



DIPARTIMENTO DI SCIENZE  
ECONOMICHE E AZIENDALI  
'MARCO FANNO'



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

# *Retrovation or retro-innovation*



Leica Camera

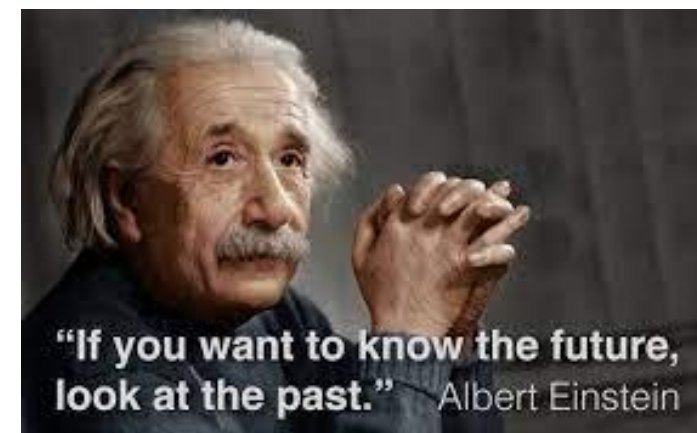
Vinyl Record Player +  
Bluetooth Speaker



Pokemon Go - App

**"Retrovation"** or **"retro-innovation"** is a concept that refers to the reintroduction or revival of older methods, technologies, designs, or practices in contemporary contexts.

- It involves looking to the **past** for inspiration and bringing elements from previous eras into the present, often with the aim of combining **historical qualities** with original **advancements** and **innovation**.
- It can be about **balancing** the revival of largely forgotten past practices, products, ideas and/or technologies with the need for progress and novelty in innovation.



Retrovation can refer to a **product**, **service** or a **production method** that is based on **forgotten resources** and **broken chains** or **lost trails**.

Retrovation then means an **innovative translation** of the object from the past in such a way that it will be appropriated in a **new use**. Retrovation is at that point an **innovation** that uses historical knowledge (Suominen and Sivula, 2016).

There are two kinds of retrovations:

- 1 - we may connect an object of the past to a **new purpose** and thus, create a retrovation.
- 2 - we would be able to revive or resurrect an artefact or a practice in the **new context** in such a way that it maintains its connection to the original purpose of the artefact (Sivula, 2012).

## Inspiration from the Past:

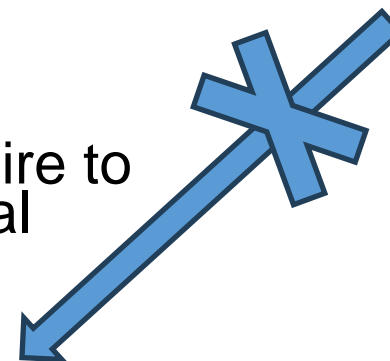
Retrovation involves drawing **inspiration** from historical periods, styles, or techniques. It may be driven by a desire to **re-capture** a particular aesthetic, functionality, or cultural aspect that was prevalent in the past.

## Modern Adaptations:

The reintroduced elements should be not merely replicas of the past but are **adapted** to meet **current standards, preferences, or technological requirements**. This fusion of the old and the new results in a **hybrid approach** that combines nostalgia with contemporary advancements.

## Nostalgia and Authenticity:

Nostalgia often plays a significant role in retrovation. People may be drawn to the familiarity and sentimentality associated with **older** practices, objects, or designs. The quest for authenticity and a connection to a **perceived** simpler or more genuine past is a driving force.





## Sustainability and Craftsmanship:

In certain cases, retrovation aligns with sustainability goals. Embracing older, often more manual or artisanal methods may be seen as a response to concerns about mass production, environmental impact, and a desire for more **sustainable** and **ethical** practices.

## Cultural and Lifestyle Choices:

Retrovation extends beyond specific industries and can influence various aspects of culture and lifestyle. Whether in fashion, design, entertainment, or agriculture, individuals may choose retrovation as a way to express their **identity**, **values**, or a particular **lifestyle**.

## Consumer Preferences:

Consumer preferences often drive retrovation. The popularity of **vintage** or **retro-styled** products indicates a demand for alternatives to the rapid pace of technological change, embracing items that evoke a sense of history and timelessness.



## Tech Gadgets:

- **Mechanical Keyboards:** Mechanical keyboards, reminiscent of older typewriters, have seen a resurgence in popularity due to their tactile feedback and durability. They combine a classic typing experience with modern technology. They can be more efficient (e.g., professional gamers).
- **Analog Watches:** Despite the prevalence of smartwatches, analog watches have maintained their appeal. Some watch enthusiasts appreciate the craftsmanship, design, and simplicity of traditional timepieces.



## Architecture and Design:

- **Mid-Century Modern Architecture:** The mid-century modern architectural style from the mid-20th century has experienced a revival in recent years. Characterized by clean lines, open spaces, and a focus on functionality, this style is embraced for its timeless appeal.
- **Retro-Inspired Home Decor:** Home decor trends often include retro-inspired elements, such as furniture, wallpapers, and color schemes reminiscent of specific decades like the 1950s or 1970s.





## Entertainment and Media:

- **Retro Video Games:** The popularity of retro gaming consoles, classic video game re-releases, and the use of pixel art in modern games showcase a strong trend of retrovation in the gaming industry.
- **Film Photography Apps:** Some photography apps intentionally mimic the characteristics of analog film, allowing users to capture digital photos with the aesthetic qualities of older film stocks.



## Automotive Design:

- **Classic Car Revivals:** Some automobile manufacturers produce modern versions of classic car models, combining the nostalgic design of older vehicles with modern technology, safety features, and performance.
- **Electric Bicycles with Vintage Design:** Electric bicycles designed with a vintage aesthetic, resembling classic bicycles, appeal to individuals who appreciate the retro look but desire the convenience of electric propulsion.



## Educational Tools:

- **Analog Educational Tools:** Some educators incorporate traditional teaching tools, such as chalkboards or abacus counters, into modern classrooms to create a balance between old and new educational methods.

## Communication and Technology:

- **Mechanical Typewriters:** While digital word processing is standard, some writers and enthusiasts use mechanical typewriters for a tactile and distraction-free writing experience.
- **Vinyl-Inspired Bluetooth Speakers:** Bluetooth speakers designed to resemble vintage vinyl records combine nostalgic design with modern wireless technology.



## Food and Beverages:

- **Craft Brewing and Artisanal Foods:**  
The rise of craft breweries and artisanal food producers represents a retrovation in the food and beverage industry. Consumers seek unique and handcrafted products with a focus on quality.
- **Revival of Traditional Cooking Techniques:** The resurgence of interest in traditional cooking methods, such as fermentation, pickling, and preserving, reflects a desire for authenticity and a connection to the past.



## Fashion and Design:

- **Vintage Clothing:** The popularity of vintage clothing, which includes clothing styles from past decades, is a form of retrovation in the fashion industry. Consumers often appreciate the craftsmanship, unique designs, and sustainability aspects of vintage fashion.
- **Retro-Inspired Design:** In product design, there's a trend of drawing inspiration from retro aesthetics. This could involve creating modern gadgets or furniture with a design reminiscent of a bygone era.
- **Vintage-Inspired Eyewear:** The reintroduction of eyewear styles from past decades, such as cat-eye glasses or round frames, is an example of retrovation in the fashion industry.





## Board Games and Retro Gaming:

- **Board Games:** The resurgence of interest in tabletop board games, including vintage games, represents a form of retrovation in entertainment. People are drawn to the social and tangible aspects of board games.
- **Retro Gaming Consoles:** Nostalgia-driven interest in retro gaming consoles, such as the re-release of classic gaming systems, indicates a desire to revisit the gaming experiences of the past.



## Home Appliances:

- **Retro Kitchen Appliances:** Some companies design kitchen appliances with a retro aesthetic, combining vintage looks with modern functionality. Examples include refrigerators, toasters, and mixers with nostalgic designs.
- **Retro-Inspired Radios:** Modern radios designed to resemble classic, mid-century models provide a nostalgic touch to home decor while incorporating modern radio technology.



Retro-innovation or retrovation should not be interpreted as a simple re-use of something from the past, but as a proper **innovation** inspired from the past: key process of adaption to meet current standards, preferences, or technological requirements.

The **distinction** lies in the degree of creativity, adaptation, and integration of historical elements into contemporary contexts.



## **Re-use of something from the past:**



- This involves the direct application or re-implementation of a past concept, object, or practice without significant modification or adaptation.
- The focus is on replicating or reintroducing the original elements with minimal changes, emphasizing authenticity and preservation of the historical form.
- Little to no innovation or modernization occurs, and the primary goal is often to evoke nostalgia or maintain a connection to the past.
- Examples could include the reissuing of classic books, the re-release of vintage video games, or the straightforward reproduction of historical fashion designs.

## Proper Innovation Inspired from the Past:

- This involves a more **creative** and **transformative** approach, where elements from the past serve as inspiration for the development of something **new** and **adapted** to contemporary needs.
- The emphasis is on combining **historical** aesthetics, principles, or concepts with **modern** technology, functionality, or design.
- The result is an **innovative product or concept** that retains a connection to the past but introduces novel elements or improvements.
- Examples could include the integration of vintage design elements into modern technology, the adaptation of traditional craftsmanship techniques using contemporary materials, or the reinterpretation of historical architectural styles in new constructions.



## Mobilising the Past: Towards a Conceptualisation of Retro-Innovation

Lukas Zagata\* , Lee-Ann Sutherland , Jiří Hrabák and Michal Lostak

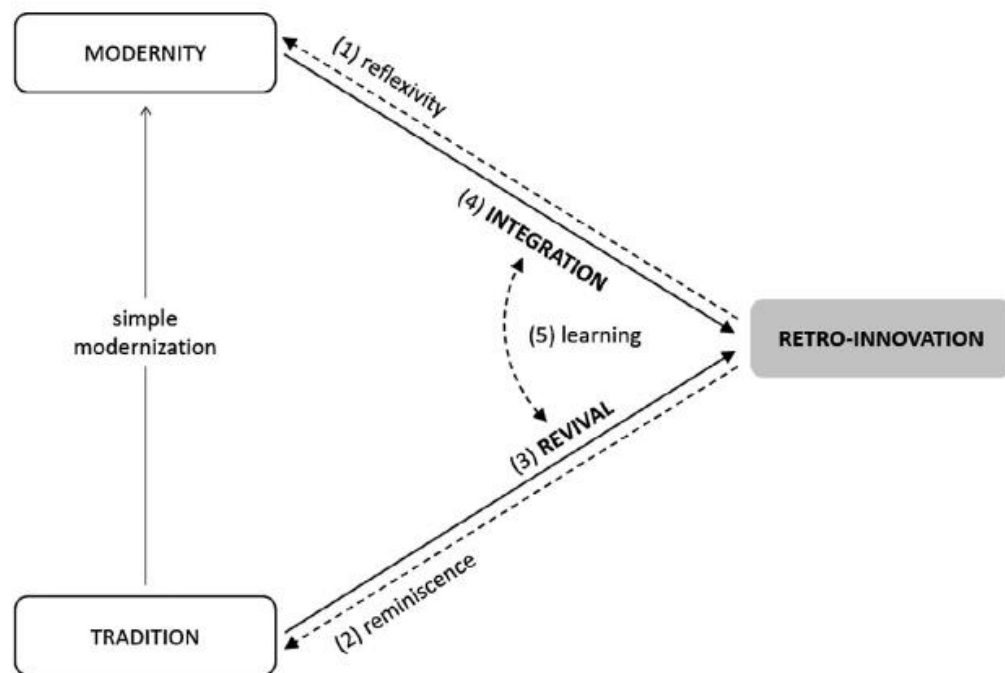
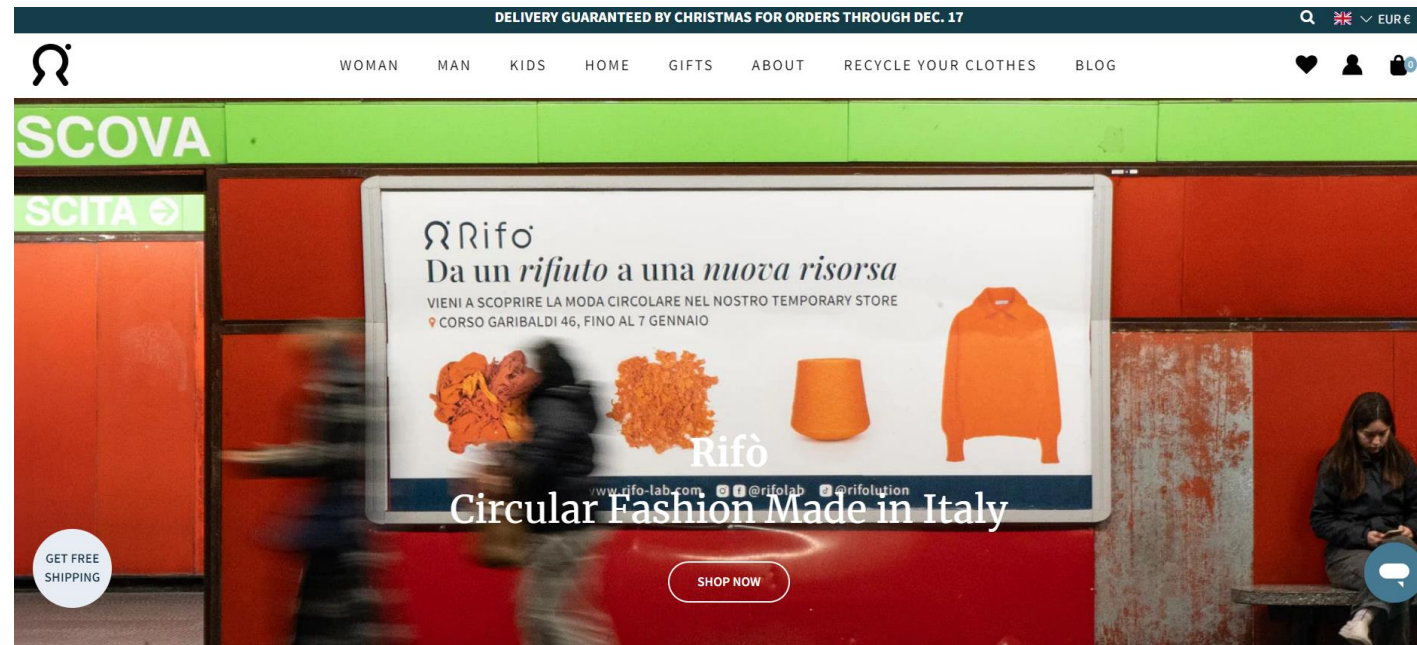


Figure 1: *Formation of the retro-innovation process*

### Abstract

In this article we develop a conceptualisation of retro-innovation, simply defined as the purposeful revival of historic practices, ideas and/or technologies, and apply this conceptualisation to the analysis of the development of the organic farming movement in the Czech Republic. Within the agricultural sector, we argue that retro-innovation represents a critical practice, undertaken to counter modernisation trends. Retro-innovation processes are thus often embedded within social movements. We identify four key mechanisms of retro-innovation: reflexivity, reminiscence, revival, integration and learning. Drawing on 25 key informant interviews, we demonstrate how the growing critique of socialist collective farms in the 1980s coalesced with new policy supports in the 1990s to enable re-learning and revival of traditional farming practices, situating organic farming approaches as the revitalisation of positive historical practices. However, as the Czech case demonstrates, the numerous options for and social memories of past innovations can lead to fragmentation of efforts and products.

- Sustainability opportunities mainly when taking inspiration from the **environmentally friendly** and **pro-societal** sustainable practices of the **past**.
- Prioritizing an **efficient** and **responsible** use of resources, reduce waste, adapt to contemporary needs, foster place-based solutions, enhance resilience, and support the adoption of circular economy principles.
- Encouraging the **exploration** and **integration** of ideas, knowledge, and practices from diverse fields and disciplines.
- Its **interdisciplinary** nature can strengthen collaborative strategies by fostering cross-pollination of ideas, bridging expertise gaps, promoting innovative synthesis, enhancing problem-solving capabilities, and increasing adaptability.



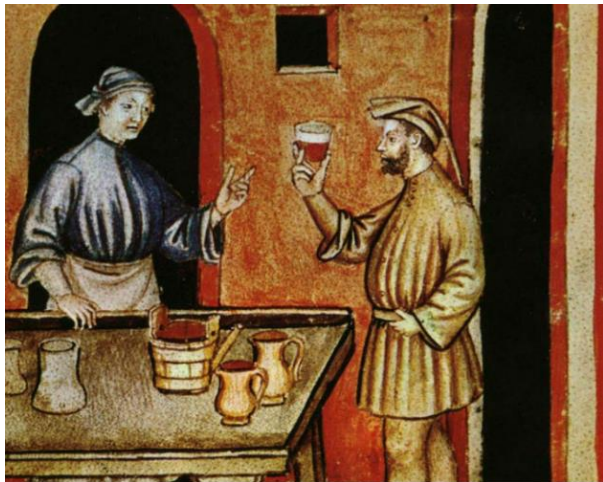
The profession of *cenciaiolo*, the artisan who selects textile scraps and waste for recycling, is an old tradition that has existed in Prato for over 100 years. The practice of recycling textile material initially had nothing to do with sustainability, but rather it was common sense to not waste the already existing material that still had potential. It was about creating a more cost-effective textile product compared to new ones, especially in the case of fibers like wool and cashmere.

This concept has always fascinated us. From the beginning, **Rifò has set the goal of transforming waste into new resources**, and this is why **we value this unique and ancient tradition**. The work of the *cenciaioli* seems almost incredible today, in the world of artificial intelligence, big data, and automation.



Food and wine production inspired from ancient times (e.g., romans, middle-age) with adoption of modern technologies.

For example, retrovation from ancient wine production techniques with modern technologies.



Windcatchers or wind towers originated in ancient Persia and used to create cross ventilation and passive cooling in buildings.

Today they can be used for mitigation of climate change as they can reduce the buildings energy consumption and carbon footprint and for adaptation to climate change because they facilitate cooling in a warmer climate.

Several places in ancient and today's Iran and Middle East



Zion Visitor Centre,  
Zion National Park, Utah, USA



Kensington Oval Stadium,  
Bridgetown, Barbados





## **The Italian startup DMAT presents a revolutionary and sustainable concrete, inspired by a recipe from the “antica Roma”. The idea was born thanks to a chemical-archaeological study published by Science Advances magazine**

**DMAT technologies** respond to the new needs of a market, that of concrete, which today is worth around 650 billion euros and which is called upon to respond to the urgent challenge of decarbonising its production processes, among the most impacting on the planet: its the industrial chain is in fact responsible for 8% of CO2 emissions. Concrete is man's most used material, 33 billion tons of it are produced every year, 18 times the weight of global steel production and eight times that of all automobiles produced in history.

At the base of the innovative self-healing concrete, a study on the Pantheon in Rome, built 1905 years ago and survived intact to the present day after facing earthquakes, fires and bad weather. Investigating the secret behind the resilience of the concrete with which the Pantheon was built was a research begun in 2017 and led by chemist Admir Masic - associate professor of Environmental Engineering at the MIT-Massachusetts Institute of Technology, the most avant-garde university in the research and development of materials.

Starting from this study published by the authoritative magazine Science Advances, which identified the elements that have allowed its extraordinary longevity, the Italian startup DMAT, a deep tech company specializing in cutting-edge materials, has begun to develop an innovative technology to create new types of durable and sustainable concretes, without increasing production costs.

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### Abstract

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### Retrovation – the Concept of a Historical Innovation

14.12.2016

[historical innovation](#) [retrovation](#)

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*The overview introduces the concept of “retrovation.” The concept refers to an innovation that utilizes knowledge concerning the past. A retrovation is an innovation created for the intentional use of historical knowledge in the revivification of an object or for providing a new meaning or purpose for it. The aim of the overview is to reflect upon the theoretical as well as more practical possibilities of retrovation, and to create an overview of the various examples of retroventions. [1]*

## (Dis)continuity and advisory challenges in farmer-led retro-innovation: biological pest control and direct marketing in Latvia

Emils Kilis , Anda Adamsons-Fiskovica , Sandra Šūmane  and Talis Tisenkopfs 

Baltic Studies Centre, Riga, Latvia

### ABSTRACT

**Purpose:** To advance the discussion of retro-innovation and highlight the implications this has for the provision of agricultural advice and the role of advisors.

**Design/Methodology/Approach:** 70 interviews with farmers and 10 interviews with experts on biological pest control and direct marketing in Latvia were conducted.

**Findings:** Biological pest control and direct marketing in Latvia are practices that challenge existing conceptions of retro-innovation as they exhibit incremental development, while still combining old and new knowledge in a way that transforms farming practices. They also underline the importance of continuous learning and exchange within the farming community, which supplement the knowledge and advice provided by formal advisory organisations, indicating that the practices are highly dependent upon locally embedded sources of knowledge and a balance between formal instruction and informal peer-to-peer learning. This allows them to retain their dynamism and evolve, although more targeted advisory assistance would help to address issues that prevent biological pest control and direct marketing from being more widely adopted.

**Practical implications:** This paper highlights the importance of locally embedded forms of learning and advice provision. A better understanding of these can provide a more solid basis for interventions that aim to encourage widespread adoption of sustainability-oriented practices.

**Theoretical implications:** This paper improves understanding of retro-innovation processes by drawing attention to the disparate motivations driving innovation and the role of continuity in retro-innovation.

**Originality:** This paper advances the discussion on retro-innovation by looking at examples that expand upon existing approaches to it and highlight specific advisory challenges.

### ARTICLE HISTORY

Received 10 November 2020

Accepted 7 October 2021

### KEYWORDS

AKIS; retro-innovation; pest control; direct marketing; informal learning; learning networks

## Responsible Management as Re-enchantment and Retrovation

*Roy Suddaby (main text)*

*Oliver Laasch (commentary)*

**Abstract:** We recognize the over-rationalized nature of contemporary management theory and practice as one of the main roots of irresponsible management. Responsible managers, therefore, first and foremost have to internalize that managerial myths of rationality are not above and beyond human agency. This insight may empower responsible managers to engage in the institutional work of re-enchanting the economic world. Crucial tasks of such institutional work include both the creation of a responsible management profession and a change of the corporation's institutional character. Both institutionalization projects hinge on realizing managers' and corporations' entangled positive roles in the service of society. We discuss craft modes of production as an alternative to the rationalized bigger-is-better management paradigm. We stress the need for similar responsible management innovations that break with current paradigms of an over-rationalized economic world. Craft modes of management exemplify the potential of 'retrovation', novelty through the revival of managerial practices from a less-rationalized economic past.

## HIGHLIGHTING THE RETRO SIDE OF INNOVATION AND ITS POTENTIAL FOR REGIME CHANGE IN AGRICULTURE

Marian Stuiver

### ABSTRACT

*The potential impact of farmer's innovations for the development of food regimes is the topic of this chapter. Two case studies analysed from the perspective of strategic niche management show that there is niche formation visible as an alternative to the dominant modern food regime. These innovations are based upon the active rediscovery of marginalised and often forgotten knowledge and result in effective linkages between old and new knowledge. This retro side of innovations can have a large potential for developing viable alternatives for rural development. Social scientists play an important role in the understanding of the retro side of innovations and its potential and influence on the prevailing knowledge and information systems inside and outside of the scientific domain.*

*d*SEA

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