and the relationship with typical products and agritourism. This path can have as its point of fall the structuring of a territory, which has the ability to overcome the simplification of food tourism and itineraries towards a systemic consideration of the territory, with the opening to all other attractions, but based on the relationship agriculture-hospitality-restaurant.

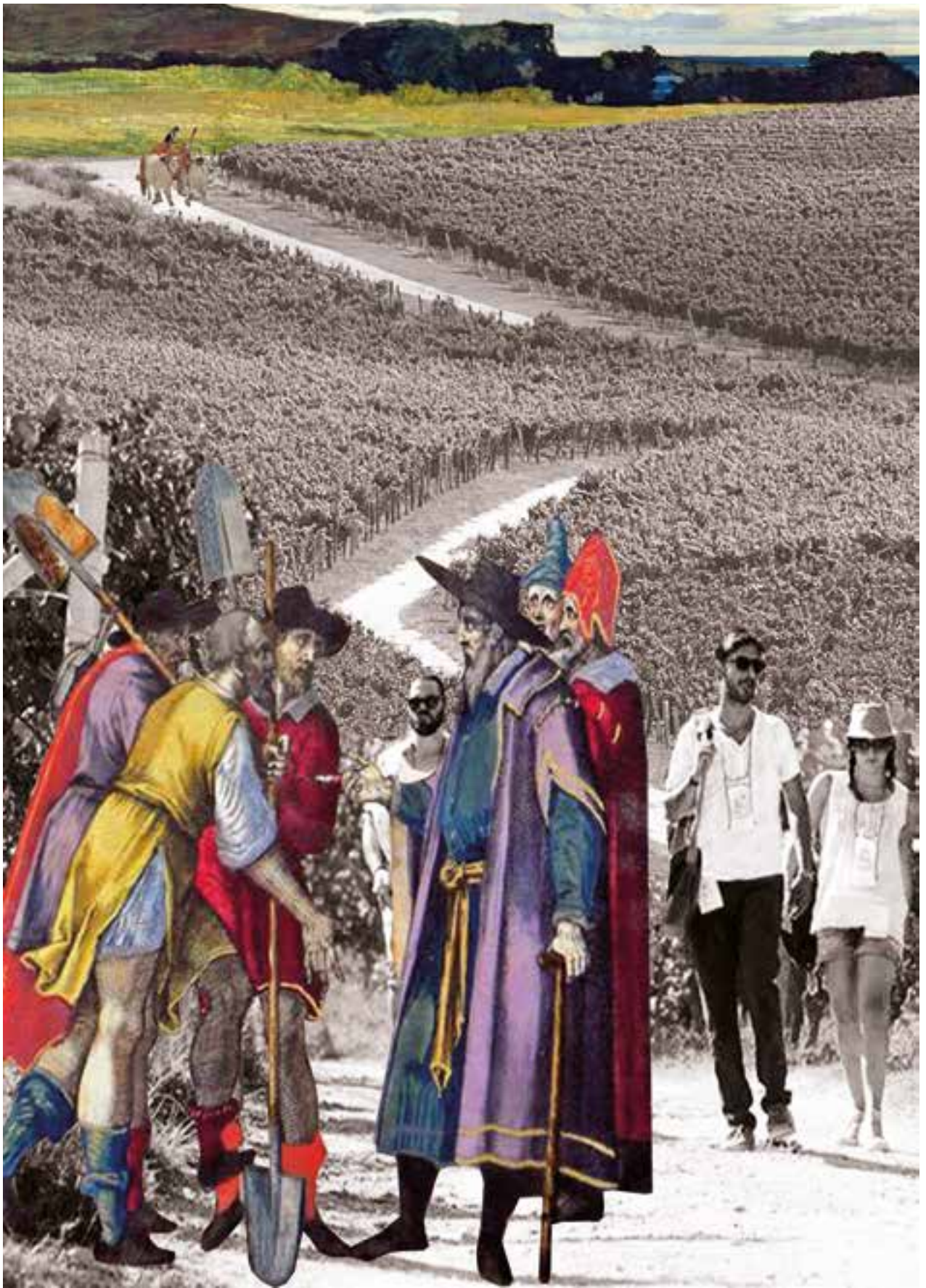
The typical agricultural product is the result of a historical, collective and localized process of accumulation of knowledge, based on the combination of specific territorial, physical and anthropic resources. This combination generates a strong link, unique and irreproducible with the territory of origin and, at the same time, is an indicator of diversity. The relationship of the agricultural product with the territory is a function of the different components and aspects of typicality (Hausman, 2009), which refer to the environmental dimension and local resources, production techniques, conditioning and processing, local cultural and social aspects, as well as historical factors that accompany the evolutionary trajectories of the product itself. A dynamic relationship and not static and immutable. This is because enogastronomy is part of the culture of a territory: typical productions are one of the elements of the past that can be selected for the "dynamic preservation" of the territory and landscape (Dallen-Boyd, 2007). Therefore typical productions take on a new form with regard to the evolution of the concept of land and income: productive factor for touristic competitiveness, summarizing aspects of a natural factor, but also of the anthropic action, becoming a territorial product and an element of attractiveness for touristic purposes.

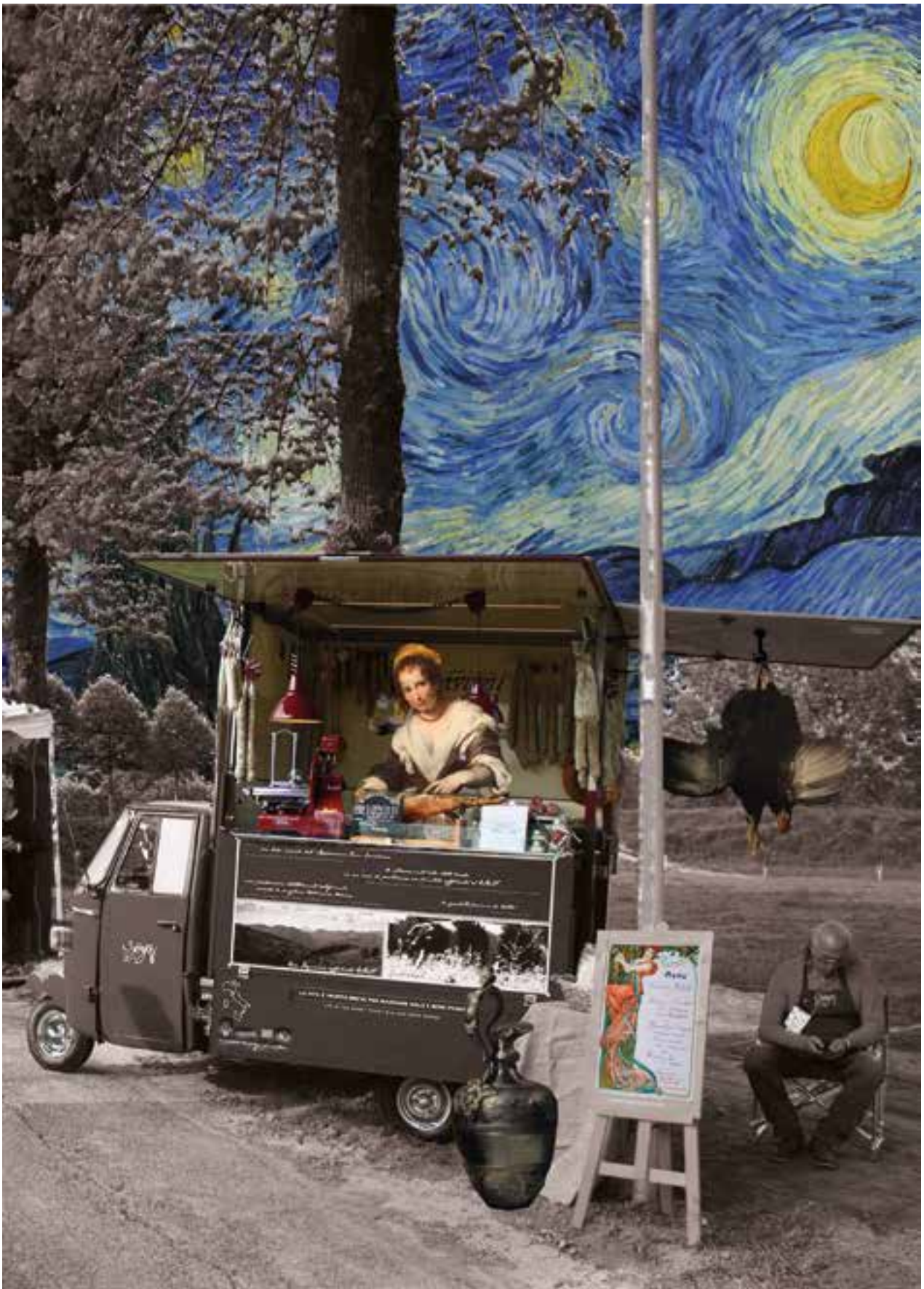
The diversity of the enogastronomical richness of Italy is rep-

resented by the list of “Traditional Italian Agri-food Products” (PAT) at the Ministry of Agriculture and Community Policies, local and local products which widen the concept of typical product, according to the legislative decree 173/98: on one hand it identifies the variety in terms of richness, of all that is defined as food culture in close relation with tourism development; on the other hand it provides the enogastronomical characterization of agricultural production. In support of the already mentioned thesis of a consistency of the system built in Italy, “regional typicalities are the shelves of the library of Italian enogastronomy”.). The term “typical” refers directly to the origin of a product of a specific area, having peculiar characteristics compared to the production. As a whole, typical productions and regional specialties represent a patrimony located in a diversified way on a regional scale; a whole that potentially generates an attractive capacity higher than the sum of the products themselves. The typical product is a determining factor for tourism, widely considered: excursionists, local and international tourists; the latter are increasingly going to Italy to know the natural and artistic beauties and the enogastronomical ones located in the territory. For this reason, the system of typical productions deserves a consideration at a functional level, or better to say, complementary, to the traditional and conventional system of tourist offer. In the classic theory, agricultural localization depends on the income and the price the farmer is willing to pay. The link between rent and typical product makes it necessary to go beyond the classic approach, since it no longer refers only to agriculture, but also to production as a whole and to tourism in particular. The concept of income takes on a non-economic component. The activity that is localized is not only agricultural, but it is an activity with a touristic vocation: receptive (agritourism, beauty farm, country-house, but also B&b) and agro-alimentary proper. Integrating tourism in an agricultural territory expands the tourist offer in connection with agriculture. The typical product-farmhouse relationship is the basis of the authenticity of this integration-connection: an objective typicality that characterizes the identity and that, according to some authors, can represent a brand in itself.

When a person buys a service, they are buying a set of intangible assets; when they buy an experience, they are paying to spend part of their time enjoying “memorable” activities that a business puts on to engage them in a personal way. Creating an experience is about engaging and enriching. That’s why it’s important to pay attention to the activities the consumer enacts. These activities are identified in sensing, or the preparation of information sets; sharing, or interaction with the consumption context; performing, or operation or use. It is necessary to be able to support and guide the client during these activities. In sensing, paying attention to the generation of information that leads to a sense of discovery of the place,

► *“Marcialonga”. While I bovi al carro (G.Fattori, 1867), on their way back, young tourists walk through the vineyards of the langhe, heedless of the vintners. (photomontage: N.Canessa, 2021)*





the objects, the flavors, the stories. In sharing, facilitating the relationship with the place, with the service providers, with the inhabitants, with other visitors. In performing, making access to services and elements of attraction easy, simple and direct, simplifying fruition and encouraging memories. To do all this, it is also necessary to intervene on training, forming new managerial skills. It is necessary to know how to recognize, construct and enhance elements of surprise and exceptionality; to create the perception of participating in an event expressly organized for that client; to develop communication and interaction with the context made up of places, people, objects, sensations and diversity. In order to do this, a deep analysis of the market and new tools such as introspection, observation and storytelling are required, since the traditional qualitative and quantitative tools can only marginally capture elements such as practices, experiences, emotions, relationships, cultural values. Food can give all this, and its very high cultural content can represent the main entrance and the key to understanding “cultural districts”, a set of elements that go well beyond the simple product. In fact, “food has always been an expression of the community, it enters into idioms, recurs in myths, legends, metaphors and even in liturgy (as good as bread, the legends of the Wild Man who taught the mountain people how to make cheese, the world seen as the cosmic egg, wine as the symbol of the blood of Christ)” (Bernardi, 2001).

From the ways and forms of eating one can get an effective picture of society. The young Marx wrote that “hunger is hunger, but the hunger which is satisfied with cooked meat eaten with knife and fork, is a different hunger from the one which devours raw meat, helping itself with hands, nails and teeth” (Marx, 1968). So nowadays, food takes on the function of a “medium” capable not only of communicating material culture, tradition, emotions, flavors, scents, but also of generating value in the territory, even triggering unexpected germs of entrepreneurship. Food as the great beacon and undisputed protagonist of the great country festivals, able to attract the interest of travelers and the media, distributing new and unexpected wealth in the territory. In fact, in the century of food insecurity, of transgenic foods, “in the era of globalization, of uniformity of consumption and homogenization of taste, everything that is presented as having territorial specificity, begins to regain value” (Paolini, 2009). In free time, the consumption of local gastronomic products becomes a way to (re)appropriate atavistic ties between the individual and the peculiarities of the territory (Antonioli, 1996). The rediscovery of roots, sensitivity to anthropological aspects, the desire to learn about history, the aesthetic-sensorial dimension all add up and interfere with oral gratification in the appreciation of many products or dishes. The deposit that exists in a place becomes the medium to illuminate that place, making it visible and visitable to the gastronaut¹ and the foodtrotter² (two new types of visi-

◀ *“Streetfood”. Talk about getting art out of museums, La Cuoca (B.Strozzi, 1625) took the statement a little too literally. (photomontage: N.Canessa, 2021)*

tors), developing wealth and provoking the encounter between consumer and producer. Gastronomy contributes to building identity, giving that appeal that a place needs in order to become a tourist destination.

“Food and wine tourist is the one who is willing to move from his or her place of residence in order to reach and understand the culture of a destination known for a valuable food production, get in direct contact with the producer, visit the area destined to the elaboration of the raw material and to the subsequent packaging, taste on site, and possibly personally buy the specialty and then go back home, surely enriched by the experience” (Croce and Perri, 2008).

The precise origin of this type of tourism remains uncertain. In 1841 was written *L'Italie confortable, manuel du touriste di Valere*, a guide conceived for the tourist who, while traveling in Italy, wanted to have practical information and indications about the typical enogastronomical products of the various areas and addresses of laboratories and stores where to find the various typical specialties. Then in 1931 was born a *Gastronomical Guide of Italy*, by the Italian Touring Club, which however lacks practical information about where to find the various products and about the processes of transformation and production. An important step in the definition of what would later become the canons of today's enogastronomical tourism, was marked in 1971 by Mario Soldati who published *Vino al Vino*, a collection of articles written during three journeys in the peninsula in search of authentic products and far from industrial transformation processes. A fundamental role was also played by the cultural associations *Slow Food* and *Gambero Rosso* which, in the 1980's, published guides which praised good eating and organized tasting courses and events of great impact, involving even non experts in the knowledge of the most hidden aspects of food. In the last years, consumers can also recognize the quality of agri-food products by reading the label, which shows, for example, territorial quality marks such as DOP, IGT, AS (Community quality policy, Community regulations 2081, 2082 of 1992). However it was only in 1993, with the product having the highest evocative power, that is wine, that the history of Italian enogastronomical tourism officially began. The merit is mainly due to the Wine Tourism Movement that in that year promotes for the first time “*Cantine Aperte*” (Open Cellars), an event to which at the beginning only some wineries adhered, but which then got the consent of many other wine producers. This event consists in having wineries open to the public in the last Sunday of the month of May in order to allow everyone to visit and get in touch with the environment where wine is produced, the production process, to get in touch with the “origin” of the product. In order for food and wine tourism to be an opportunity for development, however, it must be wisely organized in a sustainable and responsible way and put quality at the center. Therefore both

¹ Gastronauts are mainly male, between 30 and 50 years old, they preferably travel on Saturdays and Sundays in order to reach nearby places, they limit their visit to just one day, they travel mostly alone, or with their family or friends, personally organizing their trip, they pay great attention to the gastronomic heritage and to the way it can be enjoyed, they reserve a secondary role to the purely touristic value of the territory. There is also the gastronaut motivated by an event, that is, a type of tourist motivated to move by a festival, a festival, a fair or any other initiative linked to food and able to attract a target which is not purely gastronomic. (Croce and Perri, 2008)

² The foodtrotter, on the other hand, is a traveler who sees in the gastronomic heritage “the central element of the journey, where, however, the other resources of the territory also play an important role: his or her vacation, even if lasting just a few days, is therefore longer. In this case, accessory services play an important role, indeed, a discriminating one. The foodtrotter is mainly male, aged between 30 and 50 years old, he comes from places not particularly far from the enogastronomical destination (about 200 km) or however from longer distances but easily reachable, he has a medium-high culture and he mainly works as a conceptual worker, he moves with his family or friends personally organizing his journey, he stays in the place at least 2-3 days, he gives the same importance to tourist resources and to the presence of an “accommodation system for every pocket” (Croce and Perri, 2008)

the actors operating in the territory, as well as tourists, must act in a “future” perspective, in the sense that it must always be kept in mind that besides satisfying the needs of present generations, it is responsible and desirable to guarantee the same satisfaction to future generations, respecting resources and environmental quality while they are being enjoyed. The typical local product must not be commercialized, but its peculiarities must be highlighted and to do this everyone must act in compliance with a common code of ethics, which gives the guidelines for a correct and responsible behavior, which goes beyond the purely speculative logic and immediate profit. Sustainable development should also lead to an improvement in the quality of life, without exceeding the carrying capacity³ of destinations and ecosystems.

³ The carrying capacity of a tourist destination is defined as the maximum number of people who can visit a tourist destination at the same time, without causing destruction to the physical, economic and socio-cultural environment, leading to a lowering of the level of satisfaction on the part of visitors.

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Foods and dishes in the Mediterranean diet

NEW PARADIGMS FOR NEW AGRO-CITIES

The city is a word that lately has rediscovered all its expressive and semantic meaning of what distinguishes it from what it is not. It is nowadays assuming once again urban, suburban and metropolitan scenarios, centre and peripheries, in a new leap in scale from the polis to the megalopolis. The city is again at the centre of the debate that has ceased to be an exclusive property of old urbanism, being now understood as multi-disciplines encounter of sciences.

We are witness in a divers and prolific debate in almost all the human sciences, that takes place precisely within the idea of the city once again becoming the primary focus of research in terms of economy, politics, ecology, technology, health and logistics.

Since the first decade of the century the structural nature of the urban condition based on resilient view seemed unapproachable, because adapting an anachronistic model simply perpetuates its obsolescence, and despite generating temporary improvements in its reforming vision, it does not offer a real solution to the problems that we must face. One of the big questions is the reinterpretation of the nature, the landscape

and the agricultural fields in-between the new *Metapolitan/ Megapolitan* conditions.

How to approach the new Agro-Urban dimension of our fractal polycentralities?

The concept “AgroCities” deepened within the MedCoast AgroCities research (Tucci, G. 2019) and developed through the agrocities.com¹ platform can be a useful tool for:

- to encourage public bodies to integrate new actions and innovative practices during the phases of drafting plans or processes of territorial governance, already showing their use and functioning in other similar contexts;
- to help private bodies and/or companies by clarifying any doubts about the use of new technological systems and good practices, suggesting what can be the best strategies and the competent companies with which to collaborate;
- to facilitate partnerships between institutions, universities, companies, local authorities and associations by promoting participation in European and international calls;
- to provide a showcase for new research, experiments and patents of universities, companies or private groups, publishing information, development and updates on the results obtained, encouraging global sharing and the possibility of arousing the interest of funding bodies;
- to favour the collaboration of scholars and companies dealing with common themes and/or researchers who experiment with similar practices or technologies in different research centres;
- to collect information and data, useful for understanding which topics are of most interest to users.

The development of these potentials around a new “circular design” could be applied in three large-scale architectural types:

- the new concept of *botanical gardens* as constructed structures of renewed interest: the new *fab labs* in agriculture.
- the new market programs as k0-linked-markets and bio-markets: new structures for new activities.
- the new dimension of the real and virtual *Food Highways*: a large-scale vision for the combination Logistics-Mobility-Connectivity and its varied declination in the 21st century.

The prospective research developed by the IAAC Urban Science Lab in these *supragro* megapolitan domains, mixes dynamic multi-productive processes with evolving multi-functional potentials and joints, first, the study of conceptual strategies for the development – in our new complex urban areas – of new programs of activities associated to the primary production of food and its derived capacities, in secondary and tertiary sec-

¹ www.agrocities.com is an open-source on-line website, result of the doctoral research ‘MedCoast AgroCities’ developed by Giorgia Tucci, PhD Architect from the University of Genoa, within the GicLab-Unige research group, coordinated by Prof. Manuel Gausa. Tucci G. (2019), MedCoast AgroCities. New operational strategies for the development of the Mediterranean agro-urban areas. ListLab Editore: Trento-Barcellona.





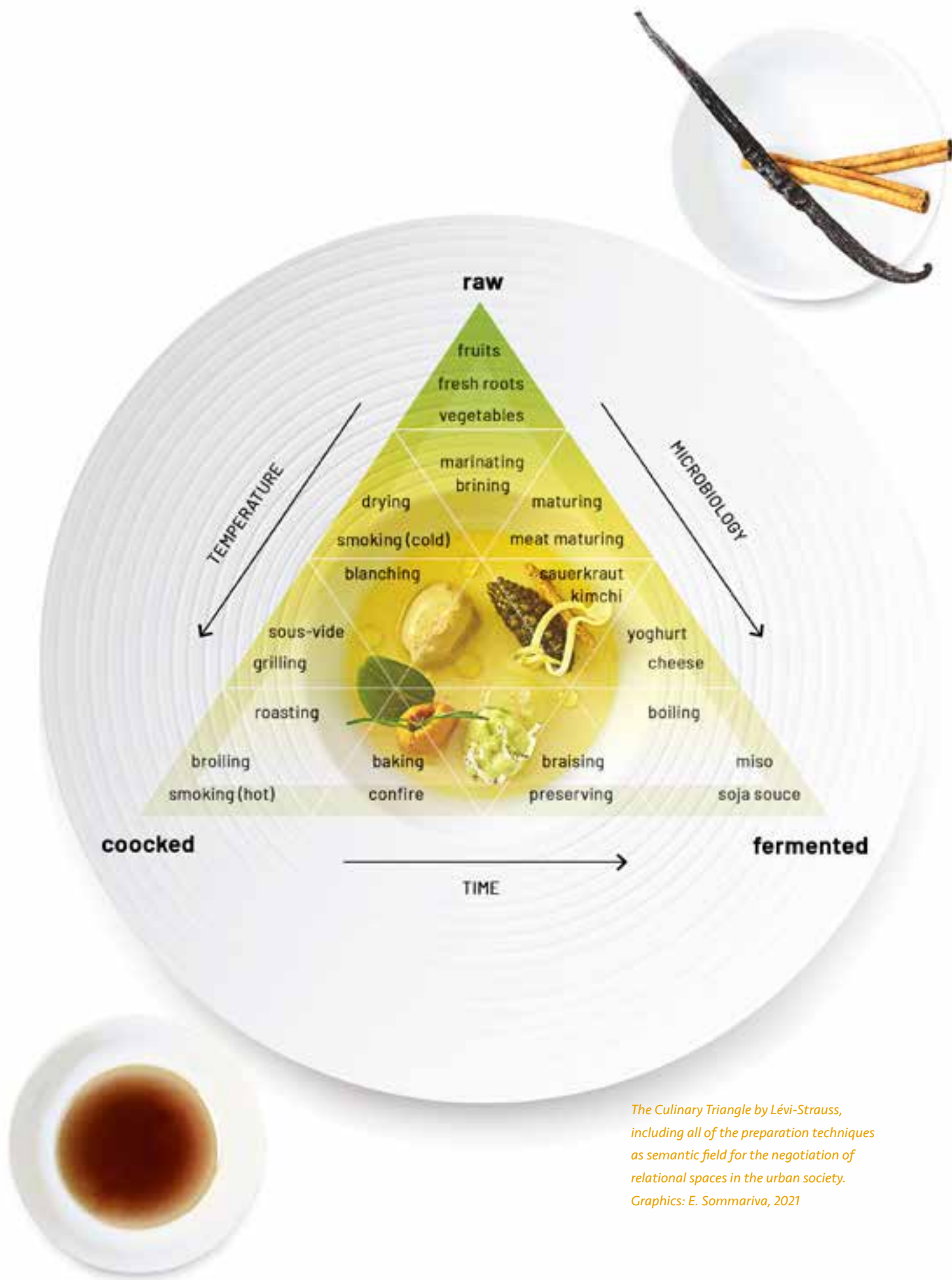
Agro-Cities & Agricultural hyper-Park for the Baix Llobregat, The Llobregat, AC+, an agropark of parks (Actar Arquitectura-Gic-Lab, pictures of Federica Ciccone, IAAC, 2014). A consultation for Barcelona Regional (Director: Willy Müller 2011-2015). A physical and networked, material and immaterial hyper-connected, territory.

The topics of botanical gardens, new market-processes and Food Highways in a landscape and urban-territorial declination for the 21st century. X-Urban Studio, IAAC-Urban Science Laboratory, Willy MüllerCamila Alvarez



tors. But also, in a second level, new conceptions for architectural devices of large size linked with a new way to produce, market and consume k0 products; and, in a third level, a design projective approach to new large-scale mobility structures able to relate the consolidated urban centers with an efficient connectivity to close (or in-between) rural areas.

Favouring a “XXI” version of an old and traditional primary activity that now is able not only to conjugated old food-crops and new goods-props but to cross and combine “living, working and resting” programs through new ways of production, marketing, packaging, enjoyment and consumption capable to be recognized in a new kind of *rurban* environments, with global capacities, local identities and strategic proximities.



The Culinary Triangle by Lévi-Strauss, including all of the preparation techniques as semantic field for the negotiation of relational spaces in the urban society. Graphics: E. Sommariva, 2021

CrEATing Cities, recrEATing savours

Food preparation and consumption, in the general context, is a recurring topic in media, art, literature and culture that reveals significant components of societies' structure. Against the merely nutritional aspects, food embodies a series of significances, which result from the collection of contextual and relational social practices, through personal experiences of other *foodways*¹ (Molz 2007; Duruz *et al.* 2011).

¹ In the context of this essay, the term *foodways* describes a holistic approach to food as a medium of creative invention, cultural identity and material aspects which profoundly shape urban society and people daily routines and habits. For more information see 'Foodways: Diasporic Explorations at the Age of (Digital) Discoveries' (Sommariva, 2020)

Already Claude Lévi-Strauss in the book "*Le cru et le cuit*" (1964) traced in the form of a *culinary triangle* a semantic field through which the various forms of transformation of food recipes and their mutual influences (in terms of techniques, tools, talents, traditions, etc.) shaped the negotiation of relational spaces in the urban society. In an augmented semiotic interpretation, the work of Roland Barthes and Lévi-Strauss is crucial to understand food as system of communication, a language with rules not unlike grammar (Dusselier 2009). Borne out of change and subject to cultural evolution through differentiations, food is a phenomenon of material culture, able to orient local economies, commercial exchanges and people movements since the foundation of our urban society, being a constant part of its renewal cycles.



Today, in the context of radical transformations of food cycles, meaning at times the standardisation and commodification processes, at times the diverse re-localization of production, distribution and consumption —often based on new technologies and new media— the globalization of *gastronomic landscapes*² represent a significant area of investigation, which underlines the enduring constant of food: the *changes* and *exchanges*.

One of the great ironies of our contemporary society in the wake of worldwide migration, from one side, and social distancing due to global pandemic, to the other, is the fact that foodstuffs can still be transported across the globe regardless any socio-spatial and environmental implications, patterning geographies of demands and eating habits according to a “take-make-dispose economy” (Ellen MacArthur Foundation, 2014) which includes regions of lack. As Robyn Metcalfe argues in her recent book *Food Routes* (2019) our food cycles depend upon reliable quantity, quality and schedules, in a continuous quest for newly fresh and healthy produce we can trust, but also able to satisfy consumers’ convenience, wishes as well as their phobias. We want the peaches from the farmer next door, one hundred types of bread, spices and exotic fruits for all seasons, dozens of coffee types, long-life milk and great quantities of pork, chicken and beef, which indeed is not quite

Maritime Spice Routes indirectly connect markets from East to West already in middle ages
 Graphics: E. Sommariva, 2020

² The notion of *Gastronomic landscapes* refers to the multiple value chain creation mechanisms around food cycles: from production to distribution of foods, from the destination’s cultural and culinary identity, to the tangible and intangible heritage (culinary crafts, recipes, innovation and cross-overs, etc.) until the meal and convivial experience.

the most efficient way for feeding us, considering the intensive land-use transformation for creating new arable and pasture lands in the Global South.

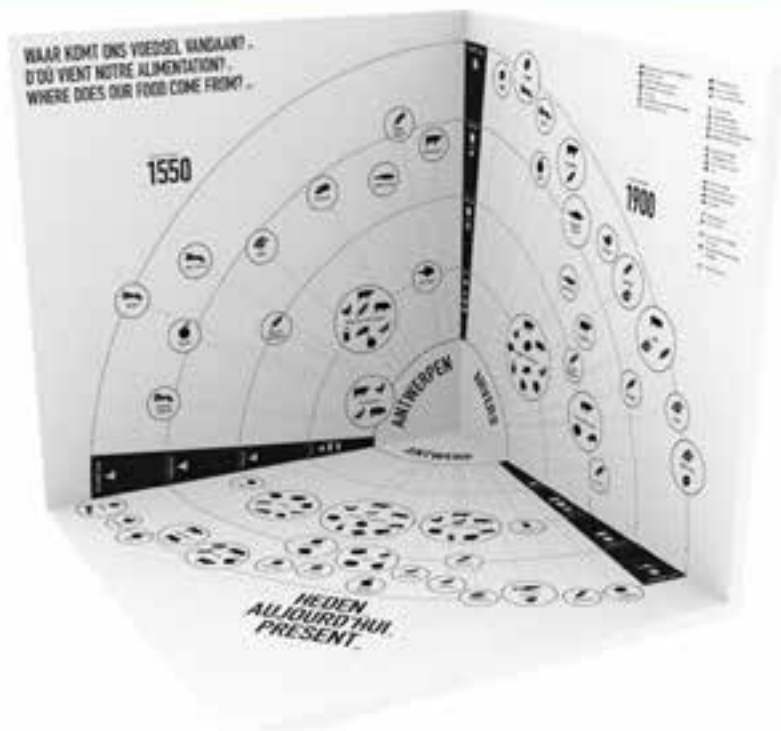
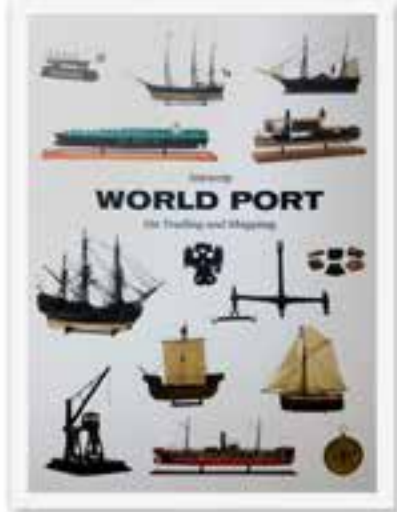
Moreover, the climatic urgencies by worsening the perishability and the biodiversity level of some produces, further force dietary and culinary adaptations for any migrant community, who may have wished to reproduce their food habits in the new home land. Historically, similar uncertainties have been associated with attempts to move food plants and animals from one region to another in order to introduce new possibilities of production and extending markets' control. (Atkins *et al.* 2007).

However, foodstuffs in relational terms are hybrid products in an emerging cosmopolitan habitat: material objects blended with human actions (Whatmore 2002), subject to heritage-making process as a response to the extreme industrialization of food processing and the subsequent transformation of domestic economies. In a liquid society (Baumann 2000) knowledge formation through food cycles is the most accessible threshold of a different culture (La Cecla 1997); recalling the protective intimacy of a domestic space and re-creating, time to time, local savouries and territorial identities through global trends and cultural crossovers.

A significant impetus for these topics, in line with the *Creative Food Cycles* project, came from a series of studies, researches and exhibitions which illustrates the future potential of a networked view of food exchange and how much our urban society has all evolved through food. Among others, the inspiring lecture about *Hungry Cities* (2009) by the London architect Carolyn Steel, the work of the Dutch anthropologist Irene Cieraad on the architecture of food supply, and the international exhibitions *Food Revolution 5.0* at the Hamburg Museum für Kunst und Gewerbe (2017) and *Antwerp à la Carte* organised at MAS Museum (Beyers, Van Damme 2016) contribute to depict a portrait of cities as the pivotal field of action and innovation of *food hubs* between local foodscapes and cosmopolitanism.

In every culture food supply and foodways constitute an organized system of cultural habits, rituals and fundamental prerequisites for the creation and maintenance of urban life. Our cities and landscapes, houses and markets, habits and routines, tastes and local economies have all evolved through the importation of food directly from other regions if not overseas, embracing all four positions of Warde's model of the diffusion of exotic produces: *rejection*, *indigenization*, *restyling*, and *authentication*.

Most early cities followed this pattern. Rome, at its height, was one of the most populated cities in the ancient world, and it was forced to import shiploads of grain, olive oil, pork, honey, wine, fish and *garum* – a fermented fish sauce derived from Greek/Phoenician cuisine, no Romans could live without – from Egypt, North Africa, Sicily, Middle East, the Black Sea and the North Atlantic coast. Feeding Rome was a bane of every



³ Historians have defined a shared origin of pasta culture, flourishing in the Mediterranean region as the result of exchanges between neighbouring early-medieval cultures at the juncture of Sicilian, Italian and Arab world. A significant reference has been traced by the work of Emilio Sereni *History of the Italian Agricultural Landscape* (1961), where he mentions how the fresh fine sheets of dough (lasagne) derives from the Greek-Roman *lagana*, while the long filiiform dry pasta would come from *itrium* of the Arab-Norman culture and in the records of Jerusalem Talmud.

emperor so that Cicero reckoned that the *Cura Annonae*, a free grain dole handed out to one third of citizens, cost Rome a fifth of all its revenue. A regular and predictable supply of grain and the grain dole were part of the Roman leadership's strategy of maintaining tranquillity among a restive urban population by providing them with what the poet Juvenal sarcastically called "*panem et circenses*". (Rickman 1980)

However, Mediterranean regions could not have been the same, without an intricate far-flung web of indirect connections to Asia, stretching from eastern merchants' routes such as the Eurasian Silk Road, to the maritime Spice Route for the supply of precious spices and luxury goods. Catalyst of discoveries and exploration, foodstuffs exchange represented throughout history one of the main drivers for reshaping world's supply and trade geographies and, by extension, civilization.

Among many biographies of explorers and mariners discussing East-West historical exchanges and long-distance food-related dialogues, Marco Polo's journey (1295) on his return from Katay (modern China) is at the centre of controversies³ among historians for establishing the origin of one of the staples of Mediterranean diet: the pasta. Polo referred to a kind of noodles made from breadfruit flour he had seen in Java. However, the use of *durum wheat* and dried pasta, as we know today, was already linked to the culture and lifestyle of the nomadic Arab tribes to withstand long journeys in the desert, where water was scarce (Steingarten 1998). The cylindrical and empty shape similar to macaroni would be a legacy of this influence, early mentioned as *itriyya* by the Arab geographer Al-Idrisi (1154) in the compilation of exported food products from the court of Norman kings of Sicily. Today two traditional recipes from Palermo '*vermicelli di tria*' and from Salento '*ciceri e tria*' by recalling the Arab term, evoke the long strands of dough, wrapped like balls of wool and exported in the main ports of the Mediterranean since 13th century.

Thanks to the commercial trades promoted by the Maritime Republics the Middle-East with Alexandria, Cairo, Constantinople, Acri and Antioch represented the direct access to riches. At that time many European port-cities and markets were supplied with appalling food necessitating huge quantities of pepper, ginger and cinnamon to disguise rancid taste or the salt used to conserve dried old meat; and when these fine commodities arrived to its destination, often they were ready to embark new route to be distributed across Europe. Some were resold directly to merchants arriving from the North or to emissaries of the Hanseatic League, operating from Flanders to the Baltic Sea, while others were shipped on barges up the Po Valley, and carried on mules across the Alpine passes to Switzerland, Germany and France. Just to give an idea of the commercial values of spices, Venetian and Genoese merchants were used to sell a pound of pepper in London and Bruges, for

◀ *Antwerp à la Carte: on cities and food exhibition at MAS Museum aan de Stroom, Belgium*
Photos: E. Sommariva, 2018

“This duty, senators,
devolves upon the emperor
and if neglected, the utter
ruin of the state will follow

Emperor Tiberius 22 AD, Cura Annonae

— Distribution of grain, olive produce, c. 2,000 yrs B.C.

— Cultivated grain, olive produce, present days





Reine island is one of the Lofoten archipelago foodhub for stockfish fishing and processing before exportation
 Photo: R. Mantero, 2017

⁴ A Genoese fishermen and trading output has been established at *la Caleta* in Gibraltar since the 15th century. The heritage of this community is evident throughout Gibraltar but especially in the architecture of traditional courthouses with terrace gardens and the local cuisine cross-overs: like *la calentita* a chickpea flour-based flat-bread similar to Genoese *farinata*.

◀ *Cura Annonae, a free grain dole to maintain tranquillity among a restive urban population, was part of the Roman food's strategy to supply the city by overseas import of grain, olives, wine and other foodstuffs*
 Graphics: E. Sommariva, 2021

a sum equivalent to a week's work for a carpenter or a shipwright. (Cipolla, 1997)

These operations were of great magnitude and both Genoese and Venetian settlers established a networked presence of docking outposts or coastal settlements with the primarily intention to control over trade routes, market outlets and to preserve particularly monopoly of import/export of fine goods and foodstuffs. By the 15th century, a part from the western Mediterranean commercial routes to Black Sea and Crimea, Genoa had established a presence in Gibraltar⁴, on the Atlantic coast of Morocco, on the Northern Atlantic coast of the Iberian Peninsula (Santiago de Compostela) till the English Channel and Northern Sea largescale fishing hubs, opening new mercantile and culinary exchanges and contaminations.

Stockfish (dried cod) founds its way to Mediterranean cuisines during 15th century, as a result of large fish trade practices among Norway, England and continental Europe. This increased demand is probably explained both by Christian fasting practices —especially during the Lent period— and by growing urban populations looking for cheap and easily preserved foodstuffs. (Barrett *et al.* 2004)

If the Vikings probably already knew the process to dry cod, the Norwegian trade of stockfish from Lofoten islands, Newfoundland and Labrador, represented the perfect solution for the abundance of provision and the versatility of culinary uses: from fish soups to main course, it became extremely popular and widely consumed in Portugal, Spain, and in Italy. The ease and stability of conservation allowed this dried fish to sustain

both long journeys by sea and by land, reaching also the innermost continental markets.

Again, creative inventions and social innovation triggered by growing food markets and commodities demand, resulted in extensive overseas explorations to find new sources of supply. Food and fine goods started to be mapped alongside nautical routes to reach them in newly-discovered lands outside Europe. Whether the Asian colonial empire of Portugal, England and the Netherlands might be said to have sprouted for the sake of precious foodstuffs and how fortunes were made and lost due to them, yet to modern eyes it might seem unrealistic that food should have exerted such a powerful attraction.

Understanding how food supply represented a powerful factor in European urban society to foster social innovations and new economic perspectives, can also answer to a desire for public recognition of difficult past times and deal with themes of multiculturalism, migration and intercultural contact, providing a space of dialogue and hybridization to explore differences otherwise difficult to deal with.

These narratives grew out of largely invented foundation myths and traditions of individualism and nationality. Instead of exploring specific countries, the intention of this essay is to underline the necessity to focus on transnational spaces, from medieval Europe to contemporary challenges of urban society conscious that European cosmopolitan habitats of the future needs not to forget the lesson learned throughout history of being inclusive, curious and pours to cross-cultural learning and connections.

*Ciceri e Tria, traditional Apulian pasta recipe
recalling the legacy of Arabs/Normans*

itriyya

Photo: I profumi dell'orto - V. De Felice, 2017





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◀ *Stoccafisso accomodato, traditional Ligurian stockfish stew recipe listed in the regional agri-food products*
Photo: A Small Kitchen - E. Monzani, 2020



*Fig. 1. The centrality of act of drinking wine
in The Wine Glass (Het glas wijn) of Jan Ver-
meer. Elaboration by the author.*

ODE TO WINE

Ancient and contemporary values of the wine cycle

*Abbasso l'acqua che rovina i ponti,
perfino quella pura delle fonti,
la cosa che per noi davvero conti
è il vino che mantiene mari e monti.
[...]*

Italian folk song. *L'acqua fa male, il vino fa cantare.*

Shame on water that ruins the bridges,
even the pure one from the sources,
the thing that really matters to us
it's the wine that maintain the seas
and the mountains.

Wine and the culture of drinking together

The wine is part of human life since very long time. It has been part of everyday nourishment, but also of religion, art and culture. The art has often testified to the harvesting and pressing of grapes, already in many ancient civilizations. Wall decorations with vine scenes, dating back to the second millennium B.C., found in the necropolis of Thebes, for example, testify to the wine



Fig. 2. The centrality of wine and act of drinking it in *Le déjeuner des canotiers* of Pierre-Auguste Renoir. Elaboration by the author.

production of the ancient Egyptians. Well known are the different wine-themed representations of Greeks and Romans, both in vases and paintings and sculptures. The theme of wine has crossed the art, from the *Bacchus* of Caravaggio, to the *Cenacolo* painted by Leonardo da Vinci, to the sixteenth century still lifes. The act of drinking wine is the centre of the scene in *The Wine Glass* (*Het glas wijn*) of Jan Vermeer (fig.1); Van Gogh represents the harvest in *La Vigne rouge* and wine is present on the tables of *Le déjeuner des canotiers* (fig.2), just to mention a few examples of a huge artistic heritage.

Herodotus, in the *Histories*, tells us that also the Persians were passionate wine drinkers. The most important problems, according to Herodotus, were usually discussed while drunk and then, if the decision was acceptable, it was reconsidered the next day, when they were sober. Also, if they made a decision while sober, they used to reconsider it again, while drinking wine (Müller, 2005).

Tullio Gregory (2018c) remind us the value of the convivium as the ancient Greek and Roman culture have taught us: the symposium is a moment of civilization and one of the highest expressions of civil life. He recalls the importance of the pleasure of conversing freely at the end of the day, during and after dinner, sipping good

wine. Gregory claims that this tradition remained valid, even if varied, until the beginning of the twentieth century, while it was interrupted by the triumph of speed and noise, of the television and of the network (Gregory, 2018c).

Was Gregory too categorical with contemporary technologies? Maybe. During the last year, forced at home due to the Covid-19 pandemic, information technology helped us to be connected, not just for work issues, but also with family and friends.

We are in a situation where the social, physical, dimension has been denied, where the ritual of the glass of wine, or beer, to exchange thoughts with colleagues and friends after work, outside the formal environment of the office, has been denied; the risk is now to lose all that spontaneous exchange of knowledge and ideas that takes place only within such rituals. Marilena Colussi, researcher, sociologist and marketing expert of the food wine supply chain, in an interview of April 21, 2020¹, pointed out that, despite the impossibility of confrontation *vis-a-vis* the wine or the action of drinking something together, even in these emergency situations, remained central. She also reflects on how we have focused more on the nutritional, cultural, symbolic, food and beverage exchange value, contradicting the convention whereby the development of increasingly advanced societies, would tend to dispose of primary needs in favour of needs linked to more complex intellectual desires.

We tried to recreate a surrogate conviviality organizing digital aperitifs or dinners; on those occasions, while technology was the tool to see and connect each other, the conviviality, or, at list the illusion of it, was created again with the act of drink something together, often, a glass of good wine (fig.3). The act of drinking wine, in fact, doesn't just mean quenching your thirst, but it brings with it complex lay or religious meanings; as expression of the culture, more than of the nature, it goes beyond the product itself and its consumption, becoming a sign of friendship, hospitality and joy (Gregory, 2018a).

The cycle of production and consumption of wine, from the planting of the vine, the harvest, the offer and the act of drinking, is ancient, it brings with it historical, mythical, linguistic and cultural references; it is part of the so-called *wet-culture*, typical of the Mediterranean countries, characterized by the values of use of *food drink*, convivial and socializing. In this type of culture, the approach to wine is gradual starting from childhood; usually children learn how wine is created already in the family or at school (fig.4- 5), and the consumption of it is an aspect that is associated with the daily conviviality of the meal or with the act of toasting on festive occasions (Beccaria, Petrilli, Rolando, 2012).

What is the social and cultural role of wine today in our society and territories? Are there new possibilities and new possible links in the wine cycle?

¹ The interview is available at: https://winenews.it/it/vino-cibo-e-una-nuova-socialita-il-cambiamento-da-coronavirus-secondo-marilena-colussi_415001/



Wine sculpting our territory

The incipit of the folk song *“L’acqua fa male il vino fa cantare”* ironically compares the damage caused by running water, and rivers that erode and destroy bridges overflowing, to the qualities of wine, able to maintain the entire territory. Despite the ironic and goliardic spirit, it focuses on a real fact, that is the ability of the productive cycle of wine, from cultivation to consumption, to structure and maintain the territory, as well as to provide work, sustenance, as well as pleasure, over all the entire territory. This comparison also recalls us that rivers and wine have been connected since ancient times. The waterways, in fact, were the main arteries of communication and were the transport routes of grapes, amphorae and barrels. Along the Nile, for example, there were tunnel pergolas and the Muscat vine of Alexandria, and the Greek civilization spread viticulture on many rivers in the Mediterranean basin (Fregoni, 2019). The Romans were the ones who created the best-known fluvial viticulture, which from the port of Marseille went up the Rhone, the Rhine, the Moselle and the Danube, up to the Black Sea, defining the territorial structure that we have inherited for centuries (Fregoni, 2019).

The territorial aspect, and management is increasingly important in the production cycle of wine; the vineyards have been designing our territories for centuries, sculpting unique landscapes in which agriculture becomes a fundamental component of management and care of the territory (fig.6). The cultivation and maintenance of terraces, for example, are essential tools to counter the growing hydrogeological risks. Terracing, in fact, is

Fig. 3. An online aperitif during 2020 pandemic. Published on LA NAZIONE on March 13, 2020., Photo by Castellani, Elaboration by the author.

Fig 4. A child pressing of grapes with feet during a school activity. Elaboration by the author. ►

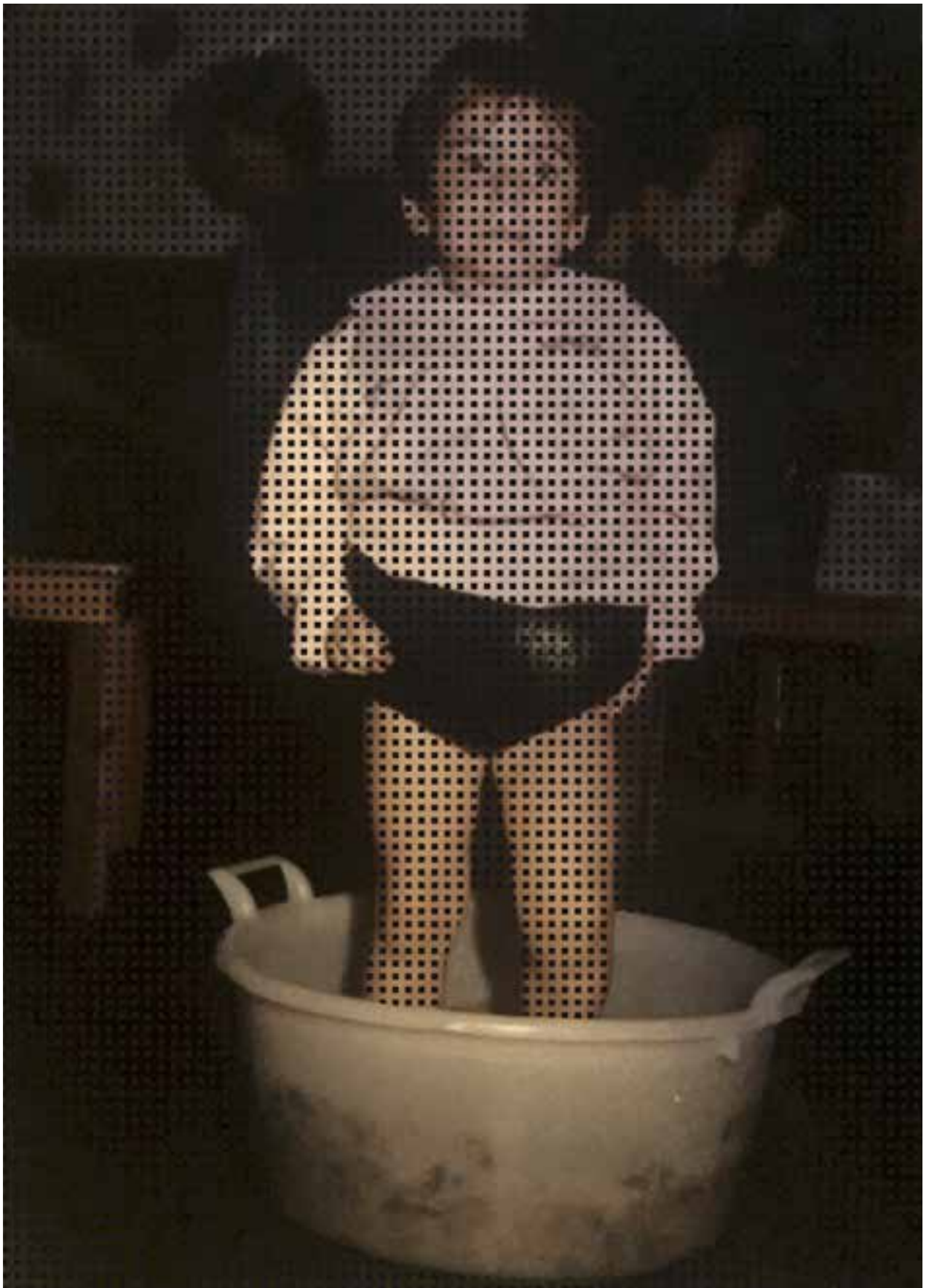






Fig. 6. View of the cultivated landscape from one of the towers of San Gimignano. Photo and elaboration by the author.

built to retain soil and water, to reduce erosion and to allow irrigation on the surface and it is one of the most visible and widespread distinctive features of human activity in different parts of the world (Brancucci, G. et al., 2018).

The architectures for the production of wine have a fundamental role on the territory too; they are no longer just places of production but have become attractors of a new food and wine tourism, in which people can taste wine and learn how this is created and treated. These buildings sometimes have the chance of becoming complex infrastructures that redesign and define new landscapes around themselves, as the Antinori winery in the Chianti Classico of Archea Associati does; it fits into the surrounding landscape enriching and multiplying it (fig. 7). However, at the same time, it is the intensive cultivation that, favouring more productive and more easily mechanically manageable territories, tends to encourage the abandonment of less profitable areas because more inaccessible. In Liguria, for example, which is a territory characterized by a complex morphological context, historically cultivated on terraces (fig.8), agriculture, is not so profitable when compared to modern agricultural practices, due to high production costs and labour requirements (Brancucci, G. et al., 2018); this progressive abandonment of slopes increases the hydrogeological risk.

◀ *Fig. 5. Mechanical pressing of grapes during a domestic harvest. Photo and elaboration by the author.*



Fig. 7. Antinori winery in the Chianti Classico, by Archea Associati.

Photo and elaboration by the author.

Agriculture, according to OECD², is the largest user of water globally and it is a major source of water pollution, but it also has the opportunity to contribute to flooding risk reduction and mitigation. The European inputs indicate the need to encourage more sustainable agriculture that not only exploits the territory but takes care of it.

An important step forward in this direction for the wine sector was the “*Testo Unico del vino*” (238/2016)³ that contain the organic discipline of the cultivation of vine and the production and trade of wine. In Article 1, wine, vine and wine-growing territories are for the first time recognised as national cultural heritage to be protected and valued, as the result of work, knowledge, practices and traditions. In the same normative apparatus, a provision is introduced on the safeguard of the heroic or historical vineyards that insist on areas subject to risk of hydrogeological instability or having particular landscape value.

The opportunities opened by this law are huge. The definition in Article 1 is of great importance and allows to approach these territories and cultivations not only from a productive point of view but also, and above all, from a cultural and creative one, combining conservation of tradition, maintenance of the territory with innovation and sustainability.

² According to The Organization for Economic Co-operation and Development (OECD) (<http://www1.oecd.org/agriculture/topics/water-and-agriculture/>)

³ The complete text of the “Disciplina organica della coltivazione della vite e della produzione e del commercio del vino”. 238/2016, commonly known as “Testo Unico del vino” is available at: <https://www.gazzettaufficiale.it/eli/id/2016/12/28/16G00251/sg>

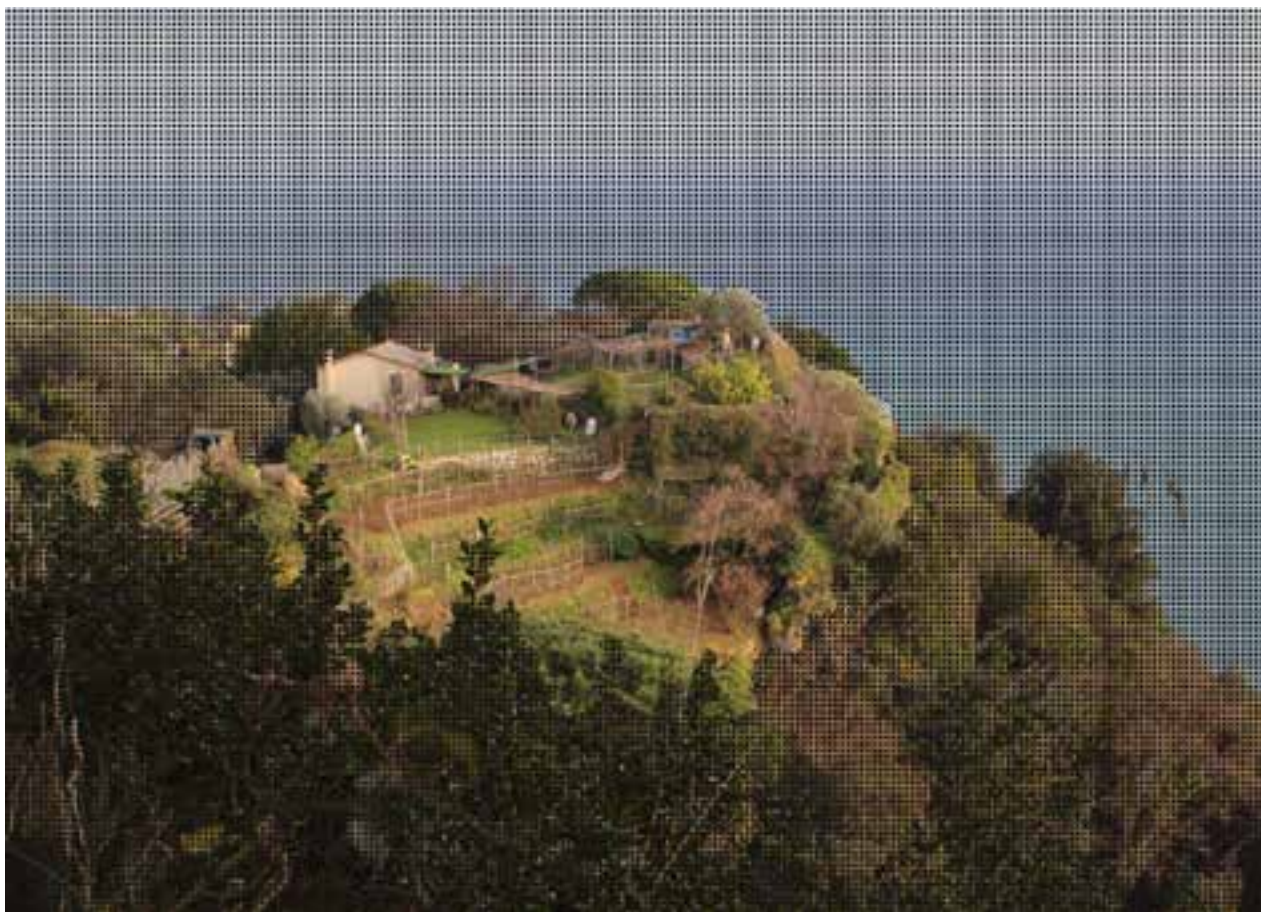


Fig. 8. Wine cultivated terraces on the promontory of Portofino. Photo and elaboration by the author.

Wine and new materials

Aiming at “zero waste” society and a circular economy, waste products can be transformed, through mechanical, chemical and biological processes into raw materials for new products. This is particularly interesting in the agro-industrial sector, that strongly increased the amount of lignocellulosic products generated by the activity over the last 100 years (Maicas, Mateo, 2020).

The amount of possibilities coming from food waste is surprising. In the last ten years, several companies that produce fabrics from food waste have been born and grown. Among the waste used there are citrus fruits (with the company Orange Fiber⁴), pineapple (with Piñatex⁵), bananas (with Bananatex⁶), milk (with Due di latte⁷) and of course wine, with Wineleather⁸, produced in Italy by Vegea.

Among all the agricultural wastes grape pomace is recognized as one of the most interesting for originating a wide variety of products, from bioactive molecules to materials such fillers for biocomposites (Berger, Mattos, Amico, et al., 2020).

Wine production is one of the most important agro-industrial activities in Southern Europe countries and the annual European-wide production of Grape by-products amounts to a total of 14.5 million tons years (Maicas, Mateo, 2020). Pomace (fig.9) is traditionally used as fertilizer or animal feed, or as pigments to

⁴ More information at: <http://orangefiber.it/>

⁵ More information at: <https://www.ananas-anam.com/>

⁶ More information at: <https://www.bananatex.info/index.html>

⁷ More information at: <https://antonellabel-lina.wixsite.com/duedilatte>

⁸ More information at: <https://www.vegeacompany.com/> and at: <https://www.materially.eu/it/m-news/112-materials-raw-materials/240-wineleather-pelle-vegetale-dal-vino>



Fig. 9. Pomace. Elaboration by the author.

colour fabrics; however, already in 2013 several studies have been developed concerning applications such as fuel alcohol production and biofuel energy production (Robison, 2013). Maicas and Mateo (2020) underline that this by-product is endowed with a high antioxidant activity and report that grape pomace produced in wineries can be used in the pharmaceutical, cosmetic and food industries as source of antioxidants; They also reported that it has been used also as bio-sorbent material for the elimination of toxic compounds. Another research published in 2020 demonstrate that Grape pomace and wood particle utilization are a sustainable alternative to reduce petroleum-based plastics consumption in industries and described these composites as having a good behaviour against water and good mechanical properties (Berger, Mattos, Amico, et al., 2020).

Particularly interesting is the case of the Italian company Vegea that was born in Milan in January 2016. It produces Wineleather, which is the first 100% Made in Italy vegetable leather. The company claims to use the marc in a zero-impact process, that transforms the fiber and vegetable oils present in the marc into ecological material very similar to a skin, for mechanical, aesthetic and sensorial characteristics. They also declared that with 13 million tons of waste 3 billion square meters of vegan leather can be produced, replacing the production processes of animal and synthetic leather⁹.

⁹ <https://www.colturaecultura.it/articolo/una-pelle-di-vino-i-tessuti-di-wineleather>

Final considerations

Wine and its production cycle show to be, since ancient times, an important cultural heritage, to be preserved, enjoyed and handed down; at the same time the reflections and the cases just presented show us how this supply chain, so rich in tradition and culture, is also dynamic and open to innovation, both from the point of view of management, care and strategic planning of the territory, and in the defining a closed production cycle, through the creation of new bio-materials from waste. The attention to a new kind of sustainable and innovative agriculture of wine and the creation

of new products obtained from pomace, show us that new links in the wine cycle chain have been added and they are open to be explored further, with new strategies not only economical but also creative and innovative.

During this pandemic time another reflection comes directly to mind when thinking about wine and the vine: once the Great Flood was over, when peace between God and the men was restored, the first action that Noah did, according to the book of Genesis, was to plant a vineyard, not wheat or other vegetables. Planting a vineyard involves a long-term project, patience and dedication.

Significant is that the history of men starts again from the wine and the vineyard, it starts not from the necessary but from the voluptuous (Gregory, 2018a).

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MYCO-PANEL

Mycelium panel towards a more sustainable construction

Nature has always been a great inspiration for architects. Lately architects increased focus on sustainability and ecology, as a result architects started to reach beyond biomimicry, but blending the architectural approach with biology. Using experimental techniques that focus on material driven innovation aiming to invent a new bio material.

The correlation between biology and architecture opens the door to a new bio-based materials that helped designers to explore a new methods of design with living organism. Hence, nowadays several projects based on digital technologies attempt to integrate ecological materials due to their environmental benefits compared to contemporary ones, but also due to their local availability and low cost in combination with high precision and affordability offered by digital technologies without any extra cost (Buswell 2011).

Several examples that implemented bio-based materials and digital design and bio fabrication are, the Hy-fi (Nagy 2015) and the Myco Tree projects (BRG 2017). In the Hy-fi project a large scale installation in the form of a tower pavilion was developed using mycelium brick as building materials. They were assembled together based on stacking logic using computational techniques.

In the Myco Tree project is a spatial branching structure made out of load-bearing mycelium components. Its geometry was designed



Fig. 1: *Mycelium roots binding with straw*

using 3D graphic statics, keeping the weak material in compression only. Its complex nodes were grown in digitally fabricated moulds.

Methodology

Mycelium is the root network of mushrooms, a fast growing matrix that can act as a natural binder. Digesting plant based waste products such as coffee ,straw and sawdust, mycelium's root network binds the substrate into a structurally active bio material composite. The advantages of such products are significant: As mycelium follows a metabolic cycle, building elements or whole constructions can be composted after their original use. According to BRG 2017 ,the material can be grown locally, reducing both the energy and time required for transportation. And, as they are organic matter, they act to reverse carbon emissions through the absorption of carbon. To initiate the growth process, sterilized substrate is mixed with mycelium tissue. Over the course of days, the fungi will start to digest and transform the nutrients, growing into a dense, spongy substance of interlocking mycelium filaments. (Figure 1)

Production process

The procedure followed for the creation of such materials is more like the creation of a simple

Do it yourself material. The production of a mycelium panel material is completed in 6 phases :

Phase 1: Preparation

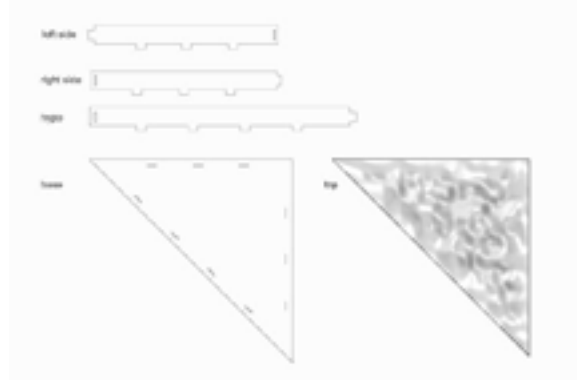
Mycelium is the vegetative part of a fungus or fungus-like bacterial colony, consisting of branching, thread like hyphae structures. Mycelium grows naturally in the wild and it is something one can grow at home/lab through tissue samples. Another option is to buy ready grown mycelium online.

Phase 2 : Designing the Formwork

The formwork can be digitally designed. Acrylic sheets are used to make the base and the sides. The acrylic sheets are interlocked into each other so that it does not need to be glued and can be easily removed later. (figure 2)



Fig. 2: *Acrylic Sheets Interlocked*



The top part of the design is developed through parametric design software (Rhino, Grasshopper) and then milled on a High density foam using a CNC milling machine.

The milled piece is then placed on the vacuum forming machine where a plastic sheet is heated and moulded on top of the milled piece according to the designed shape.(figure 3)



Figure 3: *Vacuum forming process*

Phase 3 : Sterilized formwork and casting mycelium substrate

All sides of the form were sterilized with alcohol solution in order to kill all the harmful bacteria that may affect the growth of mycelium. The sterilization process was done two hours before casting. The form once dried and cleaned is ready to be filled with mycelium. Mycelium is scrapped from its original lump and scrambled uniformly into the formwork. It is then rammed with hands to make it more compact until it fills the formwork to the top. The Bottom and sides of the formwork are perforated with small holes about 3 millimeters in diameter in order to achieve air circulation and let the mycelium

breath. The bottom side and the top piece of formwork are held together with tape and interlocked by the joints of the mold. The tighter it's packed the smoother the final product will be. Mycelium can be casted on various shaped molds, so packing the substrate against smooth materials such as plexiglass or plastic will result in a smooth finish.(figure 4)



Figure 4: Casted Mycelium

Phase 4 : Seal and Store

A black bag was used to seal the mold up completely. Mycelium needs oxygen to grow since it consumes oxygen and expels CO₂. It is important that some air flow into mycelium through holes. If the bag is sealed up with enough moisture then one doesn't need to mist it during the growth stage. Finally the mold should be stored in a cool (15-20 degree celsius) and dark place to prevent bacterial growth.

Phase 5 : Growing

After waiting for the mycelium to grow for a period of three weeks. Some of the mycelium grew from some openings and eventually fruit into small mushrooms. Once this has happened there are potentially mushroom spores on the model and in theory, given the right conditions mushrooms could start growing again. If it shows green or black spots, the substrate has become contaminated with bacteria and should probably be composted.(figure 5)

Figure 5: Mycelium roots growth



Phase 6 : Baking

Once the model looks sufficiently covered with mycelium roots, it is removed from the formwork very carefully as the material is fragile. The model is then placed in the oven for the drying process. Different sizes and quantities of mycelium are baked at different temperatures. The tiles are baked for about 58 hours at the temperature of 80 120 degree celsius. (figure 6)



Figure 6: Baked mycelium Panel

Conclusion

In Conclusion , mycelium is a fascinating organism, that have numerous potential applications in architecture , construction and product design . While the research presented in this paper aimed to obtain material study on the interrelaion between digital design techniques through experimentation in order to examine the potential of mycelium bio-based material.

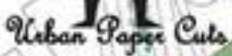
The aim was obtained through design by research approach which shed the light on the focus of the process of materilaztion and formation rather than the end result. In addition, another goal was to understand whether if it is possible to apply living organisms to a digitally designed form that can be used as isolation/sound proofing panel and construction brick.

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BUILDING A MEAL, BUILDING & FOOD.

Four Hyper-minimal articles n. 6*

Food and architecture are a binomial that although initially it seems strange to us, in reality, they are not far apart. Is food an invention or a convention, is it empirical or scientific?

A project is not the resolution of an exact and fixed program on an imposed place, nor does the territory dictate more than a simple obsession.

*NOTE: See for the original version in Spanish "Hyperminimal articles 6" in the magazine *Fisuras* 9/10, 1992.

Construction, processes versus result, taste, conventionality, decoration versus substance, folds, curls, chemistry versus alchemy, natural and artificial, coloring cards, additives, sweeteners isolating sensations, the expanded concept of materials, uses and enjoyment are common fields of research.

In these micro-texts it is proposed to reflect on the very definition of architecture through the use of techniques, materials and purposes apparently outside the usual processes of the discipline.

A new border territory between creative-matter fields in which the experimenter-researcher can easily take food as an explorative, testing and working, material, and present an eatable built object such as maki-sushi or similar: that is, a product capable of being eaten in a single bite by means of a common utensil, as well as the plan or drawing intended to project, describe and allow its definition and specific construction.

◀ *Federico Soriano-Dolores Palacios, 2020, Andersen, House of Fairytales, Garden and Master Plan*







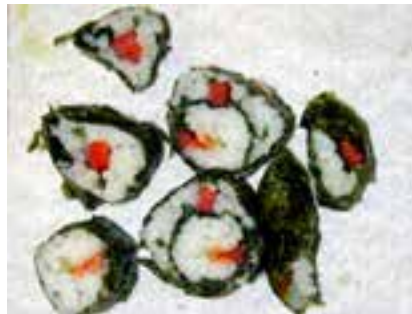
An exercise completed with another operational format, a memory text (narration, instruction and recipe) of no more than 50 words, equivalent for both fields of action.
Experimental term: five hours.

Action 1: Folding & Sushing

(On March 1, 2000, Wednesday, within the Master of Architecture and Criticism of the Polytechnic University of Catalunya, a program directed by Carles Muro and Ton Salvadó, and which was developed at the ETSAB, within the semester in charge of the professor Eduardo Arroyo was imposed – as an exercise proposed by the guest Federico Soriano – the statement corresponding to the hyper-minimal text “Building the food”, previously exposed.

32 students of various nationalities participated in the test. The duration of the exercise was exactly five hours.

The statement was presented in the morning, running from one to six in the afternoon and a party was held at the end where they ate – as a discipline within the tested *trans-discipline* – the results themselves.)



Action 2: car-cooking

We thought we might get a little hungry on our road trip to Barcelona.

We were going to deliver some documents from the Laminar Tower project and solve a course at the UIC (International University of Catalonia). Six hundred kilometers to the opening and no time for a hot meal.

So, we grabbed the *Destiny Manifold: The First!* The only guide to cooking on your own car engine! and we decided to make our food there, in the car.



Advertised with a cooking time of 140-200 miles (225-300 Km), "*Chicken Wings for any city*" was undoubtedly the most appropriate recipe for our Madrid-Barcelona journey, just enough for a quick hot snack midway.

Release date: November 2, 2000.

– Wednesday, November 1, 2000.

At home, place the chicken wings in a bowl. Mix the other ingredients in another and pour it over the wings. Cover it carefully and put it in the fridge for 24 hours, stirring from time to time.



– Thursday, November 2, 2000.

Drain the wings, keeping the marinade, and spread them over three sheets of aluminum foil. Spread them with the remaining marinade. Wrap the food with the aluminum by folding it with flaps.



Look under the hood of the car and you will see a shiny flat surface ... just over the top in the middle of the engine.



Although there are many nooks and crannies between the engine and the hole that houses it where things could fit, what really interests us is that kind of grill at the top.



Note: as Madrid has the busiest highways in the country, it is important that we think in terms of time rather than distance when we are cooking in the car.



So halfway through, let's eat!



Wigglesworth Till Architects *The Meal* 1997
"The first drawing responds to a table before starting a meal (...) raising questions of composition, objectual order and static relationships associated to the physical- and consequently the visual and perceptual - configuration of the elements.
The third representation is another static presentation, comparable to the first image, but which has been structured by the actions of the food. The visual result is no longer so reassuring but contains certain information that are direct translations of the events.
The second drawing traces all the movements that have occurred during the meal. In it, we are able to read the actions that are

happening, the tensions, the distances, the interests ...
If we focus the intensity of the project on the first representation of the meal, we are clearly facing a reassuring response. Everything seems to be kept in order and balance. The objects are arranged with laws that draw a compositional configuration as the final result. Everything seems perpetual, stable. Dead
Just on the opposite side, if we concentrate on forcing the intensity in the second representation, we are forcing the questions.
The questions of what can happen. Not in how it is presented to us, but in how this food develops: What can happen? What are the actions going to be? Where are tensions going

to be generated? What kind of relationships will be established between diners?

The distance between diners increases the volume of cross-talk which facilitates the appearance of somewhat more intense tense) discussions, and these allow the appearance of non-conforming topics. The arrangement of the shared food in the center of the table establishes complicities and discoveries between the different attitudes of the diners. The tablecloth measurements establish generous concealments under the table to reveal another level of relationships that are not wanted to share publicly... "

Amadeu SANTACANA (2014), *Los icebergs del realismo invisible*, in *Diagonal* n. 37

(Inter)action 2: The layout of the table.

We work with the arrangement, with the momentary order of the elements.

Our tables also include this discourse of the adapted order.

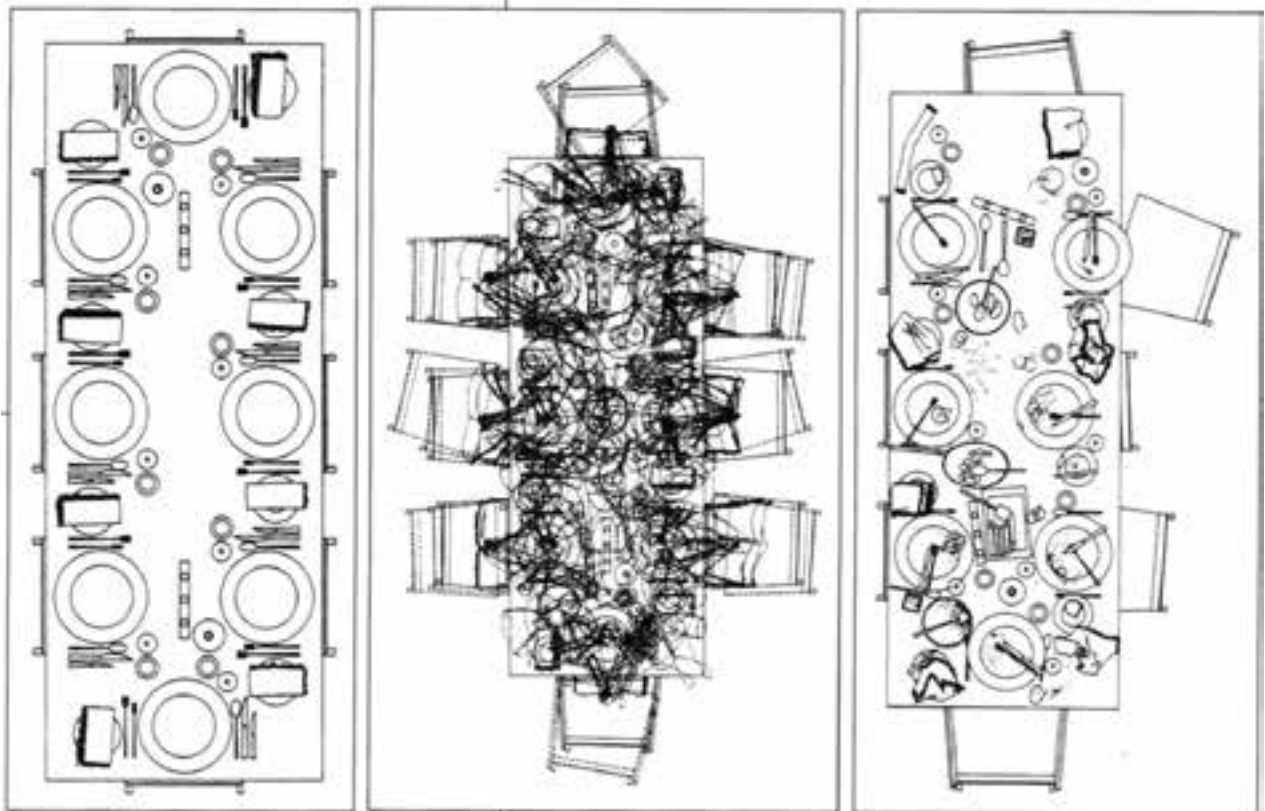
The label had maintained an exact and rigorous organization between plates, cutlery, glasses, the result of a classic reading of food. The succession in the correct order of the various meats, the different services that each type of food required, the order of the drinks, ... built some composition rules. Parties and banquets were allowed to leave a space for freedom or improvisation in the center of the tables.

Today we no longer eat by following this label. Side dishes, salads, shared dishes, heterogeneous drinks sharing a table, sometimes all the food is already present, other times we eat directly and individually from the sources.

But the initial composition on our tables remains unchanged. Only at the end is its adaptability checked.

There are open provisions that would resolve this flexibility. Specific for each moment and type of food, or ambiguous, or formal like abstract sculptures, or alignments where utensils are shown waiting for the diner to establish their final position, or incongruous, aligned or simultaneous.

We may, we have to do a tabletop project.



(Inter)action 1: Eatable-gardens.

Can we imagine an urban garden built with edible plants instead of ornamental ones? Where the hedges are made with tomato plants or red peppers or black aubergines? Can we imagine a bright flowerbed of strawberries, some asparagus hedges, some neat potato plantations?

Fruit trees; plums, apple trees, apricots, custard apples. Fields of sunflowers, barley or wheat, changing color, watering, gathering. Plowed landscapes, furrows.

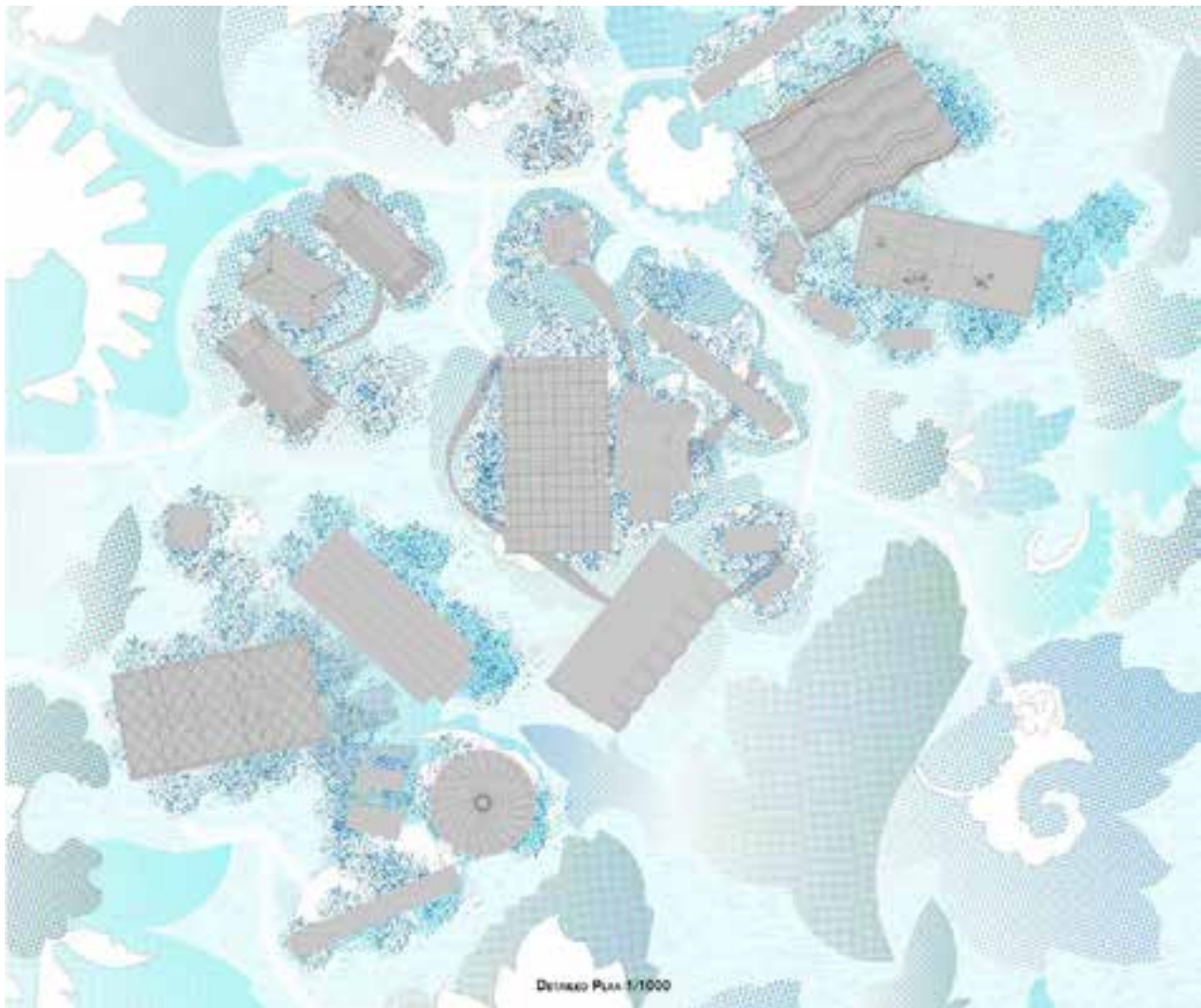
Drylands and fallow fields. Reeds and bamboo canes, slender and vertical.

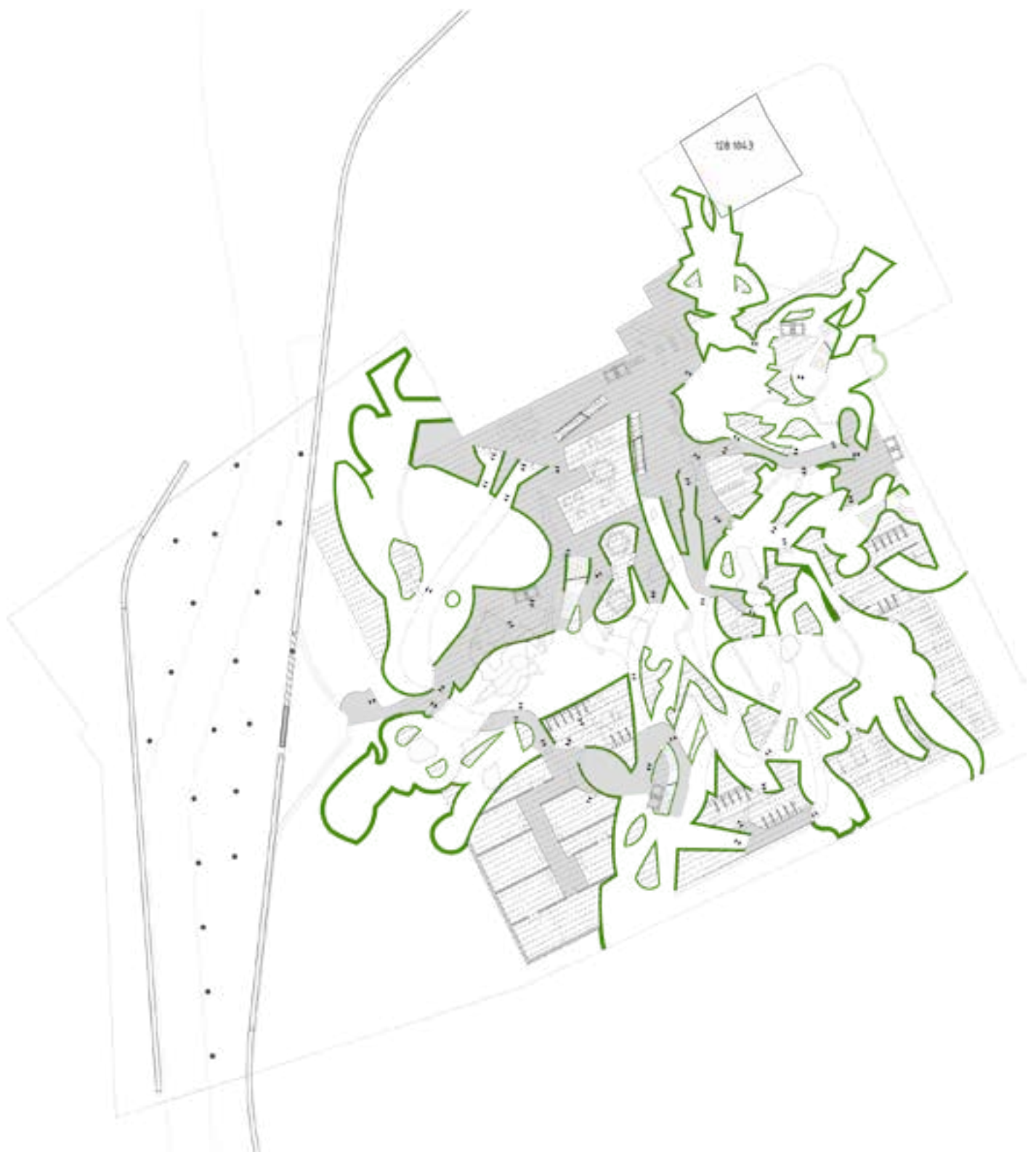
Melon crops spreading close to the ground.

An edible park.

Perhaps the only problem is its maintenance. That is, take care of them, clean them, water them, prune them or mow them... well, basically like any other garden.

*Federico Soriano-Dolores Palacios, 2020,
Hsinta Ecological Power plant, pieces and
dishes*





*Federico Soriano-Dolores Palacios, 2020,
Andersen, House of Fairytales, Green Walls*



Federico Soriano-Dolores Palacios, 2020,

Hsinta Ecological Power plant.

Set dispositional Axonometry as a picnic
blanket or as a food carpet.





Primal greek culture

FOOD WASTE RITUALS IN PUBLIC

***Food waste* is defined as the volume of food—edible substances, either raw or prepared/cooked—that is not finally consumed. In natural ecosystems, food waste does not exist, as every single bit of organic matter is a food source for some other species. On the contrary, for affluent urban societies globally, the over-abundancy of food results in billions of tons of food that is destroyed.**

This lost food has tremendous negative economic, environmental and social impact (intensification of agriculture, depleting resources and fertile soil, huge carbon footprint, extra energy and resources needed for transportation, packaging etc., increasing the global food distribution inequality), until it is finally put on the shelf or table, ready for consumption, only to end up as garbage, taken out of the food-cycle.

Data confirm that food waste is mainly a problem pertaining to the developed world and urban affluent societies, also one mainly occurring in the consumption stage of the cycle of food. While most food waste occurs in the cities, it goes virtually unnoticed there and no one takes responsibility. City authorities, suppliers, merchants and other players involved, have efficient mechanisms by which they swiftly carry discarded food out of the city, hidden from public view and awareness. Apparently, the first obstacle to overcome on the way to cure this imbalance is: *invisibility*.

The opportunity to address this problem from the standpoint of architecture emerged during the elaboration of the Diploma Thesis “**Food Waste Rituals: An Athenian case for the food surplus management**” by Eleni Nikolaou and supervised by prof. K. Grivas, submitted to the Department of Architecture, University of Patras, in 2019. The project aimed to examine and present in a graspable manner the phenomenon of global food waste in its full spectrum and scale, to render the phenomenon visible within the urban fabric, where it mostly occurs, and finally to suggest events and interventions – everyday Food Waste Rituals within public spaces – as actions towards understanding and dealing with the problem. The design investigated visually the urban experiences which could occur through such interventions. The carefully crafted imagery has been deliberately using various forms and mediums, adjusting to the nature of each stage of analysis and design (quantitative, qualitative, speculative).

The research underpinning the project was multi-layered, and the findings had to be processed and presented in comprehensive ways. We decided on a three parts strategy: a) punchy visuals for shedding light to the global scale of the phenomenon, b) comprehensive data visualisations that would explain the various aspects of it, and c) narrative media to portray the findings of local field research.

For delivering quick, punchy and immediate messages and capturing public’s awareness, we used the format of **collectible post-stamps**. Each stamp portrays one side of the global scale and impact of food waste. Some messages are: “*from the global of food production, at least 1/3 is wasted (mount Fuji) while 60% of that occurs by consumers*”, “*if food waste was a country it would be the third largest CO₂ emitting country in the world*”, finally “*food waste has increased by 200 times in the last 60 years.*”

Secondly, through a **series of infographics** we tried to visualize detailed data and statistics, making them easily graspable and allowing comparative reading. The “Cycles of Food Waste” infographics showcased statistical findings on the questions: “*What types of food are mostly wasted in different parts of the globe, and in which stages of the food cycle?*” By visualizing and comparing the data it emerges that food waste in the developing world is a rural problem, occurring in the early stages of production, whereas in the developed world, food waste is of much bigger scale and occurs in production and mainly in consumption, consisting mainly an urban problem.

Other types of more in-depth visuals, like the “Snapshot Cases boards”, focused on specific regions (e.g. Atlantic Ocean, Yorkshire, Indochina, Greece) to highlight particular occurrences of food waste, explaining the causes, who and how are involved, presenting actions that have been taken so far to amend the situation, and summarizing future suggestions. Thus, bigger than necessary fish catches, strict appearance standards, bad handling products, or wasteful consumers’ behaviours have

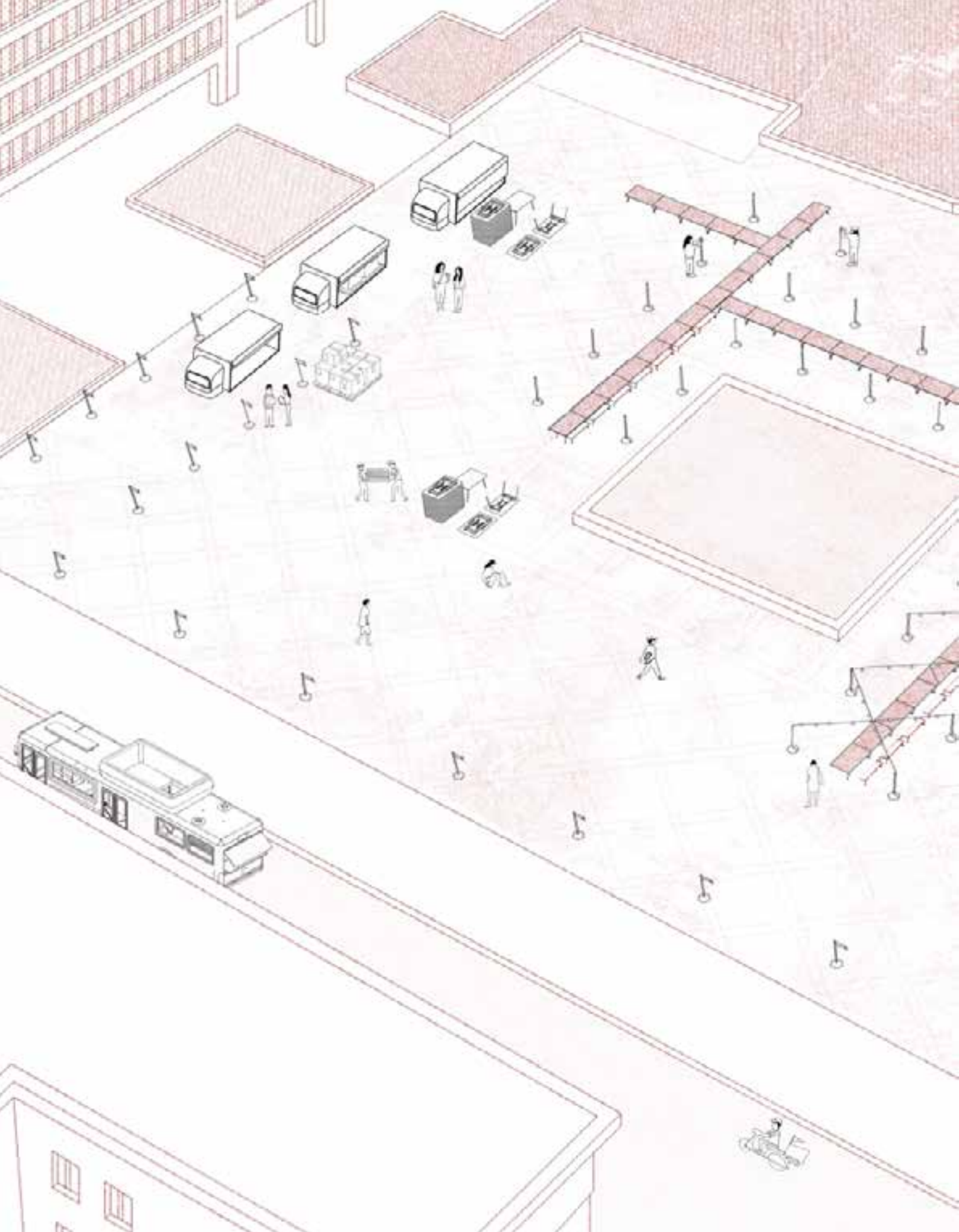
Figure 1, Stamps No 1 and No 6, and two of the “Food Cycles” Infographics

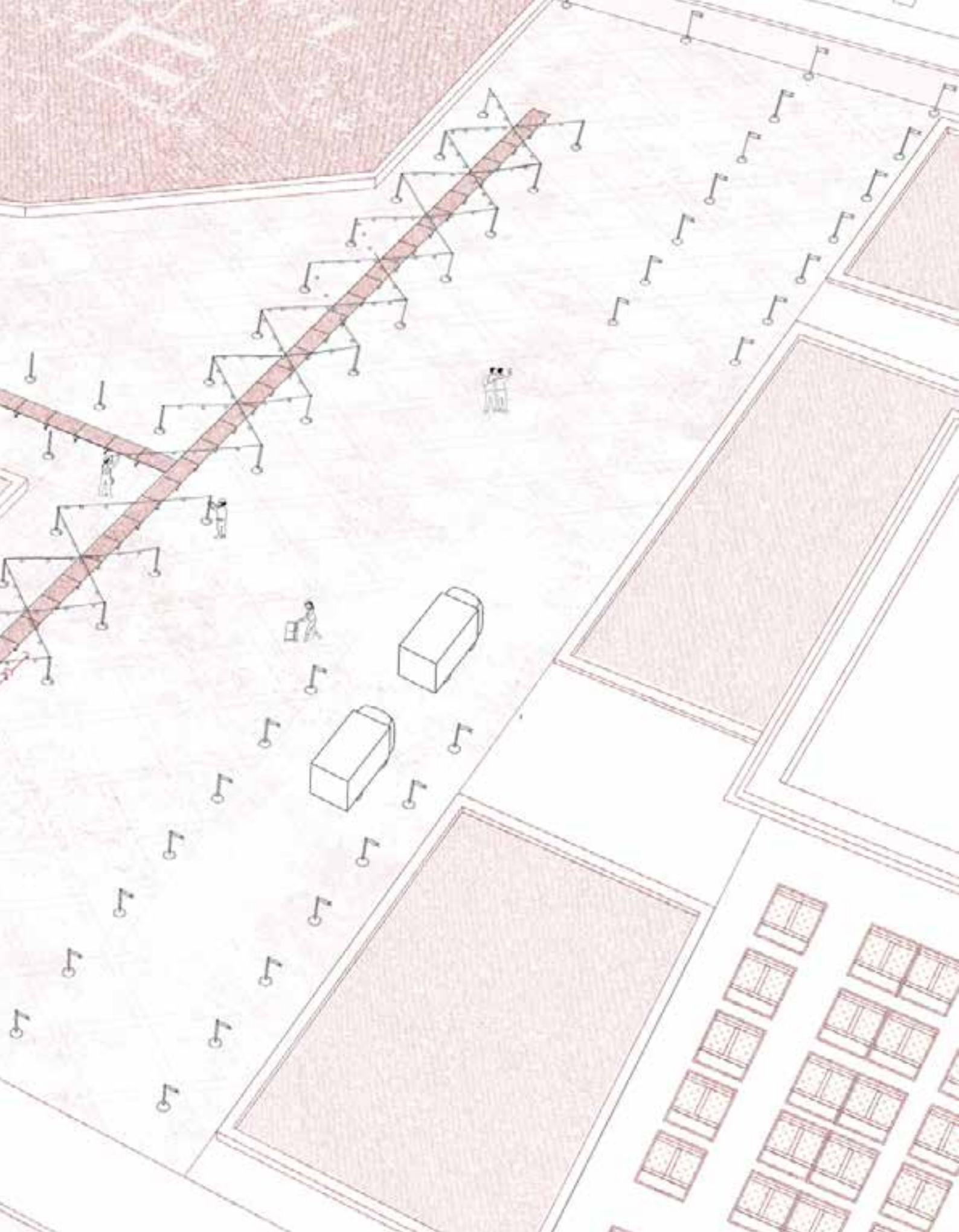


been singled out there as major causes of food waste. The broad spectrum of solutions included redirection of surplus to other markets and needing groups, alternative uses for out-graded products, raising funds to improve facilities and provide education for better food handling and responsible consumption. Finally, the research was narrowed down to the local conditions of Athens where we could weave into the food network and get local insight, by paying visits and interviewing local food suppliers, restaurants, nongovernmental organizations, etc. Brief series of comics illustrations, the “Stories of Food Waste comic” documented the observations using engaging narrative media.

The Case of Athens: Five food waste rituals

We selected Athens as a testbed, for the second phase of the project, where we propose and design rituals integrated into the everyday life of cities, that would make the food-waste phenomenon *tangible* and would organise participatory actions to engage and educate the public. Athens has a particular interest due to its high concentration of eating places in its historical centre. After urban analysis and mappings, we identified *Athinas Street* and a series of adjacent public spaces as an ideal ground for design experimentation. Thus, the project ended up proposing five paradigmatic public interventions with a ritualistic quality.







The ‘Waste Park’ proposes an industrial facility in the form of public leisure park where non-consumable food surplus is collected and undergoes treatment transforming it into useful products, such as detergents, and compost. Citizens may use those products for organic city farming, or at home. The ‘Waste Park’ could be deployed in any disused or dilapidated open public space – in our case we selected the *Varvaki Square*, located right opposite the main food market. The industrial facility of the ‘Waste Park’ aspires to become a friendly, accessible and safely designed open public space where people of all ages can spend some quiet time, observing the machines and learning about the process. The infrastructure of the park comprises of a series of custom designed, oversized machines, at the size of architectural *follies* which create spatially and visually enticing spaces between and underneath them, creating a public *sculpture garden*.

The ‘Re-Food Arcades’ are specifically designed for the ubiquitous covered arcades around Athens; some of them boisterous places for intense social interaction among locals and tourists. “Stoa Lykourgou” and “Stoa Dragatsaniou” were selected to showcase the project. The ‘R-F Fridges’ are clusters of oversized, colourful and illuminated fridges, like vending machines with pop-aesthetics. They serve as drop-off points for citizens or restaurants who want to donate their food surplus, or places where citizens in need can find food (homeless, immigrants, pet owners, bird feeders). The fridges check food, categorize, lightly process and package it in portions, in a semi-automatic way. Food that is finally left over is automatically collected to be composted. The clusters of fridges are a fun-mechanism for re-circulating some of the food-surplus right next to its source before it becomes waste, also becom-

Figure 2, One of the Snapshot Cases Boards, and an excerpt of the “Stories of Athens food waste” comic.

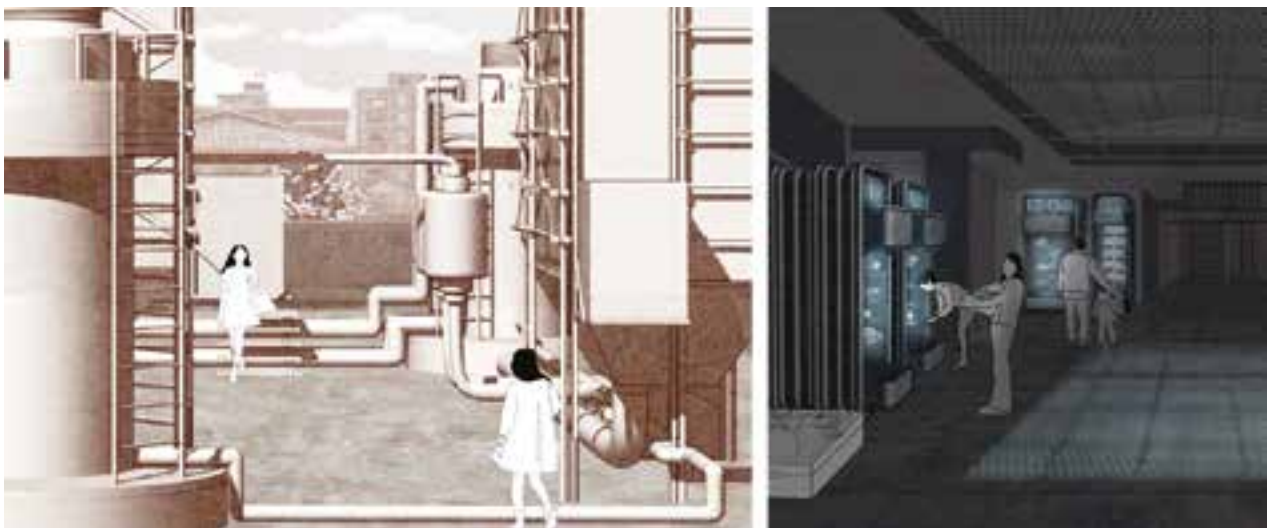
¹ <https://www.diaart.org/visit/visit-our-locations-sites/walter-de-maria-the-new-york-earth-room-new-york-united-states>

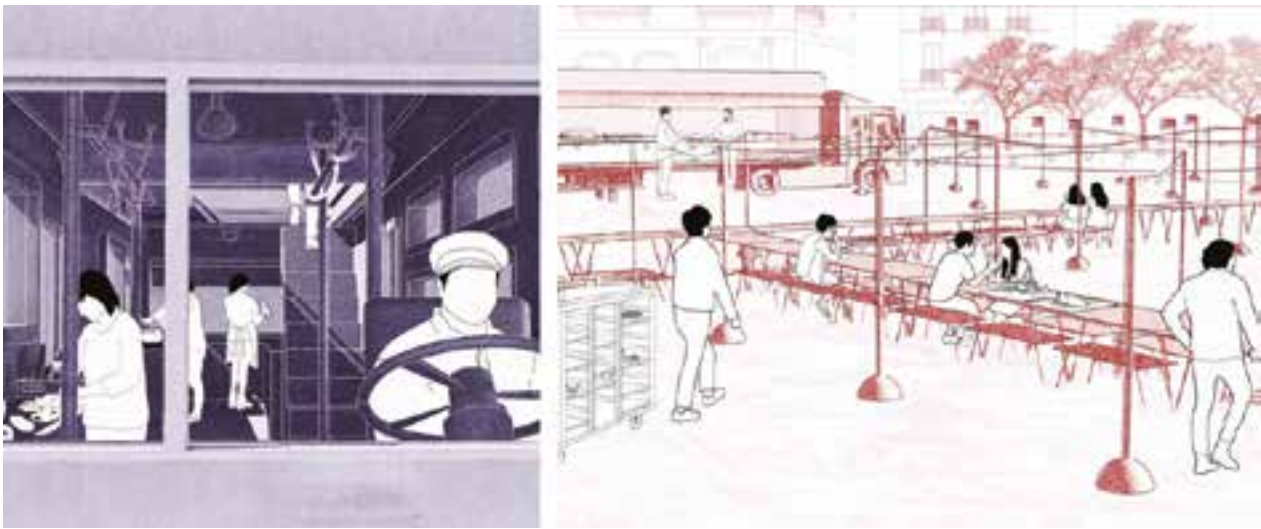
ing the focus of social play, especially among younger people, transforming some of the peripheral and disused arcades into vibrant places. They refer to the Japanese vending machines, with a hint of irony and humour.

The **'Moving Food Workshop'** is a cook-shop on wheels, helping to rescue and re-serve as quality food some of the surplus food right inside in its source, around the hundreds of eating places of Athens centre, creating an urban live event/ritual. It is a retrofitted bus which accommodates a pantry and storage area in the lower deck, where volunteering chefs collect food directly from the restaurants, and prepare it on the spot to serve snacks and quick hot meals to the public like a social canteen. Passengers are invited to cook with experts learning easy recipes and tips on how to use leftover food more efficiently. Visitors can hop on the upper *eating roof basket* for a quick tour & dine experience around the city centre. The bus follows a circle itinerary around the busiest streets of the *Commercial Triangle* of Athens and stops at designated places to collect and serve food. It also acts as a circulating advertisement for socially ethical food consumption, bonding producers and consumers of food in a shared urban activity on wheels.

The **Compost Halls** are a network of large, public, compost depots scattered among the vacant properties of Athens, with an open programme, designed as places of cultural experience and contemplation. Balanced compost smells only lightly like common dirt, so it is plausible to store it inside vacant properties of the city centre, and provocatively turn accumulated compost into an *exhibit* – Walter de Maria's three "Earth Rooms" 1968 – 1977, are the inspiration behind this proposal.¹ Athens has an abundance of vacant properties in its centre, which usually offer enchanting views of the city and its historic surroundings. The 'Compost Halls' provide ample space amidst the accumulating dirt, with open programmes, where cultural (exhibitions, installations, events, projections) and education-

Figure 3, The 'Waste Park' at Varvakeion Square and the 'Re-Food Fridges' in one of the Arcades.

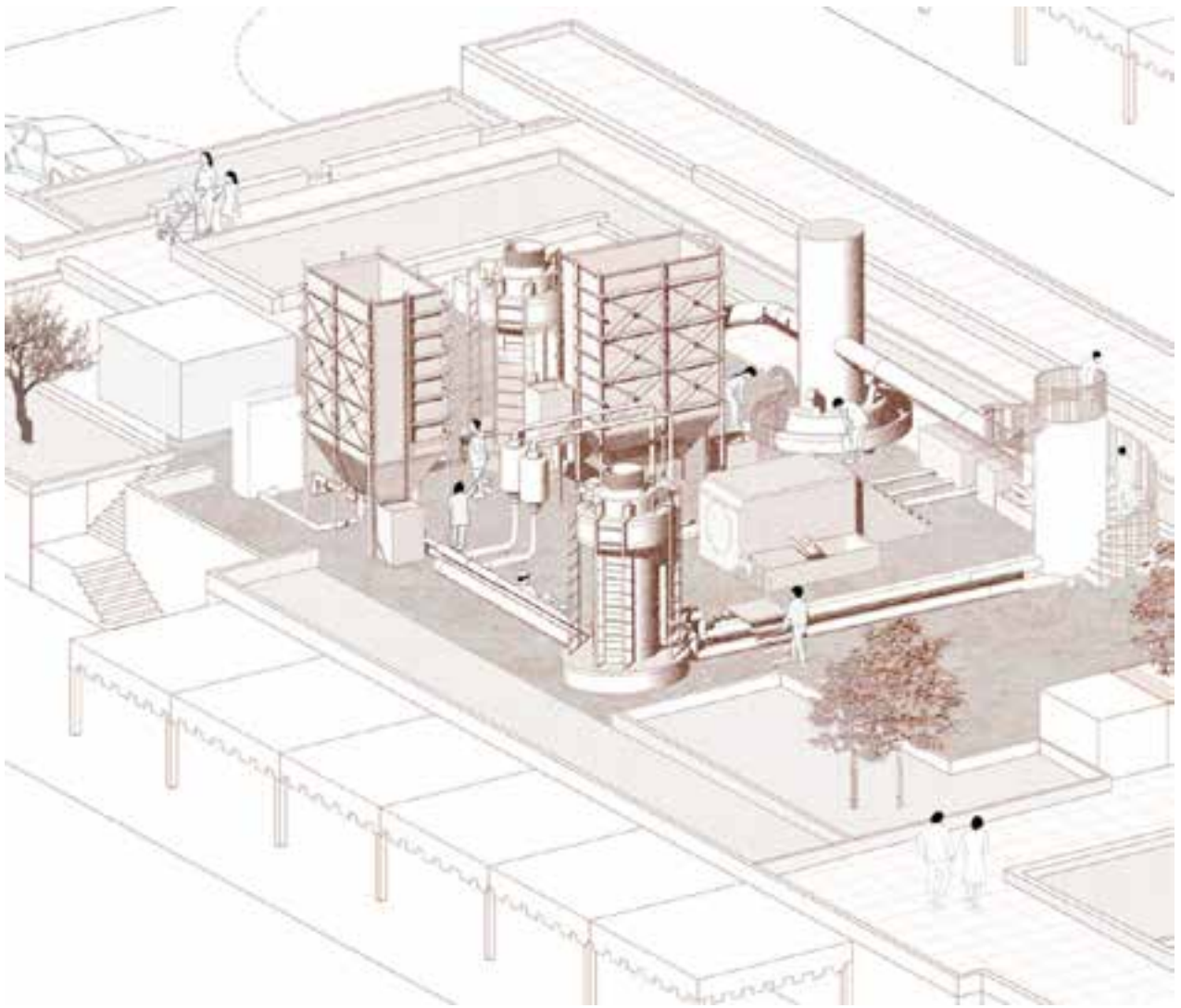




al events (seminars, children activities, workshops, lectures, etc.) related to food culture and food cycles can be hosted, offering moments of contemplation and public awareness over the phenomenon of food-waste and its by-effects, or simply the urban life's disconnection from the earth.

The **'Bring-your-Surplus' Festival** is the culmination of the public rituals around food-waste. It's a public celebration for rescued food, and an occasion for rewarding those individuals, groups, businesses and institutions whose efforts in the field scored highest. The Festival is a big temporary event hosted in large, open public spaces (Kotzia Square, off Athinas Street was selected). Through participation, people appreciate in a social and joyous way the value of protecting food. Participants are asked to bring their surplus food and celebrate sharing it. The party is set up using portable and folding equipment (tables, benches, lighting, signage, trolleys and cooking units). These are moved into trucks which also participate in the set-up providing utility spaces. The spatial layout of the festival is free, depending on the chosen site and the venue organisers; the sole condition is the creation of a single continuous, communal table!

Figure 4, The 'Moving Food Workshop', and the 'Bring-your-Surplus Festival'.



Note on illustrations

For the illustrations of the project, we have meticulously studied the Japanese art genre of ukiyo-e. Its imagery depicts everyday life scenes in a highly stylized and ritualistic style, with a high level of aesthetics and composition. We believe that the appropriation of this certain style lends aesthetic and symbolic rigour to the project.



E. D. E. N.

The following essay presents our entry to the “Cook 8” architectural competition, titled “Everything you Desire to Eat Now (except apples)”. A utopian vision of the closed loop cycle of food, from production to preparation to consumption and finally composting, articulated within the cylindrical space of a hydroponic garden where limits between different procedures and participants’ roles are blurred. Our main concern was to address the qualms of the individual consumer who is faced with a multitude of dilemmas concerning environmental and social impact when attempting to make the right choices concerning nutrition.

Cook 8

In November 2017, just as the economic crisis was receding in Southern Europe, *Domes* architectural Review, based in Athens, Greece, hosted an International Design competition titled “Cook 8 – The new way of dining”. The challenge was to reinvent the struc-

tures that host social activity prompted by the daily need to prepare and consume food. The production of new meaning through redefinition of the social element, was at the heart of the debate.

The competition brief called for the design of a 24-30 m² space, maximum 3,5 meters height, within no given context. It should host 8 people, and the activities to be addressed were preparation, including storage, preservation and processing, cleaning, consumption itself, and basic sanitary facilities. The idea was to depart from the norm, to venture beyond the familiar commercial or traditional prototypes, and reinvent the social protocol itself.

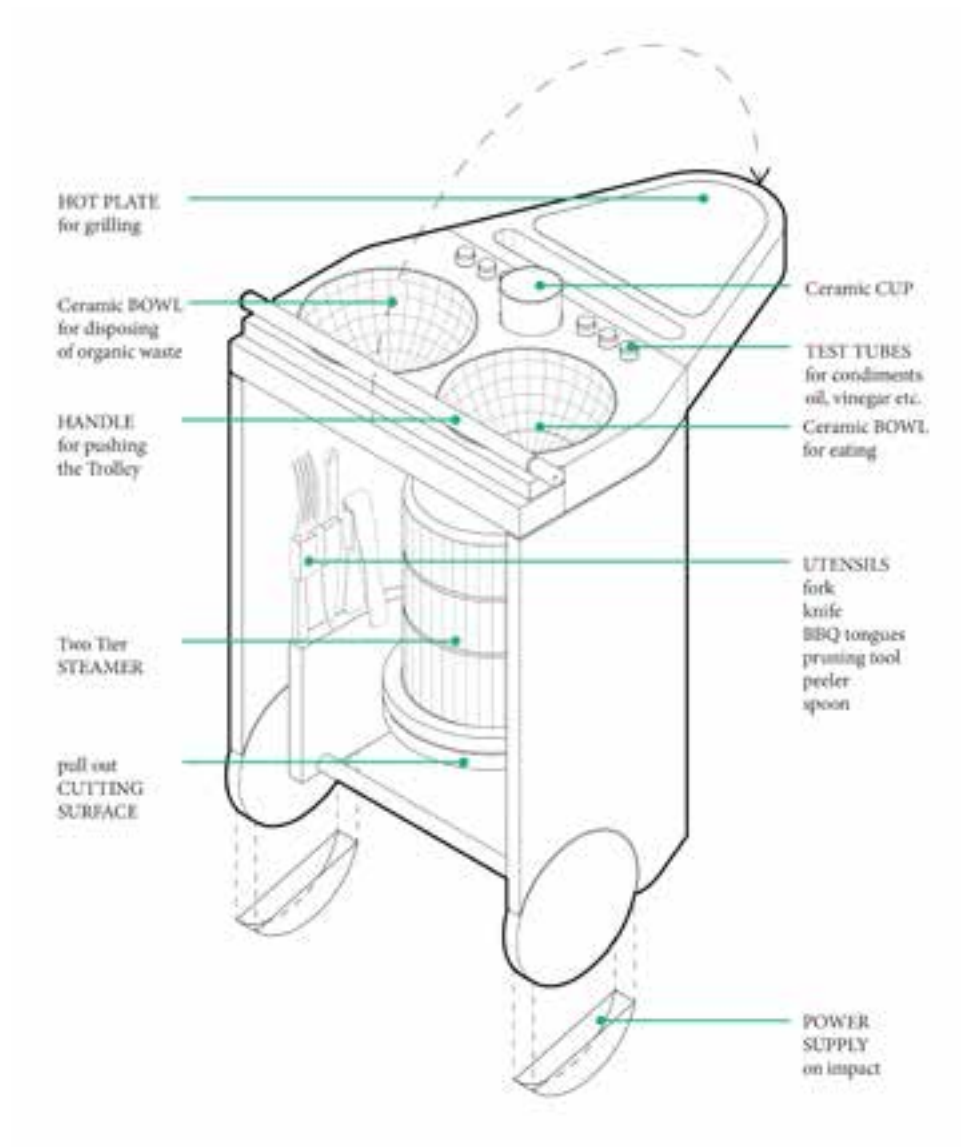
There were 280 entries to the competition, coming from 24 different countries, although predominantly Greece. Most of the proposals defined the context loosely within utopian, digital, natural, or theatrical settings. With no exception, proposals tackled the 8-strong population as a random collection of strangers honoring the challenge for production of new social space and somewhat implying the urban context as point of departure. The brief was open concerning the roles of participants as cooks or consumers, yet almost none of the proposals ventured to make that distinction. The unforeseen element revealed by the competition results was that a considerable part of the participants made it a point to include the phase of food production, or even the phase of composting in their proposals, two processes which were not required or even implied by the brief itself. Given the very limited space available in order to unfold the already heavy load of activities required, it was surprising that those entries chose to raise the level of complexity. This tendency was reflected in the opening essay of the publication of the competition results.¹

¹ G. Panetsos, "Cook 8 – The new dining experience" Catalogue: International competition/COOK8: the new dining place > 2018, p. 12-13

E.D.E.N.

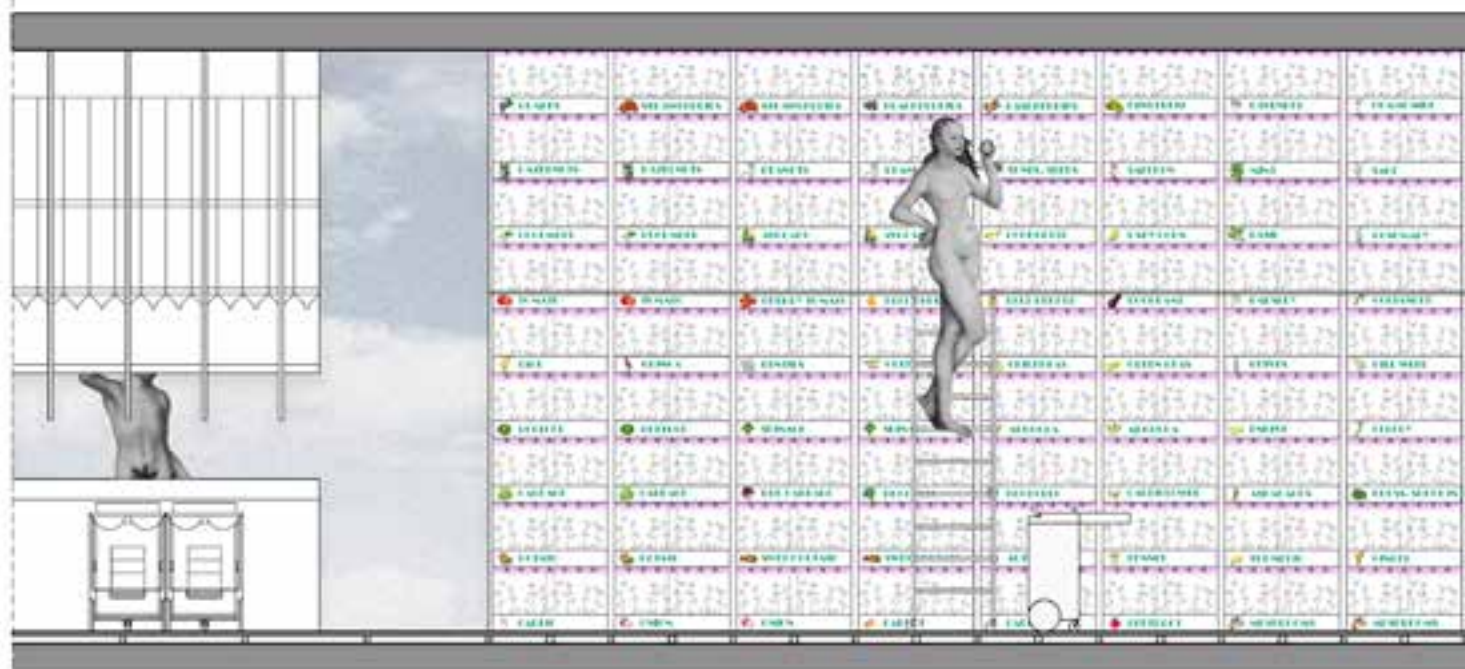
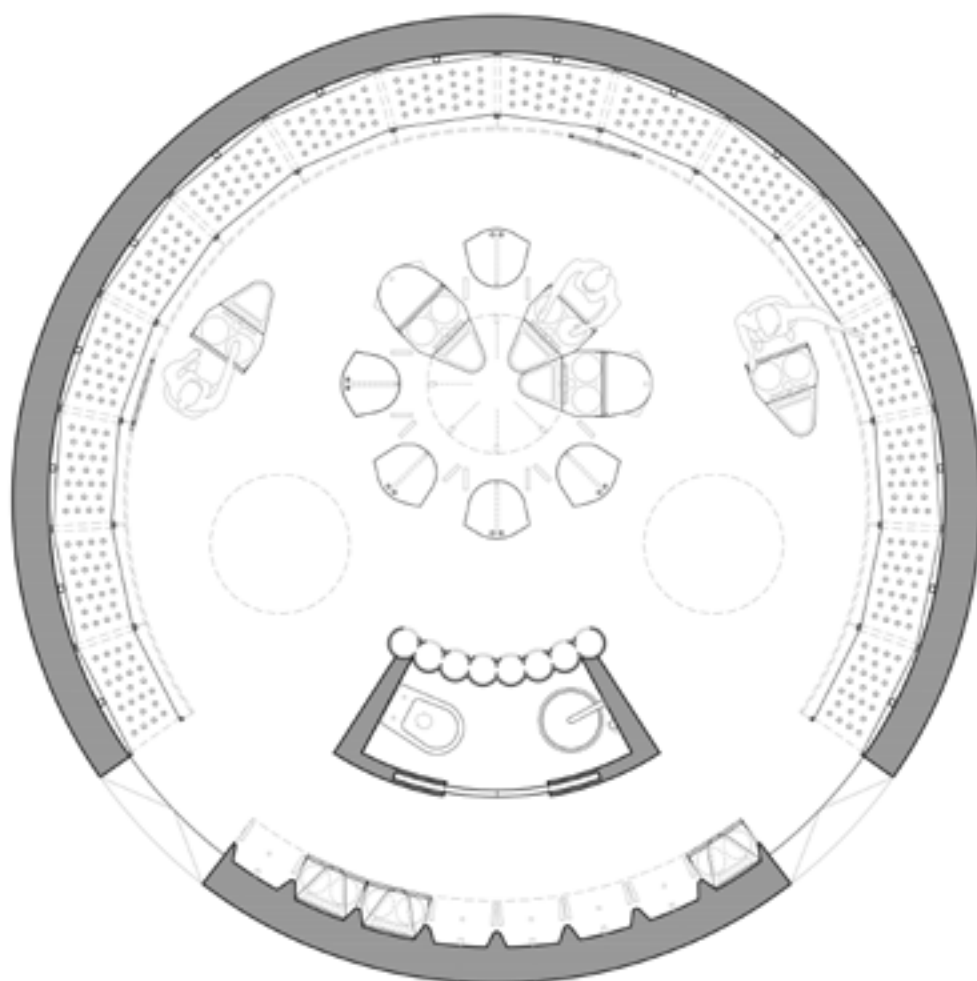
In the case of our own proposal, the incentive was to consciously retract sentiments of guilt from the entire process of food consumption while still retaining the pleasure element. The allusion to the Garden of Eden is evident and deliberately refers to the collective loss of innocence experienced in relation to the consumption of food that was increasingly felt in the crisis years. Our goal was to generate an entirely guilt-free social experience.

In a culture of spatial compaction, urban farming and an increased tendency for DIY and gourmet nutrition-conscious cuisine, food growing is brought into the cooking experience as an integral part of the process. No product enters the space besides seeds and water supply, and no storage is needed all produce is alive. Zero waste is produced as everything organic becomes compost (except of course what exits through the plumbing route). There is no chef, no waiters, no self-service servers in white aprons and hats, and no back-room dishwashers. Those are all replaced by inspired self-nutrition, DIY cooking and cleaning and last, but certainly not least, the hydroponic Gardener who tends to the space during closing hours. The key to all this is the Trolley with a capital T.



Allow us to walk you through it

You enter the space through either of the two entrances (let's just assume on the right side for the sake of the scenario). You are close to the periphery of a cylindrical space and turning toward the interior you can smell lime trees. On your left, you will find a curvilinear sink, with tubes that come down from the ceiling as taps, and right underneath it, a series of slots, that house the quirky little Trolleys. You pick up your Trolley and check everything is there: 2 ceramic bowls, a ceramic cup, test tubes set inside their holding slots, a hot plate, eating utensils, a two-tier steamer, and a pull-out cutting surface. Above the Trolleys you will find condiments and miniature silos filled with all kinds of in-house sun-dried products. If you are out of inspiration today, there are digital recipe walls behind you, synced directly to inventory.



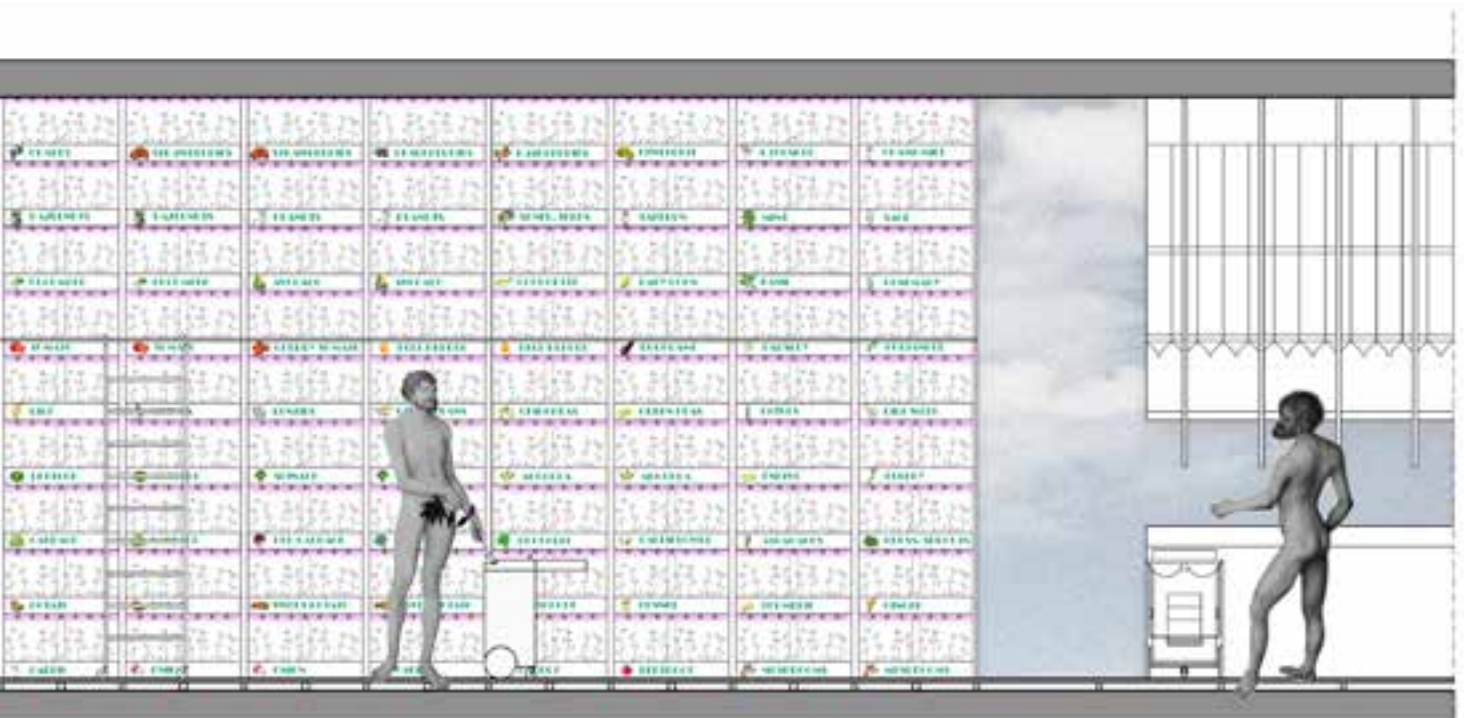
Hydroponic super market

Once you have settled in on your mission and equipped yourself with any condiments that might spice it up, you guide your Trolley into the cylindrical space, much as you would in a supermarket. The walls are lined with shelves, where you will find hydroponically growing vegetables, herbs, fruits and other delicious nutritious plants. In the bottom shelves you will find root vegetables, above them crawling vegetables, then leafy vegetables, legumes, grains, fruits and other hanging vegetables, and finally, nuts, herbs and edible flowers, in the order where you would find them in nature. If you need to reach the top levels, a rolling library ladder is available to help you with your task. You pick according to your inspiration and place your choices in the bowls of your Trolley.

Social cooking in a circle

Once you are finished gathering all you need, you find your seat around the center of the space. You could be the first to arrive, you might join other seated diners, or you could be the one to actually complete the circle, even if for a moment. In all probability, you are among strangers.

Position your Trolley in an available slot so it can receive power, and you-literally pull up your seat to sit down. You have two bowls. One will be for eating so you place all prepared food there, and the other is for preparation. You can fit a cutting surface on top of the second one, and you can use it to store all peels and organic waste until you dispose of it in the compost tower.





Once you've peeled and chopped your vegetables, herbs, nuts, mushrooms, seeds, or grains with the supplied tools, you can leave them raw, cook them in the steamer, or on the hot plate on the "nose" of the Trolley in front of you. Share recipes and cooking tips with your neighbors. It's the perfect conversation starter.

Zero waste

Once you have finished your meal, bid farewell to your peers, place your seat back flush to the floor, and guide your trolley toward the exit. On your way you will find the compost tower. Kindly dispose of any organic waste you may have gathered down the available shafts, so that it may contribute to the daily supply of compost tea the Gardener makes every night to feed the plants. Then bring your trolley back under the curvy sink where you found it at the entrance. Take out the utensils, ceramic bowls and cup to wash them, wipe the hot plate clean, fold the Trolley' "nose" up to fit it under the sink, and put back any condiments you may have chosen.

If you wish to use the WC before you exit, you will find it behind you: its back wall is (unsurprisingly) the compost tower.

We hope you enjoyed your meal in an inspiring place to share informally with anyone that might happen to feel the similar urge.

² The figures used in the images were taken from Lucas Cranach the younger's Adam and Eve portraits and paintings.

Changing food mentality

In our proposal the concept of a closed loop cycle of food is taken to its extremes. Only the seeds needed to initiate the plants' life, the participants themselves, and, the tending gardener ever enter or exit the space. The concept of *zero waste* cooking is employed in its very literal sense. In the graphics, the participants are portrayed naked and the imagery is taken from depictions of the garden of Eden². This decision was meant to underline the idea that the participants leave all of their urban gear behind and enter in a state of purity. Despite this implied state of purity, "digested" urban protocols are very much a part of the overall experience: The synced-to-inventory recipe video wall, and the Trolley gadget that holds all necessary equipment, homage to the super market experience and DIY, are a direct reference to contemporary urban habits for food-gathering and preparing. The elements that are clearly missing are the stages of food distribution and waste.

Nature is brought into the space, as an ever-regenerating source of nutrition standing amidst a high-tech totally regulated hydroponic environment where seasons are constant and reproduction is abundantly present. Within this high-efficiency environment, familiar traditional ceramic reusable utensils play their role toward the completion of the experience. The protocol ensures that all organic waste is fed back to the compost tower which produces a steady flow of compost tea used to upkeep the constant regeneration of plants. The most important figure is the absent figure: that of the tending gardener, which during opening hours monitors the climatic conditions and during closing hours tends to the plants and dried food supply.

This is a utopian vision placing the emphasis on a redefinition of public mentality toward food. If each meal could potentially become a closed loop experience, then the expectations toward the performance of the food economy would adjust accordingly.

*What Is Home
Without a
Mother*



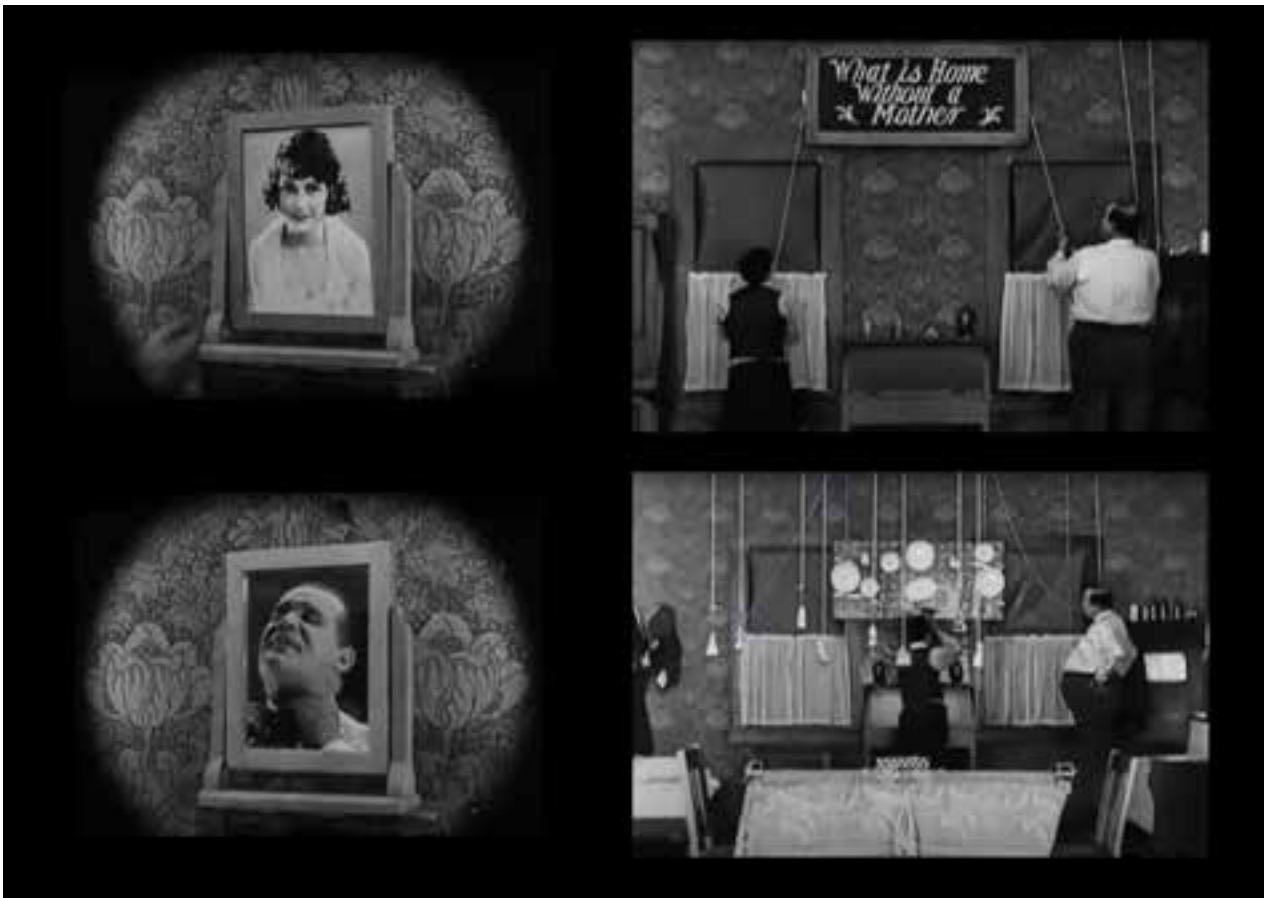
FOOD PROTOCOLS

The Mechanical (M) other

The starting point of this essay derives from the observation that the architectural space regarding food rituals remains typologically unchanged and conceptually un-evolved. I will argue that it is the Figure of the Mother (not always as a gender specific subject) which is the dominant element in the architecture of domesticity, archetypically embedded in the domestic foodscape.

We can define the space related with food as the structural formation of production and consumption bound by language. A need (the need to survive) formulates the locus of an infinite “mechanical” system of flows and cuts that composes a series of devices translated into architecture. This rather functional routine has been the subject of conceptualization by having exposed its own mechanism to the structure of language. The eating process is at the same time a byproduct and a production unit of language in which food protocols consists of the verbal code (etiquette) that form a set of orders mainly prohibitions that define social conduct. The production of architectural space is based on the prohibitions articulated by devices in which the human body can plug in and control the flows and cuts.

We can trace an analogy between domestic foodscape and the lacanian concept of the Mother as represented by the primary instinct of the dependence of the infant upon the maternal fig-



ure and the forthcoming development of language established during the infants development. “...In the beginning of the psychical-libidinal subject’s ontogenic life history, the maternal caretaker is, at one and the same time, both overwhelmingly, stiflingly present or near and, in her strange, impenetrable alterity, also frustratingly, uncontrollably absent or inaccessible; there is either too much or too little of her, never the right balanced amount¹.” . The figure of the Mother initially appeared in the utopian, self-contained and entirely satisfying environment of the uterus and then experienced as a loss into the social landscape where language is formulated. The analogy between the Symbolic as the system of constraints represented by the paternal figure as public space, the Real as the archetypal symbol of the mother, and the ego can be multiplied in the domestic space and translated into a set of devices and architectural spaces related to the mother as the operator of the mechanical-linguistic system and the focal point of desire production. The process is completely interiorized and codified in the domestic environment where the family table represents the psychoanalytic triangulation of the three registers by reproducing its structure in architectural terms.

A spatial analogy of the mechanical mother is illustrated in the silent film Scarecrow², where the concept of the linguistic origins of the maternal figure as an automaton is interiorized in domestic space. In the film, the house, in which the two bachelors live

The Scarecrow, 1920

¹ Johnston, Adrian, “Jacques Lacan”, *The Stanford Encyclopedia of Philosophy* (Summer 2019 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/sum2019/entries/lacan/>>.

² *The Scarecrow*, director, Edward F. Cline, Buster Keaton, (1920· Metro Pictures)

(Buster Keaton & Joe Roberts) functions as the mechanical equivalent of the system of desire in the form of lack represented as a two fold concept: (i) as unfulfilled love between the two bachelors and the farmer's daughter (Sybil Seely) (ii) as a "Home without a Mother" equipped with space and labor saving devices. The spatial choreography can be traced in a set of devices spread throughout the house such as the rotating mirror | picture of the farmer's daughter and the rotating dining table with attached dishes with the hidden motto "what is a Home without a Mother" seen at the end of the scene.

The maternal omnipotent figure can be traced not only as a gender specific subject but rather as a linguistic one that is responsible for the multiplication and reproduction of numerous substitutes of the archetypal symbol. Thus we can speak of the mechanical analogy of the (m) Other as the verbal and non verbal articulation of desire as defined by the lacanian question "*What does the (m) Other want?*" expressed simultaneously by the immanent emotional instability of the ego and its relation with the Real.

In order to trace an evolution of the architectural type we have to examine the archetypal condition before the post-break-up; the possibility of a spatial articulation of the once self-contained and entirely satisfying utopian environment of the uterus that will restore the concept of the Real and will mark the Return to the state before the Fall³. A virtuous space without a dysfunctional ego contaminated by the troubles of civilization.

A possible threshold can be traced in the meal replacement technology. If the concept of food space is originated as a historical concept of lack, the technological evolution of food industry is able to challenge scientifically established social, physical and biological laws⁴. Meal replacement seems to offer a spatial alternative to the structure of food space by restoring the concept of plenty by altering the linguistic and spatial established agglomerations.

We can observe the spatial changes between a classic filmic romantic dinner in an Italian Restaurant and a couple wandering in the mountains with its bottle of food substitute in a meal replacement promo. The centralized theme of the dining table and its architectural scenery expressed by the cliché of the restaurant can be overwhelmed by the fluid space of infinite possibilities. The reconstruction of Paradise as an interiorized landscape in contrast with the artificial and static domestic scene can be the alternative infrastructure of the new domestic transformation

Thus the utopian environment of the uterus emerges as a new architectural type; a feasible restoration project of the new Garden of Eden without a mechanical (M) Other.

³ "In the Christian-jewish tradition and in part of the antique tradition, the original, pre-cultural state of man is thus considered as a privileged condition. Paradise and Golden Age represent the state of grace, whose memory stands in the way of civilization, which is regarded as a necessary evil troubling this happy harmony". Bohdan Paczowski, "The House as Nature and the Nature as a House", L Architecture d' Aujourd'hui 227, June 1983, pp LXIV

⁴ According to Marcuse: "Utopia is a historical concept. It refers to projects for social change that are considered impossible.... The project of a social transformation, however, can also be considered unfeasible because it contradicts certain scientifically established laws, biological laws, physical laws". Marcuse, Herbert, *The End of Utopia*, Psychoanalyse und Politik (1967)

***BREAK-
PERFORMANCE***

1

The Histories-Teller

CORNISH PASTY

Sappiamo fin dagli antichi Egizi, che raffiguravano le divinità con il cibo come carni d'oca e di vitello, accompagnate da pane di orzo e segale, che per gli occhi abbiamo l'arte, per le orecchie la musica, per il gusto e l'olfatto il cibo, anche se per l'olfatto la questione è un po' diversa perché abbiamo perso il piacere verso gli odori e soprattutto verso i cattivi gli odori che danno carattere ai luoghi strutturandoli nella memoria. Forse negli anni perderemo il naso utile solo per respirare sostituito anche in questo dalla bocca.

Ma la storia del cibo non è solo legata all'alimentazione, il cibo sconfina sempre in qualcos'altro. L'dea di contorno non è solo una lavorazione di verdure o cibi di accompagnamento a pietanze più sostanziose. La stessa alimentazione diviene contorno di altro anche distante con il quale si accompagna in modo inaspettato. Così non stupisce che nel 2017 la Volkswagen abbia inserito nel suo catalogo generale dei ricambi, con il codice n. 199 398 500 A, quello che dal 1973 è il pezzo più prodotto dalla casa automobilistica tedesca con quasi sette milioni di pezzi all'anno. Che cos'è? Un volante? Un cerchione? Un accendisigari? Nò è un

wurstel. Volkswagen produce salsicce, nel suo stabilimento automobilistico a Wolfsburg da oltre 45 anni, originariamente destinate esclusivamente alle mense dell'azienda, per il consumo del personale fino a quando ha iniziato a vendere le sue salsicce nei pub, confermando lo stesso interesse a cibo e mobilità sostenibile. L'idea Le relazioni sociali, la convivialità, l'erotismo, le guerre, le carestie e le pandemie diventano, con il cibo protagonista, al suo pari. Durante le pandemie, ormai sappiamo per diretta esperienza, che cresce non tanto il bisogno di cibo, ma il bisogno di fare cibo, di farlo proprio e dividerlo. L'esperienza diretta con il cibo si sostituisce alla sua rappresentazione.

Qualche anno dopo il De Architectura, fondamento teorico dell'architettura occidentale scritto nel 15 A.C. da Vitruvio, Marco Gavio Apicio trascrive, reinterpretandole, le ricette del suo tempo nel volume De Re Coquinaria. Apicio non solo realizza il primo vero testo di cucina, qualche secolo prima di Pellegrino Artusi, ma definisce alcuni dei concetti che ancora oggi utilizziamo per indicare il cibo come pietanza o contorno. Apicio racconta anche del condimento che in quel periodo era costituito tra gli altri dal Garum o Liquame, il cui nome rende l'idea del gusto, del colore e dell'odore di quell'ingrediente, una sorta di putrefazione di pesce il cui esito era un liquido che aveva lo scopo di sostituirsi al sale come condimento. Di quella salsa e di quelle pietanze rimangono oggi, quale memoria, la più raffinata colatura di alici, possi-



Garum



Cassata, Villa di Oplontis, 79 DC

Tiziano, *Adamo ed Eva nel Paradiso Terrestre*,
1565



bilmente di Cetara e le raffigurazioni murali di Pompei, che possiamo considerare di fatto le illustrazioni su parete del volume di Apicio, come zuppe di pesce, pane, verdure, frutta, uova e la prima rappresentazione di cassata multicolor della storia come ancora oggi vediamo nelle pasticcerie.

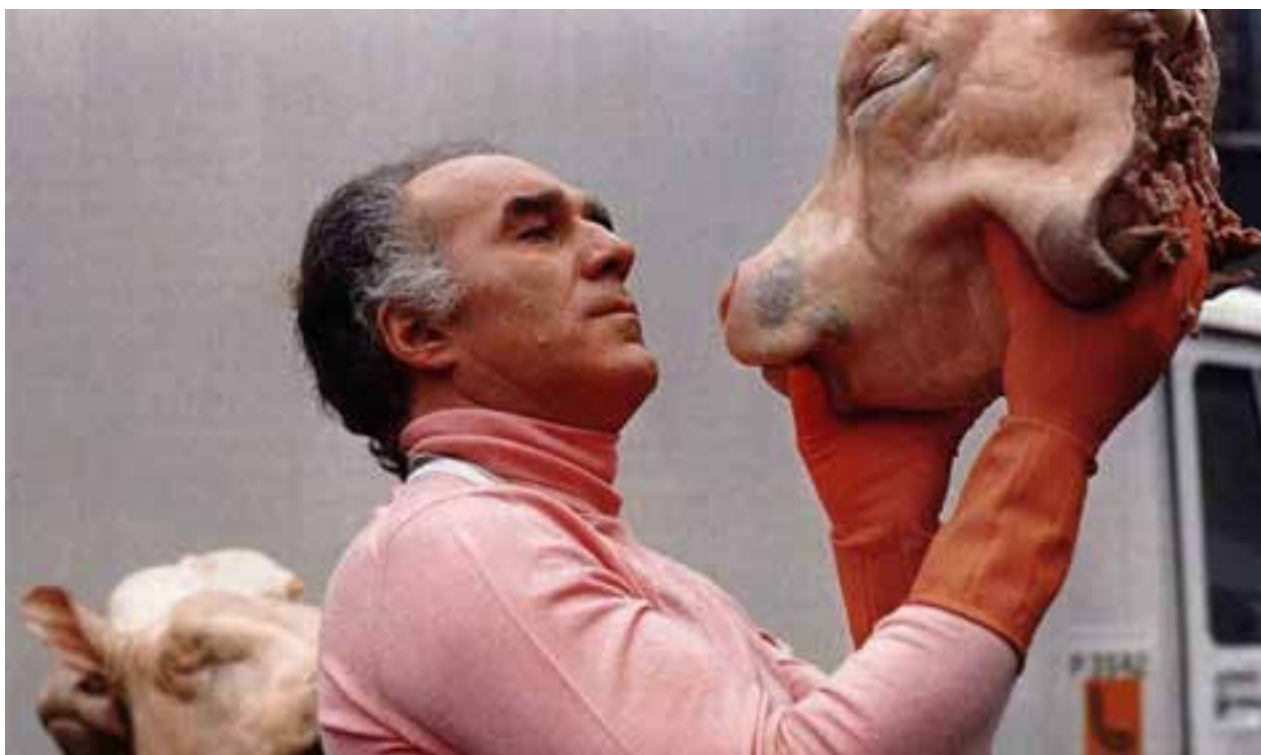
La storia dell'alimentazione e del cibo in fondo è la storia della civiltà, fin dalle origini motivo di passioni ed equivoci, come nell'incresciosa vicenda della mela proibita. Il cibo è nutrimento, divinità, passione, eros, dannazione. Nel quadro di Tiziano *Adamo ed Eva nel Paradiso terrestre* del 1565, Adamo si presenta per quello che è, primitivo e credulone, mentre tocca il seno a EVA intenta a raccogliere il frutto proibito, come fosse lui il padrone della mela e di EVA. Per Tiziano l'eros accennato di Adamo è l'altra faccia della mela, attratto umanamente dalla nudità della consorte, ancora prima che consumassero il frutto del peccato, atto che li avrebbe accesi di umane passioni, contraddicendo di fatto i versi Biblici che narrano un'altra storia *"Allora la donna vide che l'albero era buono da mangiare, gradito agli occhi e desiderabile per*



acquistare saggezza; prese del suo frutto e ne mangiò, poi ne diede anche al marito, che era con lei, e anch'egli ne mangiò. Allora si aprirono gli occhi di tutti e due e si accorsero di essere nudi; intrecciarono foglie di fico e se ne fecero cinture."

Pieter Aertsen, *Bancarella di carne*, 1551

Molto prima che in *9½ Weeks* di Adrian Lyne, cibo, eros e morte si intrecciano nelle arti figurative come in quella Fiamminga. Nel pittore Olandese Joachim Beuckelaer il rapporto tra cibo ed eros si fa esplicito come in *Venditrice di ortaggi* del 1548, in *Mercato di Campagna* del 1550 e nel *Bordello* del 1552, nel quale uomini e donne non tralasciano di ingurgitare cibo durante i loro rapporti sessuali. Lo zio di Beuckelaer, Pieter Aertsen di Amsterdam, forse più interessante e raffinato del nipote, a metà del '500 raffigura senza mezze misure, donne ammiccanti immerse nel cibo che maneggiano con complice sensualità, come ne *La cuoca* del 1566, che infilza un grande spiedo di pollame o la donna che raccoglie un cavolo simbolo allora di fertilità, ne *Al mercato* del 1569, entrambe con lo sguardo invitante rivolto a chi guarda il quadro. In Per Pieter Aertsen la sensualità della carne è rappresentata anche nei suoi spetti più macabri come in *Bancarella di Carne* del 1551, nella quale una grande testa scorticata di un bue, primeggia tra altri brandelli di carni e teste mozzate di suini, anticipando di alcuni secoli *Mucca sezionata* di Damien Hirst del 1990. Michel Piccoli nel film *La grande abbuffata* di Marco Ferreri del 1973, nel quale si mescolano cibo, eros



Marco Ferreri, *La grande abbuffata*, 1973

e morte, sembra dialogare, tenendola tra le mani, con la medesima testa di bovino raffigurata nel quadro di Per Pieter Aertsen nel 1551.

La riscrittura è pratica dell'arte figurativa, dalla pittura al cinema. La rappresentazione del convivialità del cibo, che si ripete ogni volta che sediamo attorno a una tavola, sembra volersi affermare nella scena del matrimonio tratta dal film *Mamma Roma* di Pier Paolo Pasolini, del 1962, nella quale il regista riprende esplicitamente l'impostazione dell'Ultima Cena di Leonardo da Vinci, con un grande tavolo rettangolare dalla tovaglia ben curata, ripreso frontalmente secondo la prospettiva centrale di Brunelleschi.

Nel film *RO.GO.PA.G.* del 1963, sempre Pier Paolo Pasolini, nell'episodio da lui diretto intitolato *La ricotta*, racconta di un set cinematografico impegnato nelle riprese della storia della Crocifissione di Cristo. Stracci, nome della comparsa che interpreta il ladrone buono, povero e affamato, durante una delle pause del set, vende il suo cane per comprarsi da mangiare. Con quei soldi Stracci compra una grande quantità di ricotta, che mangia avidamente a bocca aperta fino a farne indigestione, come il protagonista del celebre quadro di Vincenzo Campi *Mangiatori di ricotta* del 1580, al quale Pasolini si ispira. Durante la scena della crocifissione Stracci, a seguito dell'indigestione, muore sulla croce. Il regista, senza ombra di commozione, commenta: "Povero Stracci. Crepare... non aveva altro modo per ricordarsi che anche lui era vivo...".





Bronwyn Marshall sul Domus di settembre 2020 torna a parlare Jan Gehl e dei quartieri dei venti minuti, ossia il tempo necessario per raggiungere da ogni suo punto, a piedi o in bicicletta, tutti i servizi essenziali del quartiere stesso. Per l'architetto danese Jan Gehl la vita che passiamo tra gli edifici ha la stessa se non maggiore importanza degli edifici stessi, e a quella che chiama "vita tra gli edifici" ha anche dedicato un fondamentale testo (in italiano *Vita in città*, Maggioli Editore, 2012). Ma le malelingue sostengono che dietro a questa operazione di ripescaggio dei quartieri virtuosi di Gehl ci siano le multinazionali del food delivery come Just Eat, che trarrebbero indiscutibile vantaggio e incremento del fatturato dalla riduzione del traffico a quattro ruote.

Le norme di sicurezza COVID, previste da Boris Johnson alla fine del 2020, hanno annunciato che i pub britannici possono restare aperti e servire alcolici solo ai clienti che ordinano anche un "pasto sostanzioso" scatenando negli esercenti dei PUB una rabbiosa protesta, perché i PUB inglesi sono soliti servire con gli alcolici solo dei Cornish Pasty, ossia fagottini di pasta ripieni di carne e verdure; tutto tranne che un pasto sostanzioso. È iniziato così nel Regno Unito un confronto istituzionale sul significato di questa espressione: quali alimenti soddisfano il requisito di pasto sostanzioso? A risolvere il caso ci ha pensato il segretario di Stato per gli Affari Interni Robert Jenrick, affermando una volta per tutte che il Cornish Pasty può essere considerato "pasto sostanzioso" se servito su un piatto con contorno di patatine o insalata e consumato al tavolo, così anche l'alcol potrà essere servito e i PUB restare aperti. Insomma, no fagottino, no party.

◀ Vincenzo Campi, *Mangiatori di ricotta*, 1550

◀ Pier Paolo Pasolini, *La ricotta*, 1963







III
FIRST PLATE

RATION(AL) FOOD ATLAS. SECOND LIFE FOR URBAN WASTE.

In 2016, more than 2.01 billion tons of waste were generated globally, but with global population growth and urbanization it is assumed that 3.4 billion tons of waste will be produced by 2050, according to the report “What a Waste 2.0: A global snapshot of solid waste management up to 2050”. Specifically, half is made up of urban waste (those produced by families), while the other half concerns so-called special waste, that is, coming from industrial and production activities.

Globally, domestic waste generated by households amounts to about 60 tons of waste per second, equal to 2 billion tons every year. Germany, Japan, Turkey, France and the United Kingdom are the top five producing countries of household waste (according to data from the OECD, Organization for Economic Cooperation and Development, 2016-2018).

Waste continues to be defined as discarded material, destined to be discarded or which must be discarded by law. Only a limited amount is recycled, almost nearly a third of the waste is still land-filled, leading to immense greenhouse gas emissions and water pollution. Another large part is burned. According to the



«Circularity World Gap 2019» report presented at the Davos Forum, only 9% of the 92 billion tons of raw materials consumed in the world are recovered and reintroduced into the system, following the principles of the circular economy. The gap to be recovered is still enormous and the urgency to do so is serious. At a global level, the Sustainable Development Goals Agenda 2030 (SDGs) of the United Nations promote and face the global challenge of the green economy, a challenge that can no longer be delayed given the unsustainability of the current model, in key to fighting climate change and decarbonising the system, with the aim of guiding a transition to sustainability that includes the transition from a linear economy to a circular economy, the correction of imbalances in our food system, the energy of the future, buildings and mobility.

However, this emergency situation has fueled a new creativity in recent years. The awareness of industries and consumers, increasingly attentive to the socio-environmental values of products, at the origin of raw materials and production processes, has favored a strong push towards planning solutions for the enhancement of urban waste or those waste produced in domestic level, thanks above all to the advancement of technological innovation in research and experimentation increasingly oriented towards environmental sustainability.

Companies, start-ups, research and groups of young professionals have focused their attention on the recovery of waste materials, adopting the principles of the Circular Economy and starting new biocompatible and sustainable businesses, such as: new fabrics for the fashion industry, new biomaterials for construction, new bioproducts for the world of design, new biopackaging for food and non-food packaging, etc. Valid and innovative alternatives to current waste disposal processes (recycling, composting, energy production).

Indeed, it has become possible to reconcile ethics and social responsibility with the legitimate desire of investors to profit, pursuing environmental improvement actions and real sustainability objectives. The world of textiles, packaging and design have opened their doors to new products derived from milk, fruit, vegetables, plastics, mushrooms, coffee, shellfish, algae and many others. Some of the most interesting projects of recent years at an international level, the result of experiments on the second life of agro-food domestic waste, can be collected within 4 categories:

- biofabrics
- biopackagings
- bioproducts
- biomaterials.





#biofabrics

from milk

Due di latte [Pisa, Italy]: is the currently most innovative Italian brand in the fashion scene. The incredible idea of transforming milk into quality fabric is made possible thanks to the most innovative bioengineering techniques. The fiber, at the heart of the fabric, is obtained by creating it with a sustainable and eco-friendly recycling process starting from the industrial surpluses of the food sectors. Casein is separated from serum, isolated, denatured and subsequently transformed into fiber. The fiber is spun and the thread thus obtained is transformed into fabric.

[<https://antonellabellina.wixsite.com/duedilatte>]

QMILK [Hannover, Germany]: is a protein fiber, velvety like silk. It is therefore an ideal combination for a wide variety of materials mixed with natural or synthetic fibers. Through its soft grip, the fiber is ideal for clothing. QMILK dissolves without residues in the water and allows to satisfy the needs of “flushable”, without affecting the infrastructure of the sewer. Is the only natural fiber with heat-binding properties. Bonding and stabilization takes place by heat treatment a 100 ° C and with pressure.

[<https://www.qmilkfiber.eu/?lang=en>]



from fruit and vegetables

Orange Fiber [Catania, Italy]: is the world's first and only brand to produce a patented material from citrus juice by-products, repurposing them to create beautiful, sensorial materials that reshape your sartorial experience. Their fabrics are formed from a silk-like cellulose yarn that can blend with other materials. When used in its purest form, the resulting 100% citrus textile features a soft and silky hand-feel, lightweight, and can be opaque or shiny according to production needs.

[<http://orangefiber.it>]

Grape Leather [Italy]: not only does animal leather production require the lives of millions of animals annually, it also affects the environment by using acids, heavy metals and lots of water for tanning. Production of synthetic leather alternatives might save the lives of animals, but generates pollution with synthetic polymers, plasticizers and solvents, while grape skins, stalks and seeds discarded during wine production are ideal for making 100% vegetal leather. No toxic solvents, heavy metals or dangerous substances are needed in the production process.

[<https://globalchangeaward.com/winners/grape-leather>]

Fruit Leather [Rotterdam, Netherlands]: is the project conceived by a team of young designers who have decided to reduce the waste of fruit and vegetables and reduce the costs for their disposal. To do this, they collect organic waste from the







markets and transform it into material to make bags, furniture and clothes. The aim of the project is to raise awareness of the problem of food waste, and demonstrate that a solution exists. [<https://fruitleather.nl>]

Banana Fiber [Barcelona, Spain]: comes from waste generated by the banana industry. Banana fiber was used for centuries by Colombian communities and does not require any water or extension of land for cultivation, since it is obtained from the residues of banana agriculture. Currently 65% of CO₂ eq cotton emissions are generated in cultivation and harvest, while for the production of banana fiber the emissions generated are zero. The vision of Indianes is that banana fiber is the solution to the environmental crisis caused by the textile and fashion industry. [<https://www.indianesfootwear.com/?lang=en>]

Piñatex [London, UK]: is an innovative natural textile made from waste pineapple leaf fibre. These leaves are a by-product from existing pineapple harvest, so the raw material requires no additional environmental resources to produce. Piñatex is fit for use across fashion, accessories & upholstery and has been used by over 1000 brands worldwide including Hugo Boss, H&M and the Hilton Hotel Bankside. [<https://www.ananas-anam.com>]

Food Textile [Tokyo, Japan]: as a bridge between the food and clothing industries, the project focus on the “colour” of food, using dyeing techniques and ingredients to develop original products as well as various domestic products. They purchase non-standard ingredients, food scraps, coffee husks, etc. from food-related companies and plantations that are not specified in the collection form of the ingredients to be discarded from food related companies and plantations. [<https://www.foodtextile.jp/project.html>]





Malai [Kerala, India]: is a newly developed biocomposite material made from entirely organic and sustainable bacterial cellulose, grown on agricultural waste sourced from the coconut industry in Southern India. It is a flexible and durable with a feel comparable to leather or paper. It is water resistant and because it contains absolutely no artificial 'nasties' it will not cause any allergies, intolerances or illness. It is a completely vegan product and as such you could even eat it.

[<https://malai.eco>]

Bananatex [Kerala, India]: is the world's first durable, waterproof fabric made purely from Banana plants. Cultivated in the Philippines within a natural ecosystem of sustainable forestry, the plant requires no chemical treatments. Its self-sufficiency has made it an important contributor to reforestation of areas once eroded by Palm plantations, whilst enhancing the prosperity of local farmers.

[<https://www.bananatex.info>]

Maeko [Milano, Italy]: Nettle is a vegetal fiber obtained from wild nettle (*Urtica dioica*), a perennial herb belonging to the Urticaceae family. Long, shiny and uniform, nettle is a very precious fiber. It is elastic, resistant to twisting, and unlike other fibers, its strength increases with the passage of time. Excellent, thin and flexible yarns are obtained from nettle which are also strong and tenacious. The nettle fiber is soft, resistant and breathable like linen but shiny like silk. It is a natural fiber, 100% biodegradable, which also has antistatic properties.

[<https://www.maekotessuti.com/eng>]

Nullarbor [Nedlands, Australia]: is an eco-friendly tree-free rayon fibre, sourced from sustainable coconut waste. Nanolose's biomaterial technology process begins in a facility where



microbes naturally ferment liquid waste products from food industries into cellulose, a cotton-like raw material that then is transformed into their Nullarbor fibre. The process to produce cellulose requires very little land, water or energy and a production cycle is just 18 days, compared to the eight months seen in the cotton industry.

[<https://nanollose.com>]

Desserto [Guadalajara, Mexico]: is a highly sustainable plant based vegan leather made from cactus, often distinguished by its great softness at touch while offering a great performance for a wide variety of applications and complying with the most rigorous quality and environmental standards. The cactus vegan leather, is partially biodegradable and has the technical specifications required by the fashion, leather goods, luxury packaging and furniture industries.

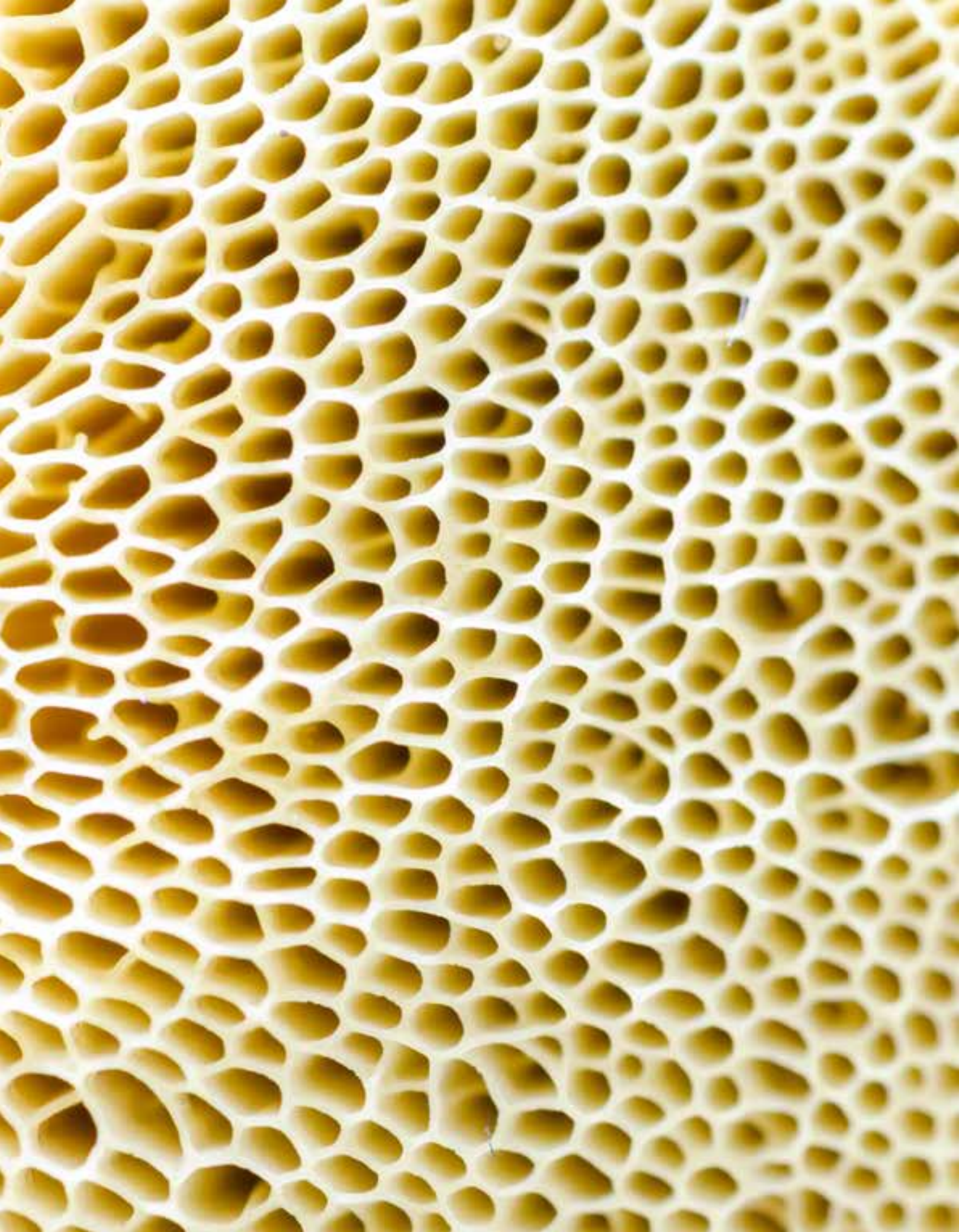
[<https://desserto.com.mx/home>]

from plastic

RIFÒ [Firenze, Italy]: created a T-shirt that was sustainable, responsible and social. They wanted it to be a durable garment that made the wearer feel good. Using an innovative system, they regenerated cotton and plastic bottles collected from the sea. Each t-shirt is made with 1kg of cotton scraps and 4-5 plastic bottles. Virgin cotton is one of the most polluting fibers in the textile industry. 2700 litres of water and many pesticides are used to produce a t-shirt. Not to mention the environmental impact of plastic waste left on its own. Instead, producing RIFÒ t-shirt requires only 30 litres of water.

[<https://www.rifo-lab.com>]





Plastex [Cairo, Egypt]: is a new designed material made from re-used plastic bags. The idea is to prolong the life cycle of plastic bags before it gets labeled as 'trash'. The average period of usage of a single-use plastic bag is only 12 minutes. By looking at plastic bags as a raw material rather than waste, Reform Studio has been able to transform it into a new durable eco-friendly handmade fabric. Plastex is designed to raise awareness about waste and the possibilities behind reusing what was once destined to become 'trash'.
[<https://reformstudio.net>]

Got Bag [Main, Germany]: is an eco-friendly, social-first fashion brand dedicated to raising awareness and cleaning our oceans from plastic pollution. With the idea of turning plastic waste into sustainable travel gear, they started in 2016 to develop the world's first backpacks made from 100% recycled ocean plastic. The fabric of Got Bag is water-repellent thanks to an innovative BIO-PU coating, which uses significantly less water and oil during production, while also emitting less CO₂ than traditional coating processes. The coating is 100% biodegradable and all of our products are free from PFC.
[<https://us.got-bag.com>]

from mushrooms

MuSkin [Firenze, Italy]: is a 100 % vegetable peel alternative to animal leather. It comes from the *Phellinus ellipsoideus*, a kind of big parasitic fungus that grows in the wild and attacks the trees in the subtropical forests. The total absence of toxic substance makes MuSkin ideal for the use in close-to-skin applications and thanks to its very natural origin it limits bacteria proliferation. MuSkin has the capacity to absorb moisture and then to release it in a short time, just like a fabric. It is not waterproof in its natural form, but it can be treated with eco wax.
[<https://lifematerials.eu/en/shop/muskin>]







Nat-2 [Munich, Germany]: is the most innovative high-end sustainable footwear brand bringing never used before natural materials into footwear design such as real stone, coffee grounds, hayfield, corn, cork, mushrooms, oxblood, fish leather, flowers, cannabis, red pepper, skeleton leaves, moss and many more. The “mushroom leather” is unique in its vintage look and unbelievable soft in its feel as well. The tinder sponge is a parasite growing on dead or weak birches and Beeches.

[<https://nat-2.eu>]

Biolea [Italy-Netherlands]: is a unique technology to grow novel materials, assimilable and alternative to traditional animal leather, using mycelium to create an innovative bio leather. Resonant with the rhythms of natural ecosystems, these materials originate from renewable resources are grown by means of fungal fermentation, without using or generating any toxic compound or waste.

[<https://www.worthproject.eu/project/biolea>]

from coffee

S.Café® [New Tapei, Taiwan]: S. Café® technology, with a low-temperature, high-pressure and energy saving process, combines coffee grounds onto the yarn surface, changing the characteristics of the filament, and offers up to 200% faster drying time compared to cotton. Also, the micro-pores on coffee grounds absorb odours





and reflect UV rays all the time. Comparing to cotton, this sustainable technology provides 3x more odour control, 5x more UV protection and improves drying efficiency by 50% compared to other common used fabrics.

[<http://www.scafe fabrics.com/en-global/home/index>]

from mollusc

Crabyon [London, UK]: is a recently created fiber, consisting of a natural product from shellfish, which, combined with other natural fibers such as hemp, linen, cotton or wool, allows for a new generation of “natural antibacterial” fabrics. It was born in Japan through an industrial process, by crushing the shells of crustaceans from the food industry and mixing it with cellulose, without the use of solvents. A method that makes Chitin and Chitosan available, substances with innumerable hygienic-sanitary properties. A textile fiber which, in addition to being antibacterial and antimicrobial, is haemostatic, completely biodegradable, hypoallergenic, ecological and biocompatible.

[https://omikenshi.co.jp/profile_english]

Tômtex [New York, USA]: is a 100% bio-based material is created from shell seafood waste and coffee ground, with the aim to work as a sustainable alternative instead of faux and animal leather. It's 100% natural biodegradable, and free of plastic. It is often distinguished by its excellent softness to the touch while delivering high performance and durability. A coating of beeswax layer can enhance its water resistance properties. It can replicate any texture surface including animal skin/exotic skin textures, and other design patterns.

[<https://www.tomtex.co>]



#biopackagings

from fruit and vegetables

GONE [San Francisco, USA]: began with Studies in Natural Packaging, an in-depth exploration of plant-based bioplastics. A great deal of single-use products that are made from and/or packaged in synthetic plastic could be redesigned to use this bioplastic. In this instance it serves as a container for an energy gel, a nutritional supplement often used during endurance sports like running or cycling. “Gone” allows athletes to dispose of the package immediately with no negative environmental impact; it can be thrown on the side of the road where rainfall and local critters will break it down in a matter of days.

[<https://www.iamlizziewright.com/gone>]

Peel Saver [Milan, Italy]: Fries companies produce a lot of potato peels waste. The idea of this project is to use this waste material in order to create a street food packaging. The potato peel is made up of starches and fibers components, which after maceration and natural drying, acquire the ability to bond with each other and harden. The obtained material is completely made of production waste and is 100% biodegradable. After being used, the packaging can be usefully reinserted in the biological cycle becoming animal food or fertilizer for plants.

[<https://www.behance.net/gallery/69674825/Peel-Saver-ecological-fries-packaging>]

Biogusto [Santiago de Chile, Chile]: is an ecological alternative to traditional packaging, using as raw material rice husks, waste from the rice industry. Its objective is to achieve a 100% natural, biodegradable and recyclable product. Only in Chile are more than 25,000 tons of rice husks discarded per year. Biogusto’s tableware is capable of transporting food and maintaining the temperature of them like a traditional packaging can, with the great difference that it is 100% natural and biodegradable in two months in contact with the earth.

[<https://www.biogusto.cl>]





BioPack [Salonico, Greece]: Initially conceived to contain the classic eggs, it is composed of paper pulp, flour, starch and natural legume seeds. After consuming the eggs, the container will not be thrown away, but you will place it in a pot or on the ground, you will water it and you will wait 30 days to see real plants grow. This project respects the environment 100% without burdening the costs of the recycling chain. The payoff used by the author perfectly summarizes Biopack's design process: 'Use plant grow'.

[<https://georgebosnas.com/portfolio/biodegrapak>]

Cocoform [Volendam, Netherlands]: consists of coconut fibre and a natural binder. The material is pressed into many different shapes. The material looks natural and good. It provides protection for the item it holds and is bio-degradable and compostable. Cocoform has infinite possibilities due to its flexible characteristics, whether for use as trays, boxes or containers. Produced in large or small quantities; everything is possible.

[https://www.enkev.com/en/market/packaging_22]

Bio-Peel [London, UK]: blends waste orange peels from industrial juicing with a mixture of other biodegradable products, including bio-polymers, vegetable glycerine (a by-product of bio-diesel), and water. The material is malleable until it is baked and dried. Bio-Peel material steadily degrades in water, so it is unsuitable as packaging for liquid. The material is very strong, able to take more than half a tonne of compressive strength, so other applications could be packing crates or hard surfaces, like table tops.

[<https://www.brunel.ac.uk/news-and-events/news/articles/Un-peeled-Orange-peel-based-food-packaging-unveiled>]

Scoby Packaging [Puławy, Poland]: is weaved through a biological process that turns bio-waste into bio-material. This form of pure cellulose has unique features that does not need an addition of fossil-fuels and other toxic substances. A high performing solution which is durable, 100% free of plastic and home composta-





ble. The material serves as an oxygen and a microbial barrier. It is insoluble in water and impermeable to water which makes it a great alternative to plastic-coated paper and plastic foils. From bags to sachets, it can be used for all kinds of packaging and wrapping that might normally be done with plastic.

[<https://www.makegrowlab.com>]

Wine Matters [Italy]: is a completely eco-sustainable packaging coming from waste grape skins and branches. It becomes a sturdy and poetic packaging for the wine, and white wine grapes become paper for the labels. Every detail is not only a practical and cyclical re-used material, but also a poetic connection to the environment, the skills and the local crafts of the region in which the wines have been crafted.

[<https://ludovicacantarelli.com>]

from mushrooms

Mushroom Packaging [Green Island, USA]: is simply made with 2 ingredients: hemp hurds and mycelium, it is a living material and is grown to shape. A high-performing packaging solution, cost competitive, thermally insulating, and water resistant. The material is grown in the tray for 4 days, then removed to grow for 2 more days, and dried for 1 day. Add to the soil to compost in 30 days, 100% home-compostable. No industrial composting required. Simply break into small pieces and place outside in the soil, allowing nutrients to return to the Earth.

[<https://mushroompackaging.com>]

from milk

Papermilk [Milan, Italy]: it is a type of milk-based paper. The milk fibers contained in the paper give the new support not only a unique touch and softness. Papermilk can also be used to create packaging, as well as writing and drawing paper. Produced with milk fibres (up to 10%), cotton fibres (up to 40%) and wood-free primary pulp from responsible sources, Papermilk is tactile paper with a velvety feel that is FSC certified. The material is suitable for most popular printing and finishing techniques: offset, offset with UV inks, letterpress, blind embossing, foil blocking, thermography and silk screen printing.

[<https://materialdistrict.com/material/papermilk>]

from algae

Evoware [Bali, Indonesia]: is a film based on algae and intended for the food sector. An original (and completely biodegradable) biopackaging (using seaweed) so healthy and natural that it can even be eaten. The packaging taste like jelly and are available in different flavours, from mint to green tea. Evoware's mission is to innovate more biodegradable alternatives to single use plastic products using seaweed and increase the livelihood of seaweed farmers in Indonesia.

[<https://rethink-plastic.com>]



#bioproducts

from fruit and vegetables

Bio-Trimming [London, UK]: raises awareness about global food waste issues while doing its part to prevent food waste from entering landfills. London-based designer Hoyan IP turns leftover bits of food into belt buckles, buttons, and other useful accessories. Bio-Trimming believes in crafting for the future of design and sustainability using science. By making beautiful jewellery & accessories from inedible food compounds, mainly from fruit & vegetable components, the team is passionate about making eco-friendly, re-purposed materials to make a powerful, beautiful, fashion statement.

[<https://bio-trimmings.com>]

Papelyco [Cali, Colombia]: offers an alternative and sustainable solution to the usual disposable dishes that often end up in the sea, killing and damaging marine flora and fauna. The slogan that the company is sponsoring is “turn your plate into a beautiful plant”. Plates, trays and cutlery are made with corn seeds and pineapple skins. These products reduce pollution and greenhouse gas emissions. Furthermore, inside these products there are seeds that allow the object to be planted at the end of its use.

[<https://lifepack.com.co/en>]

Saccharum [London, UK]: aims to elevate sugarcane by transforming it from a humble crop into a crafted artefact. Saccharum (sugarcane) is a perennial grass growing abundantly across the globe and is the main source of sucrose. Saccharum project is a fascinating series of design artefacts that highlight the plastic quality of sugar. Bowls, vases, several types of dishes, all elements which are characterized by a unique and porous materiality, with colours ranging from white to light grey. Perfect to accommodate sweet foods, fruits, flowers, these handmade objects constitute only the preview of what may be the alternative use of this fascinating natural material.

[<https://www.ellabulley.com/saccharum>]







HUSQUE [Moorooka, Australia]: was born with the aim of developing the use of an innovative material for the creation of design objects for the home, exploiting the production waste and consumption of macadamia nuts. The bowls are made with an innovative process that uses macadamia nut shells, the discarded shells are ground into fine particles, mixed with a polymer, and the final product is formed by beautiful and useful objects. Husque has qualities that allow it to be molded into thick and thin sections with low shrinkage, is strong and is insulating, can be worked and has different finishing options, including polishing, painting, waxing and oiling with beeswax and natural minerals.

[<https://www.husque.com>]

VIPOT [Bergamo, Italy]: Vipot natural pot is made up on average of 85% of vegetable fiber waste from rice (husk) and 15% of vegetable aggregates. Heat and pressure cement the ingredients, all the waste is recycled in the production process and there is no waste of material. The product biodegrades only in contact with the earth or in special systems, so not during storage, never during daily use and in dishwasher. It offers a valid alternative to the sector of fruit and vegetable nursery, to the sector of pot cultivation in general, in the field of gardening and decorative plants at home and on the terrace.

[<https://www.futurepowersrl.eu/en/vipot>]

RePulp [France]: revalue citrus fruit waste, giving it a facelift. This project becomes an alternative to plastics from petrochemicals, 100% eco-responsible from citrus waste. The Repulp material is bio-sourced, and therefore fits into a virtuous circle. The colour varies according to the arrival of citrus, mainly orange. The idea is not to create a new disposable item, but reusable and once it reaches the end of its life it can go back to its own recycling cycle using conventional compost.

[<https://www.repulp.fr>]



LEAF [Munich, Germany]: outdoor tableware, as renewable and biodegradable as a leaf falling from a tree. Their plates consist of leaves, and leaves only. The bottom and top layer are made from leaves, stitched together with fibers from palm leaves. And in between, you find a layer of paper made of leaves. No plastics, additives, oil, glue, chemicals, only leaves and they are water-proof. [<https://www.kickstarter.com/projects/643319217/beleaf?lang=it>]

Food Waste Ware [Tokyo, Japan]: black tableware is made out of food waste collected from food markets, shops and domestic kitchen. As part of his research, Kosuke documented how much food was discarded from the food markets, shops and his kitchen on a daily basis, which is then compiled into a booklet with instructions on how to turn food waste into tableware. The research booklet and the mould used for forming tableware are designed as if they were an actual recipe book and a real kitchen utensil so as to make viewers to imagine what they could each do as individuals. [<https://www.kosuke-araki.com>]

KAIKU [London, UK]: is a system that turns plants into powdered paint pigments using vaporisation technology. Avocados, pomegranates, beetroots, lemons and onions are just some of the fruits





and vegetables that can be placed into Kaiku and turned into the raw material for paints, inks and dyes. It offers an alternative system that uses food waste that would otherwise rot in landfill to produce non-toxic pigments.

[<https://www.dezeen.com/2019/09/02/kaiku-nicole-stjernsward-design-food-waste-pigment>]

Agricola [Rotterdam, Netherlands]: is a series of design products based on criteria of low co2 emissions and use of available local resources. The products are made of waste coming from the production and consumption of fruit, vegetables, cereals. By using a selection of that medium, treated with different natural bonds (such as latex, dammar gum and gamboge) it's possible to produce clean and mouldable materials that would last in time and quality between 8 and 10 years. After this time frame, the product will normally biodegrade and decompose in a composter, becoming nutrient for trees and vegetables.

[http://www.gionatagatto.com/Projects_1.html]

Crush Uva [Rossano Veneto, Italy]: is an ecological paper produced with by-products of the wine processing presented by the Vicenza paper mill that created it: Favini, a reference company for the production innovative and sustainable graphic specialties. The residue resulting from the pressing of the bunches and the subsequent processes, is dried and micronized. The flour obtained is mixed with water and natural fibers to produce a unique and high quality ecological paper.

[<https://www.favini.com/news/dai-vigneti-a-crush-uva>]

Dyelicious [Hong Kong, China]: Eric and his team went to the garbage dump to pick up leftovers, bought crooked melon at the vegetable market, recovered coffee grounds in cafes, and combined traditional vegetable dyeing techniques to turn these vegetable waste into dyes. Natural plant wastes are used as dyes, cloths using natural dyes are brightly coloured, and because the raw materials used are not chemical products, they are safer and non-toxic.

[<https://dyelicioushouse.wixsite.com/home/about-us>]

Artichair [Athens, Greek]: is a series of indoor furniture made of a 100% biodegradable material derived from fibers of Artichoke Thistle, that is the most efficient. It needs no water, no pesticides, it is non eatable and the seed is spread once in ten years. The final material has been applied into product design in a variety of methods, such as hand production, compression molding, and freehand transformations.

[<https://www.kizistudio.com>]

Solskin Peels [Wahat al Salam, Israel]: is a series of objects made from the recycling of citrus peels finished with shellac. The products, which maintain the colours and fragrance of the fruit, are 100% biodegradable, made from dried molded orange peels. The





peels are biodegradable, locally sourced, cheap, water-resistant, and they smell good. Using a simple molding and drying technique, the designer developed a series of zero-waste biodegradable functional objects including cups, plates, spoons, and even small jars.

[<https://inhabitat.com/israel-based-solskin-studio-creates-biodegradable-objects-from-orange-skins>]

HyO-Cup [Wahat al Salam, Israel]: Crème studio transforms fruits into containers, rather than the opposite (storing fruits in them). Using the easy-to-grow and tough-when-dry gourd, Crème created specialized 3D-printed molds that allowed the gourd to grow in certain shapes. Once the gourd dries out, the mold is opened, the fruit is cut, and its insides cleaned. The result is the HyO-Cup, a product that's watertight, and formed with a surprising amount of accuracy. It's possible to achieve any shape, making stylized containers, or even more functional, stackable designs. Once done, instead of going into a landfill, the HyO-Cups go into a composting pit.

[<http://cremedesign.com/product/gourds>]

Orto Cafe [Fukuoka, Japan]: Japanese designer Nobuhiko Ari-kawa of Rice-Design has created edible tableware. The plates, bowls and chopsticks are intended to replace disposable paper tableware. The pieces are made from hardtack, a biscuit dough made from flour, water and salt which was traditionally used as dry emergency rations at sea. The biscuits will last for months as long as they are kept dry.

[<https://www.dezeen.com/2008/03/26/edible-tableware-by-rice-design>]



KI•RA [Greece]: is a collection of utensils that facilitate with the production and consumption of edible containers. The most common outdoor meals, picnics and lunch breaks were the main inspiration. The linear progress of food preparation and consumption of a temporary, alfresco meal becomes circular. The kit consists of a recipe, a ceramic casserole dish, a dough comb and a tablecloth. The recipe is ideal to prepare a dough that will result in a strong, tasty and resilient bread.

[<http://kostantiamanthou.blogspot.com/p/texts.html>]

Taste No Waste [Greece]: explores the concept of edible containers, either hand-sized for single portions or in larger nests for sharing with others. The concept illustrates a new aesthetic and typology of products that gives rise to new ways of handling food, encouraging new prehensile modes and meal rituals. The containers are made with tomato as the principal ingredient. The tomato is transformed into a range of tastes and textures: crunchy, firm, soft and jelly-like, each offering a marked and unique flavour profile.

[<http://www.dianeclairbisson.com/crunchy-food-nest-series>]

Wasara [Korea]: is a biodegradable and compostable single-use tableware line made of 100% renewable materials as bamboo, reed pulp, bagasse and sugar cane scraps from the extraction of juice. As a destination for paper cups, WASARA can only be used once. Sugar canes and bamboos are plants with great vitality and without fear of exhaustion. The use of sugar canes and bamboo as a substitute for wood pulp leads to the effective use of resources.

[<https://www.wasara.co.kr/home>]

from coffee

Kaffeeform [Berlin, Germany]: promotes the principle of a circular economy. The rising consumption of coffee around the world is producing a growing amount of coffee grounds, most of which goes straight into the bin. This is where Kaffeeform comes in: it reuses otherwise wasted resources as a raw material. The innovative material resulting from this is exceptionally durable. It finds its perfect second life as a coffee cup. The coffee cycle is complete.

[<https://www.kaffeeform.com>]

Decafé [Alicante, Spain]: was to exploit all the coffee that is thrown away every day and create beautiful lamps made with coffee grounds. For this, it needs to create a blend based on coffee grounds but lasting over time and, at the same time, this mixture of binders should be natural to continue with the sustainable chain of the project. Today this material made with coffee grounds is recognized as a reliable, high quality material and has certificates of excellence from prestigious libraries of materials.

[<https://www.decafe.es>]



Re.Bean Coffee Stool [Melbourne, Australia]: explores a brand-new sustainable material for furniture pieces from locally collected coffee ground waste and other coffee industry waste. The project features not only a unique smell and tactile of its materiality from coffee, but also its 100% biodegradability – generating no waste to natural environment.

[<https://www.kristenwangdesign.com>]

from milk

Milk Brick [Sassari, Italy]: is an Innovative Start-up of the circular economy, it recovers the waste milk from the Dairy Industry and the waste milk from the G.D.O and transforms it into a new raw material to be used in the industrial production of hundreds of products for the construction industry. Milk Brick enhances 100% of the recovered milk without generating production residues, they have a continuous life cycle and are 100% recyclable.

[<https://www.milkbrick.com>]

Caseína [Santiago del Chile, Chile]: is a bioplastic made from bovine milk. This project explores the methods of processing protein (casein) extracted from cow's milk as a natural alternative to oil-based polymers, using the milk with other biopolymers to produce objects. The pots are 100% biodegradable and constitute a new experience when eating. One of the properties of casein is to intensify the colours and enhance the lights, which is why it is enhanced at this stage. Different shapes, textures and colour palettes are developed in each piece.

[<https://margaritatalep.com/Caseina-desarrollo>]

from mushrooms

MYX [Copenhagen, Denmark]: is a lamp consists of plant fibre and mushroom-mycelium. The lamp is grown into shape during a period of 2-3 weeks, where the mushroom mycelium grows together the plant fibres into a flexible and soft living textile. After 2 weeks you can harvest the healthy Oyster mushrooms. The waste product 'shaped as a lamp' can then be dried and used as a lightweight material, that is both organic, compostable and sustainable. The mushroom mycelium stabilizes the construction behaving as a glue between the fibres.

[<http://jonasedvard.dk/work/myx>]

Mycelium Chair [Zaandam, Netherlands]: as the archetype for a functional design object, is made by 3D printing of a mushroom-living material, using this infinite natural source as a living glue for binding organic waste. Once it's full-grown and dried, it turns into a structural, stable and renewable material, comparable to cork or wood. The growth of mushrooms is not in conflict with its function as a stool, they are hidden as jewellery within its structure.

[<https://www.ericklarenbeek.com>]



#biomaterials

from fruit and vegetables

Nuatan [London, UK]: a brand for value added-products made from a new generation of bioplastic material, which is both biobased, made of 100% renewable raw resources, biodegradable, and leaving no micro plastics behind nor contributing to global warming. NUATAN solutions are made of 100% plant-based biopolymers Polylactic acid (PLA) and Polyhydroxybutyrate (PHB) produced out of plant-based renewable resources.

[<https://www.nuatan.com>]

From peel to peel [Bolzen, Italy]: combines food waste with bacteria and yeasts to create disposable packaging, in a bid to provide a sustainable alternative to plastic. The project makes eco-friendly food packaging and containers by fermenting microbial cellulose, a symbiotic culture of bacteria and yeasts – also known as scoby – with fruit and vegetable leftovers. Emma Sicher, the designer, also experimented with different fruits and vegetables like apples, potatoes, beetroot, grape pomace and beer hops to create different colours and textures of the material.

[<https://www.dezeen.com/2018/11/13/sustainable-food-packaging-emma-sicher-peel>]

Chip[s] Board [London, UK]: is dedicated to developing bio-plastics and bio-plastic composites for the ever changing design sectors. It has developed a range of innovative and sustainable circular economy materials using potato waste. All materials developed by Chip[s] Board® are durable, recyclable and biodegradable. They contain no toxic chemicals and have been designed specifically to create a stronger circular economy for materials.

[<https://www.chipsboard.com>]



Totomoxtle [Mexico City, Mexico]: is a new veneer material made with husks of heirloom Mexican corn. Ranging from deep purples, to soft creams, Totomoxtle showcases the wealth of diversity of the native corns of Mexico which are naturally colourful and are essential for the rich gastronomy of the country. Totomoxtle focuses on regenerating traditional agricultural practices in Mexico, and creating a new craft that generates income for impoverished farmers and promotes the preservation of biodiversity for future food security.

[<https://www.fernandolaposse.com/projects/totomoxtle>]

Sunflower Enterprise [Rotterdam, Netherlands]: Thanks to the agricultural waste of sunflower and its seeds, it is possible to obtain and treat the waste differently to get to different bio materials and then use for many purposes, from insulation panels to iPhone cases to support surfaces. Commonly grown to produce oil, seeds or bio-fuel, sunflower farming produces agricultural waste that has the potential to be made into valuable resources.

[<http://studiothomasvailly.com>]

TomaPaint [Parma, Italy]: is a green start-up whose goal is to revolutionize the metal food packaging business through a bio-resin obtained from industrial tomato processing by-products. The bio-resin will be used to produce a bio-lacquer to be applied on the internal and external surfaces of metal food containers, so as to offer an ecological alternative to synthetic lacquers with environmental and health benefits.

[<https://www.tomapaint.com>]

Cuchara [Montevideo, Uruguay]: experiments with the use of fruit fabrics in the food industry of our country. Food is fully exploited since everything is used: its pulp, seeds and peel. The result is flexible, edible and very tasty sheets that can be used as a snack or healthy treat, wrap or cover for desserts, sandwiches, among others. The project aims to reuse food that otherwise would not be consumed so it does not stress the production of food resources but proposes a way to consume nutrients destined for destruction.

[<https://cuchara.uy/#proyectos/telas-comestibles>]

ORB [London, UK]: is 100% biodegradable, vegan, sustainable and renewable. It achieves this by sourcing waste by-products from the food production or agricultural sectors and processing it into a homogenous filler which is bound together with a unique and completely organic binder to form an affordable and sustainable replacement for wood-based sheet materials. As a highly versatile material Orb can be formed into standard sheets for the construction sector that can be worked in the same way as more common composite boards such as MDF, OSB etc.

[<https://www.biohm.co.uk>]

AgriDust [Italy]: is a project of recovery and valorisation of waste fruit and vegetables. Working the six chosen waste (Coffee grounds, pea-





nut shell, husk tomato, bean pod, orange waste and lemon waste), is born a biodegradable material and atoxic in all its process of creating and processing. The material is constituted for the 64.5% from waste and the remaining 35.5% by a binder in basis of potato starch. AgriDust can be used to create pots for plants and packaging, moreover using cold technology, lends itself as material for the printers 3D, where the classic extruder is substituted by a syringe.

[<https://www.behance.net/gallery/24616719/AgriDust-Biodegradable-material>]

from mollusc

Shellworks [London, UK]: created a bioplastic by combining vinegar and chitin, which is a fibrous substance that forms the main component of mollusc shells, as well as the cell walls of fungi. The resulting range of potential products includes self-fertilizing planters, pill blisters and food containers, which can be recycled or composted. Making this process more accessible and convenient. After use these products will begin to degrade when you plant the material in the soil.

[<https://www.theshellworks.com>]

Sea Stone [London, UK]: is a cement look alike “mimic” material which in reality is comprised by natural, non-toxic and sustainable materials. It features plastic hardness and aesthetic texture. Sea Stone is a zero-waste project. It is made by by-products of the seashell which goes to landfills after the consumption in the seafood industry. As wasted shells are the main composition of the Sea Stone, it indicates the up-cycling of the product, using shell after consumption in the sea food market and industry.

[<https://www.newtab-22.com>]

from milk

Protein [Sussex, UK]: a bio-plastic based on skimmed milk, therefore non-polluting and produced through the use of renewable sources. This material seems to have all the versatile characteristics of plastic that we all know. The milk is heated to separate the whey from the curd. The curd is then dried in an industrial dryer and mixed with a natural plasticiser. What comes out of it is a ductile material, which like the synthetic plastics currently on the market can be shaped, coloured, printed and even carved like wood.

[<http://www.tessasilva.com>]

from mushrooms

Ecovative [Green Island, USA]: uses the Mycelium Foundry to create plant-based meat, biodegradable packaging, and more. Mycelium is capable of building macrostructures. This aspect is unique to biofabrication platforms in the biotechnology space. The biofabrication processes enable to tune the structure of mycelium based on the desired performance characteristics of the material. Mycelium materials will biodegrade over time after their intended product life cycle in contrast to plastic-based materials.

[<https://ecovativedesign.com>]

Mogu [Varese, Italy]: this cutting-edge technology is based on mycelium, the vegetative stage of mushrooms. The materials are produced by growing selected strains of mycelium on pre-engineered substrates made of agro-industrial residues. By tuning the matrix configuration, it is possible to harvest different materials within short timeframes and with limited use of resources. Fungal mycelium acts as a reinforcement to the matrix structure, creating a 100% plastic-free and coherent material composite. At the end of the production process, mycelium materials are inertized by slow drying, for reduced energy consumption. The resulting products are completely stable, safe, durable and biodegradable.

[<https://mogu.bio/technology>]

from eggs

Calchèra San Giorgio [Trento, Italy]: produces building materials for restoration using eggshell as raw material, giving it new life. Calcium carbonate is a fundamental component of lime. Cement is obtained from the crushing of egg shells mixed with clay. In addition, egg shells are also used as biomass to produce the energy needed to cook the clay, activating a process of circular economy and sustainable development.

[<https://www.calcherasangiorgio.it>]

from algae

Terroir [Copenhagen, Denmark]: is a new material developed from seaweed and paper and is created as a research into local materials. It is best described as a warm and tactile surface with the softness of cork and the lightness of paper, which can be used for products and furniture. The colour of the material is determined by the different species of seaweed – ranging from dark brown to light green. After being dried the seaweed is ground into powder and cooked into glue, utilizing the viscous and adhesive effect of the Alginate – the natural polymer of the brown algae.

[<http://steenfatt.dk/work/terroir>]







As already anticipated in 2012 by William Myers in *Biodesign: Nature + Science + Creativity* the world of architecture and design in the broadest sense of the term are getting closer and closer to experimentation and the use of “living” materials with aim to improve the ecological performance of objects, clothes, buildings in search of new expressive possibilities, combining science, nature and creativity, reaching a synthesis between biology and technology.

Biodesign, or bioengineering, is a recent and rapidly growing movement that has become possible thanks to numerous advances in technology and biology. This means, for example, growing a lamp in mycelium, the mushroom that makes a surprisingly durable material for furniture, or using the digital fabrication of 3D printers to print a chair modeled on the development of bone tissue. Not just designing with living organisms, but designing living systems.

It is not yet clear how this new design discipline will evolve, there are those who argue that bioengineering will revolutionize the industry by replacing traditional industrial materials with living materials, and there are those who remain skeptical about large-scale application. However, it is undeniable that this sector is developing rapidly on a global scale and that it will certainly have important implications for the future of the planet.

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WV

IV
SECOND PLATE

GOA REASONED RECIPES BOOK.
Prototyping, experimentation
and innovation to rethink the food waste.

The Creative Food Cycles research part developed by the UNIGE Team focused on the capacity for self-sufficiency, understood as a capacity for self-production and, above all, awareness of the potential and richness of food waste. The current situation has also led us to further reflect on how important the social capacity of food processing in all its cycles can be within cities, to create better habitats and facilitate production in certain urban contexts (Cockrall-King, 2012).

In fact, in cities, access to food is not always easy, there are entire neighborhoods defined as food deserts, in which it is impossible to find fresh and quality food (Dutko et. Al., 2012) Within this scenario, the main result of the UNIGE Team's activities was to create real products and prototypes starting from the recovery and recycling of food waste in order to convey a proactive message in the fight against food waste.

The prototypes were exhibited during the project activities involving visitors in an active role through artistic performances and co-creation workshops.

These prototypes were useful for reflecting on the production, consumption and recycling models implemented in our cit-

ies, opening the doors to a topic that represents an interesting field of investigation for design, which attempts to propose new solutions to this type of environmental problems. and social in which the system at a general level and the choices of individual consumers are intimately intertwined. See for example the famous exhibition at the Milan Triennale 'Broken Nature' in 2019.

The designers, students and planners involved in the project have focused, through the development of artefacts, on the importance that the circular economy linked to the food system represents a new regeneration resource, in which food waste returns to the interior. of the circuit in the form of a new material, new product or new food.

Following the publication of the Cities and Circular Economy for Food report at the World Economic Forum in Davos (January 2019), the Ellen MacArthur Foundation launched the Food initiative, promoting new urban food strategies. "Cities play a crucial role in keeping food at its highest value and eliminating waste. They can become hubs for the redistribution of surplus foods and a thriving bioeconomy where food by-products are transformed into organic fertilisers, biomaterials, medicines, and bioenergy."

Thanks to the CFC project, the Genoa research unit had the opportunity to address this complex issue and develop numerous design proposals, starting with food waste.

The main purpose, in addition to experimentation, was to convey a message to society and raise awareness of recycling, increasing awareness of the importance of waste and the possible ways of processing waste, looking for easy to reproduce procedures and daily use of the products made. The quality of the products made has allowed the research team to generate new knowledge in the field of design and cultural dissemination of great innovation.

It is possible to identify some macro-categories with which food waste has been processed.

The main artisanal processes can be summarized in:

- **food drying:** the drying process allows to progressively eliminate part of the initial water content from the product, thanks to the administration of heat (oven, dryer, open air). It was mainly used in the initial phase of processing wet waste such as fruit and vegetables.
- **food compression:** through a process of compression, the floury food is mixed with natural thickeners - such as potato starch, corn starch, gelatine, agar-agar - and compressed inside rigid models in order to define a precise shape. This process was mainly used starting from already dry foods such as flour, coffee waste, egg shells, dried fruit shells, etc. mixed with thickeners.

- **bioplastic combination:** in circumstances of particular need for product resistance, bioresin was used to agglomerate and fix in a resistant way the starting material. Usually this method has been used to create the structural parts of the products, with the great ability to incorporate even medium-sized dry food waste (legumes, pasta, dried fruit shells, fish bones, etc.).
- **cooking chemistry:** are identified with this definition, all those processes that have worked and modified the chemical component of food to obtain a new material, such as the extraction of fats, the combination of acid solutions, the dissolution of sugars, freezing or cooking, etc.
- **product handling:** with product handling or manipulation we mean the manufacturing process of a product that changes its shape and function, but not its internal composition. For example, the manipulation of cardboard food packaging that becomes artistic elements or bottle caps that turn into accessories to wear, as well as cans that turn into clothes.

In the following sheets we have summarized an extract of the main prototyping and processing experiments of the products obtained during the development of the CFC project together with the designers, students and professionals involved.

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From milk to

Galalight

Luca Cangelosi, Pierre Picozzi

Having taken into consideration the works of decorative industrial production of the 1930s such as buttons, pen pins and bijouterie objects, the designers have noticed that the galalith, a material derived from milk, can be useful for furnishing the home given its elegant charm that almost resembles ivory, horns or marble. Focusing instead on the chemical composition they discovered that the porosity of the material is perfectly suited to make the light shine through. Hence the idea of creating table lamps formed by the union of pieces obtained from simple and linear molds so as to accelerate the process of drying the material, and also its subsequent processing by hand, which is expected only as the finishing of a piece already industrially printed. The study of the various compositions has led the design examples where the key words are: geometry, naturalness and elegance.





From packaging to

Biorigami

Martina Caprari, Vanessa Sanna

The goal is to create a packaging that in addition to its natural function, can have a second life and also can be completely eco-friendly.

A packaging that is totally biodegradable, but not disposed of like other waste, which can perform other functions before reaching the “end” of its existence. A new and revolutionary object in full respect of our planet.

The BIORIGAMI project consists of creating alternative packaging in both form and function. Combining the art of origami with biodegradable it was possible to create a product in perfect harmony with nature. The packaging structure is made by folding the typical origami paper and using a single joint at the ends.





From food waste to

Bis Bioresin

Giulia Centineo, Margherita Lequio, Changrui Li, Xinran Shi

Bis products are the result of two different concepts that can be traced back to a common element: the reuse of food waste.

Bis has two lines: Bis Bioresina and Bis Compostable, both deal with dishes, but with a different purpose: the first involves re-use, while the other one the biodegradability of the product after use.

1. BIS BIORESIN

The Bis Bioresin material provides for the reuse of food-derived waste that in some way is able to imitate and replace commonly used materials. The realization process involves the union between dry waste and a transparent bioresin. After the drying period there is a resistant and personalized material suitable for any type of use, both for the production of products or even tiles and flooring. The waste mainly used is: egg shells, pasta, lentil and coffee pasta, which, given their structure, are able to imitate glass and stone from which two different lines are named.

Bis Bioresin takes defined and flat geometric shapes for reasons of management of the resin itself, liquid and sticky if just used. The size of the products depends totally on the shape of the silicone mold that is used. The use of pastry molds currently on the market is thus used.





From food waste to

Bis Biocompostable

Giulia Centineo, Margherita Lequio, Changrui Li, Xinran Shi

2. BIS BIOCOMPOSTABLE

The Bis Compostable material has biodegradability as its main characteristic, its goal is to use food waste as an excellent substitute for plastic, especially the disposable one. Bis Compostable is obtained through the drying of any vegetable waste, minced and combined with simple water and flour.

Bis Bioresin takes defined and flat geometric shapes for reasons of management of the resin itself, liquid and sticky if just used. The size of the products depends totally on the shape of the silicone mold that is used.





From loofah to

Loofah fiber

Wang Shijing, Chen Wenjing, Liang Qiulin

Loofah fiber is a natural and intelligent material with a fibrous, porous, robust and light water-absorbent and anti-bacterial mesh structure, with great potential in terms of packaging, filters, low-cost splints and acoustic sound-absorbing panels. At the same time, since the material is also naturally degradable, it is a good substitute for many materials.

The mission of the loofah fiber is to completely reuse matured and inedible loofah, and combine the good physical properties of the loofah and develop it into a high quality natural material that will hopefully replace the industrial fiber material in the future.





PORTABLE LIGHT

From pineapple to

F-ananas

Cao Zheng, Liu Fei, Liu Xiaodong

F-ananas aims to provide a new type of raw materials, thereby reducing the demand for cotton and linen, and setting off a new wave in the textile industry.

F-ananas is the only brand in the world that uses tablecloths made of pineapple fiber. It recycles the discarded pineapple leaves, and fabricates the fiber ropes by extracting fibers, washing the fibers, drying the fibers, etc, and weaving out different kinds of table lists with these fiber ropes, bringing natural and special style to the restaurant. Using these table mats can make your life more refined and different from the past; because these products are handwoven, you will feel a holiday style and bring you high-quality product experience. And the heart of the craftsman.





From coffee to

Coffee Puzzle

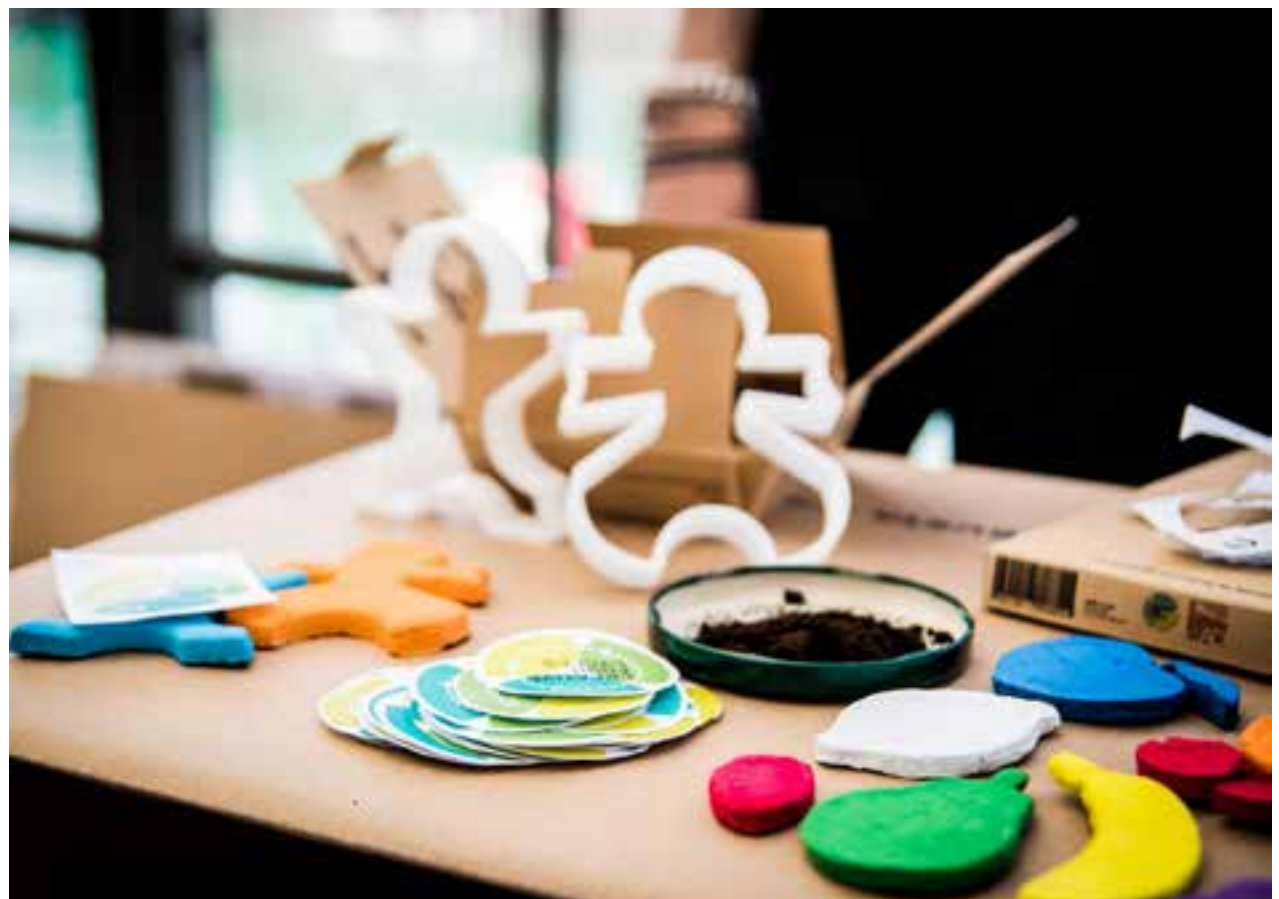
*Sharon Giubilo, Daniele Rossi,
Ludovica Sabbatini, Serena Vaglica*

Did you ever thought about how many coffees are drunk every day? According to a survey conducted by Coffitalia on coffee consumption (2018), Italy is the sixth European consumer in the world, with 341 thousand tons of coffee powder per year.

After being used, the coffee powder is thrown in the food waste. The goal of the project is to save this waste and give to it a new life. Thanks to a few simple steps, exhausted coffee becomes Coffee Puzzle, an engaging game suitable for all children. Just combine coffee, potato flour, lemon juice, honey and water and you will get a soft paste suitable to be manipulated like plasticine.

CoffeePuzzle is available in three different set: Fruit, Kids and City. Each of those let you create three different puzzles, repeatable as many times as you want, so you can keep having fun and, above all, you can reduce the food waste. This, however, is only the beginning!





From rice husk to

V.Pot

Nicol Guglielmi, Chiara Lorenzo, Mirko Sostegni

During the initial phase, several researches were carried out on the trays used in festivals, parties and at home, focusing on the ergonomic aspects of this product. The problems were discussed and the shape of a tray was studied, which included a saucer holder and a hole to fit the glass in it. This solution was designed on the basis of the crowded context that we took in the studio.

Form and function of the concept has led the designers to choose a material derived from the rice husk, waste processing of the latter. This material has already been used by an Italian company named Vipot which characteristics were perfectly suited to the product and its use. The purpose of V.Pot-project is to include in a single form compact and ergonomic a plate, a container for sauces and a glass holder. The tray can be placed in relation with other products made by Vipot such as the glass and the cutlery, cancelling the waste that could be created in an event of this kind. The shapes are born from the study of the environment of the Suq, which is compatible with that of the majority of events of the same kind, in which you precisely is facing crowded and often confined spaces. The objectives set in the concept phase have become tangible in the prototype, the tray is in fact reusable, ergonomic, hygienic, biodegradable and economic.





From peanuts to

Hanging Plates

Camila Larrosa, Julieta Coppa, Lucia Navarro, Claudia del Arco

The project is designed for temporary events. It consists in a series of dishes created with a new ecological material based on peanuts, aiming to reduce the use of plastic in this type of events. The project is based in many circular modules in which a series of plates of different sizes are placed. The product is at the service of the public, so that they can grab any plate and use it to place their food inside of it. As the user grabs the plates, the panel changes its relief and in turn changes the space.

The dishes being made with peanut peels avoids the use of plastic in the gastronomic industry and generates a 100% biodegradable product.





From fish bones to

Bofish

Francesca Mercadante, Omar Tonella

BOFISH is an innovative material obtained from bone and cartilaginous waste from fish, especially those from tuna caught in the waters of Camogli from tonnage. The fish waste is minced with variable grain and then mixed with a particular natural resin and natural pigments, until a liquid compound is obtained which, once hardened, possesses the mechanical properties of the resin. Considering the state of this compound it is possible to give the desired shape through silicone molds.

The BOFISH brand is simple and immediate. The composition of the logo takes place through the superimposition of the pictogram of a fishbone and the “bofish” logo.





From coffee to

DishBratta

Andrea Montaldo

The goal of DishBratta is to make the community aware of the amount of coffee that does not have a real application in the recycling chain.

The DishBratta line is made by mixing coffee ground and a biological resin. It consists of a set of two dishes, a dinner plate and a deep dish, a fork, a spoon and chopsticks.

Each object was made following specific steps: to make the dishes, the meal glass and the coffee glass the mixture was poured into each of these everyday objects.





From coffee to

M00KA

Stefano Brugaletta, Sandra Esposito

Anna Franzoni, Greta Spinelli

M00ka is a product born from a circular design idea; it is a vase that completes its life cycle becoming fertilizer for the plant. Presented in a setting that offers visitors a visual and olfactory experience.

Trying to cross the characteristics of a “fertilizer pot” with the typical aromatic plants that many of us generally have at home, the idea of creating an olfactory path was born able to project the visitor of an exhibition into a real sensorial experience.

At the end of the visit, users will be able to take home a pot with a seedling, and then decide whether to hang it in the kitchen or plant M00ka directly in a pot on their balcony. After some time, the pot will become food for the plant which in the meantime can continue to thrive.





From packaging to

FLORA

Chiara Dipasquale, Giorgia Rosa

FLORA is an installation characterized by the reuse of egg packaging made of recycled paper in the last stage. Looking at the product from a different point of view, it is still possible to use it with a different purpose and shape.

By simply cutting the single container in a linear and elegant shape, but at the same time very simple, everything comes to life and the material is reused one last time. The name chosen for the set-up, FLORA, obviously derives from the use of more than 3000 cardboard flowers that, when assembled, somehow recreate a landscape at the same time natural and abstract, within which you feel projected.

The installation consists of two walls placed to form a right angle and surmounted by a triangular roof. The first panel is covered with cardboard flowers and, the second, is a reflecting surface. The roof is open and not oppressive due to the presence of a metal mesh to which other flowers are attached facing downwards. So the visitor feels enveloped in a space that surrounds him on three sides.





From infusions to

BioPlastic

Giulia Geri, Ilaria Tornaboni

BioPlastic was born from the desire to create a line of packaging for chamomiles and infusions starting from the classic internal waste of the sachets once used. It consists in two box packs, a more classic version, with a straight cut, and one with a transverse cut. The packs are made from entirely recycled and biodegradable paper with the window created from the internal waste of the chamomile or other infusion sachet which, mixed with other natural materials, becomes 100% compostable bioplastic.

The goal of this packaging is to sensitize people to recycling and everyone uses sustainable materials purchased from food waste. This product is of high quality and could simply be placed in the world of industry. The finish of the material in chamomile and in infusion of imitation is very similar to that of a thin plastic, type film, it is rough in that everything is present pieces of leaf and flowers of the infusion. Also use a natural glue you can safely throw it in the damp or in the compost bin.



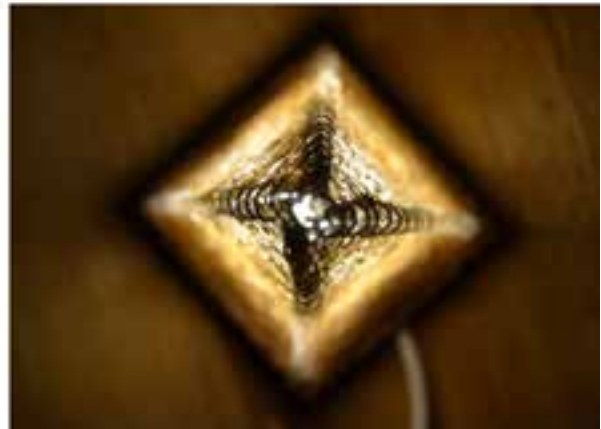


From fennel to

Fennut Light

Giulia Geri, Ilaria Tornaboni

The goal of Fennut light is to make people aware of the importance of recycling and using sustainable materials obtained from food waste. As a matter of fact, with what is usually thrown away, it is possible to create different materials suitable for different products. Fennut light is a lamp in two versions, Tube and Pyramid, where two materials born from food waste are used together. One version has a simpler and rawer processing, the other a more complex and refined one. The two materials are completely natural and no environmental polluting products have been added. The lampshades are composed of a completely natural and biodegradable bioplastic material deriving from fennel waste. The bases are made of the material deriving from the chopped shells of walnuts, also completely natural.





From wood packaging to

Gli Apostoli

Nicolò Goretti, Miruna Patricia Llup, Ángel Salinas Escandón

The reuse of a poor material with a short cycle of life - like the wood from the chests used for transport of fruit and vegetables - to create a product with a simple and ergonomic design.

The idea to create a set of plates came from the festival's theme: the banquet, the joy of dining and eating together. Starting from this, the designers thought of the famous paintings that present this theme and they chose as point of reference the famous painting of Leonardo da Vinci, "The Last Supper". From this story, they created a set of 13 plates and a kind of placemat, representing the 12 Apostles, Jesus and Mary Magdalene.

The collection of plates is made 100% of natural and recycled materials and top covered with a protection layer to secure a safety multiple usage. Each plate carries the name of one of the 12 Apostles and has a unique design, a graphic interpretation and representation of the stories and symbols of the Apostles.





From recycled paper to

PAPER-SIGN

Irene De Natale, Sara Di Raimondo

Our planet is increasingly immersed by waste, negative signs of Anthropocene. The goal of Paper-sign is to leave a positive sign with an interactive and dynamic installation, on occasion of an event, where people can take a recycled paper with seeds from the installation and plant that in their home.

Paper-sign is an installation made with recycled paper from food waste and food packaging. It consists of two parts: one on the ground, called paperblocks, is made of cylindrical paper sheets. The cylinders are fixed through cuts on the quadrants. The result is a dynamic, light and colourful structure. This installation has the function to support the event products which are exposed.

fronte



retro





From wax to

WAX OUT

Andrea Mazzilli

Large supermarket chains produce huge amounts of fruit and vegetable waste just because they are “ugly to sell” because they have stains on their surfaces. The cost of disposing of this waste and the consequences for the environment are so worrying that numerous associations have been activated against the waste of “unsightly food”. From this problem, so needy to be understood and supported, the idea of the project called WAX OUT was born, which consists in using mainly apple waste to create vertical elements used for a future installation. The discarded apples are initially cut into thin slices, then arranged on a flat surface forming a circle. Once dried, they will form a semi-transparent vegetable sheet. To the touch it will turn out to be a real paper. The material obtained is completely composed of slices of apples without the addition of adhesives and therefore 100% natural. In addition, it was thought to combine the vegetable sheets of apples with a second material, wax, which will serve as a base for these elements that will develop in height. The apple leaves will be joined by jute threads that will develop from the wax. These vertical elements, once created and thickened together in a space, will form a vegetable forest. Inside, open spaces will open up for the display of products related to the exhibition.





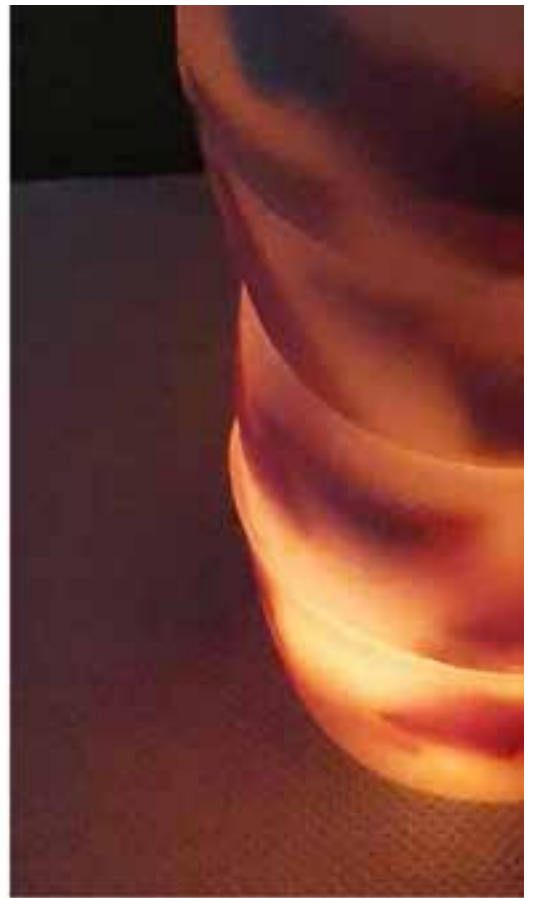
From wax to

IN • WAX

Selene Polliano

IN • WAX was created to be used as a base for the products of the other exhibitors and create an atmosphere by being illuminated inside. It can also be used as a single installation within the space. It is a product created from wax waste and fruit peels, in particular orange. A hollow cone trunk that could be used as a piece of furniture, a lamp or as a base on which objects could be placed through a shelf. Its modular shape makes it chameleon-like. The aim of the product is therefore to create an installation that could be used as a base for other products or to create an atmosphere in the place where it will be used being illuminated inside. The orange peels will have to be dried first as their moisture would risk rotting them. Once inserted into the wax they will be preserved for a long time and give the product an orange scent.





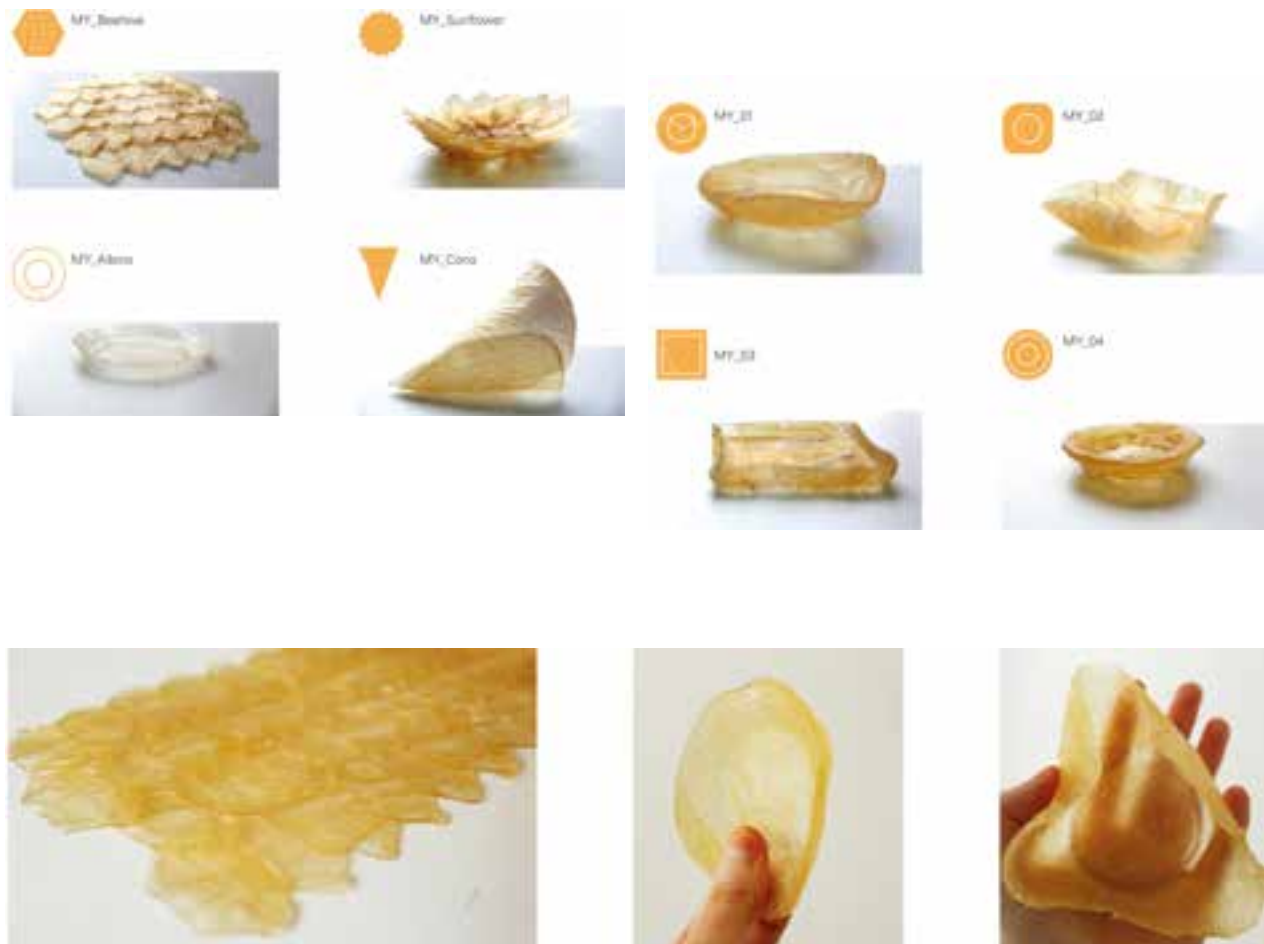
From honey to

MIELLOW *Sofia Lenti*

“Mellow”, in English, means “relaxation”, “chill out” but also “sweet” and “juicy” just like this bioplastic. Miellow, in fact, wants to associate himself with these adjectives and its easy way to prepare. The product is based on honey with the addition of about 40% of potato starch. The ingredients are few, essential and completely natural which makes that material biodegradable and 100% compostable.

Miellow is a honey-based bioplastic. Its strength is resistance and elasticity. It can be used in various ways and is not intimidated by water. Its texture is delicate and fine, the semi-transparency given by honey gives it a glass-like appearance.

It can be used as a sweetener in coffee, tea or milk as it is entirely prepared with natural ingredients and for its high amount of honey.





From fruit to

Fruit leather

Federica Vicini, Luigi Scala, Noemi Campion

Tons of fruits and vegetables are thrown away every day because they are too mature or because they have suffered breakdowns during the production process that has made them less inviting to customers. The project was based on finding a solution to avoid this waste and be able to rework it into an innovative product capable of giving a second life to these fruits.

By exploiting the scraps of fruit in excess, damaged or spoiled, it is possible to make sheets of a soft and foldable consistency. The sheets produced have excellent material qualities and, combined with imagination, they can be used in a multitude of areas, from setting up and decorating a table to creating recyclable accessories and packaging.





From avocado and eggs to

Meltin'Marble

Marta Collu

Meltin'Marble is a modeling paste that, due to the nature of its ingredients, melts on contact with water. The pearlescent base is given by bicarbonate, the shades of color are the result of experiments and combinations of toasted seed powder and/or dye derived from boiling avocado peels or the seeds themselves, and/or eggshell powder.

The project is based on an surprise effect and paradox: the small objects created refer to the aesthetics of marble, granite or concrete, materials capable of lasting forever due to their resistance and hardness, but are revealed in something extremely fragile, light and ephemeral, in a "marble" that can dissolve in contact with water.





From avocado to

Avo-glasses + Avo-case

Marta Collu

The project is a bioplastic that has some properties similar to wood and has a good resistance to water. The surface remains mostly shiny to the eye and rough to the touch. The yield of the material depends on the avocado peel that is used: the best results are obtained with the dark, thick and rough “Hass” avocado peels, which when boiled and chopped take on the appearance of a soft sand.

The dark and shiny material of the frame derives from the peel of the “Hass” avocado, for sunglasses that are casual but with character. The Avo-case is made from a transparent bioplastic derived from gelatin, with a tone that derives from the natural color extracted from the same skins that make up the frame.

The seed powder finally adds a slightly rough touch.





From fruits and vegetables to

Orto di colori

Camilla Giulia Barale, Stella Femke Rigo

The project consists of setting up a fantastic vegetable garden in which the colors contained in bottles of various sizes recreate a surreal environment. At the end of the path in this garden which wants to reconstruct a return to life of the fruits of the earth, a small workshop will be held in which the method for obtaining the colors on display will be explained.

The project idea was born for the Food Cycle festival, a festival entirely dedicated to the recycling of food and its reuse giving it a second life. “Garden of colors” from a second “chance” in a creative way to these scraps, the goal is to create totally natural dyes, making people understand that “even from manure flowers are born ...” is not just a sentence of a song but it is reality, even food waste can be magical.





From fruits and vegetables to

Giano Project

Federica Vicini, Stella Femke Rigo

Giano_project has its roots in the foodwaste of fruit and vegetables, focusing its attention on the huge amount of products that are thrown away every day because they are too ripe or because they are damaged during transport.

The goal of Giano is to find a solution to rework the waste elements and convey them in the production of a series of natural dyes designed to color fabrics, paper and wood. At the same time, prototyped sheets of soft and foldable consistency, with excellent material qualities, which combined with the imagination can be used in a multitude of products: clothes, table cloths, pots for plants, accessories and recyclable packaging.





From can to

DrinkDress

Enrico Levo, Margherita Massalin, Giacomo Rossi

The Drink Dress project consists in the development of a dress entirely made with aluminum cans and recycled metal rings that will act as elements of union between the elements that make up the dress. This project wants to sensitize people to the reuse of materials that we consider single use. The dress is made up entirely of scales of different sizes that allow an excellent adherence to the body and the dress can be easily adapted to different sizes thanks to the back zip that allows you to tighten or widen the garment as needed.





From food waste to

Foodshot

Enrico Levo, Margherita Massalin, Giacomo Rossi

The Foodshot project consists in creating a new way to consume an aperitif. The focus of our project, aims not only to create a new product, but also a new experience of consuming an aperitif by eliminating waste and pollution caused using single-use plastics. Foodshot consists of two products: a bubble, created with the help of molecular cuisine, which can contain various types of drinks, juices or sauces and the second element is a gelatin disc created with agar agar, which together with other liquids or natural dyes serves to create this sort of jelly coaster to support the bubble, which will perform the function of “glass” to contain the liquid to be consumed but as already mentioned devoid of any plastic material!





From plastic to

My Upcycling Closet

Chiara Fiorani, Carlotta Ricaldone

Food product packaging is transformed into futuristic accessories to wear to valorise parts of the body and at the same time give value to the packaging by transforming it into works of art. Bottle caps and tetra pak packages are transformed into fabrics to create futuristic accessories. At the same time they promote a new art that uses food packaging. Food product packaging becomes accessories to wear and at the same time reflection on contemporary consumerism and environmental issues related to overproduction.





From prickly pear to

PRICKLY CYCLES

Lorena Likaj, Federica Pelle, Kuo Yu

The project consists in the recycling of every part of Prickly Pear. The experiments with fruits have led to the creation of a new type of biological material, 100% compostable.

With prickly pear wastes, the designers were able to realise different objects, like a cover, a pochette, glasses cups, a tray and a necklace, combined the new material with fabric, wood or glass.





From packaging to

Ri-carta

Erijon Ademi, Lorenzo Decia, Chiara De Filippo

Ri-carta is a project inspired by techniques of paper and cardboard recycling. The goal is to recycle paper food packaging to obtain sheets of various sizes with interesting and diverse textures. Once assembled it will be possible to obtain wearable garments, such as gilet, hats, papillons, or, combined them, it is possible to make modular installation. The particular translucency of the material could be possible to obtain beautiful light effects.





From leaves to

Leaf Bubble

Wang Wenyang, Cheng Huan

The leaf bubble project is a process that combines the reuse of leaf veins and the improvement of traditional paper. We extracted the leaf nerves and combined grapefruit peel to create a new type of paper. This type of paper is not damaged when exposed to water and has filtering characteristics. And we made good use of these features to complete the packaging design for the tea bags. We hope to realize waste recycling and embody new ideas based on traditional paper making technology at the same time, to give paper new values and functions.





From organic waste to

OL-FACTORY

Sara Chinellato, Federico Giordano, Sara Iebole

The OL-FACTORY is a different way to enjoy food waste. Using those organic waste to create some fragrances gives back their original existence: the smell of the food waste keeps being the same as the fresh fruit and vegetables, and with this project the willingness is to remind at the origins of the product.

This project is focused on the creation of an olfactory set-up. This installation has been designed following “totems” shapes that can be used by visitors. Just by pressing the air pump at the base users will be able to smell the aromas contained in the hidden dispenser, through an aluminium cone who channel the scent.

The structure made with canned food packaging has been colored black so as not to suggest to the user which fragrance is inside. The set-up will consist of 15 individual structures of the same height arranged in a room to create a path.





From coffee and spices to

Lit Up Dust

Matteo Barbagelata, Fabio Di Bella, Chiara Garofalo

The project is about reusing food waste we make everyday and the spices, for their powerful colours.

One of the principal waste we made, in particular during this hard period because of pandemic, is coffee, which we drink a lot in the morning and in the afternoon. Lit Up Dust took the wastes of it and decided to create a bioleather, 100% sustainable. This leather has an incredibly transparency that the design wanted to exalt. Thus Lit Up Dust borns, a geometric lamp that has bioleather on its structure made with wood. As well as coffee, we also used spices like curcuma, cinnamon, chili pepper for their bright colours, so each lamp has different textures and colours. On the bottom of the frame there is a base made with peanuts shells.





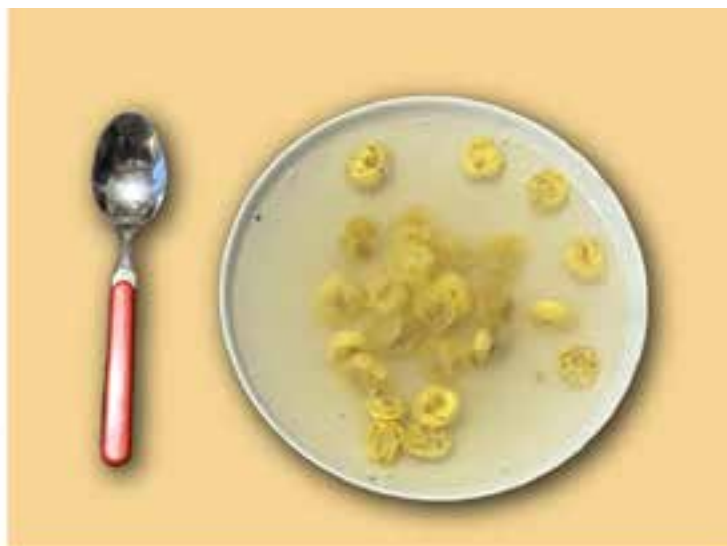
From chestnuts to

ChestnuTube

Francesca Marrosu, Federica Nazzaro

The aim of the project is to create a resistant, hard, lightweight material that could replace harmful materials such as a plastic in a circular economy system. The packaging is a tube made with chestnut waste, containing single portions of pasta typically consumed in broth. The pasta will be wrapped in a soluble bioplastic containing aromas and spices. Once the tube is open, there will be three portions of pasta, each wrapped in its own flavored film. The user will throw the pasta with the film into a pot of hot water, and the film will dissolve and it will season the broth. A quick dish, respecting the environment.





From eggs to

Egg_IT

Alexandra Efremova, Alice Macchione

UP

Food-reinterpretation of Luminous jellyfish entirely made of eggshells. The spheres were prepared by applying eggshells to a glass semicircular mould.

Dense application of the material made possible creation of a rigid shell. The result became the basis of the light shade.

DOWN

Luminous flowers made by modelling egg trays, paper and plastic ones. They are coloured with egg yolk and tempera made on the base of spices for fascinating chromatic nuances.





From pasta and flour to

PRINTelle

Clara Giusta, Paola Taramasco, Martina Vallarino

PRINTelle is the first result of the food 3D printing research project. From the vastness of food, attention was paid to dry pasta as a dish, Italian par excellence, of which numerous quantities still become waste both at an industrial level and at home level, not recovered to date. We thought of a world in which pasta can take on extraordinary shapes, combining the capabilities of technology with the need to recover waste. The recipe requires few ingredients: water, egg white, and pasta waste. The first step involves reducing the waste into powder, finely chopping it. Then the egg white and water are added. The compound must be worked until it reaches a consistency suitable for extrusion. With the help of a manual extruder (syringe, pastry bag), the dough was extruded along the perimeter of an upside-down coffee capsule covered with aluminum foil. This served as a support function. Once the shape is complete, the product is left to dry in the air and then in the dryer. Once the drying process is finished, the pasta is ready to be cooked. Cooking takes about 10 minutes. This is just the beginning: a series of experiments aimed at achieving an extrudable mixture from a 3D print. The name of the pasta is a devotion to technology and to the process that defines it: 3DPRINTING (PRINT-elle).





From fruits to

Spheres

Marta Guggiari, Beatrice Intermite

The project derived from awareness that a large amount of fruit and vegetables are thrown away every day. Therefore we decided to go to the market in our area which, under, our request, provided us with some fruit and vegetables scraps such as: apple, pear, grapes, turnip and artichoke.

From these food waste, the idea was to develop a new material that was able to adapt to a spherical element, that could be resistant and that could filter the light. Therefore the designers thought of an installation consisting of 20 spheres, from which the name of the project "Spheres". The spheres were placed on metal rods of different height inside which autonomous LEDs. The goal was to create an evocative area in the space at the Albergo dei Poveri, thank to the lighting, the color range given by the different food scraps and the spherical shape of different sizes.





From waste to

UNDERREATED BEAUTY

Alessia Moi Giorgia Parisi

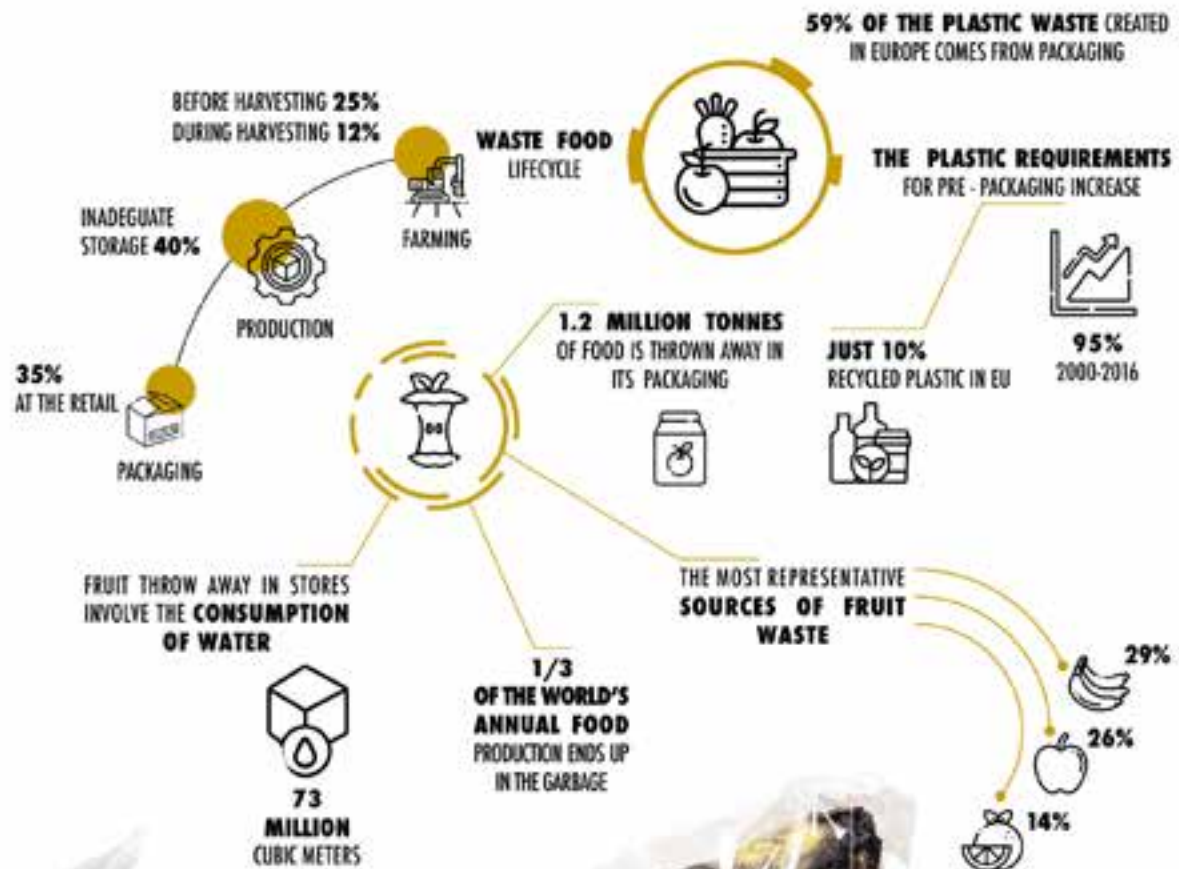
The Underreated Beauty project consists of a first part of artistic photography aimed at paying homage to food waste by placing it on the level of installation and still life. The shots immortalize different sculptures made of food waste that acquire new beauty through the artistic composition.

The same shots are used in a second time to build a series of posters and infographics about life cycle, production and consumption of the foods that are most wasted.

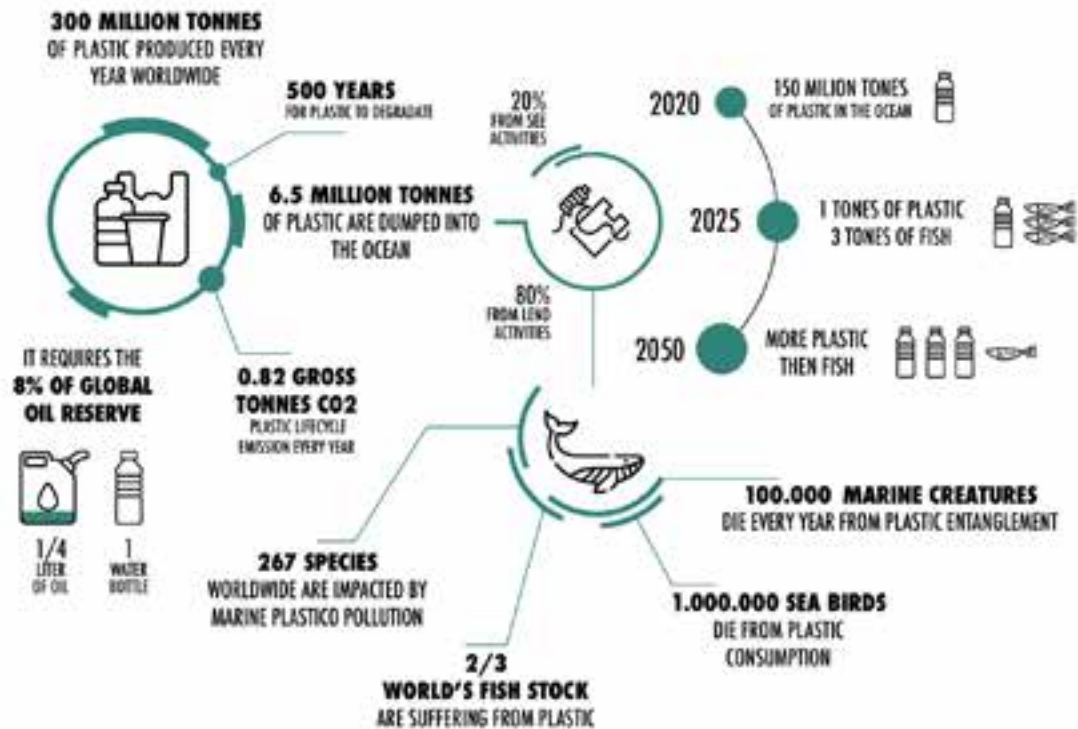




BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES



BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES



BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES

OVER 24 MILLION TONS
OF CARDBOARD IS DISCARDED
EACH YEAR



400 MILLION TONS OF
PAPER AND CARDBOARD BEING
MANUFACTURED WORLDWIDE

THE ENGINE OF **BIOENERGY** IN EUROPE



PAPER INDUSTRY HAS REDUCED
THE CO₂ EMISSIONS PRODUCED
BY 42% COMPARED TO 1990

ONLY 11% OF WOOD OBTAINED
FROM THE **WORLD'S FORESTS**
IS USED IN THE PAPER INDUSTRY.

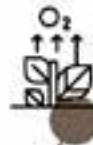


PRODUCING 1 TONNES
OF PAPER GENERATES
1.25 TONS OF CO₂

RECYCLING A TON OF CARDBOARD
PRESERVES



**SUSTAINABLY MANAGED
FOREST** CAN REDUCE CARBON
IMPACT



CUTTING ACTIVITIES ARE FULLY OFFSET
BY THE **REPLANTING** ACTIVITIES



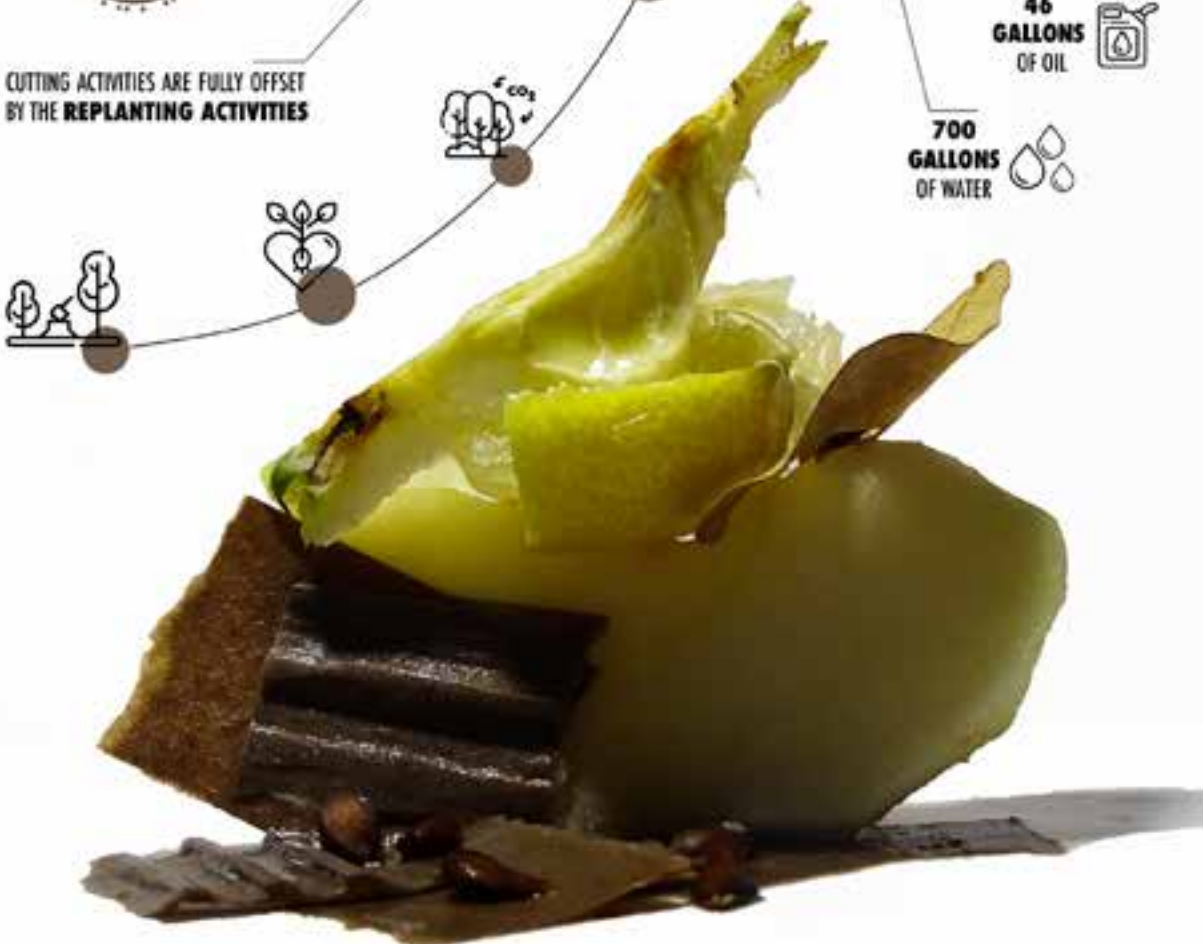
15
TREES



46
GALLONS
OF OIL



700
GALLONS
OF WATER



BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES

CLIMATE CHANGE COULD REDUCE THE NUMBER OF WILD COFFEE SPECIES AND PUT NEARLY **60% OF ALL COFFEE SPECIES AT RISK OF EXTINCTION.**



THE PROCESS OF GROWING COFFEE PLANTS CAN NEGATIVELY EFFECT THE ENVIRONMENT

COFFEE COULD BE EXTINCT IN 2080



A STANDARD CUP OF COFFEE REQUIRES **140 LITERS OF WATER**

THE DEMAND FOR COFFEE IS **CONTINUOUSLY INCREASING**

TRYING TO KEEP UP WITH THE DEMAND F ARE BEEN ADOPTED **DESTRUCTIVE PRACTICES THAT CAN HARM BOTH THE COFFEE PLANTS AND THE SURROUNDING ECOSYSTEM**

NATIONS THAT DEPEND ON COFFEE PRODUCTION WOULD BE HIT THE HARDEST BY THESE CHANGES

100 MILLION PEOPLE MAKE A LIVING GROWING COFFEE

PEOPLE ALL OVER THE WORLD CONSUME ABOUT **2.25 BILLION CUPS OF COFFEE EVERY DAY**

BILLIONS OF COFFEE CUPS ARE THROWN AWAY EACH YEAR AROUND THE WORLD

4.5%

10.5%

28%

57%

**17 KG CO2e
1KG OF
PRODUCT**



BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES

A VALUE SIMILAR TO
OTHER BASIC FOODS OF
ANIMAL ORIGIN SUCH AS
MILK AND MUCH LOWER
THAN THAT OF VEAL,
PORK OR LAMB



THE EGG INDUSTRIES, TOGETHER
WITH MEAT AND DAIRY ONES, PRODUCE
**65% OF WORLDWIDE
NITRUS OXIDE EMISSION**



300X MORE POWERFUL
AT TRAPPING HEAT IN THE EARTH'S
ATMOSPHERE THEN CARBON DIOXIDE

**2.7KG OF CO₂e
PER DOZEN EGGS**



LAYER HENS HAVE BEEN
GENETICALLY SELECTED
TO **MAXIMISE EGG
PRODUCTION**

68 MILLIONS TONES
OF EGGS IS PRODUCED
WORLDWIDE



**CRUELTY
OF EGG
INDUSTRY**



HENS HAVE NATURAL LIFE
EXPECTANCY OF UP TO 12 YEARS,
HOWEVER HENS USED IN THE
EGG INDUSTRY ARE TYPICALLY
**SLAUGHTERED AT AROUND
72 WEEKS OF AGE**

**350 EGGS
A YEAR FROM ONE HEN**



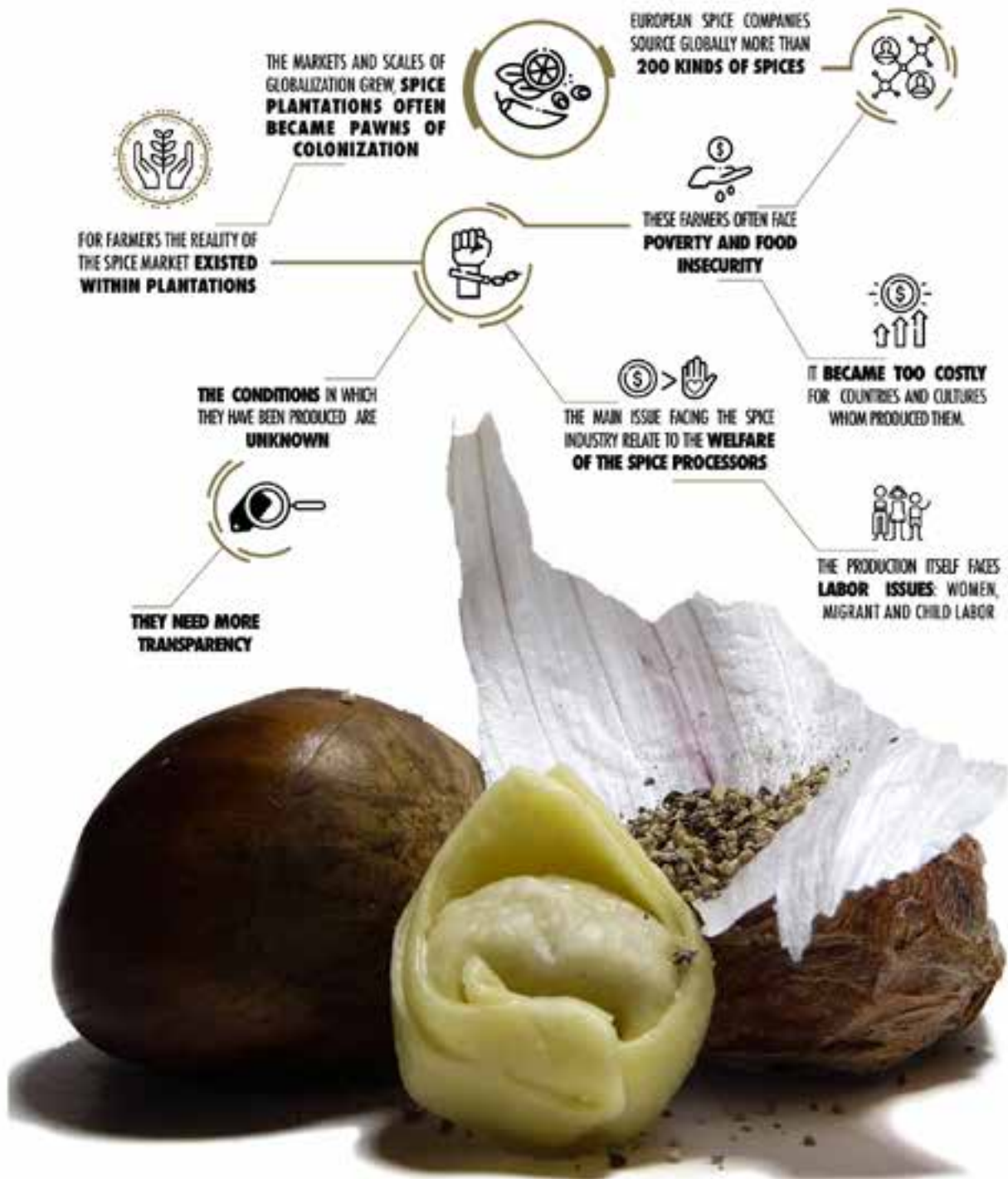
**477 GALLONS OF
WATER** ARE NEEDED TO
PRODUCE 1 POUND OF EGG

FIVE TO EIGHT HENS ARE
KEPT TOGETHER IN 40X55
DARK CAGES

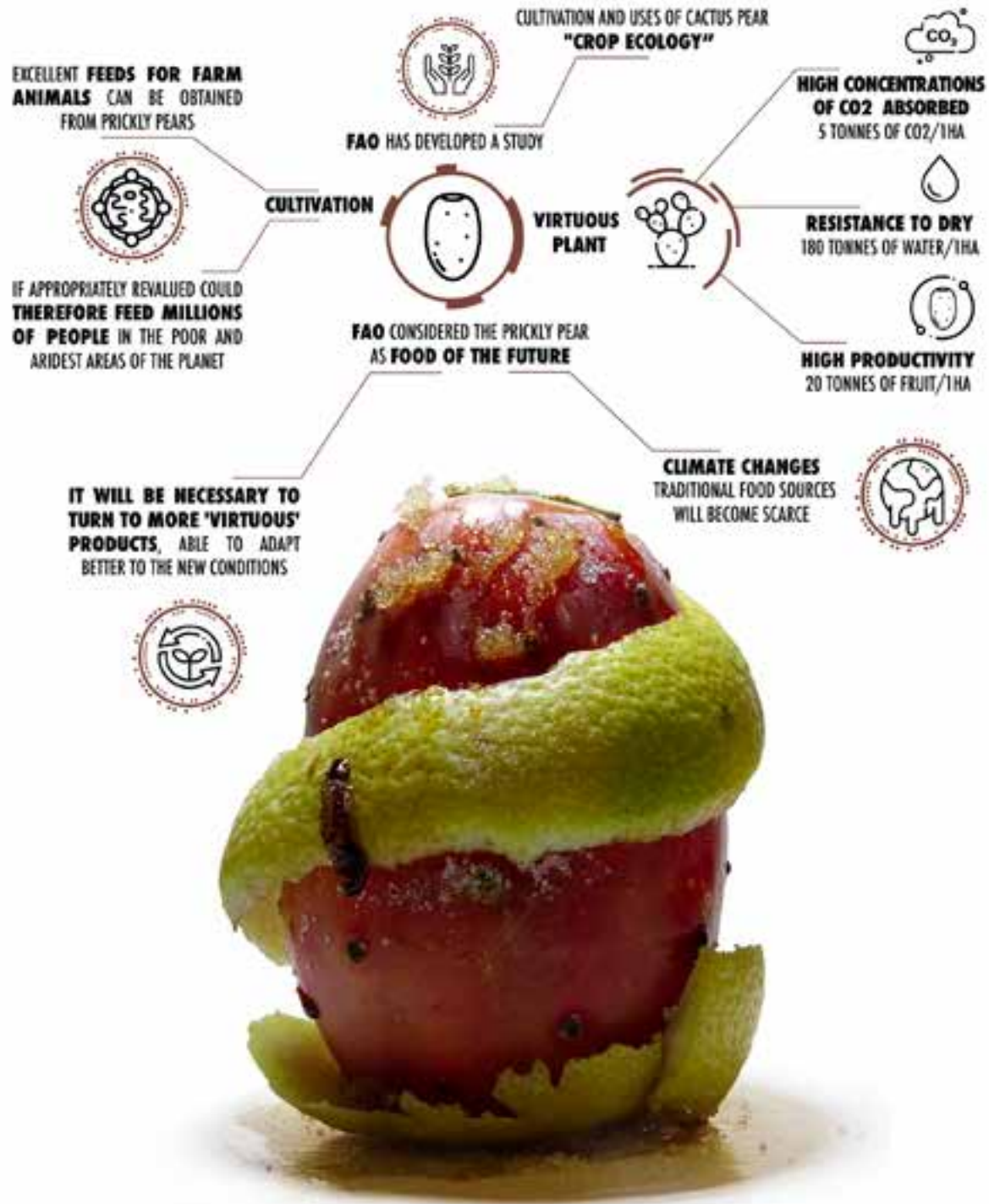
MILLIONS
OF MALE CHICKENS ARE GROUND
UP ALIVE BECAUSE THEY ARE
**USELESS TO THE EGG
INDUSTRY**



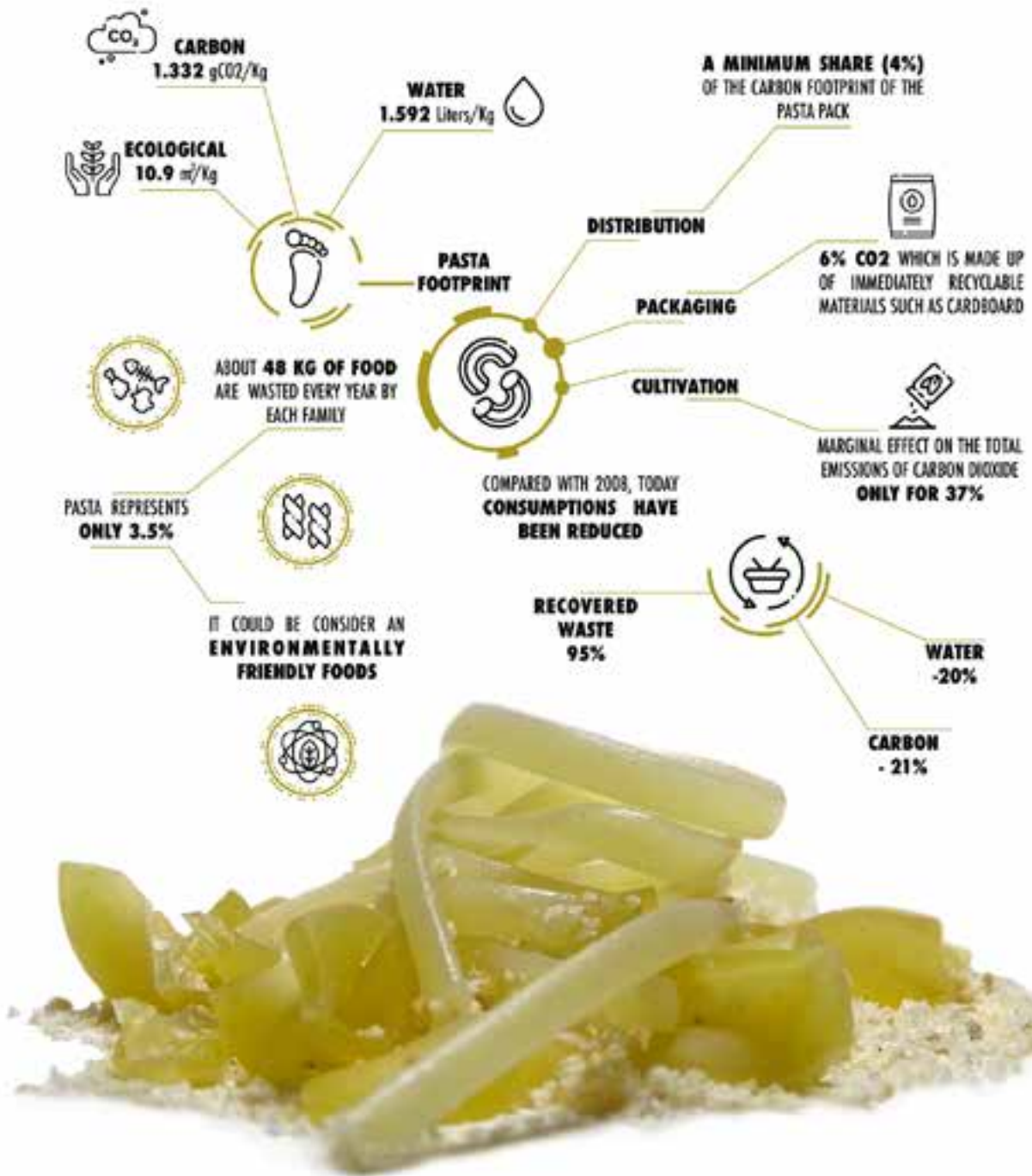
BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES



BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES



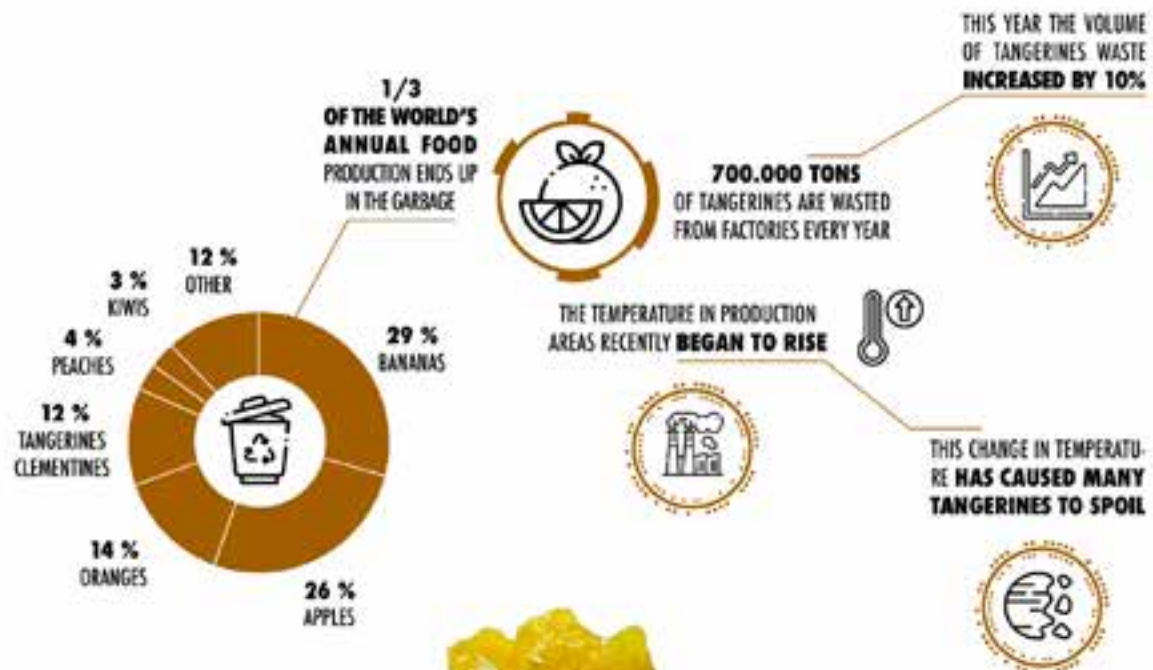
BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES



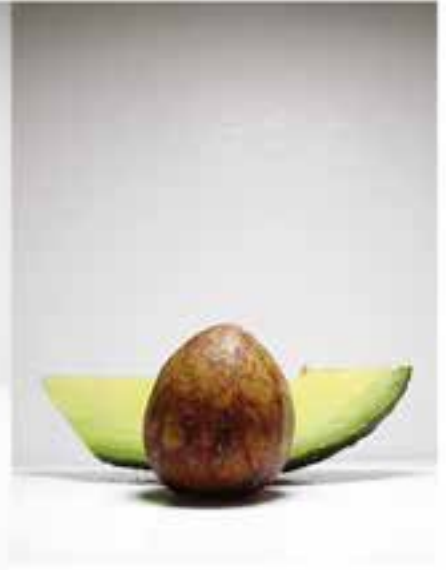
BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES



BAD PRODUCTION PRACTICES ARE BAD CONSUMPTION PRACTICES







V

V
SIDES

THE *PERFORMATIVE ACT* AS A DESIGN ACTION RESEARCH EXPERIENCE.

The dissemination actions of the research conducted in the CFC project by the research group of the University of Genoa have made use of fresh communication tools, not so commonly applied in the design field. If on the one hand, with a more usual approach, during the two years of activity, prototypes of new products and materials were developed in order to showcase how food waste as a material could give rise to a new generation of products within everyone's reach and capable of generating a paradigm shift in our daily actions, on the other hand, telling these experiences to a wider audience required open mind and innovation in envisioning new tools.

In this brief essay it is necessary to make a difference between the results of the projects – the prototypes developed giving a new meaning to food waste, and the overall dissemination project of what has been done in the CFC process.



According to this idea the outcomes of the research can be measured both through the number of prototypes developed, and through the people physically involved in the activities and the methods applied to engage them.

The more than 30 prototypes realized by designers in CFC process represent a quite relevant investigation into the recycling of food waste, developed over the course of two years (2019-2020) under the Creative Program advocacy. Every single project carries with itself a visionary approach in which the designers envision a world of widespread production of artifacts derived from food waste. If, on the one hand, the designers, facing the Covid outbreak, had to be ingenious in developing solutions that they could prototype with limited means in their own homes, on the other hand, they foresaw the possibility that each of us, with simple gestures, could limit the use of non-renewable resources that our planet is no longer able to contain as waste. The inclusion of end users in the process and their *de facto* transformation into small-scale producers and change-makers is a topic of great potential that should be explored further.

On a general level the experience of the CFC was also the project of the team of researchers of the Dipartimento Architettura e Design of Genoa, who have wondered how to generate real change within our reach, inventing new meanings for the world waste. It is in this kind of challenge that lies the highest rate of innovation that we can trace in the experience herein described. To fully understand the adopted method is necessary to go back to the basics. When a designer operates, he uses a sequence of actions that follow a theoretical model well described by Celaschi¹ as a way of organizing the factors that contribute to obtaining a result by prefiguring the process and the effects according to five phases: observation of the reality (according to a purpose), construction of a model of reality, manipulation of the models created (it is the most creative moment where the form of reality needs to be measured with other possible forms), evaluation pro and cons, and, at the end, transformation of the reality for which most of times the planned form is related to the industrial process.

The process of devising and planning the research and design process that we want to implement is very sensitive, because in this phase the experience of the researcher is needed. The research process must be governed in the implementation phases, when the limitations or problems that will eventually affect each phase of the process once it has begun are brought out.

In the case of the project of dissemination of the products proposed in the calls and activities of the CFC we have focused carefully on the last phase, or how to get to affect the reality around us, how to get to shape a change, involving the world

¹Flaviano Celaschi, Alessandro Deserti, (2007) *Design e innovazione. Strumenti e pratiche per la ricerca applicata*, Bologna: Carrocci

of food cycles and in particular the issue of waste of surplus food, one of the priorities to be able to move towards greater sustainability in our cities.

In this sense, the CFC process itself is an overall project that, instead of transforming reality by referring to the dimension in which the designed form passes into the hands of the industrial process, tries to impact on it by creating public awareness through the use of a diversity of media (objects, videos and stage performances). In particular the performative dimension and the project staging thus took on in the process the value of the last and final stage of the research methodology model.

A performative act is any real action that modifies the real.

First of all, as in real performances, the relationship with the audience and its involvement was sought. In 2019 summer and fall period participants of the *mise en place* in *The Food Shakers* | *Food Remakers Workshop* and *Food (re)makers Installation* had been able to touch real objects made of food waste: the first time presented by an actor who on a real stage brought them one by one on a table while telling about their origin. In the second installation the public was involved in the real making of the products, like in a real cooking show, to then attend a culinary performance that used the same scraps for a 360 degrees experience.

The last experience, the planned final festival, due to the emergency framework set by the pandemic period, saw some limits imposed on the possibility of staging the material projects that were originated by the activities of the designers and forced us to be more creative, realizing it in a digital and innovative on-line Festinar version (a hybrid term that mixes the concepts of Festival and Webinar) according to the ongoing circumstances of the Covid spreading.

The experience has imposed the experimentation of new tools, i.e. the realization of performances inspired by the theatrical dimension, but without real public, and because of that just recorded and post produced.

Coming to the specific actions carried out in the Festinar the dimension of staging is intertwined with the dimension of performance linked to visual art. In the background the *Albergo dei Poveri* is a constant presence: an emblematic huge building with a great story to tell, actually underused and in search of new meanings. Locating in this place the performances on food waste assumes a wider meaning, because it is in the combination of discarded places and food waste that we try to emphasize how what has always been under our eyes is looking for new meanings and can provoke a change in the existing situation.

Today in the field of visual arts the language of performance is experiencing a new acceleration called *performative turn*, a paradigmatic that has affected also other disciplines in the humanities and social sciences. The performance becomes in this way a hypertext in which the action of the performer and the experience of the audience are mutually inscribed. The performance seems to be based on the theatrical gesture, but it produces a deviation from it to become visual art. It is born from the contamination of languages, paradigm of a contemporaneity in which everything is possible. In short, the performance crystallizes in itself many characteristics of the contemporary, in the form, in the process, in the urgency of an ethic rather than an aesthetic, in the problematic of live and mediated, of the relationship with the public, of the event, in the question of how it is handed down and told.

In our project the performative turn happened according to the possibility of transforming the event into a performative act, into a real action that modifies the real, provoking an exchange of roles between performer and public. The exchange of roles also shows that the performative event contains a political dimension in order to provoke a change in the status of the spectator.

The proposed prototypes become the only possible reality in the staging, the designers become actors and for a few moments the public live a different reality. The final message of the performance is that is important for people to experience a different reality, but also to become actors in it.

The circumstances encountered during the course of CFC actions have allowed us to address the topic from multiple perspectives, but always keeping in the foreground the final goal to offer a platform for reflection and analysis on the meaning of a new use of materials through a pervasive DIY production and how design could be an important agent in developing a more responsible use of resources. One main outcome of the project is for sure the creation of the availability of all the activities open access: the drawings, the prototypes, the essays, the videos of the performances, that has been elaborated during the Festinar, and the books are all contained in the website that refers a precise chronology of the process and of the contributions of the different partners.

This is the description of some scenes, to which the chosen images refer, of the performance *Defilee*² created by Elio Micco, Alessia Ronco Milanaccio and Arianna Sortino for the presentation of the products elaborated within the Urban design courses of the Event and Communication Design Master Degree of the University of Genoa.

² See the *GOA REASONED RECIPES BOOK*.

Prototyping, experimentation and innovation to rethink the food waste (p 219).

Scene1

Interior space: disused underground kitchens of the Albergo dei Poveri.

The camera wanders curiously through the dark and desolate environment, bringing to light details of a now remote past use. The mouths of the oven, the switches, the blades for baking bread, etc.. On the large wooden table among debris and rubble, in front of a window below street level, through which light rains down from above, a large pallet of vegetables and colorful fruit is suddenly brought to light. The camera, as if enraptured by the appearance of colorful elements and the freshness of the food, continues to turn around the richness of the arrangement. Now appear in the cone of vision of the camera two figures from behind completely dressed in white who begin to take the vegetables from the table.





Scene 2

Interior space: Staircase and Hall of Statues on the second floor.

From the stairs into the large and rich room comes a woman dressed in a garish dress. Her proceeding is confident, as if she were headed to a place she knows well. The woman walks towards the camera and then turns between the enormous white marble statues and positions herself in front of the church entrance. At the center of the symmetrical scene, between the pedestals of the figures of the people who have supported the Albergo dei Poveri over the centuries, the woman stops and allows the camera to get closer, thus focusing on the fabric of her dress which is made of flakes of dried fruit.

Another figure appears on the opposite staircase going down the stairs. It appears slowly from above, from the feet to the figure, we can distinguish a metallic dress composed of scales that, instead of being superimposed, are tied one by one by a metal mesh. The woman stops after descending all the steps and we can see that the dress is made from the remains of food packaging.





Scene 3

Interior space: Women's Corridor, a wing of the Albergo still under renovation.

In the darkness of the long corridor cluttered with objects, some figures dressed in white move, appearing and disappearing behind packages. The scene is confused by the presence of a plastic sheet that veils the outlines of the windows and other objects in the long corridor. A white light rains down from the huge windows. A young woman appears wearing a white jumpsuit that makes her anonymous. She carries like a precious tray a golden circle on which are placed some objects. With her slow gait she advances along the corridor. Her movements are followed by the camera that is in front of her step by step. Arriving at her destination, the girl puts down the golden disc, showing off what she has brought. She changes the framing and from a detail it becomes clear that the precious objects are made from materials derived from food waste. The camera lingers on the overall shot of the objects placed on the reflecting disc.





***BREAK-
PERFORMANCE***

2

The Dancer

Giulia Soldati

Performer

SCARPETTA HAND DANCES

I strongly believe this moment is a design challenge to rethink the way we gather together around a table sharing a meal - and how much we miss it - or the time we spend cooking and transforming ingredients.

Because of new restrictions due to the current spreading of Covid-19, we are again forced to keep distance, meaning that we cannot share the same table and a meal together (again). I asked myself, how can a online performance bring us together, giving us the feeling that we are sharing food?

During the first lockdown I was amazed by the fact that the same action was repeated simultaneously in so many parts of the world. The whole world was baking – and eating at home.

Two ingredients, flour and water, and the most primordial tools, our hands, to create what in most cultures is the symbol of communion and essential element of nourishment: bread. It came in different shape, flatbread, sourdough, piadina, pida, paratha. Food has again the amazing power to unite us.

I decided to start the performance by re-enacting the gestures of



making bread, the mixing and kneading. Just hands, no ingredients, a choreography of gestures.

The second part of the performance wanted to involve the audience put the attention of how we can consume bread, and the symbolism it brings along. First of all the ritual of the action of breaking and sharing bread.

Bread, olive oil, salt and pepper: few ingredients and the most sincere gesture, the *scarpetta*.

Scarpetta is how Italians call the action of scooping with a piece of bread the remaining ingredients on the plate after eating. It is an action that is part of our food tradition, which probably everyone has done at the end of a meal at home, without even thinking of it too much. I often do it with my finger as well once in a while. The amazing thing is that the gesture is defined by a name, being therefore recognizable worldwide.

Sometimes this action is not well seen in formal settings, as restaurants for example, and for this reason I wanted to celebrate it and show the beauty of it. I like to think of the *scarpetta* as dancing hands around the table. Our hands can be used to enjoy food and to explore new food interactions around the table.

The cameras and audio could be turned on, joining each other in the gesture of dipping bread in oil and salt, hearing each other eating (and laughing), seeing each other's hands. Despite the distance, food still had the power of bringing people, us, together.







VN

VI
DESSERTS
AND COFFEE

***The GOA Festinar:
a virtual banquet
for an on-line
interaction***

THE GOA FESTINAR: THE URL OCCASION TO RETHINK IRL EVENT

The pandemic has taught us that many activities we thought were crystallised in tradition and unchanging, can be reformulated in new ways, sometimes with emergency and exceptional organisations, sometimes opening up new scenarios and opportunities for reconfiguration.

The festival event, which has always been considered a public attraction, capable of bringing people together in a space, because of the engaging, inclusive and often festive way in which it takes place.

Festival came into Middle English from Old French. The word was derived from the medieval Latin 'festivalis', which came from the Latin word 'festum' meaning 'a feast'. *Festival* was first used in the early 15th century as an adjective meaning 'relating to a feast', with the noun meaning coming into use at the end of the 16th century. For most of its history the word *festival* was associated with religion, abundant food and drink, whether this was the *festival* of Shrove Tuesday before the beginning of Lent and its fasting.

This is why the festival was initially chosen as the final event of the Creative Food Cycles research project, for its association



with food and the convivial dimension at the centre, a moment of celebration combining the serious and the profane, in a dialectic capable of attracting a heterogeneous and wide audience. Initially In a marketplace of ideas, different stalls and products focused on virtuous process from food waste, would have been crossed by curious citizens, together with expert and performers who treat food as an inspiration and an opportunity for reflection using different concepts and installations.

Even the space of the Albergo dei Poveri, the venue for the event, in continuity with the process of exploitation of waste, through a temporary event would have opened its doors to the citizens to give them the opportunity to retrace part of its huge spaces that for a long time housed only the few insiders.

The Pandemic changed the whole organization, not only the method of access, but also the structure of the contents and their display. The challenge was to rethink the final event without betraying the principles and themes that had given rise to the first draft of ideas.

If interaction is one of the fundamental festival elements, the first question was: is it possible to transfer interaction to the digital plane?

How do you recreate the energy of an in-person fair when most participants are joining from behind a laptop?

This was demonstrated in a disruptive way by the world of fashion, which in the Milan Digital Fashion Week staged from 14 to 17 July 2020 reformulated the more traditional paradigm of the fashion show in new formats: teasers, dancing avatars and streaming art clips to reveal the “good” soul of the virtual world. From the previous aseptic and sterile settings, new formats have been proposed that use the storytelling of cinema, the entertainment of the show and the narrative lightness of TV series: all to counterbalance the physical distance with greater emotional involvement.

It's impossible to faithfully transfer the plan of an event from the real to the digital dimension.

The keyword of this necessity is change.

From this conviction emerged the need to coin a new term, which would recall the dimension of celebration, meeting and confrontation but in a digital key: Festinar.

Festinar is a new format is the union between Festival and the digital version of the Webinar. The Festinar confirms the virtual format and educational purpose of the Webinar, but in a less frontal and formal way, more engaging like the Festival.

Festinar should not be perceived as the safe format of the Festival in the Covid era, but as a new type of event, like benefit to a URL – as opposed to IRL (In Real Life) – approach.

The future of events is hybrid announces Forbes in November 2020.

A hybrid event model strategically incorporates in-person and virtual elements for attendees.

This solution allows to pre-record elements, sync up slides, link



up to social channels, field Q&As, give viewers a customizable console and line up a schedule.

Another important features as Browns' Peterson said is that the carbon footprints of fashion industry put on the world is pretty impractical, in fact she travels 10 months a year to see collections and would prefer to do more virtually if she could, maybe using different approaches it will be possible to see some interesting innovations.

In order to do this, the festival was not broadcast live, but films were shot in extreme spaces, which would not have been open to the public due to their advanced state of abandonment.

The difference with the previous version is that while before people revitalized the Albergo dei Poveri, in the new version it is the spaces of the original location that transfer a sense of celebration and conviviality into the participants' homes.

The contrast between the cold and darkness of the empties spaces and the warmth and color of projects made from food scraps became the key expedient to create a strong contrast, not only chromatic but also semantic, between the forgotten and re-valued elements.

The big change in the Festinar version was to stage the products, to create a performance, a story, a narrative in order to convey the sense of the project and to stage the dynamic and vital part which is complementary to the static part.





In the festival the focus of the project was on the interaction between objects and visitors and the exchange of knowledge between people, in the Festinar the focus becomes the emphasis on the performance between man and food, man and project.

Last October, two of New York City's major design fairs, the International Contemporary Furniture Fair (ICFF) and Wanted-Design, co-organized a two-day virtual festival called Closeup. International talents, such as Dutch industrial designer Marcel Wanders, chatted with the likes of William Hanley, the editor-in-chief of Dwell, in TV-style interview panels.

"It was quite a different thing to organize than a traditional festival, but it gave us a better opportunity to tell the stories behind the designs, as opposed to simply showing the designs. That was something many of the designers appreciated. I'm so happy we have found a way to do this, to keep this alive."

The great opportunity offered by the pandemic was not only to occupy a space for an event, but to bring together spaces and projects, stories and lights, designers and dust in one broad narrative.

Thanks to the performative dimension, we rediscover the gestures that lie behind every interaction between man and food, often with distant and meaningful origins, capable of becoming a strong symbol of union in this moment of closure and distancing. Thanks to the participation of the famous designer Giulia Soldati, a moment of digital conviviality was recreated by sharing and simultaneously staging the experience of the 'scarpetta', a ges-

ture that so simple such as spontaneous and genuine. Design in this way is a tool to investigate the action of eating, recognizing the amazing power food has to bring people together.

Certainly with the creation of this new Festinar event format the intention is to emphasise the importance of projects ephemeral components, those have no place in the product market, but which become central to the performance of a project, the experience and the narrative.

It's unrealistic to think that the incredibly absurd collective experience of these months won't change the way we consume events going forward. We had to become fluent in virtual event technology. We now know the benefits of attending online events, as much as we are very clear about the limitations. We all realized that some meetings in person are completely unnecessary. Traveling for thousands of miles polluting the environment for a two-hour meeting is a waste of resources and money few will be able to afford.

We will have to experiment with new formats and hybrid forms of participation, which can provide new ideas capable of putting into system different languages and transfer multiple levels of meaning of the projects.

To think that virtual attendance won't continue after the crisis ends is naive at best.

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***BREAK-
PERFORMANCE***

3

***The Food
fashion show***

CELEBRATING WASTE

A timeless set for an ephemeral action

“Exhibitions are places to be occupied, not just things to be observed”. These are the words used by Beatrice Galilee, curator of the Lisbon Architecture Triennale, in 2013, to describe the approach used in *“her”* Triennale. An approach that wants to go over the traditional conception of an exhibition, focusing not only on the exhibition structure, but the entire event, the involvement of the public, the interaction within the spaces in which it acts and all those disciplines that - directly or indirectly - influence the practice of design.

¹ Term coined by Chiara Olivastri, to describe the event halfway between a real Festival and a digital Webinar.

These words are borrowed to describe in an equally effective way, the approach used by the working group of the Department of Architecture and Design of Genoa in planning and realizing the performance *“Food fashion show”*, on the occasion of the *Festinar¹ Creative Food Cycle*, *“International Festival FOOD interACTION”*, held in December 2020. The initial purpose was to communicate the materials and the products developed by designers starting from food waste, within the intense program of the final CFC research Festival, in order to raise awareness of consumption, and especially in a reuse, more aware of the food we waste every day.



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Photo courtesy: Chiara Basso for Creative Food Cycles

The situation caused by COVID-19, and the consequent change in the manner the event was carried out, meant that we had to think about a different way of sharing the research and the prototypes, adaptable to a festival (or, in this case, to a *Festinar*) online.

The particular historical moment we are experiencing, characterized by uncertainty and continuous adjustments of our daily routine, has inevitably led to having to rethink (also) the use of spaces and to explore new ways of relating with the environment that surrounds us and, especially for those who operate in the field of visual disciplines and design, with *new ways of communicating*.

As mentioned, the purpose of the final festival of the *Creative Food Cycles* research was to share the outcome of the experiments carried out by professors, researchers and designers during the two years of the project, involving not only people who works in that specific field, but also the external public, together in a moment of collective celebration.

Having to rethink the way in which an event like this could be realized, due to the pandemic, posed a new challenge in the search for an equally intriguing way, for the audience and participants, which could still be usable in a moment of restriction of freedom and reduction of social relations, without forgotten *interaction* and *involvement*, which are fundamental elements for the success of a festival.

It was therefore decided to work on a way that went over the display of a series of objects, an event that through its realization could appropriate a space, interact with it, discover it, redesign it and talk about it, transforming itself into a *celebratory performance* of what things that we we normally consider “waste”.

The location chosen to hold the event was the Albergo dei Poveri, a wonderful and imposing seventeenth-century Genoese building. The initial purpose was to revitalize a location that was generally secondary to traditional city activities, opening it to the Festival public, who would animate the spaces during the three days of the originally scheduled event. However, the pandemic conditions and the restrictions imposed have meant that the impossibility of letting the public in became an opportunity to discover and take advantage of an unprecedented hidden scenography, which became the context of a suggestive *performance* with projects.

The building, in fact, is currently partly used by the University of Genoa, partly under construction for a future opening as a museum and partly in a state of complete abandonment. These spaces, abandoned, hidden, extreme, fixed in an instant that transformed them into a timeless place, became the suitable context for the realization of the *performance*, which saw the students involved in an event between the theatrical scene and the artistic action, which wanted to emphasize the correlation between the timeless condition of the Albergo - its abandoned spaces, a sort of “urban waste” waiting to be enhanced - and the themes of the designers’ projects, who have created prototypes and installations starting from food waste materials.



Two different types of waste, both in the condition of being able to - or, better, *having to* - be enhanced through the design process, celebrating them and not rejecting them, giving new life to something that we normally consider waste, but which in reality has infinite potential to (re)use.

Through the performance we wanted to pointing out the contrast between the context, still in its fixed condition of abandonment, and the frenetic and dynamic process of design, which constantly generates ideas, creativity, shapes and meanings.

During the performance not only different ways to reusing food waste were presented: together with the products we showed new processes, new ways of observing and considering what surrounds us, new meanings and new interactions that, through an ephemeral action today, lay the foundations for the design thinking of tomorrow.

It is therefore, at this point, that the initial condition is reversed: ephemeral actions (prototypes made with food, organic material therefore destined for a short term) become timeless actions, born to consolidate in the future, to become good practices in common use, while the persistent condition of the space acquires a transitory significance, a condition of temporary decay, which can regain value, and identity, through its reuse.









PAPAGNO





The Food fashion show

The performance “*Food fashion show*” was included in the dense program of the *Festinar*, through the creation of a short movie, made by the Plurale Visual Design studio, directed by Elio Micco and the UNIGE working group, which presented with a new way the relationship that has been created between space and objects. The natural condition of the building made it possible to work with an extremely suggestive scenography, in order to celebrate different kind of waste, such as structure, object or food. The abandoned and dusty rooms, which would never have been accessible to the public in normal conditions, lent themselves to support the objects that were the *stars* of the show², emphasizing their characteristics and starting a dialogue with them.

² See the *GOA REASONED RECIPES BOOK*.
*Prototyping, experimentation and
innovation to rethink the food waste (p 219).*

1. Raw Material

The video opens its shooting on forgotten details, aiming to re-discover the old kitchen of the Albergo dei Poveri; under layers of rubble, appear ovens, tables, worktops and tools covered by a thick layer of dust, a sign of use time long gone. It is here, on a gray and dusty table, that a very colorful and opulent installation appears: it is made with fresh fruit and vegetables, which symbolizes the raw starting point from which objects and materials - that will appear in the following scenes - are made.









1. Défilé

On a second time, on the majestic stairs that lead to the only space currently accessible to the public, and in the long, dark corridors, abandoned, used as waste storage, new clothes and accessories, obtained from food waste, appear in sequence.

They are made with materials such as 100% compostable leather, obtained from fruit waste, or shells of eggs, recycled plastic, or aluminum recovered from old cans.

The models move among rubble, debris and abandoned objects, making their clothes and accessories and their regenerated materials stand out even more, transforming from their initial waste condition to a new product.



































2. Products

White, ethereal, neutral human figures move slowly along the *Corridoio delle Donne*, among boxes full of paintings, documents, old wooden reels and antique furniture, waiting to be transported to new locations.

The flickering light filters through the large windows, through a cellophane layer that wraps them, exactly in the same ways as the boxes are wrapped and packed, in order to underline the precarious condition of the structure itself, not only of what it houses.

The figures moved carrying the objects on large golden and transparent trays, which reflect the warm and charged colors of the products, enhancing the materials, contrasting with the neutrality of the backgrounds. They use old tables, computers, trolleys and ladders as supports to put the attention on - “show off” - the object transformed into the main subject of an ephemeral, temporary experience, which ends when the camera moves on, to capture an another scene.





















AVOCADO

CARO

CAN

CIPOLLOTTI

FRAGOLE

AVOCADO







3. Interactions

In addition to the main movie of the fashion show, other 15 short videos were made to tell, again through the *performance mode*, the individual projects in detail and the interactions that the designer has initially with the raw material, then with the project and finally with the prototype.

Each project was associated with a particular space within the Albergo dei Poveri, chose from kitchens, corridors, former workshops, gardens or technical rooms, which could enhance its meanings and atmosphere.

The result is a series of tales suspended between the motionless condition and the dynamic one, between past and future, which celebrate space, (food) waste and design at the same time.

We are surrounded by different kind of waste, but usually we forget that there are a lot of potentials behind it, whether they are food or buildings or something else. The *Food fashion show*, and the entire CFC Project have shown that through art and design we can find out these potentialities and create new kind of products, materials and, most important, new experiences.

Credits:

CFC GENOA GROUP

Manuel Gausa, Silvia Pericu, Chiara Olivastri, Matilde Pitanti,
Alessia Ronco Milanaccio, Giorgia Tucci, Francesca Vercellino

CREATIVES and MODELS

Erijon Ademi, Matteo Barbagelata, Sara Chinellato, Chiara De Filippo,
Lorenzo Decia, Fabio Di Bella, Alexandra Efremova, Chiara Fiorani,
Chiara Garofalo, Federico Giordano, Clara Giusta, Marta Guggiari,
Cheng Huan Sara Iebole, Beatrice Intermite, Enrico Levo, Lorena Likaj,
Alice Macchione, Francesca Marrosu, Margherita Massalin, Alessia Moi,
Federica Nazzaro Giorgia Parisi, Federica Pelle, Carlotta Ricaldone,
Stella Femke Rigo, Giacomo Rossi, Paola Taramasco, Wang Wenyang,
Kuo Yu, Martina Vallarino, Federica Vicini

SCENOGRAPHY AND SET DESIGN

Elio Micco
with Alessia Ronco Milanaccio, Arianna Sortino

VIDEO

Plurale Visual Design

THANKS TO

Marco Sinesi, Anna Maria de Marini – Albergo dei Poveri

To watch the complete video go to:

<https://www.youtube.com/watch?v=MvYAyMRhQTU>



























VNI

***VII
FINAL
DE FIESTA***

***Fireworks:
artificial
pyrotechnics***

THE BANQUET: THE GREAT-FOOD.

Plates and dishes, eat and eaters, moments

... and movements: profusion, arrangement, interaction.

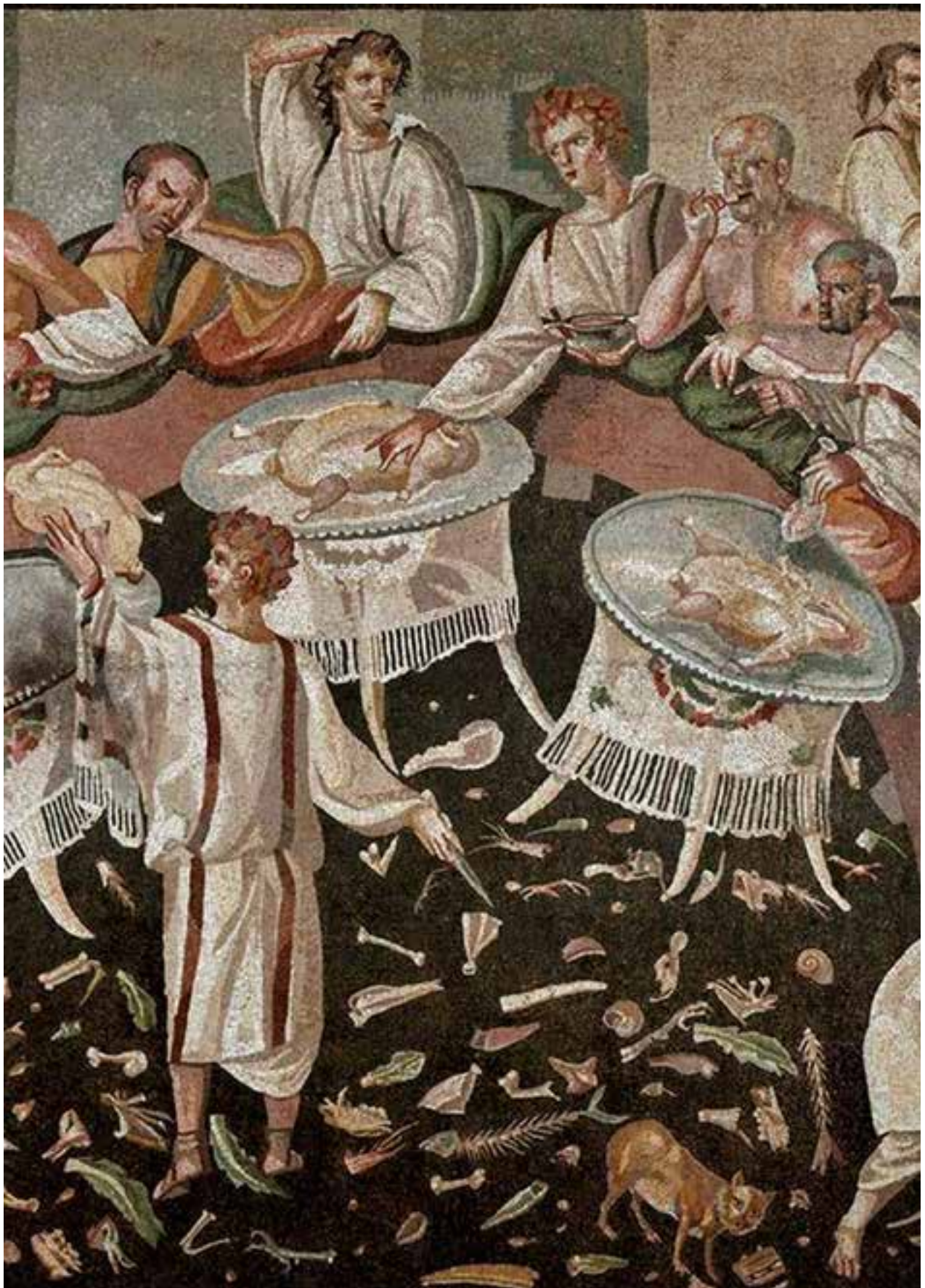
A– The beginning of *The Banquet*.

(...) I found Socrates, he told me he was coming out of the bathroom and had put on his sandals against his custom. I asked him where he was going so handsome.

– “I’m going to eat at Agaton’s house,” he replied. I refused to attend the feast party he gave yesterday to celebrate his victory, because I could not accommodate an excessive crowd; but I say my word for today (...) Come with me, then (...).

When I got to Agaton’s house, I found the door open (...).

A slave led me on the spot to the room where the meeting was taking place, everyone was already seated at the table and waiting only to be served. We began to eat. After we had been kept waiting for some time, according to his custom Socrates entered (...). Agaton invited him to sit down. (...) Socrates sat down, and when he and the other guests had finished eating, libations were made successively, a hymn was sung in honor of the god, and after all the other customary ceremonies, they talked about drinking.



B– The ending of *The Banquet*.

(... At the end) a throng of young people appeared at the door as one of the guests opened it to leave; and entering the room they took their places at the table. Then, there was a great noise and bustle, and, in the general disorder, the guests ended up drinking excessively.

(Some) fell asleep (...) and did not wake up until dawn (...). Others had left. Only Agathon, Socrates and Aristophanes were awake and at the same time were draining a large glass, which they passed from hand to hand (...). At the same time Socrates argued with them (...) requiring them to recognize that the same man must be a tragic poet and a comic poet, and when one knows how to treat tragedy (...) one must also know how to treat comedy. Forced to agree to this, and while they were in the middle of the discussion, Agathon and Aristophanes began to doze off (...). Socrates, seeing them asleep, got up and went out accompanied, as usual (...).

Platon, *The Banquet* (free English version of M. Gausa)

The Banquet as a paradigm of the exuberant

The banquet is the great meal par excellence.

It brings together gastronomic experience, relational exchange, social interaction, spatial organization, creative show, festive celebration and scenic performance in a large format that combines agape and event.

Unlike the feast (*“a splendid and abundant meal”* according to the dictionary) the banquet is presented as *“a magnificent meal attended by many diners and in which one or several events converge or are celebrated”* (*“a multiple and sumptuous entertainment of eating and drinking; often, a complimentary or ceremonial feast, followed by speeches”* paraphrasing the Webster dictionary).¹

This conjugation – quantitative and qualitative – between Food and Event is fundamental in the notion of banquet and combines the sumptuous, the neat, the numerous, the varied, the multiple, in short, in all its meanings (profusion, diversity, density, exuberance) and in its various “multi-” facets (from the multitude of diners to the multiplication of delicacies, from the multiplicity of moments to the multiplicity of movements)

Indeed, delicacies and plates (dishes, stews and vessels), meals and diners (guests and hosts), sites and situations (*spaces* and *spatialities*) end up combining in a wide operative paraphernalia, of a progressively heteroclit, polyphasic and polyphonic space-temporary dimension.

The banquet begins in an orderly and composed way and ends, generally, drifting towards a dynamic open, fluctuant and fluctuating collective process, between spaces and diners.

The time factor becomes in effect in an evolutionary action and not only in a transitive duration.

¹ See “Banquet” in the Webster online dictionary: www.webster-dictionary.org/definition/banquet

Roman Mosaic (V or VI Century): Parentalia banquets – and parties – in honor of the deceased, in which marriages were suspended and temples were closed.

The banquet lasts because in its own neat exuberance the temporal dimension appears implicit, but also the experiential vocation, on which gastronomic enjoyment – or delight is built from a series of sequences and instants (with their various rhythms and climax moments, more or less patterned) that carry the dynamic evolution of the sensory pleasures experienced and of the spatial structures generated (from the initial composed forms to the most open – and lax – final configurations).

That “multivalent” spatial condition (made of complex simultaneities) refers to the same fuzzy logics in which the interactions between multiple informational exchanges (and, therefore, changes) are inscribed, inherent to their implicit and explicitly dynamic condition – unpredictable in its evolution – which (beyond the initial formal and planned organization obliged by the logistics of the banquet itself) tends towards a spontaneous alteration, a variation and fluctuation, bringing it closer to the non-linear systematics of dynamic interactive systems of our habitats and, therefore, to the urban environments themselves. At the same time, the suspense that the event itself entails – with “expectant” temporal sequences and “unexpected” situations – combines patterns, rhythms and constitutive and surprising moments, at the same time, in that fundamental desire to combine enjoyment and pleasure in common (collective and interactive) on which that great Feast/Festival that is all Banquet is sustained.

The Food is in the center of the Banquet but the very dual combination between gastronomical experience and spatial (and occupational) experience (associated with that scenic dimension of every montage-event: tribute, celebration, show, ritual, etc.) favors – as in the majority of space-time processes with an evolutionary nature – substantial aspects of prevision and provision, of logic and logistics, of maneuvers and movements, of actions and reactions, of planning and adaptation (of strategy and tactics in short) typical of an organization oriented and open at the same time, associated not only with complex dynamic systems but with the fields of forces and variable trajectories associated with them; dynamic process in which fuzzy logics, open logics, neat logics and differential logics are joined in configurations of progressively elastic and topological order, informal and informational (from the evolutions of a battle to the evolutions of a city, from social behaviors to environmental behaviors).²

Configurations (referred to that multiple, complex and dynamic interaction between situations and solicitations, volitions and information(s), local and global, general and particular) that would call, in turn, to possible “operative (dispositional) logics” called to combine instructions, distributions and evolutions in a flexible vector, inducer and transformer, at the same time.

We want to deep, in the next pages, these four different dimensions (spatial and dispositional, relational and inter-relational, social and sensorial).

² See the different reflexions about the relation between crowds, configurations, complex and multiple spatial structures and open logics” in GAUSA, Manuel (2018), *Open(ing). Space-Time-Information*, New York-Barcelona, Actar Publishers. See also GAUSA, Manuel (2010), *Open. Spacio-Tempo-Información*, New York-Barcelona, Actar Publishers.

II– Spatial dimension.

Multiplicity and density: neat logics, dynamic dispositions.

A banquet is, above all, a multiple and dynamic spatial grouping, scenic... and scenographic.

The banquet is defined in the first place, as we have pointed out, as a great meeting: a mass gathering around an agape.

It therefore implies a process of spatial-temporal occupation and distribution that, like other similar neat processes, with notable levels of evolutionary self-regulation and self-organization (crowds, flocks or banks in movement, gas expansions, traffic movements, or the own city's entropic developments ...) refers to the generation of “constructions” with more or less prolonged or instantaneous durations in time; constructions that generally appear as regular structures in their starting organized conformations (sensibly disciplined in their initial forms or formations -, composed and/or compositional) and progressively dissolved in irregular configurations, as a greater and more relaxed freedom of movements it is produced.

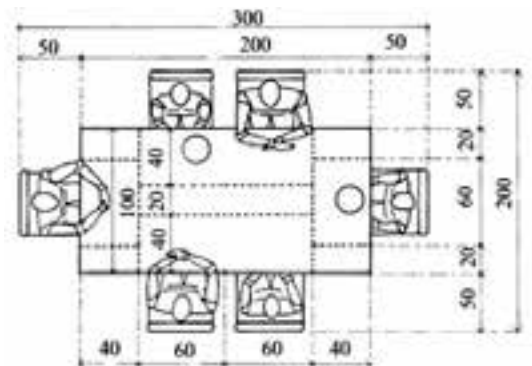
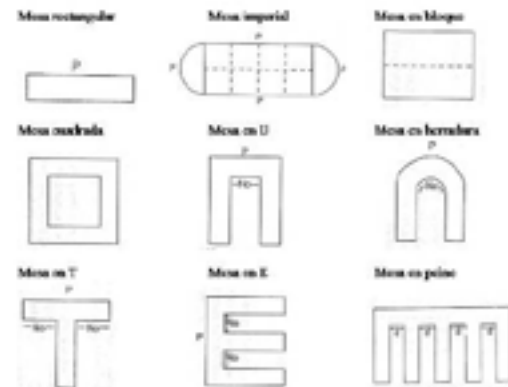
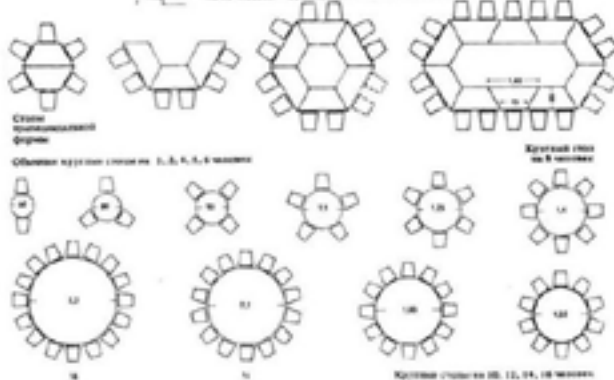
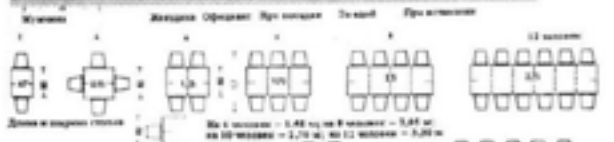
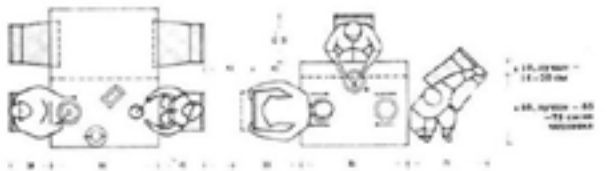
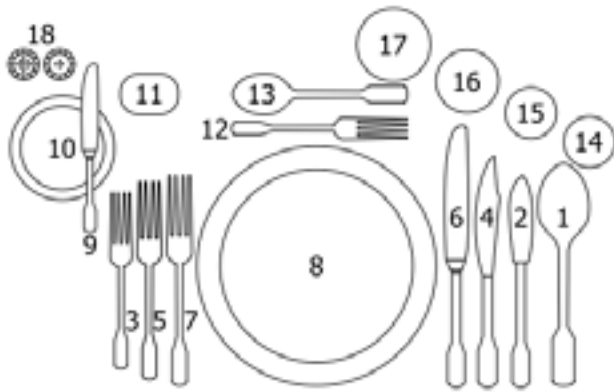
As in most systems of dynamic evolution, the snapshot of each of the trajectories in space formed by the movements themselves, generated in and during the banquet from the (dis)positions of plates, cutlery(s) and utensils to that of the diners and eaters themselves) indicates a transitory situation, in a state of “latent change”, characteristic of an eminently variable nature over time.



Victorian Banquet.

Manners and customs of English Gentlemen

Farmers, 1849 (archive).



How to lay dinner and eating spaces:

Neufert rationalistic dimensions and organizations as an efficient precise/fixed taxonomy.

First diagram above; In a formal, canonical table, we will find more or less cutlery and pieces, depending on the menu that is offered and the desire to make protocolary efforts. In a complete table, really formal and well composed, the following elements are placed with this arrangement: 1. Soup spoon. 2. Appetizer or salad knife. 3. Fork for appetizer or salad. 4. Fish shovel. 5. Fish fork. 6. Carving knife. 7. Fork for the main – or carving – plate. 8. Underplate in nickel silver, resin or wicker. Flat plate, starter plate - something smaller. And on them, if necessary, the cup and saucer for consommé or soup. 9. Butter knife, located on the bread plate. 10. Plate of bread. 11. In formal circumstances, a cardboard plaque with the diner's name. 12. Dessert fork. 13. Dessert spoon. 14. Glass of aperitif or glass of champagne. 15. Glass of white wine. 16. Glass of red wine. 17. Cup or glass of water. 18. The height of chic for official receptions, individual salt and pepper.

The napkin, in general to the right of the plate. The placement of the cutlery is logical: in order of use, from the outside to the plate. The cutlery located to the right of the plate are usually those for which we need more precision or strength. Somewhat exceptionally an appetizer fork (or for a simple salad) can be placed on the right, since it will be used only in that case.



The term “deployment” used on some occasions to address this type of phenomenon (and converted at the banquet into an authentic “deployment of means”, understanding the term “means” in all its meanings³) illustrates this progressively diffuse evolution of configurations in/of the space in which the relationships are established in a different way from that of the static, precise and regular Cartesian layout: through geometries of dynamic order, mostly topological, rhizomatic and irregular.

Geometries that express a more elastic and differential order – more *dispositional* – related to a “poly-geometric” organization/occupation of space that would refer to a complex combination of differential assemblages or *agencements* (using such a Deleuzian term⁴) rather than a subordinate or strictly hierarchical global understanding: a strategically relational system rather than a strictly formal or visual system.

These multiple configurations, so well portrayed in the exuberant paintings of Veronese, Tiepolo or even Titian (for referring only to the sophistication of the movement so present in the Baroque period) appear, in effect, as variable manifestations called to express a whole series of variable combinations of “positioning positions” (dispositions) referred to a wide range of spatial conjugations and permutations between “positional options and decisions” – of concentration or of dilatation, of grouping or spacing, of connection and interconnection.

A potential of/for fluctuation and distribution among “multiple bundles of possibilities”, implicit in the own processes of (inter) change and (inter)action generated guided by a mixed conjunction of common (general) and individual (particular) criteria of action.

The term “disposition”, so mentioned, allows us to synthesize, in this sense, diverse and appropriate meanings:

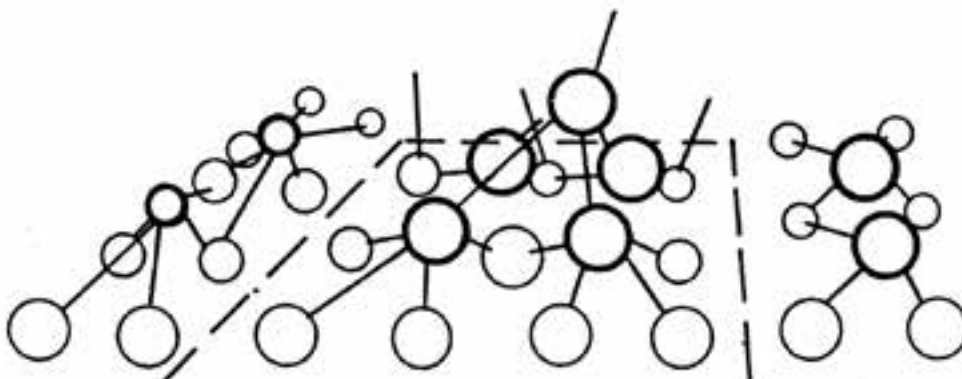
- Disposition as “arrangement”, as “ordering” and “ordination” adjusted to an occupational or distributive logic.
- Disposition, also, as an “instruction” and as an operative “decision” (an instrumental “guideline” and not just an “order”) in allusion to the internal vector (logic, pattern or evolutionary criterion) implicit in such structures.
- Disposition as an initial composition, but also and, above all,

³ “The term deployment as a ‘folding’ or ‘unfolding’ movement is not a geometric or representative framework, but rather a type of connection, of correlation between heterogeneous forms: a relating machine.”

HADJISAVVA, Dimitra (1996) “El concepto de lugar en las teorías arquitectónicas: mutaciones”. Lecture given in the context of the “UIA-Barcelona 96” congress .

⁴ See DELEUZE, Gilles y GUATTARI, Felix (1980) *Mille Plateaux*, Paris, Éditions de Minuit, pg. 383.

See also DELEUZE, Gilles (1995) *Conversaciones*, Valencia, Pretextos, pg. 278.



Fuzzy logic diagram.
Schemes of option/
decision dynamic
movements in space
and time



Alonso Sánchez Coello (XVI Century), *The Banquet of the Monarchs: Charles V, Philip II and their niece Anna of Austria: Habsburg consanguinities in a banquet between familiars, relatives and courtiers*

⁵ See GAUSA, Manuel (2018) *Open(ing)*, op.cit, Chapter 6 (Dispositions) p. 216

as an (open) combination of positions (and positioning movements).

– Disposition, then, as a configuration (virtually dynamic) that is, as a “formulation” and not only as a “form-formation”: as a driven “way” of placing things and people ... but also as an open “logic” to place things and people.

– Disposition, ultimately, as “aptitude” (preparation for action) and as “attitude” (“state of mind in the face of action, of change). An active and activistic logic. (Pro)active and (inter)active.⁵

We have already pointed out how the “great Banquet” does not cease to be, in effect – as a battle (unpredictable) as an urban process (uncertain) as a social phenomenon (indeterminate) as an environmental movement (inaccurate) – the translation of a spatial system essentially complex, dynamic and open, whose structural, geometric, metabolic understanding (interactive and informational) refers, in fact, to the progressive computational/digital study of such irregular organizations called to replace the old spatial paradigms based on the traditional notions of “composition” and “position” (and associated with stable geometries, forms and orders) by a new type of more operative and “dispositive” logics, open to a “dis-subject” (undisciplined) combination of trajectories (not subject to binding or predetermining formal orders) between processes, events and movements.

Paolo Veronese, *Nozze di Cana*, 1563. The great banquet of the transition from Renaissance to Barroc. Ideal proportions and a apparently balanced composition are combined with a rich profusion of moving figures, lights and colors with asymmetrical arrangements and fluctuating figural distortions in a visual tension between stability and instability of a clear dynamic force and expression.





A combination in which the two most characteristic aspects of non-linear dynamic systems – “order” and “chaos” – would paradoxically be coupled and combined, evidencing that “determined indeterminism” implicit in them through internal and adaptable criteria, rules or patterns of movement and mobilization.

A more *informal* logic, then, for *informational*. A fluctuating and “open logic” in which, in effect, diverse and progressive movements of “concentration” (or “grouping”), of “dilatation”(and “spacing”), of interconnection (and “interrelating”), articulated by networks – real or virtual – of path-furrows.⁶

Movements referred to spontaneous or pseudo-spontaneous differential parameters of “concentration, dilation and interconnection” or of “positioning, spacing and linking” sensibly topological and fractal, that is, dynamically irregular.⁷

⁶ See THOM, René (1996) “Life Scores”, in *BAU* no 014. 1996.

⁷ See BECKER, Sybille et al. (1994): “Selbstorganisation Urbaner Strukturen” (“Autoorganización de estructuras urbanas”) in *Arch+* no 121, 1994.

The 1st Academy Awards ceremony – the name Oscars were not decided – was organized by the Academy of Motion Picture Arts and Sciences, honoring the best films of 1927 and 1928. It was held on May 16th, 1929, at a private dinner at the Hollywood Roosevelt Hotel in Los Angeles California.



III– Relational dimension. Interaction and exchange, moment and movement

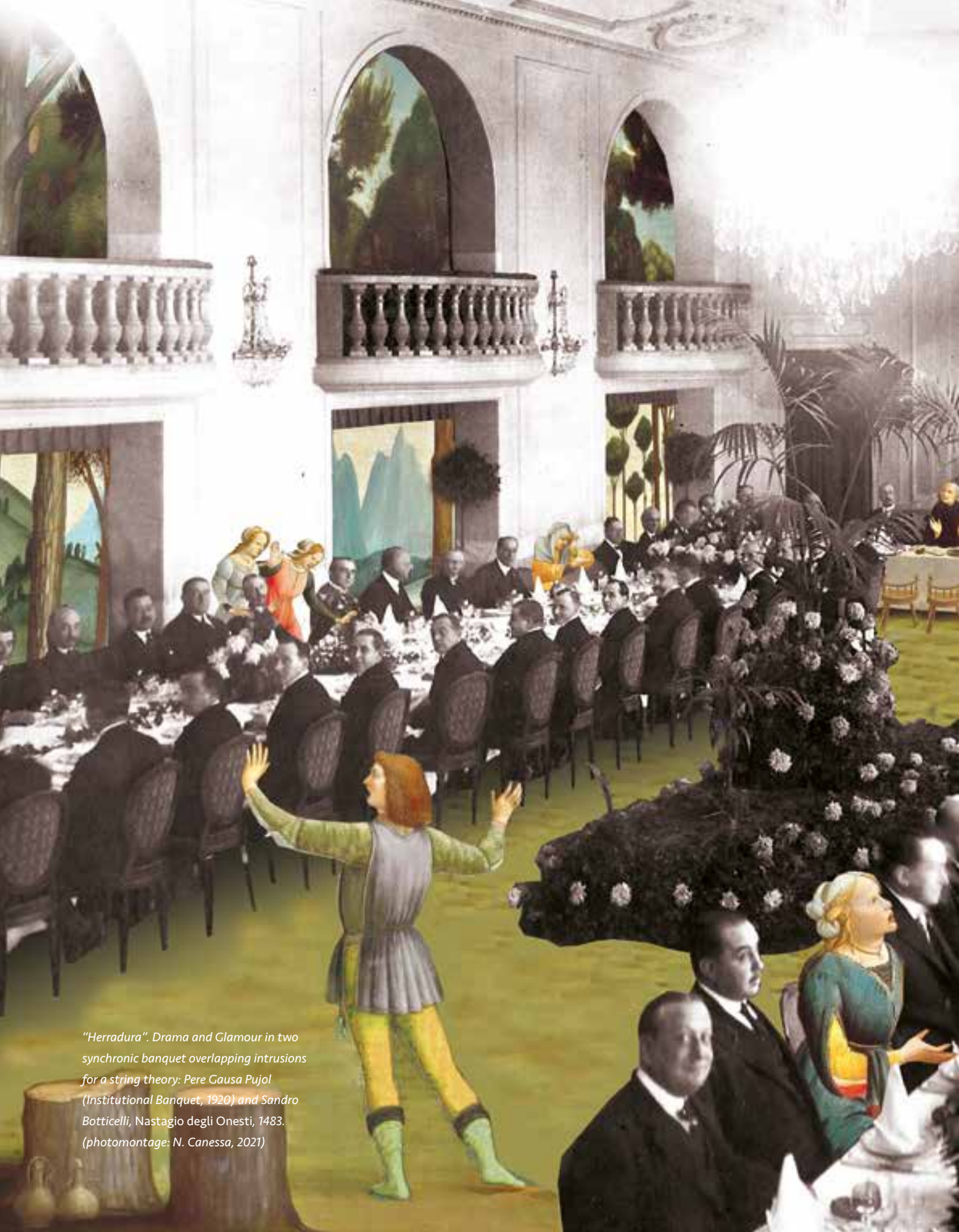
A banquet is a relational process of exchanges made of moments (and movements) in interaction.

We have already pointed out how the banquet is presented as a spatiotemporal and experiential process associated with multiple parameters of relational exchange.

Like all “ongoing” development – like all *being* – the spontaneous and entropic evolution of this set of individual and collective behaviors, in process, refers to complex polymorphic constructions adjusted to dynamics of evolution – local and global –, essentially referred to multiple (and multi-level) processes of informational interactions⁸: general processes determined, in turn, by an infinity of particular “reactions” “to” – and “in

⁸ See HELBING, Dirk et al. (1994) “Struktur-bildung Dynamischer Systeme” (“Formación estructural de sistemas dinámicos”) in *Arch* + no 121, 1994.





*"Herradura". Drama and Glamour in two
synchronic banquet overlapping intrusions
for a string theory: Pere Gausa Pujol
(Institutional Banquet, 1920) and Sandro
Botticelli, Nastagio degli Onesti, 1483.
(photomontage: N. Canessa, 2021)*



the” – context or milieu in which they develop; and by secondary phenomena (local and global in turn: accidents, noise, distortions ... “attractions” or “rejections”) as much or more determining depending on the scope – and scale – of the action. In initial conditions of distribution, relatively stable, regular, or more or less regulated (the isotropic occupation, early, of the sea line on a beach or, at the banquet, the predetermined position in front of the own plate and the arrangement of pieces and diners around a table) a “formal” discipline seems to prevail. This disciplined conformation gives way, however, in conditions of progressive density, freedom and easiness of movements, to more relaxed and dissolved distributions (although no less strategic and operational in the spontaneous search for greater efficiency in relationships and exchanges: approaches, encounters, displacements, etc., functionally self-generated as the event proceeds).

The inducing scheme (“posed and composed”) is rapidly and *glocally* altered, deformed and distorted into a set “disposed” to a major (inter)change, that is, to an entropic increase of greater variety and intensity of relational, occupational and/or informational interactions.

We can contemplate these procedural structures as “elastic scenarios” produced at various scales and in variated profuse crowds – from flocks, herds or fish shoals to spontaneous settlements or social behaviors, and also cities – in which, various processes of poly-focalization and anisotropy could be detected; processes that would mutate and be disturbed as in virtual dynamic fields of forces, according to the various levels of conditions, volitions, solicitations and situations of informational interactions – that would combined in them.

We could recognize, in such processes, diverse parameters of dynamic actions that would be inherent to their own strategic and structural definitions:⁹

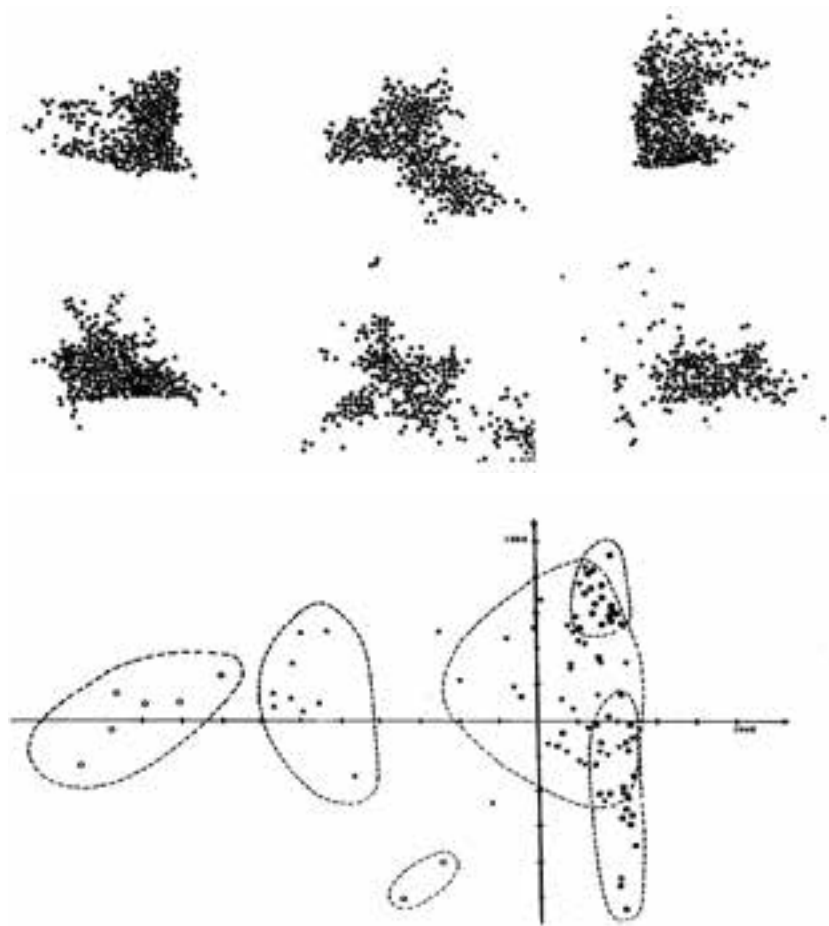
1– An “enveloping action” (of grouping) that would refer to the clustering potential itself associated with the various sequences of “setting” (between individual elements and sets or subsets of variable density) and, therefore, between the different combinations “void/full”, “concentration/expansion”, “line/path” that could be observe.

2– A “matrix action” (of interconnection) that would allude to the infrastructural “arrangement” of the system itself, to that – explicit or implicit – linking of inter-connections that would articulate – or interlaced – their configurations, like an immanent networked matrix.

3– A “sequential action” (of rhythm) that would allude to the cadences of processes, movements and events, referring to discontinuous sequences of vibration and oscillation (inter-cadential successions) in which “patterns” (of movement) and “patterns” (of behavior) would tender to coexist in the movement as in the development of the contemplated mechanisms themselves.

⁹ See GAUSA, Manuel (2010), *Open, Spacio-Tempo-Información*, Op.Cit, p. 297

Above. Diagram of porosity and connectivity in evolving matrices and dynamic clustering processes, according to Ricard T.T. Forman
 Down. Barry Le Va: The motion of a Flock of birds, 1966-67, in Stan ALLEN (1996), "Distributions, Combinations, Fields", *The Berlage Institute Cahiers* n. 5, Rotterdam, 010 eds.



¹⁰ See HALL, Edward T. (1971) *La dimensión Cachée*, Paris, Editions du Seuil, pg. 21-29.; see BALL, Philip: "La lógica de las multitudes", in *El País* 25 octubre 2000 (extract from the magazine "NATURE"); see also BATTY, Michael: "Sobre el crecimiento de la ciudad", in *Fisuras* no 5, 1997, pg.4. See also ALLEN, Stan (1996) "Distributions, Combinations, Fields" in *The Berlage Cahiers* no 5 (*Studio 95/96*) ed. 010, Rotterdam, pg. 72 and in *BAU* no 014, 1996, referring the works of Elias Canetti and Barry Le VA. See BECKER, Sybille et al. (1994) and HELBING, Dirk et al. (1994) Op.Cit.

¹¹ We have accepted some neologism or non-usual terms as *Evolutionality*, *Mixicity*, *Sequentiality*, *Matrixiality* to privilege the suffix -ity used to form nouns from active and qualitative adjectives, referring to the state, property, or capacity conformed by the adjective's description.

4- A "synthetic action" in short (of induction), which would allow *compressing* (and *condensing*) the different (and multiple) trajectories of evolution and maneuvering of the system in certain "basic nuclear rules", with flexible evolutions that (as "inducing vectors", "drivers" and "movers") would allow to *diagram* their multiple and variable bundles of potentials, in some basic directional criteria.

Edward T. Hall, Philippe Ball, Michael Batty, Elias Canetti, Stan Allen, Sybil Becker or Dirk Hebling, among others, have studied such phenomena in detail.¹⁰

Complexity (multiplicity factor), *Simultaneity* (overlapping factor), *Mutability* (change factor), *Evolutionality* (development factor), *Combinatoriality* (conjugation factor), *Discontinuity* ("empty-full" iteration factor), *Sequentiality* (rhythm factor), *Matrixiality* (entanglement factor), Elasticity (flexibility and / or deformability factor), *Mixicity* (crossover or hybridization factor) and, ultimately, *Systematicity* (relational set factor) would be presented as recognizable and identifiable parameters in such open and polyhedral organisms.¹¹

But it would be the very condition of "interaction" (that is, the "informational exchange" between diversified phenomena) that would drive – from linking, grouping, spacing... from



The last supper



crossing, netting, knitting and knotting... or emptying – that construction no longer “unitary” but profuse and essentially polyphonic, so close of the recent interpretations of our spaces and habitats.

To the traditional idea of linear order that had marked the classical interpretation of absolute space and time (unitary, exact, regular, ritual, symbolic or metaphorical) based on the idea of Composition as a subject and hierarchical relationship but also as a cohesive, closed and predictable figuration between the parties¹², the modern ideology had faced an alternative neo-linear New Order, associated with the relativistic interpretation of space-time (based on a more discontinuous and fractured spatial position, although not less fixed or less strict less measurable between objects) derived from a rational, severe, mechanical, functional and/or material productive rigor. Position as an organization, but also as an unalterable, affiliating principle (in tune with the very “ideological” – dogmatic – moment of that modern space-time, paradoxically materialistic and abstract at the same time) and that would manifest the transfer from a “stable” universe to another preferably “stabilized”.

The contemporary “space-time” presents itself, however, as a non-linear landscape, progressively unprejudiced and mutable, open – as has been pointed out – to the interactive and informational holistic incidence (global and local) of the individual and/in the general, of the infrastructural and/in the elastically relational.

A “space-time-information” of interconnected and / or interconnectable – data and messages that would possess precisely in the information, and in its open capacity for interaction and integration (conjugation, combination, complementation), a new dimensional vector.

From a predictable vision of the Universe we would have passed, throughout the 20th century, to a measurable vision and now, at the beginning of the 21st century, to a definitively differential one: a vision (an interpretation) defined from complex trajectories of variable topologies and open (and dispositional) configurations (to which referred) more free, flexible and spontaneous.

Dynamic configurations (trajectories) rather than static figurations (traces).¹³

¹² See HALL, Edward T. (1971) *La dimensión Cachée*, op.cit.

¹³ See GAUSA, Manuel (2018) *Open(ing)*, Op.Cit, Chapter 6 (Dispositions) p. 325



James ENSOR: *Comical Repast (Banquet of the Starved)* Oil on canvas, 1917–18.
 The current title of this painting reflects the two names it was given during Ensor's lifetime. Scholars have interpreted the enigmatic scene as a critique of the German occupation of Belgium during World War I, which the artist experienced firsthand.
 (www.metmuseum.org)

¹⁴ See BARICCO, Alessandro (2018) *The Game*, Barcelona, Anagrama, p. 218.

Social dimension. Interaction, exchange... and interrelation: participation and co-participation

A banquet is a collective and interactive celebration.

The basis of every banquet is the celebration – festive and convivial – of a sociocultural gastronomic experience that generally includes actions and performative actions (from speeches to entertainments and shows).

The banquet, therefor and overall, is a social event: a shared convivial and relational experience.

If the “INTERACTION + INFORMATION” combination is presented today, at the beginning of the XXI century, as the great space-cultural revolution of this new era, this relational and inter-relational logic appears clearly associated with the assumption not only of complexity but of transversality: of a new capacity to evolve between dynamic conditions and heterogeneous processes, called to generate crosses, encounters, hybridizations, mixtures and exchanges¹⁴ at all levels, environmental and social (from coexistence to co-participation, from co-generative exchanges to co-active complicities).



"PS:love". Banquet and dance, during the Banchetto di amore e psiche (G. Romano, 1534), characters from various eras dance on the dance floor, just like in a disco. (photomontage: N. Canessa, 2021)



A logic called to synthesize – and celebrate – the Exchange (reactive, responsive, interactive or proactive) in a new kind of spaces/spatialities, less prefixed or predetermined; configurations understood not as mere “compositional” episodes, but as true “dispositional” processes strategic and tactical capable to combine, from the simultaneity, global systems and local solicitations.¹⁵

In exploring this new advanced logic of information, interaction (and integration) the pioneering logic of combinatorial simultaneity has increasingly merged with a logic of responsive instantaneity.

A logic of immediate response – of the moment rather than of the event (or of the monument) – that seems to want to combine a new “(in) common logic” (active and activist, optimized or simply positivized) generated beyond the exceptive and the exceptional.

Although this rejection of the monument and of the scenic event could seem to cast doubt on the very essence of the “banquet”, it is, on the contrary, totally in line with its own evolution where the monumental (the ritual), the scenographic (the symbolic) or the functional (the positional) would gradually give way (as the event itself unfolds) to a more experiential and co-participatory idea of it: progressively the first scenic-scenario itself (celebration or planned-programmed commemoration) becomes a kinetic-scenario, increasingly disposed to a topology-topography of individual/collective (and co-active) movements interpreted in all senses (from meeting to setting, from earing to eating, from picking to speaking, from wondering to wandering... between dishes and tables) in a clear evolution towards a common shared, spontaneous and unpredictable collective performance.

The banquet seems to suggest – in a single experiential event – all that transfer of logics that we have described, from the most formal, classical, to the most positional, modern, and the most informational, reactive (or advanced) with its increasingly collective evolution in its capabilities and sensitivities. From the initial moment (formal, ritual, positional) to the evolutionary development (relational and informational) or to the ending denouement itself (increasingly informal, medial and experiential) the banquet compresses disciplinary times and logics. Today we are talking about a new mediating will related not only with the interaction but with a new sociocultural (inter) activism, in which the natural and the spontaneous come together, approaching (beyond aesthetic prejudices or stylistic filters) the optimization of what is directly operational through a receptive and reactive vocation (responsive and responsible) without narrative pretensions or aesthetic prejudices or pre-terminations.

This direct, precise, immediate, relational logic can be recognized in the design of the space, favoring today the emergence of increasingly co-generated (co-produced) processes capable

¹⁵ See GAUSA, Manuel (2012) “City Sense:- Territorializing Information” in AA.VV: *City Sense, 4th Advanced Architecture Contest*, Barcelona-New York, IaaC – Actar Publishers, p. 6.



*Familia Colombo Dinner, New York
September 1930.*

*The Cosa Nostra men: Attorney Jack Was-
serman, Carlos Marcello, Santo Trafficante,
Frank Ragano, Attorney Anthony Carollo,
Frank Cagliano and John Marcello at La
Stella Restaurant after appearing before the
Queens Grand Jury.*

*(Photo by Paul Demaria/NY Daily News,
Archive Getty Images)*

of favoring a new *e(Co)mediation* aimed at qualifying our relational environments; translating them into responses as precise as elementary in which the processes would evidencing a new synergistic and shared sensibility (and the collective banquet would be it par excellence) typical of a “performative activism” implicit in the collective culture of this new era; not only because of its technological capacity but also because of its sociological ability to recognize the system in an implied or conscientious, radical or maliciously provocative way.

Through a new type of sociocultural and techno-spatial mediation in which the natural and the artificial, the sophisticated and the spontaneous, would be combined in a dynamically efficient way, combining in real time (through shared interactive applications and beyond previous aesthetic prejudices) information, matter and context ... uses and users.

The second decade of the XXI century opens today, with the exponential development of new technologies that have, in fact, multiplied this potential for interaction into a new material and virtual dimension called to define this “mediated” contemporary reality.

The optimization of operating systems aimed at expanding the possibilities of interaction between means, media, mediums, milieux and mediators (actions and agents, actors and actants),



has favored the spread and increase – from the second decade of this century – of ubiquitous applications; new software and open programs of processing, recognizing and simulating can be defined as expected corollaries of these processes able to link space and design combining informational intelligence, artificial intelligence and new collective intelligence generated through new and more sophisticated interactive interfaces. The exploration of a new co-participatory definition (empathic or eco-empathic) for our inhabited environments, but also of a new kino-sensitive definition for a more dynamic-responsive matter (in relation to the environment) is a new approach to the common feature of much of the research produced in this new era.

AUGMENTED MATTERS (new reactive and multi-active capacities) but also COMMON BEHAVIOURS (new co-active capabilities) are combined today to delve into the aforementioned factors of informational interactivity and convivial diversity.¹⁶ In these new multi-level dimension of matters and matters Food also – as the basilar element of the banquet itself – can be contemplate not only as a primary alimentary (or eating) matter but as *hyper-matter*, linked with its multiple secondary and tertiary capacities (second life reuse, agro-misuse and food waste recycle, new bio-production, permaculture evidently but

The 1st Academy Awards ceremony – the name Oscars were not decided – was organized by the Academy of Motion Picture Arts and Sciences, honoring the best films of 1927 and 1928. It was held on May 16th, 1929, at a private dinner at the Hollywood Roosevelt Hotel in Los Angeles California.

¹⁶ See GAUSA Manuel, PERICU Silvia, CANESSA Nicola, TUCCI Giorgia (2020): "Creative Food Cycles: A Cultural Approach to the Food Life-Cycles in Cities" in SUSTAINABILITY no 12, 2020 – 6487, www.mdpi.com/journal/sustainability, Basel, MDPI, Pp. 1 17

also techno-culture, new fab-labs capacities and the 3D printing, ICT performances, etc.).

In these new multi-programmatic condition Food needs to be understood not only through its basilar alimentary (and eating) function but through a multi-productive dimension inked with new circular processes: from production to distribution, from distribution to consumption, from consumption to instruction, from instruction to disposition... and celebration.

Taking advantage of all the *smart* and *scart* possibilities of our time.¹⁷

¹⁷ See VARELA, Felipe, LARACH, Constanza eds. (2017) *Diálogos Impostergables*, Catálogo de la XX Bienal de Arquitectura de Chile, Valparaíso, Santiago de Chile, Metales pesados.

See also PERALTA Mercedes, RODRÍGUEZ. Florencia Rodríguez, SORDI Jeannette, eds. & WALDHEIM Charles, Scientific Director (2020) *NESS.docs. Landscape as Urbanism in the Americas*, Miami-Boston, LOTS of ARCHITECTURE Publishers, pp.8487.

V. Sensorial dimension. Enjoyment, pleasure ... and pain: suspense, climax & chock.

Finally, a banquet is an experiential and sensory phenomenon.

The essence of every banquet is the sequence of collective experiences (gastronomic, dialectical, intellectual, sensory, sensual and/or scenic) successively programmed, prepared, performed or co-starred in a series of scheduled scenes (of instants/stimuli) related to the own shared “dishes” and in which the pleasure of “eating together” are combined with the enjoining of “celebrating together”

The expectation and waiting (surprise and uncertainty) before the successive (and desired) activation and/or mobilization of the senses (from sight to smell, touch, hearing and obviously taste) causes a clear state of *latency* between the expected and the unexpected (what, how, when and how much ...?).

Between each new experiential sequence (be it gastronomic or incidental) a suspended moment is installed waiting for the next dish or the next performance, which is covered with a dialectical (intellectual, actual, gestural, etc.) interaction or interrelation.

This suspended time, as has been reiterated, moves between the stable and the unstable, the predictable and the unpredictable, and installs the perception of the diner in a substantively changing and fleeting scenario, in transformation, in which the most common, ordinary and apparently ritually or stable realities, give way to some kind of unusual and virtually “extraordinary” realities through sudden slips between what was “already experienced” and what is... “to experience”.

The banquet thus combines program and plan with intrigue and surprise.

This is a scenario of spatialities, realities and simultaneities not too far removed from that “tempo Hitchcock”¹⁸ that François Truffaut described: a scenario, in effect, in a constant situation of “suspense” – of unstable balance – between certainty and uncertainty, control and random, ritual and surprise.

A scenario, then, that installs the gaze in a constant “expectant situation” (essentially positive) but that, also, allows to intuit

¹⁸ See TRUFFAUT, François (1996) *Le cinema selon Hitchcock*, Paris, Robert Laffont





"Waiting for nighthawks". The night is still young, and while waiting for Nighthawks (E. Hopper, 1942) to be alone, the city is still alive and even a group of wedding revelers occupy a famous bar. (photomontage: N. Canessa, 2021)



¹⁹ See the definition of the term “*Successive-simultaneous*” in V.V.A.A. (2003): *The Metapolis Dictionary of Advanced Architecture*, Barcelona, Actar.

²⁰ See GAUSA, Manuel (2018), *Open(ing)*, Op.Cit, Chapter 4 (Records) p. 132

²¹ See the definition of the term “*Criss-crossing*” in V.V.A.A. (2003): *The Metapolis Dictionary of Advanced Architecture*, Barcelona, Op.Cit.

a space that refuses to be totally controlled or subjected, confused in a scenario of mixed and heterogeneous experiences (eating, drinking, laughing, speaking, shouting, observing, crossing or posing, pretending, showing off, simulating, putting together or separating, carrying, etc.

The duality “*sequentiality/simultaneity*”¹⁹ is perhaps, in this sense, the most evident fusion in that scenario of mergers and dissolutions, of flowing processes guided by the menu-program itself – and progressively superimposed to it – in which often the long development of the agape itself takes place; development more and more spontaneously unpredictable in front of the mixture of foods and moods, moments and movements, libations and relations; of expected presences and/or unexpected performances (spontaneous speeches, unforeseen statements, wild dancing, whispered or shouted songs, etc.).

The very heterogeneous perception of programmed stage sequences is diluted and overlaps in simultaneous situations and experiences which turns the banquet into a great tele-topical stage decidedly contemporary in its own formulation, more sensitive to the compatible superposition of diverse realities (social and spatial); to that diffuse mixture of coexistence and intertwining, of relationships and estrangements between the universal and the particular, the substantial and the anecdotal, the private and the public, the particular and the global, the natural and the artificial, the real and the virtual – between the ordinary and the extraordinary, in short – which tends, more and more, to articulate situations and experiences.

The relevant role of the new information and mobility technologies has contributed decisively (in the working and domestic life) the assumption of this new gaze translating, in short, a loss of the old stability and “formal” or “positional” essentiality in that polyhedral and polyphasic “hyper-scenario” made of multiple offers, conflicts and tensions, but also possible re-evaluations – and qualitative reinventions – that is the one of our new time.²⁰

This condition of “suspense” faces, in effect, unexpected experiences produced in situations of paradoxes and crossroads (criss-crossing²¹)

Scenarios of overlapping associated with spaces, phenomena, situations and behaviors, affected by multiple requests, and among whose most tangible manifestations could be pointed out the multi-mediatic (and multi-media) coexistence between the apparent intimate, domestic “internal” (local) security of our own “individual habitats” and the telematic, universal and “external” recognition of the huge transience and fragility (suffering, pain, drama ...) of the (global) *Habitat* itself.

A dual condition that also, at times, unexpectedly hits our everyday life, with the progressive acceptance of that substantive instability (hybrid mixture of projectivity and uncertainty, of essence and impermanence) where pleasure – we already know – would tend to coexist with pain, well-being with dis-

LA CENA DELLE CENE



Dinner's dinners". P. Bruegel's canvas Die Bauernhochzeit (1568), was not big enough to film the whole room, having to select what to film, foregoing the noisier tables, such as the GIClab GOA- CFC Team and the CFC partners big Team in the other tale (a game to discover who is who). (photomontage: N. Canessa, 2021)





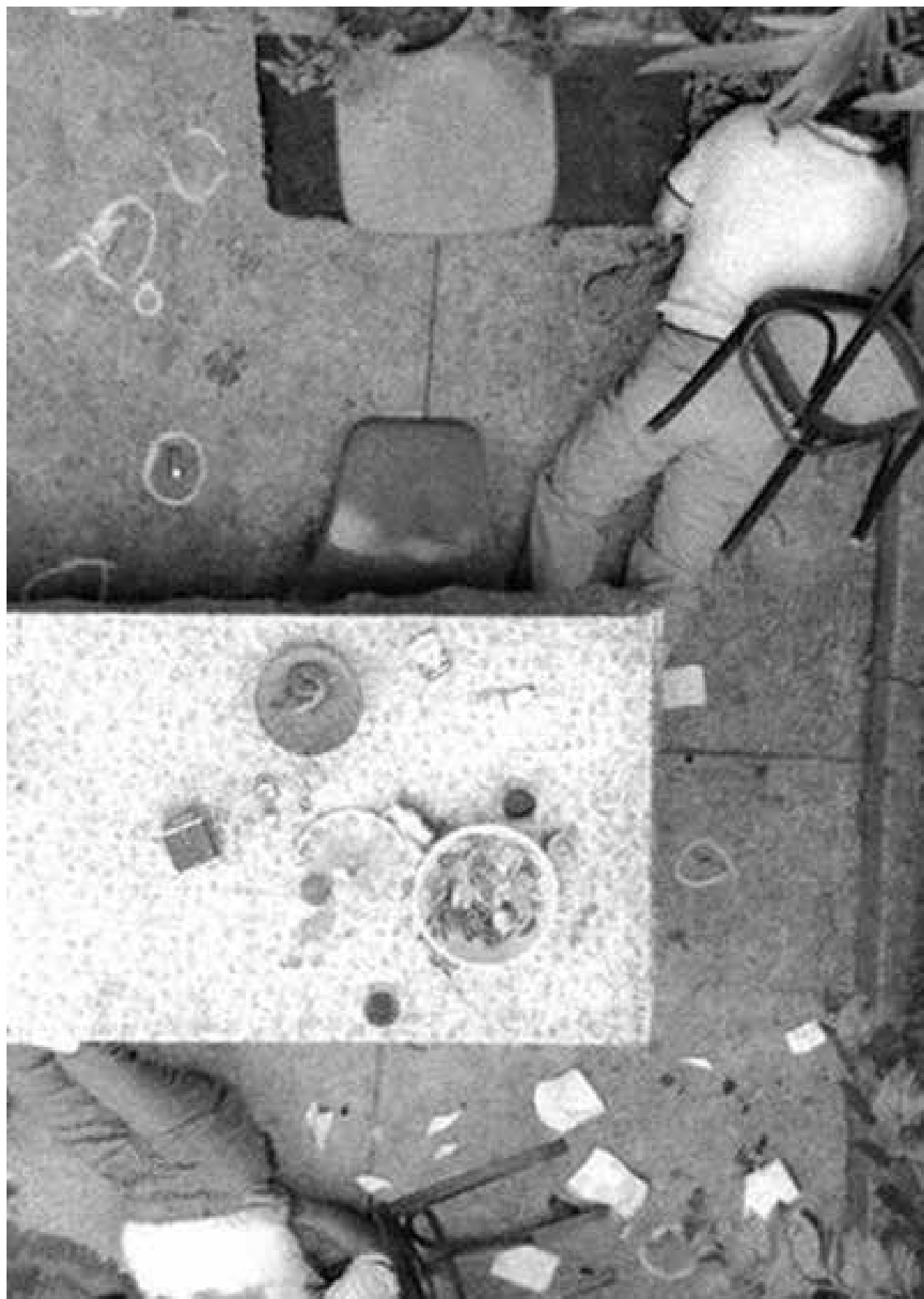
comfort, security with fear, tranquility with restlessness, harmony with conflict.

The banquet also seems to synthesize this paradoxically contemporary condition; mixing, often, enjoyment with boredom (physical and virtual), routine with climax, formality with carelessness, pleasure with pain and even as in the well-known Botticelli triptych (*La Storia di Nastagio degli Onesti*) or in the typical gastronomic encounters among gangsters (*bills and bulls, pasta and razzia*) or in the “great meal” par excellence (the *Last Supper*, with the threatening presence of Judas and his bag of coins as an announcement of the irremediable) and, why not?, in the well-intentioned family feasts, (with the unpredictable discussions presented as “the straw that broke”) the banquet sometimes shows us how drama is also lurking in the loops and loots, soaps (and foods) of the life itself...

[MG]

The importance of a banquet is estimated, on the one hand, in the quality or quantity of the delicacies and drinks; and on the other in the number and the quality of the guests or diners. The person who convenes, organizes and / or bears the expenses is called the host and must try to entertain from relational intelligence and with maximum mediating efficiency the diners or guests. However, often, a family or domestic banquet is a meeting place (festive, celebratory) between relationships and sensibilities not necessarily subject to formal courtesy and in which more or less latent conflicts can be generated that, instead of the celebration they summon the explosion more or less violent of emotions and feelings. The unexpected (the surprising) appears then beyond what was foreseen (the planned).

Pasta and bullets. Expected eating pleasures and unexpected eating dramas: Carmine Galante, also known as Lilo and Cigar (1910-1979), was the boss of the Bonanno mafia ‘family’. On July 12, 1979, Galante was eating lunch at Joe and Mary’s Italian-American Restaurant in Bushwick, Brooklyn while he was murdered along with his bodyguard, cousin and restaurant owner Leonard Coppola.



Addendum – The Banquet and art: why food represents our history

Food, nourishment for body and spirit, produces chemical energy and replaces molecules and cells that are daily demolished. As eating is essential, there is a symbolic and social value in every culture; in religions there is a close relationship between the divine and food which also has a very interesting function in the works of art of all times. Food was fundamental in this daily life, used, as well as in the following times until nowadays, for sacred rituals, a way to ingratiate oneself with the consent of Mother Nature, ensuring an effective hunting and at the same time to remove the guilt of having appropriated the raw materials of the earth.

Almost all the mural representations of Etruscan tombs are useful, from which it is possible to see the evidence of a festive and rich community; the customs of the family of the deceased, the environment in which they lived and the banquets are authentically depicted, sometimes holding a goblet of wine and an egg, symbol of the continuity of life through rebirth. As for Roman society, the banquet was a link between the earthly world and the afterlife, the deceased was often portrayed in paintings, sculptures, often in a lying position, during banquets, on the kline as in Etruscan tombs: the symbolism of the banquet implied the fragility of life and the great satisfaction of the pleasures of the table.

Other important Roman evidence are the *xeniai*, Greek term used to indicate still life: they were painted on the walls of the house and depicted the welcome gifts for guests; some of these frescoes are found in the villas of Pompeii in which are depicted figs, nuts, pears, cherries, grapes, honey, cheese and milk with their containers, game, bread and wine. Always Roman are the mosaic floors called *asarotos oikos* (floor not swept) that have spread from the second century. a.C., in which were illustrated the remains of banquets that were thrown on the floor; we have several testimonies preserved in Italian museums.

After the fall of the Roman Empire, representations of banquets became rare, in fact in the early Middle Ages food was considered a gift from God, the result of hard work and not a source of pleasure, so agricultural scenes such as the transformation of raw materials, wheat into bread, grapes into wine and olives into oil, are more common. It is necessary to wait for the Renaissance and, therefore, the Baroque period to see the representation of feasts, banquet scenes and laid tables; food became again the main subject of paintings from an aesthetic and chromatic point of view and in the balance of shapes. Paolo Veronese distinguished himself for the characteristic eurythmy of his dazzling colors and for the transparency of his atmospheres, which became a point of reference for subsequent 18th-century Venetian painting. In his works a subject is repeated: the dinner set in luxurious and animated palaces.

John and Paul; this scene is also set in a sumptuous residence, at the center of a portico surrounded by a crowd, together with Christ and the disciples there are servants, armed guards, children and animals, even a jester with a parrot, but all wearing clothes contemporary to the artist. The table is richly set with white and red wines in cups of the finest crystal, a tray with a whole chicken and lamb meat, other trays full of delicacies and a cake in the shape of a cross; it is a table that highlights waste and lust.

Clara Peeters, born in Antwerp in 1594, an exponent of the Flemish Baroque, with a limpid, realistic and careful style, portrayed natural reality in an almost deceptive way. The paintings of Peeters are the subject of different critical interpretations, some see references to the Last Supper narrated in the Gospel, others want to highlight the immoderate wealth of the tables of the bourgeoisie, beyond any interpretation, certainly gives us an interesting insight into the Dutch eating habits.

Almost three centuries later, Vincent Van Gogh painted out of inner necessity, while carefully observing contemporary artistic events, inventing his own technique in which he transfigured reality in favor of his own “ego”. In the last years of his life, before moving to France, emerges his great interest in the human being, he was interested in the meaning of existence more than narrating facts or describing places and painted it as he felt it. He was one of the most famous artists of the twentieth century, with Braque creator of Cubism, has represented a crucial junction between the nineteenth-century art and contemporary art. Picasso’s love for food and cooking had a constant influence, since his youth: it was one of his determining points, it defined his simple tastes and at the same time full of passion. In the Parisian period food remained a central element of his painting, at that time he frequented the restaurant “Le Catalan”, where they served Catalan specialties that he represented many times. Some of his most interesting works are those created during the Nazi occupation, a period in which good food was scarce, so Picasso transformed into art what he most wanted. Among others, we remember the painting *Still Life with Biscuits*, painted when he lived in the South of France: the style is his, but the composition refers to the genre painting that characterized the entire seventeenth century.

Daughter of the Mexican revolution, Frida Kahlo devoted herself to painting as a self-taught, continued to work alone in which the most congenial themes were the self-portraits of a violent and visionary realism and disturbing still lifes.

Although he was suffering he loved life and nature, painting it in his canvases: fresh flowers, fruit, intense colors and a climate of joy as in the days of celebration. One of her works is *La mesa herida*, a large table that revisits the iconographic theme of the Last Supper, inspired by Leonardo da Vinci’s Last Supper, where she represents herself and her guests: a skeleton playing with her hair, a pre-Columbian clay figure who lends



her an arm because she seems to be precisely armless, a grotesque creature that could be traceable to her husband Diego Rivera and her grandchildren, all around a table covered with bleeding sores with skinned human legs, made during the period of her divorce; certainly this is a work in which she represents all her pain.

Influenced by a violent expressionism highlighted a strong social denunciation in the post-war period, the themes he addressed have changed over the years, but despite the changing political situation he was always faithful to his principles, which made Guttuso a unified whole between man and artist. The artist constructs Palermo's Vucciria market as a dynamic place where "banniaturi" and buyers converse, a space in which the products for sale are displayed on the stalls, from the crowns of sausages to the offal, the bright red tomatoes, the rich variety of fish, the ox hanging from the hook to the fresh fruit; a wide range of appetizing and appetizing ingredients, in which Sicilian cuisine is rich, evoking the idea of life, society and food among people who buy the essential and sometimes the superfluous to feed themselves, but also to live with taste and satisfaction.

Food, therefore, is a universal expression that allows us to celebrate the traditions and identity of peoples: food brings to mind emotions, environments and seduction, the salt of life, where diversity is a challenge to give vitality to the history of humanity.

[NVC]

"Instafood". The food on our plates has always generated interest in our eyes, as has the ability to see waste as an opportunity. (photomontage: N.Canessa, 2021)

"Tiepolo and Raffaello at lunch". A large, rich table is always a place for conviviality and around the PORTable of the Leibniz University (Creative Food Cycle, 2019), people from different eras come together who know the power of food. (photomontage: N. Canessa, 2021)





WANTED

SOYA SAUCE

醬油



WHEN THE STREETS DON'T BACK DOWN IN FRONT OF THE TAKEAWAY SOY SAUCE, BUT SIDEWALK DOES!

“Food is in every place and in every age a social act” [Barthes, in Guigoni, 2009] with its own story, which is not different or less than other stories, rather, it flows in close harmony with them determining them and/or being determined by them [cf. Montanari, 2004].

The epidemic of Covid-19 has changed our way of relating to others and this has had significant consequences also on the behaviors related to our way of eating and the concrete act of eating: a true cultural revolution.

The biggest change we observed during the lockdown. Certainly the pandemic has brought the issue of health back into our lives. The food origin of the virus has worked on the common imagination and on the perception of food safety, becoming an accelerator of health food trends.

The return to self-made home cooking is a clear example of this, as well as a greater attention to the quality of what we ingest for a form of protection towards our body and our health.

If on one hand the virus has further incentivized organic and km0 diets, on the other hand it has also promoted a sort of “food autarchy” where every affected country supports its own products.

This social behavior is closely linked to the fact that short supply chains reassure the consumer because it is easier to observe the production process.

At the same time, however, the pandemic has re-promoted cer-

tain global behaviors to which world society was trying to give answers in terms of ecology and sustainability.

In fact, the use of plastic packaging has made a comeback in order to protect the product from external contamination while respecting the health of the consumer. In this way, many of the sustainable objectives proposed by the ONU 2030 Agenda and by the small and tenacious Greta Thunberg have been largely cancelled.

There are therefore two themes currently in vogue on the world food market: food safety and food security. The first concerns the health and hygiene of our food, the second, however, concerns physical, social and economic access to safe and nutritious food on a global scale.

The impact of food security also concerns issues such as sustainability, ecology and biodiversity, reconnecting to the “empty pantry syndrome”.

Food safety, on the other hand, is more typical of periods of tranquility and well-being. The concept of quantity-hunger and quality-healthiness-are indirectly proportional: if one decreases, the other increases.

These two food behaviors have brought back in vogue a *modus vivendi and operandi* closely linked to the home dimension with a consequent DIY food self-production. It is enough to think about the many tutorials circulated on the net related to bread making or the production of homemade cakes and pizzas.

This behavior is able to make each individual or family unit feel independent with respect to a social context experienced as dangerous, coping with a possible food shortage, taking care of their family-tenants and also has the purpose of controlling the growing social anxiety through a manual activity highly therapeutic.

In the pandemic era we have thus returned to a strong rediscovery of food and the sharing connected to it, as an allegory of life and of what keeps us alive.

The value and the time of family was rediscovered and as a consequence the dimension of food and conviviality were rediscovered as strictly intimate and domestic.

Promoted and at the same time made compulsory by the lockdown, this domestic dimension has created a *before* and an *after* with respect to the frenetic and dystopian times we were living.

The dimension of time has taken on a new connotation. The frenzy that used to spill out into the streets has practically disappeared, re-distributing itself in the nucleus of the house.

So in the deserted cities of the days of the lockdown, with streets without pedestrians and very few cars, the only frenetic inhabitants were a few cabs and ambulances, flanked by a new population that was growing by leaps and bounds: the riders of Just Eat, Foodora, Deliveroo, who sped through the streets on bikes and mopeds, exempt from any restrictions in force and ready for food delivery in any weather condition.

The ethical discourse regarding ordering food for the protection of the riders themselves would be a very interesting topic to explore, but certainly very long. And I don't know if I would be able to come to a brilliant conclusion.

If pre-pandemic ordering food at home was a widespread practice for years among millennials, during the lockdown it became a widespread habit even among the adult public. A new public who through this custom felt to bypass a sense of detachment and psychological and social isolation, being able "to continue to go" to restaurants and pizzerias sitting comfortably at home and allowing the restaurant market not to fail.

According to the Just Eat observatory, 34% of a sample of users had never ordered digital food delivery before. Of these, over 60% seem never to have felt the need, driven instead during the closing period by the impossibility of picking up the food at the restaurant (44%), a habit more than consolidated in Italy, but also by the lack of desire to cook (31%) and also with the idea of having a different lunch or dinner from the usual (29%) or treat oneself to a pampering (22%).

So the use of digital for home food orders is growing, especially in relation to digital payments, preferred by new users, bringing to 70% of the total transactions in digital, also due to a reduction of cash in terms of absolute values.

In this context, the use of the app to order, compared to the web, has also increased, reaching today 77% of consumers who use food delivery services via app.

The use of digital tools has also extended to new stakeholders. On the one hand, the app and technology market is expanding for customers who order food delivery, and on the other hand it is expanding for the restaurant world, which has discovered innovative ways of promotion and advertising through social media, from Facebook to Instagram.

Just Eat has in fact already made the new feature available on the social platform, allowing partner restaurants to link their Instagram profile to the menu of the restaurant on the platform.

So it's happened that not only franchises and well-known restaurants have used social media as a showcase and advertisement for their premises, but that even smaller businesses have been able to have the same possibility. A sort of digital resilience.

But thinking in environmental and territorial terms: how much will these socio-technological changes impact our future lives and our movement within a spatial and urban context?

How will the increasing number of bikes and motorcycles on the road change the redesign of transport and road design? How far will the sidewalk and our walking on it recede?

Or will the idea of the sidewalk already be outdated?

In America, DoorDash, a food delivery service launched in Palo Alto, California, in 2013, has begun using robots to bring meals



home from the kitchen to delivery drivers waiting in store parking lots to eliminate road congestion.

Who knows if the answer will be the spread of such parking lots or the replacement of current means of transportation with new ones that are less polluting, more efficient and less fuel-intensive. More importantly, how will they go about optimizing delivery times?

ASU urban planner David King recently studied how goods will move in the commercial areas of the future, looking at congestion to dwell time, from parking lot traffic to frequency of deliveries.

D. King is trying to get a sense of how city streets, coffee shops, and retail stores work, down to the common sidewalk walk.

More and more I wonder about the future of our sidewalk friend, now a recurring character within the dense theatrical plot of bikers and soya takeaway sauce.

In China, a country where \$31.9 billion was spent on food delivery in 2017 surpassing the entire economic output of Sweden that year...think about how many bikes and mopeds were traveling for home deliveries and how sidewalks were falling back in the face of zoning regulations and the new way of eating.

So it happens that streets known for “sidewalk” dining are succumbing to new zoning regulations and health and hygiene provisions, dictated by outsized commercial development in the case of the former and increasingly restrictive food safety measures in the case of the latter.

So it's not urban planners who are shaping the city, its streets and squares, but digital businesses that are coping with global changes of various kinds.

Changes that one wonders if they didn't start from the same spasmodic use of digital technology, opening up the classic question: which came first, the chicken or the egg?

The fact is that it is hitech that is redesigning the role of the street and the commercial environment, creating new types of restaurant, public space and human relations.

In China, the recent push to clean up city streets has further solidified malls as a major hub and attraction in terms of dining experiences. According to data from real estate company CBRE, there are now approximately 4600 malls and China has accounted for more than half of the world's malls built since 2015.

Doing a quick calculation we observe that if every restaurant in a mall has a food delivery service think of how many malls have quickly become dispatch centers for food delivery services.

A phenomenon of resilience of dystopian spaces already alienated from the urban context.

The city is filling up with spaces more like spaceships than real public spaces.

Think of the phenomenon of the so-called *dark kitchens* essentially, restaurants that never take customers but only produce

food for delivery, there are no waiters, only staff who receive orders over the phone and print out receipts for dishes.

So-called dark kitchens, in cities like Shanghai, tend to fill the “in-between spaces” of the urban landscape, when renting away from the urban center is cheaper and you’re closer to residential areas.

Where will the restaurant space we are used to end up? And what about the sounds and smells that spill into the streets from it? If we remove these spaces from the urban and street core, how much will the idea and the image we have of the city be modified?

In the collective imagination I suppose a more neutral space arises, with less perfumes and sounds-noises linked to the world of catering.

In the same way, the streets become less picturesque and more standardized on a cultural level.

Spaces are being redesigned in which online and offline experiences converge.

In the same domestic dimension, today closely linked to the choice of a private diet as Claude Fischler explains, digital and real experiences are converging, in which the digital facilitates the organization of the concrete act of eating as a functional and social operation.

In China, Hao Chushi is an app that allows you to hire a chef every time you host a dinner party.

Sign in via WeChat or Alipay, select your location and view the profiles of chefs in the area.

With just a few clicks, you can choose a chef based on their portfolio, select the cuisine and even ask the chef to purchase ingredients and bring his personal cooking utensils.

This operation has a very modest cost: 14 euros for a dinner for three people.

Observing the situation, it seems to me that the position of our beloved sidewalk is becoming more and more critical, and perhaps, at the end of this reading, it too will enter our homes to claim its role as a public space where once you could eat.

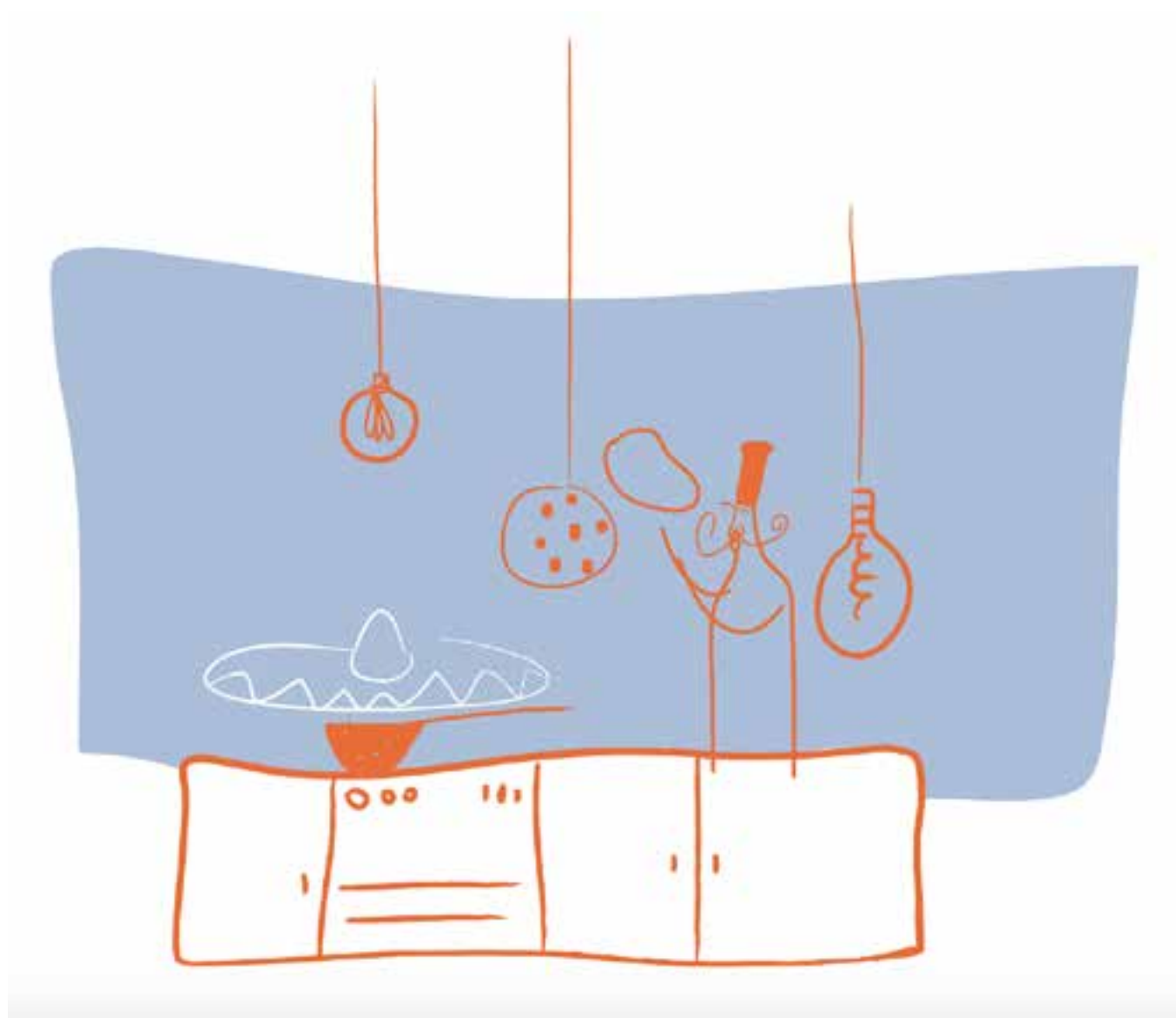
What is certain is that we will witness a radical change of scenery related to the consumption of food on the street and the spatial consumption of squares and places where in the past, not so long ago, people stopped to enjoy a good sandwich!

The *consumption of food* is in fact closely related to the *consumption of space* that gravitates around the act of eating.

This operation in turn is connected to the sounds that this act produces, to the network of relationships, images and scents.

If these sounds change... What voice will the city of tomorrow have?

Take into account not only the probable and future absence of sounds produced by restaurants and public spaces connected to



food, but also the new presence of sounds produced by new and efficient means of transport for deliveries.

Currently, Amazon, UPS, and numerous other parcel and shipping companies are investing in robots and delivery drones to overcome the problem of traffic congestion.

Such a choice implies that surely the city will emit new sounds: the hum and vibration of drones and robotic sounds that will perhaps represent more noise pollution for bats than for us.

If we think, moreover, of how many vehicles are in motion for each terrestrial at this moment and multiply this number for an approximate 741 million inhabitants of the European continent alone it will be easy to imagine how much the change of scenario will be recorded also at a sound level.

What about scents? What will happen to the scent of the succulent dishes of the restaurant or of the roasted coffee of the bars? Just about the scent of roasted coffee, Starbucks has chosen Shanghai for the launch of its second “experiential” store: The Roastery, where customers can take an augmented reality tour of the coffee brewing process.

Perhaps the streets will smell less and less but more and more so will “other spaces” in which to consume delivery food, spaces in which the olfactory, visual and sensory experience in general will be replaced by augmented reality. This is already happening... The technology of augmented reality has also been joined by that of live streaming, in order to increase the transparency of the production and buying and selling process.

Also in China, augmented reality has also spread to markets in response to the problem of mass migration from the countryside to the cities precipitating rural populations.

As a result, the government has promoted rural development, providing economic opportunities for those who have remained divorced from technology and in the countryside. The help comes through short-form videos and live streaming apps to be shown in markets.

Livestreaming becomes a new and direct channel to enable commerce between rural and urban dwellers, an excellent example of how technology can help farmers continue to live in the countryside and interact with potential buyers in the city at the same time.

Demand from the 24-hour food delivery market will continue to grow, spurred on by new and increasingly efficient means of transport for bikers and in some cases by the replacement of paper payments with digital payments. This phenomenon, a symbol of the happy growth of hi tech, is directly proportional to the phenomenon of the happy decline of the domestic dimension, where people self-produce food.

We book dinners from our cell phones and bake or make cookies at home on Sundays.

On the one hand the love for the domestic dimension as a substitute for the closed restaurant, on the other hand the desire

to escape from an environment that already sees us engaged in smartworking and video calls with family and friends.

Ael Thery, a food anthropologist who has been studying Chinese street food culture for years, says that “people take to the streets to escape from the homogeneity of habits and food options”.

It is no coincidence that for these reasons we go to restaurants, to escape from everyday life and in the case of multi-ethnic cuisine also a bit to travel spiritually to distant countries.

The desire to travel on the one hand, the fear of ingesting food whose origin is unknown on the other.

If food “represents the first vehicle on which cultures met, a common field of exchange, where the need for a primal instinct brings individuals together” [Di Renzo, 2015], where in the future will individuals come together?

Where will they relate face-to-face to escape probable urban homogeneity?

I wonder if this cultural and sociological shift will also have repercussions at the etymological level...will the word “compagno” derived from the Latin *cum-panis*: “to share bread with” still exist?

And if so, with whom will we share bread in the future? And in what space will we do so?

I wonder about the contrasts in this future scenario.

I’m curious to imagine what cities will look like, how they will function and what voice they will have, starting from our new way of eating and from the ethical-social values connected to it.

...In short, at present, the receding sidewalk is my only great certainty!

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***BREAK-
PERFORMANCE***

4

The Film Projection

Davide Rapp

Video artist and Architect / -orama.

FOOD IN MOVIES

Food is a prominent feature of our lives; as a result food scenes are used by filmmakers to forge a connection between the world they've created and the audience. In addition to this, the culinary issues often carry a metaphorical potential, thus becoming a carrier of information regarding the cultural and socio-political context in which the films were made.

Food in Movies is a 30 minutes long video specifically edited for *Creative Food Cycles*. It features 90 scenes that revolve around the act of making or consuming food. Each scene lasts 20 seconds and shows a different food-related situation in a continuous flow of images, sounds and actions. What follows is the detailed transcript of the used scenes.

The Big Chill, 1983. Michael sees Sarah staring the open fridge. "That's the problem with these things, you have to watch them every minute" he says.

Career Opportunities, 1991. Jim's father raid the fridge for a mid-night snack.

Le charme discret de la Bourgeoisie, 1972. Don Raphael open the fridge, take out a plate of veal and sit at the table.

Les Vacances de Monsieur Hulot, 1953. Hulot reaches over the table for the salt shaker and the person sitting next to him accidentally cleans his mouth on Hulot's sleeve.

Pretty Woman, 1990. Barney gives Vivian an etiquette lesson: "Dinner napkin laid gently in the lap".

Play it Again Sam, 1972. In a Chinese restaurant Allan tries to impress Sharon by demonstrating how to shovel rice into his mouth with chopsticks.

Domicile Conjugal, 1970. Antoine becomes uncomfortable with sitting down on the floor to eat, Japanese-style, at Kyoko's apartment.

The Man Who Knew Too Much, 1956. Ben, seated awkwardly at a low table in an Arab restaurant, can't break bread.

Gesù di Nazareth, 1977. Jesus breaks the bread and states: "This is the bread of Life".

L'Albero degli Zoccoli, 1978. A newlywed couple dine in a convent while the nuns intone a chant.

Disobedience, 2017. At a funeral banquet a Jewish community pays tribute to its deceased Rav.

Eastern Promises, 2007. In old lady celebrates her birthday together with her adoring family.

Hannah and Her Sisters, 1986. Hannah's father makes a toast to his daughter who prepared the Thanksgiving meal.

La Terrazza, 1980. A group of Italian politicians and intellectuals have a party.

Il Gattopardo, 1963. Sicilian aristocrats mingle with military heroes and revolutionaries in an opulent celebration.

La Terra Trema, 1948. In a poor Sicilian village, women prepare fish for consumption.

Tout Va Bien, 1972. The camera moves along a supermarket's checkout aisles.

Animal House, 1978. Donald steals from a supermarket by filling Larry's sweater with meat.

Napoleon Dynamite, 2004. Napoleon works in an intensive chicken farm.

Esterina, 1959. Esterina visits an intensive chicken farm. "Why so much light?" she asks. "Because they stay awake day and night and eat all the time" replies the farmer.

Miracolo a Milano, 1951. An old toothless man eats a whole chicken in front of an enthusiastic crowd.

Cast Away, 2000. Chuck eats freshly caught raw fish.

The Killing Of The Sacred Deer, 2017. Wife advises husband to use a sharper knife to cut fish.

Che?, 1972. Eccentric guests of a seaside villa cook fish for the American tourist Nancy.

Ripley's Game, 2002. Tom praises the meat he cooked:

"The meat is fantastic, our cook Maria was once quite intimate with the butcher".

Le Rayon Vert, 1986. As the host sets down a plate of pork chops, Delphine interjects that she doesn't eat meat.

Women In Love, 1969. Rupert explains: "The proper way to eat a fig in society is to split it in four, holding it by the stump and open it".

Into The Wild, 2007. McCandless bites into an apple and says "You're like a thousand times better than any apple I've ever had".

La Famiglia, 1987. Paolino states: "Watermelon is a desire that is never fulfilled".

Caravaggio, 1986. A young man greedily sucks lemons.

Hong Kong Express, 1994. Cop 663 eagerly eats 30 cans of pineapple.

Back To The Future Part II, 1989. Grandma Lorraine puts a small, dehydrated pizza into the hydrator and then it comes out normal size and ready to eat.

Bitter Moon, 1992. Oscar prepares breakfast for his lover using the microwave.

Phantom Threads, 2017. Reynolds invites the waitress who serves him breakfast to dinner.

The Birthday Party, 1968. Meg makes a delicious breakfast of fried bread for her husband Peter.





Call Me By Your Name, 2017. Olivier joins the Perlmans sitting at the garden breakfast table.

Il Secondo Tragico Fantozzi, 1976. Fantozzi accidentally knocks over the table where Miss Silvani and Calboni are sitting.

La Strada, 1954. A widow states: "I always eat on my feet. Who's going to keep the house going if not me?"

Kauas Pilvet Karkaavat, 1996. Waitress Illona improvises herself as a cook.

The Cook, 1918. Fatty performs astonishing tricks, flipping pancakes behind his back and tossing utensils and such.

C'era Una Volta, 1967. The king's cook doses the ingredients like an alchemist.

Big Night, 1996. Primo and Secondo cook the 'timpano', a complex baked pasta dish.

Tutto A Posto Niente In Ordine, 1974. Cooks and waiters move nervously around the kitchen.

Eat Drink Man Woman, 1994. Mr. Chu returns to his former workplace in a restaurant to help out.

The Cook The Thief And Her Lover, 1989. Georgina is fascinated by the great cuisine of the restaurant "Le Hollandais".

Il Sorpasso, 1962. Bruno happily wanders into a restaurant kitchen to sample the food.

Tristana, 1970. Tristana and the bell ringer eat the traditional 'migas'.

Lo Chiamavano Trinità, 1970. Trinità devours a huge pan of beans.

Paulet Au Vinagre, 1985. Inspector Lavardin eats fried eggs with paprika.

Breakfast At Tiffany's, 1961. Holly brings the salad to the table as the pressure cooker gurgles, exploding.

Le Vacanze Intelligenti, 1978. Remo and Augusta eat two giant sandwiches in Piazza San Marco.

Mon Oncle, 1958. A group of boys are happily gobbling down beignets from a street vendor.

The Graduate, 1967. Ben and Elaine eat at a drive-in restaurant.

Dragged Across Concrete, 2018. Brett listens to Tony loudly chewing on his sandwich in the car.

Red Desert, 1964. Giuliana hungrily eats a half-eaten sandwich.

Crazy Stupid Love, 2011. Jacob in a slick black suit eats a slice of pizza at the mall.

Witness, 1985. John takes Rachel and her son Samuel out for some hot dogs.

The Avengers, 2012. The Avengers are gathered around a table eating fast food.

The Breakfast Club, 1985. Andrew takes two sandwiches out of his bag, a bag of potato chips, an apple, a banana, cookies and a carton of milk.

The Lunchbox, 2013. Saajan extracts the 3-tiered lunchbox from its container and opens the boxes up one by one.

Le Week-End, 2013. An English couple enjoy a dinner in a Parisian restaurant.

In The Mood For Love, 2000. Su and Chow dine together in a restaurant in Shanghai.

Two For The Road, 1967. "What sort of people sit in a restaurant and don't even try to talk to each other?" queries Joanna. "Married people" quips Mark.

Marie Antoinette, 2006. Marie Antoinette and Louis XVI eat silently as the crowd screams outside their palace.

Rosemary's Baby, 1968. As they eat take-away food on the floor, Rosemary says to her husband: "Hey, let's make love".

Mrs. Doubtfire, 1993. Daniel and his kids eat take-away food in their new apartment.

American Beauty, 1999. Burnham family eat in a formal dining room with candles lit and dinner-table music.

Les 400 Coups, 1959. Mrs. Doinel makes soup and her husband serves it to their son Antoine.

Jeanne Dielman 23 Quai Du Commerce, 1975. Jeanne and her son finish their soup.

La Peau Douce, 1964. Nicole places a breakfast tray outside the bedroom. A cat arrives and sniffs around it.

Death Becomes Her, 1992. Helen plunges into a state of depression eating ice cream surrounded by her cats.

Puberty Blues, 1981. A teenager voraciously eats leftover pizza, cookies and ice cream.

Bianca, 1984. Michele relieves his post-coital anxieties by eating an oversized Nutella jar.

La Stanza Del Figlio, 2001. After his son's death, Giovanni eats a solitary supper of bread and cheese.

Jamon Jamon, 1992. Conchita sniffs garlic to remember the smell of her lover.

A Ghost Story, 2017. M. eats an entire pie as she mourns the loss of her beloved.

The Handmaiden, 2016. Late at night Sook-Hee is crying while sucking a lollipop.

Rocky, 1976. Early in the morning Rocky walks over to the fridge to crack five raw eggs into a plastic cup.

Desperately Seeking Susan, 1985. Roberta is breaking eggs along with Julia Child on TV.

2001 A Space Odyssey, 1968. Astronaut Bowman eats his meal of shapeless food watching the news on TV.

Conquest of Space, 1955. A handpicked crew eats pills while the other astronauts get real meat. One states: "All the nourishments you need: no mess, no butter and no waste".

Sleeper, 1973. Miles, disguised as a robot butler, is fighting against a chocolate putting that is growing out of control.

The Party, 1968. Bakshi is reunited with his lost shoe served on a silver platter by a waiter.

The Gold Rush, 1925. The Tramp gets so desperate that he cooks a shoe as if it were a normal meal.

The Apartment, 1960. C.C. Baxter uses a tennis racket to strain spaghetti.

C'eravamo tanto amati, 1974. Nicola prepares spaghetti for Luciana and declares: "Spaghetti! The ultimate comfort food."

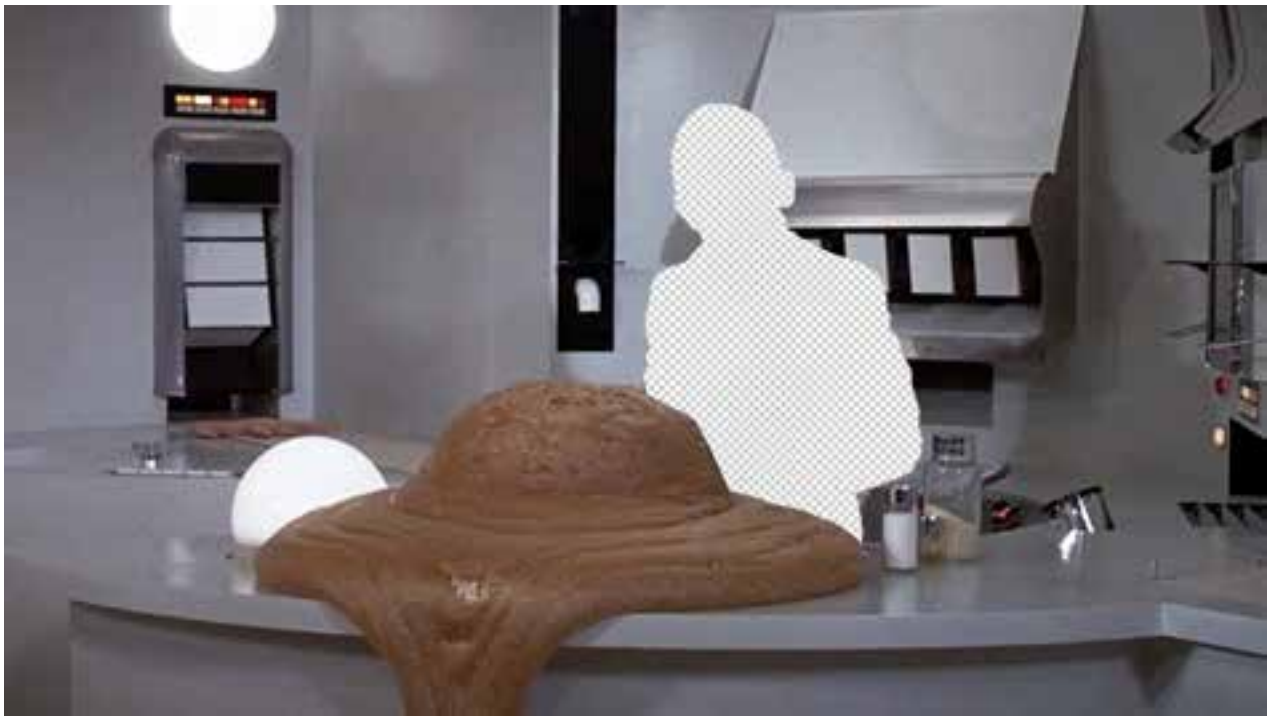
Somewhere, 2010. Johnny sits at the kitchen table and eats his plate of spaghetti all alone.

City Lights, 1931. In the ballroom the tramp accidentally eats the streamers with his spaghetti.

Elf, 2003. Buddy transforms leftover spaghetti into a sugar-packed meal with chocolate, marshmallows and candies.

Un Americano A Roma, 1954. Nando spits out his American-style meal and tastes a plate of pasta: "Maccarone, you provoked me and now I'll destroy you!".

Aprile, 1998. Moretti joins Luchetti on the set of a pasta commercial. "I don't understand the reason why you should be doing commercials" one says. "There's nothing unusual in it, there's plenty of filmmakers, even important ones, who, once in a while, do commercials" answers the other.



VIII

VIII
BACKSTAGE

SUQ Workshop and Festival Exhibition

October 24th – November 4th, 2019

In the framework of the CFC activities and in parallel to the celebration of the Genova Festival della Scienza, the meeting workshop *Food Shakers | Food Remakers* and the *CFC GOA-SUQ Exhibition* have been oriented to explore new interactive ways to enhance circular economy in food production and everyday life activities. Designed innovative prototypes were shown within the 2019 edition of SUQ Intercultural Food, Art&craft, Music Festival (October 24th – November 4th 2019) involved with Mediterranean food culture and performing arts; an opportunity to share with citizens a new kind of eco-processes through the immediacy of the artistic language.









STUDIO

GENOVA

UN MERAVIGLIOSO VIAGGIO
TRA LA GENTE
DI TUTTI I CONTINENTI

Don Andrea Gallo

































BIORIGAMI



v.pot



Goa CFC-FESTINAR

December 11th, 2020

The 1st CFC International on-line Festival (GOA-CFC *Festinar*) was celebrated the past December 11th, 2020 as a digital event with multiple on-line guests, creators and shared performances and a recorded edition with product exhibitions and actuations done in the abandoned heritage building, Albergo dei Poveri in Genoa, involving citizens, cultural associations, local authorities, and professional with the aim to demonstrate the potentials of recycling materials (including food wastes) as drivers for performative creation, social cohesions, and new economies for the city.





































CFC (Creative Food Cycles) covers different scales and levels of action (and a socio-cultural activism) from production to distribution, from distribution to consumption, from consumption to disposition (and re-production) trying to promote a strategic integration, innovative and fresh at the same time, from the territorial and urban scale to the scale of the creative-social celebrating event or creative-design product, in which the factor “food” as a productive indicator takes on a priority meaning as an inducing agent of new sustainable and innovative processes at the same time.



**Università
di Genova**



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