Review

Building the Foundation for a Necessary Debate: Projectification of Society

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Abstract: Projectification is the phenomenon whereby activities traditionally carried out in a functional manner are approached as projects. It also includes the transformation processes of organisations as project management and non-functional structures. It is a phenomenon that has become important in recent years. It has brought great benefits to organisations and public administration, and it has optimised the use of economic resources. On the other hand, projectification also brings undesirable effects, known as the dark side of projectification. Several years after the first time projectification was coined, a deep debate about projectification has been necessary to make the most of all possible levels. This research, through a bibliometric analysis and a review of the most outstanding literature, identifies those aspects that need to be discussed and where there is room for improvement. The results, with an important set of disadvantages of projectification, sometimes not taken into account, especially at the individual level, establish a solid basis for the debate on projectification and the possible points of improvement from all perspectives (individual, organisational and societal). These perspectives should be observed as different but complementary, forming a holistic understanding of projectification.

Keywords: projectification; society; project value; advantages and disadvantages

1. Introduction

In the 1990s, the term "projectification" was first coined as a form of business organisation: an amalgam of "project" and "organisational transformation" [1].

There are many other ways in which "projectification" can be defined. Depending on its components or even the cause that drives it, some of the definitions are as follows: "activities organised in other ways are transformed to become projects" [2], "contexts are adapted to fit project work" [3], "projectification is more than a formalisation of project management. It refers to a major organisational transformation that organisations still struggle with at the project and organisational levels" [4], "projectification is promoting the project as the entity of interest" [5].

The fact is that, in recent decades, the project-based approach has been gaining prominence at all levels. The number of projects has increased in organisations [6] and has become a new pattern of development in modern organisations [7].

Therefore, it can be indicated that when talking about projectification, two phenomena are included at the same time: the increase in the number of activities managed as projects and the change in the organisational structure with projects as the unit of action.

From the point of view of management, including organisational sciences and institutional theory, projectification can be studied by analysing the interactions between temporary and permanent organisations [8]. In addition, project management has been found to be the engine of change and innovation [9].

Administrations have not been unaware of this trend and, in recent decades, have chosen to define their budgets in the short and medium term by formulating annual and multi-year projects [10,11]. This circumstance is really important since other organisations tend to implement ways of working through the administration of the well-known "mirror effect" or "imitate attitude".

This growing prominence of project-oriented management has been translated into studies of the phenomenon at all levels [12,13]. Projectification at different levels has led some authors to speak of the concept of "project ecology" as a conceptualisation encompassing "social layers on multiple scales, from the micro-level of interpersonal networks to the meso-level of intra- and inter-organisational collaboration to the macro-level of wider institutional settings" [14].

At the individual level, several authors argue that "projects have become intrinsic to our lives" [15] with all their advantages and disadvantages [5] (the dark side of projectification). These studies are mainly based on the analysis of job quality perceived by workers in terms of continuity, anxiety, control of activities and other aspects related to temporary positions [16].

In the case of organisations, projectification brings changes in a way that means they can manage human resources, the definition and assignment of tasks, their organisational structure and labour relations [17].

Projectification also transforms the economy of the states in which it takes place. This modification affects productive structures and their relationships, with temporality acquiring a key role [18].

After a certain period of time, all processes of change, as is the case with projectification, produce reactions to their consequences (especially negative ones). Some of these ideas seem to represent counter-reactions to projectification as it is understood today; see, for example, the notions of "deprojectification" [3] and "post-project society" [13]. What we might see in these ideas is an embryo of yet another image of (de)projectification as a trend or counterreaction. It is necessary to know the shadows or the dark side of the projectification.

From the earliest studies to the most recent publications, there has been an important evolution in the definition of projectification, how it occurs, and its drivers, as well as its consequences (positive and negative) at different levels.

The body of knowledge available on the process of projectification has been enriched because the initial approach, strictly from the sciences of project management, has been supplemented by contributions from the perspective of business, sociology, organisational theory, etc. [19]. This has made it possible to have a more complete and holistic knowledge of a phenomenon that is conditioning economic development at all levels.

For this reason, it is considered of interest and time to know the evolution of research works related to projectification as well as its main findings. This will make it possible to establish a solid and holistic basis for the debate on convenience, or otherwise of projectification, making it possible to identify those aspects of improvement at different levels and allow the academic community and project management practitioners to make proposals for improvement, allowing the permanent structures of society and the temporary structures (projects) to add up in an effective and efficient way, reducing the negative consequences to a minimum.

Therefore, the aim of this research was to obtain knowledge on state-of-the-art projectification based on the research carried out in recent years. The results obtained were then analysed methodically in an attempt to conclude the main trends, shortcomings and future research needs, highlighting those results that allow consistent conclusions to be drawn.

2. Methodology

In order to achieve the stated objective, the methodology developed consists of carrying out an updated review of the projectification research evolution through a bibliometric analysis providing objective criteria on the trend in its evolution [20,21]. Once this analysis

has been carried out, a bibliographic review of the articles highlighted in terms of citations and an average number of normal citations, as well as other articles cited in them, was performed in order to find out how projectification arises at different levels (analysing the main drivers) and its consequences (both positive and negative). The results of bibliometric analysis constitute an added value for the literature review and make possible a formal debate about projectification and the forward roads to follow to improve how project management impacts all levels.

The bibliometric analysis illustrates and evaluates up-to-date research and delivers guidance on future directions for researchers and practitioners by presenting a comprehensive insight into specific research areas [22]. Marsilio et al. [23] noted that bibliometric methods aim to quantify the intellectual structure of a given research area as this approach reviews the latest progress in the subject field by quantitatively assessing the literature. Hjorland [24] mentioned that bibliometric statistics are very useful in developing research policies, recognising trending terms, and structuring knowledge. This approach allows the creation of a link between the authors and the scientific articles, which allows their similarities and semantic differences to be signalled. Bibliometric methods create a big portrait of knowledge at both the micro-level (authors) and macro-level (countries) and offer more knowledge and evidence about the relationship among various research directions [25].

This section analyses and classifies the research on "Projectification" until 2022 by applying the quantitative method of bibliometric analysis. To reach this aim, four core steps were followed (Figure 1): (1) searching for keywords on Scopus and the Web of Science database; (2) selecting only the journal articles and conference types of publications, (3) removing duplicates and articles that lacked "Projectification" as their main topic, and (4) performing bibliographic coupling among the items. This resulted in 877 articles that fit our criteria.
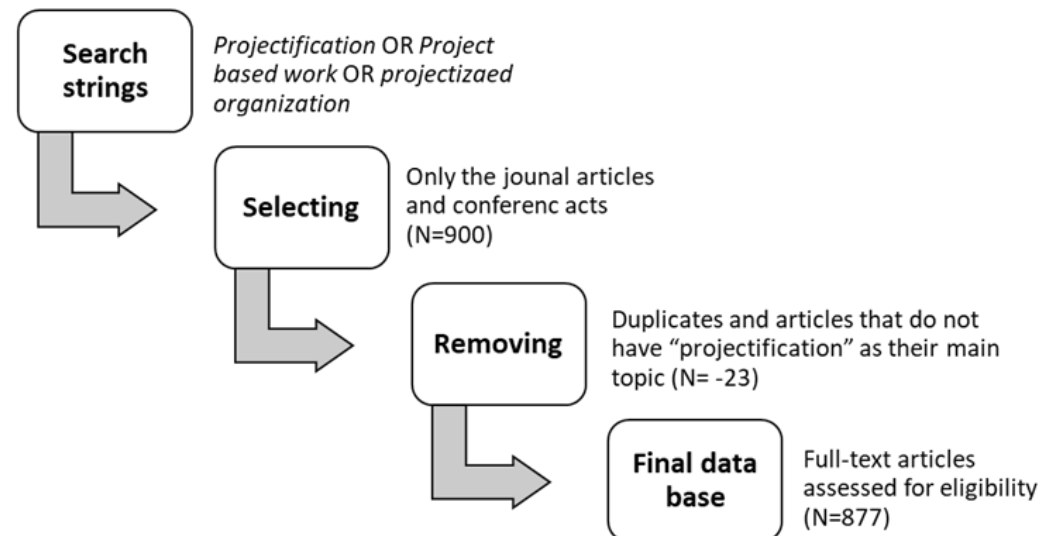

Figure 1. Steps followed to choose the full text included in bibliometric analysis.

Currently, there are different tools for bibliometric and sociometric analysis with different characteristics and possibilities, and it is necessary to decide in each analysis which ones are best suited to the objectives sought [26,27]. Biblioshiny-bibliometrics and VOS viewer tools have been selected for the present work.

The most widely used criteria in the bibliometric analysis are citation, which can inform about citation trends in a specific research discipline and illustrate the direction of recent research by focusing on the employed keywords [28]. In this paper, frequency analysis was carried out to find the most cited papers and the most commonly occurring keywords using Biblioshiny-bibliometrics software [29].

Additionally, community detection, a procedure that identifies geographic locations, trends, and other parameters of a large group of elements that interact with each other, was employed to examine the intensity of the relationship between elements. VOS viewer software was used to analyse the bibliometric networks and plot the science mapping that identifies the network community, and generate distance-based maps based on co-occurrence data [30].

On the basis of the previous studies, which have shown the existence of the phenomenon of the projectification of societies and the general preoccupation of scientists with their research, we used the literature review with the aim of analysing this phenomenon and its consequences (positive and negative) deeply in order to work on possible areas for improvement.

The literature review constitutes an original and valuable work of research in and of itself [31]; even though it provides a base for a researcher's work, it creates a solid starting point for all members of the community interested in a particular area or topic [32].

The most-considerable documents in terms of citations and average normal citations, as well as others cited in them, were used to carry out a literature review about projectification.

A review of the final literature selected made it possible to identify the most prominent facts.

3. Results

The bibliometric analysis and the literature review described above were applied to perform an exhaustive analysis of the research field of projectification and society. For this goal, firstly, study checks on the research trends of projectification were conducted, and once the status of this trend and its main research clusters were known, the consequences of this phenomenon were studied deeply.

The results are reflected in the following sections.

3.1. Bibliometric Analysis: Science Mapping

This section examines the aspects and results of bibliometric analysis. These include (i) the descriptive analysis of published research in projectification; (ii) frequency analysis; and (iii) science mapping.

3.1.1. Evolution of Projectification Research

The results demonstrate that the projectification topic has grabbed the attention of academics since 1995. Although some papers were published between 1995 and 2006, only since 2007 has the literature started to be more assertive about the projectification topic. Figure 2 shows that the number of publications has increased with time and reached its peak of 141 published articles in 2021. The last ten years were mostly productive, where a rapid increase in the annual production of papers can be observed in Figure 1, indicating projectification to be a trending topic.

Over the whole period under review, the International Journal of Project Management published most of the papers in the field of projectification, 126, with the highest number of citations, 4966, followed by the International Journal of Managing Projects in Business, 77, and the Project Management Journal, 50, as revealed in Table 1.

3.1.2. Keyword Analysis

The keywords analysis recognises the general concerns of the scientists and their studies. In this section, an analysis of the keywords and their frequency of occurrence in the reviewed papers is presented.

The results displayed in Table 2 show the main keywords associated with the theme of projectification. The key topics in Table 2 and Figure 3 constitute the structure of projectification. The results make it clear that project management is the first topic (300 occurrences) that the most relevant keywords evolve around. Links between keywords indicate a correlation between parameters, and link thickness represents link strength. The

total link strength (TLS) was used to quantitatively evaluate the links. Results with a higher TLS indicate higher collaborations.
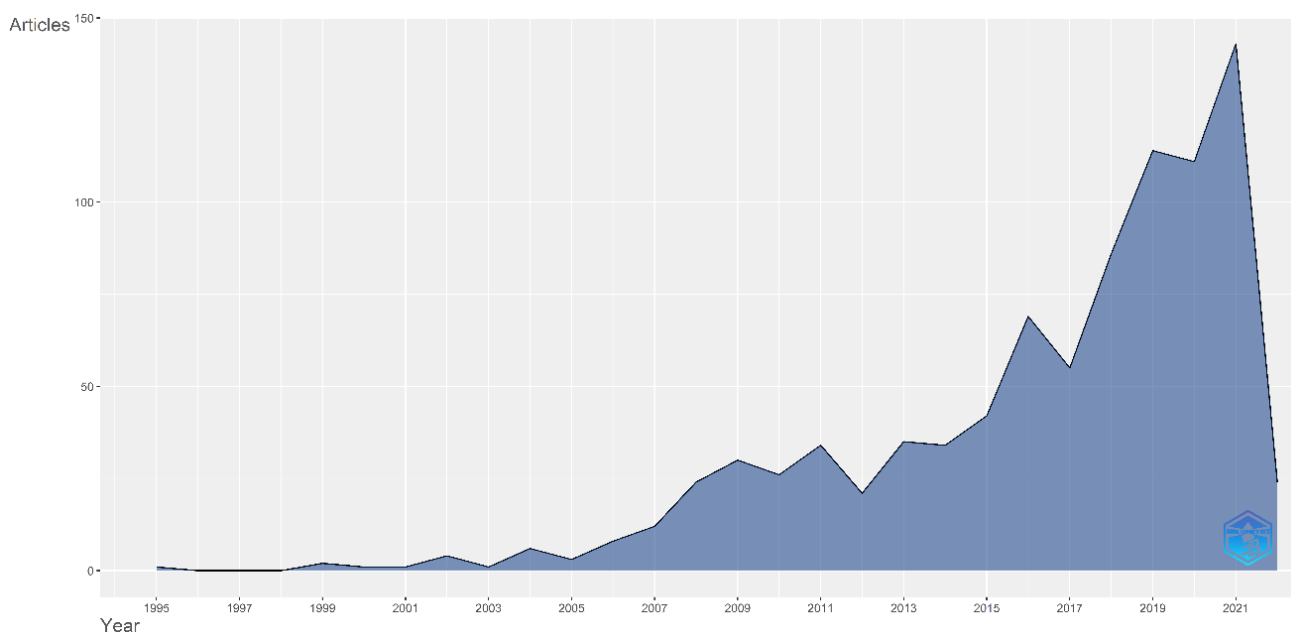

Figure 2. Annual scientific production of papers.

Table 1. Journals with the highest number of documents on projectification.

Journal Name	Nof Articles	Citations
International Journal of Project Management	126	4966
International Journal of Managing Projects in Business	77	617
Project Management Journal	50	1221
Research Policy	10	589
Organisation Science	6	535
Scandinavian Journal of Management	5	605
International Journal of Project Organisation	5	508
Organisations Studies	5	478
Academy of Management Review	5	462
Academy of Management Journal	5	382

Table 2. Most occurring keywords (N: times and TSL).

Keywords	N	TSL	Keywords	N	TSL
Project management	309	1121	Automobile Industry	64	69
Innovation	209	888	Management	64	67
Projectification	189	633	Sustainable development	53	58
Human	155	622	Temporary organisation	53	48
Projects	131	521	Learning	51	61
Knowledge management	131	477	Management practice	50	88
Organisational framework	120	425	Project managers	50	74
Program management	119	311	Research	47	77
Decision making	105	284	Governance	47	41
Conceptual framework	104	254	Information management	47	80
Human resource management	104	201	Sustainability	47	51
Information systems	88	178	Complexity	44	77
Investments	85	119	Financial data processing	39	115
Construction industry	83	142	Project governance	39	41
Governance approach	81	126	Risk assessment	39	59
Humans	79	95	Leadership	35	58

Table 2. *Cont.*

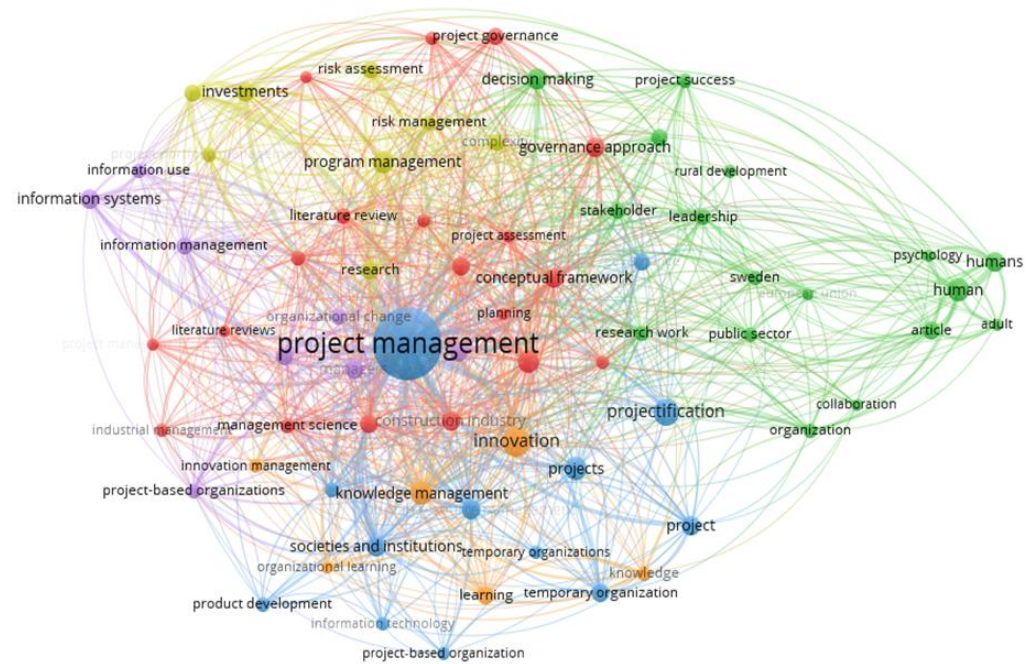| Keywords	N	TSL	Keywords	N	TSL
Managers	74	94	COVID-19	35	56
Project	74	59	Organisational change	31	24
Societies and institutions	71	119	Stakeholder	30	51

Figure 3. Keywords co-occurrence.

Figure 3 illuminates six keyword communities in the form of a network with different colours. The threshold of co-occurrence for these keywords was set to at least 15 times. Each node is a keyword, and the link thickness between the nodes represents the degree of connection.

As shown in Figure 3, the very significant clusters in addition to project management are human, information systems, innovation, program management, and the organisational framework. These communities provide a general indication of the fields that are related to projectification, which are diverse.

Analysing the first cluster in red colour, is related to project governance, governance approach, industrial management, management practices, program management, conceptual framework, organisational framework, and the construction industry [19,33,34]. This cluster portrays projectification as a managerial approach. It is an organisational restructuring methodology that boosts the prevalence of organisational projects. The results indicate that organisations are now redefining their business structures by adopting project management practices.

Analysing cluster 2, presented by the green colour, it is related to humans, stakeholders, leadership, decision making, adult, neoliberal, and psychology [35,36]. This cluster portrays projectification as an individual state. Many researchers revealed an interest in the effects of projectification on individuals, such as changes in work relations and personal life due to improved involvement in project work [37]. This cluster focuses on the role and character of individuals in the project and focuses on the social behaviour and the underlying taken-for-granted beliefs, schemas, and values of people before making any restructure of change.

The project management cluster shown in blue, represents projects, society, institutions, temporary organisations, and project-based organisations [36,38]. Cluster 3 portrays the project organisational approach of projectification and indicates that organisations have been turning from operations to project management as part of their competitive advantage.

Cluster four (yellow colour) focuses on the efforts needed for projectification to occur. The main keywords in this cluster are program management, investment, financial data processing, project portfolio management, research, risk assessment, and risk management [3,39,40]. This cluster indicates that firms are setting up their strategic objectives and delivering them with a portfolio of programs and projects, indicating the wide shift towards the use of portfolio management to structure and manage investments at an organisational level.

Examining the keywords in this cluster, it becomes evident that where projects become a governing form of organising, project management research likewise emanates to contain an inquiry into the management of bundles of projects, such as programs and portfolio management.

Moreover, in line with the increasing systemic level of projectification, considerable organisational endeavours are necessary to boost project success. It is common for institutions to embark on larger identification and a proper application of project organisational forms, which is followed by employing more program and portfolio management activities. Therefore, program, investment, and portfolio management were found to be the main keywords in this cluster as they indicate the effort needed by organisations to reach projectification.

Cluster 5 (purple) focuses on information systems (IS): information uses information management, project-based organisations, and managers [2,3]. This cluster focuses on information system use and management as an important tool to provide managers with decision-making support for planning, organising, restructuring, and controlling projects. Caniëls and Bakens [41] used structural equation modelling to examine the importance of information management on projectification and found that the use of project management information systems was beneficial to managers.

Nowadays, most of the new firms are project-based, whereas older established companies have suffered spectacular changes to become accustomed to the recent market situation. New technologies are needed in companies to restructure their organisational logic and to be able to deliver.

Finally, Cluster 6 (orange) includes keywords related to innovation, innovation management, organisational learning, learning, sustainable development, sustainability, COVID-19, knowledge, and knowledge management [42]. This cluster shows that there was a focus in the literature on the importance of spreading knowledge and awareness and on the importance of teaching practitioners about the shift and spreading needed information. This cluster portrays projectification as a societal structure change or a trending solution. It is seen as the lasting consequence of implanting project practices in social structures.

3.2. Literature Review Results

This section presents the literature review results related to projectification and society, its levels, and drivers (including project value generation), as well as the advantages and disadvantages, analysing the works of the authors who have contributed the most to this research according to their production of publications detected in the biblimetric analysis.

As we have seen above, the growth in the number of projects affects all levels and organisational models, which makes it necessary to analyse the effects of projectification in very different areas and with different points of view, as well as to know the advantages and disadvantages in each case, so that lines of work can be proposed to benefit from the advantages detected and to avoid or reduce the disadvantages.

For this study, projectification will be considered, including two phenomena: the increase in the number of activities managed as projects and the change in the organisational structure with projects as the unit of action.

This definition includes all the most important studied proposals and makes it possible to understand all the possible consequences related to growing projectification around the world at different levels.

3.2.1. Levels of Projectification

In light of the results of the research on projectification, it can be concluded that it is a complex phenomenon which affects a multitude of levels and areas and can therefore be studied at different levels, which are always interrelated [40,43]:

- Micro (dealing with the individual);
- Meso (organisations);
- Macro (industries and sectors);
- Mega (societies, countries, supranational organisations);
- Meta (relations and trends transforming global social structures).

When analysing the effects of projectification at each of these levels, very different consequences can be drawn.

At the micro-level, one could consider the modification of personal working conditions, the different training needs of the workers, and, among other consequences, the affiliation to temporary structures linked to the duration of projects in which the worker is involved [2,5,11,44,45].

Some authors state that successful citizens are adaptive, flexible, and connective team players, able to generate enthusiasm and handle multicultural inputs, prioritising availability, employability, and new projects over social stability and lifelong plans [46]. This circumstance can be seen as a risk and vulnerability for project-based work [2,33,45]. In this sense, Ballesteros-Sánchez et al. [44] detected an increase in burnout rates in the group of project workers, which was derived from the difficulty they encountered in separating work from private life, this being a "dark side" in the tendency of projectification. Along the same line, the project-based option fits well into the enterprise culture since it adapts to prevailing market conditions [47].

At the meso level, the main consequence would be a change in the organisational structure of companies and institutions. The transformation would be one from functional to project-based structures. This is a change in mindset that not only reorganises the permanent structures of companies but also distributes decision-making capacities within the company. In this way, projects become a class of assets from which values can be claimed [48]. Project value has gained both prominence and volume in the last twenty years, including creation, co-creation, delivery, and the capture of value [6,49]. The projectification of a company can have an important impact on its pattern of internationalisation in innovation, as it is an important vector for successfully implementing the most advanced internationalisation strategies and innovation processes, such as the autonomy and empowerment of project functions; the location and integration of teams; project-to-project learning processes, among others [38].

At the macro level, more global transformations are taking place, affecting the forms of production that are taking place in the different production fields. There is also an important change in the way all the agents involved in the sector relate to each other [40]. Projectification is not only taking place in typical project-oriented or project-based industries such as construction, aeronautics, or software industry but also in the public sector [10], in policy implementation [50], in performing arts or scientific research [51], and has observed an expansion of the concept of projectification to all parts of private and societal life [15].

At the mega level, society has been involved in a total transformation that forces a change in thinking, to adopt a common language based on project management, and to control almost all its economic activities based on the achievement of the objectives set for each project, programme, or portfolio. The link between society and the economy arises immediately, and this second subject has been studied by some authors [18,52,53].

Finally, at the meta-level, there has been a global transformation happening in all countries and economies [10,11,54]. Any type of relationship, be it economic, political, social, etc., would be carried out under the framework of project, programme, and portfolio management.

It is worth mentioning that distinguishing between the levels is somehow artificial because the levels are tightly linked. This is mainly because the upper levels serve as a context for lower-level actors. As generally known, the upper levels influence the actors on lower levels through policies that form the environment. At the time, the lower levels are (and increasingly) influenced by the upper levels. [55].

3.2.2. Drivers behind Projectification

Projectification comes to be realised by the intervention of different agents and drivers who manage, in one way or another, the number of projects that increase and the permanent structures that migrate temporary structures focused on the management of the project's objectives, all of which are limited in time.

Therefore, drivers make possible an increase, in absolute terms, of project-based works, activities and social relationships. Some authors have classified the drivers depending on their pull or push nature [10]:

1. Project approach inclination (pull drivers). If projects are seen as an approach to achieve something or to be efficient, it could be labelled as pull thinking. There is a vision (or a desire) that pushes a person to advocate a project approach. The driver may be that projects have been labelled successful and, therefore, the realisation comes that the project idea should be promoted in general.

2. Enforced project procedures (push drivers). Push thinking is different in the sense that the project becomes the working procedure. Your environment—your superiors—push an employee to apply formal project procedures or project management principles to have things completed.

In both cases, push and pull drivers can, moreover, be of an internal or an external nature [56]. Internal factors are directly related to characteristics of the politico-administrative system, while projectification caused by external factors can appear, for instance, in response to crises or global trends.

All the positive aspects of projectification provide a reason to support the process, and this is the sense used in some research work [17]. However, the concept of the driver used in this research implies direct participation in the process, either through pulling or pushing actions. The literature review has made it possible to identify the main drivers that, individually or together, are responsible for the increase in any of the cited components of projectification.

Firstly, one of the most powerful drivers when talking about transforming society is education. Influencing education and how future generations understand, approach, and solve their problems is the most effective way to bring about major changes in society [56]. If the project management way of thinking is introduced as a regular and effective way of working, the likelihood that future workers will use them increases exponentially.

In recent years, Project-Based Learning has been introduced as a teaching methodology. This has been conducted at practically all educational levels, especially at higher levels (university studies) [57]. The advantages of Project-Based Learning have been demonstrated in several studies, both in improving students' knowledge and skills [58,59]. It is, therefore, reasonable to assume that one of the reasons for the increase in the number of projects and the transformation of organisations towards a project-based structure is due to less resistance on the part of the workforce. This lower resistance may be because new generations of workers are more familiar with the language and way of working in project management (due to the education and training they have received).

The second most powerful driver is project-value creation. One definition of value creation related to projects places their social value at the centre. In this manner, the creation of value for a project takes the form of an agreement between most of the stakeholders involved in the development of the project [60].

How value creation occurs through a variety of relationships among the core team of the project and the rest of the stakeholders has been studied by some authors [61–63].

Therefore, the relationship between project-oriented management and the degree of projectification in society is immediate. In addition, value creation applies to a different level (as we can expose in the case of projectification), such as the micro-level (individual and group), mesa level (organisation), and macro level (including network, industries, and finally, society) [64,65].

Additionally, and equally important, it is essential to identify the relationships between temporary (project) structures and permanent (organisational) structures to be able to realise and enhance the value of the project throughout its life cycle. The link between temporary and permanent elements is essential for value creation to be oriented towards the strategic objectives of the company and to be able to realise the maximum value as expected [66].

If there is one circumstance that gives meaning to the process of projectification at different levels, it is the fact that projects create value. However, some authors also point out the circumstances under which a project can destroy value [2,33,45].

How public policies are developed can be another important driver of projectification. The management of EU funds is a clear example of this, and as a consequence, the European Union has been described as one of the main sites for, and push factors of, projectification [43,67,68]. A total of 60% of the budget is managed through different project funding systems [69]. OCDE is another example of how public policies can promote project management as a more efficient way to manage funds [70].

At the organisational level, one main driver is internal complexity [71]. The same authors stated that external pressure is another driver that changes the organisational model into a project-based structure: "External pressure in these results may represent access to knowledge or collaboration in a wider network, strategic business, and customer benefit expectations, and possibly also isomorphic pressures from institutions in the same area or industry that can be connected with the adoption of the organisational innovation". In this case, the market or competitive pressure is the pushing driver of projectification.

Other drivers that pull the process of projectification increase the number of projects or change the organisation's imitation attitude, attempting to copy from the most successful cases (making the most of other's innovation processes) just for fashion/modernity (in this case, the process of projectification has not been pre-evaluated by the actors and they just use the project-based approach because it looks modern).

The post-industrialisation of societies creates more complex tasks, new technologies that create new forms of collaboration as well as changing values of the new generation "Y" that may foster and transform project management in the future [72]. New technologies include the massive use of data. This smart use of data removes disconnected silos, reduces uncertainty, and gives real-time data that are able to make proactive and effective decisions, spot issues before they occur, and innovate by being proactive, not reactive.

A group of possible drivers that some authors call mediators [73,74] includes government agencies, industrial associations, trade unions, professional associations, entrepreneurial firms, and consultants.

As Wagner et al. [75] state, "mediators play a central role in this context, establishing long-term networks, linking networks and individuals with each other and thus creating the basis for projects".

One of these mediators is the project management associations that also influence the projectification of society [75]. A multitude of actors are involved in this process, starting with the project professionals who, integrated into organisations of a greater or lesser size, transfer the project-based approach, the culture, and the way of thinking that support it and, in short, help to transform their environment by carrying out the necessary changes [74]. Project Management Associations carry out training, normative, international networks, etc., that play a role or are micro-drivers of projectification.

3.2.3. Projectification: Advantages and Disadvantages

As with all organisational and management proposals, projectification has positive and negative aspects, affecting micro and macro levels, from individuals to society.

Based on the SLR, the advantages and disadvantages of the projectification process have been identified and are summarised in Table 3. This table has been developed considering the most frequently cited articles and avoiding the duplication of concepts, even though they are presented in different wordings.

From the literature review of the advantages and disadvantages linked to the process of projectification shown in Table 3, the main and first conclusion that can be drawn is that it is at the level of the individual that the greatest number of disadvantages of the transformation of day-to-day life are suffered by the individual. The working conditions, the uncertainties due to the time scales of commitment, and the continuous change in the working environment (space, colleagues and context) can lead to a loss of job quality and even stress and general health problems.

On the other hand, it seems clear that it is the organisational level that benefits most from the generalisation of projectification, which I understand to be a process of optimising the organisational model and trying to adopt more flexible and dynamic structures that are capable of adapting to the market and its environment in a more immediate way. However, this level is not free from the possible drawbacks derived from projectification that can lead to inefficiency in the operation and the development of unnecessary work for the achievement of the company's objectives.

Table 3. Advantages and disadvantages of projectification depending on the perspective.

Perspective	Advantages	Disadvantages
Individual	Potential for autonomous work organisation; new forms of work can bring advantages for knowledge workers, opening up new possibilities for self-realisation [51].	Working on projects can be subject to different sources of complexity [76]
	Successful management of relationships between the project team and other stakeholders [40,77].	Projects foster precarity both because of the rigidly structured and disciplined way in which project management is organised [45].
	Use of modelling in work to optimise duration, cost, quality, and risk [78,79].	Vulnerability by letting some elements of life be destroyed [5].
		Uncertainty about the close future after finishing the ongoing project [16].
		Project-based work has five sub-stressor components for the employees [80].
		Project professionals often do not take advantage of the benefits of such high job autonomy and instead prioritise work over their health [81].
		Emotional consequences of the projectified work, portraying projects as emotionally charged and potentially addictive and harmful spaces [35].
		Negative impact on the well-being of workforce (psychological issues) [82].
		A projected work life makes jobs more precarious and drives the segregation of labor [83].
		Control mechanisms over the self—responsibility of project managers [84].

Table 3. *Cont.*

Perspective	Advantages	Disadvantages
Organizational	Easy adaptation to market conditions [47].	Danger of re-bureaucratisation, neglecting the need for the integration of projects into programmes or portfolios, limited time for knowledge development, overwhelming deadline stress, and lack of trust and social continuity [36].
	Distribution of decision-making capabilities within the company and resulting value creation [85].	Costly and inefficient use of resources since several resources may be duplicated on different projects. Limited opportunities for knowledge sharing and professional growth since team members are dedicated to one project at a time [86].
	Enhancing organisational performance, innovation and competitiveness of enterprises [87].	Creates potentially negative—situations where projects do not support development but become a profitable business for the 'project class' [88].
	Optimal, effective, and efficient use of resources. Knowledge retention and learning from failure [89].	Projectified support organisation often means a step further away from influence, careers, and the decision-making strategic apex for the individual [90].
	Allows a flexible and dynamic organisational design suited to cope with trends such as globalisation, servitisation, knowledge-isation and digitisation [36,91,92].	
	Render agility and innovation through a cost-effective work mode, reducing bureaucracy and allowing better managerial control [93,94].	
	Tool for implementing strategic changes in business [95].	
	Projectification is a cornerstone for the public sector to learn and adapt over time to change and contribute to the success and benefits of a wide range of projects as a "strong owner" with a wide range of project capabilities [96].	
Social	Transforming reality within sustainability [9,77,97].	Projectification in local government makes bureaucracy appear to be battle bureaucracy with more bureaucracy. Project practices encourage bureaucratic logic, although in the name of "the project" [98].
	Adoption of a common language based on project management and the link to society and the economy [18,52,53].	
	Consequences of project work compared to non-project work are visible at the macroeconomic level and have predominantly positive effects [91].	
	Generating enthusiasm and handling multicultural inputs, prioritising availability, employability, and new projects over social stability and lifelong plans [46].	
	Effective management in governmental organisations and institutions, providing them with an appropriate method for policy implementation [43,99].	

Any process that arises with the aim of optimising processes and organisations can end up applying the maxim "do more with fewer resources" in a way that produces undesired effects in the organisation: stress, reduction in the quality of work, a real reduction in productivity, among others [100].

Finally, at the societal level, there are few references to the effects of the projectification of society. This may be due to the fact that the necessary studies and interference to obtain solid conclusions require work at the macro level, which to date has not been identified in the literature. Only a few studies have been started, such as those that have attempted to establish the relationship between development and the degree of projectification, but in any case, with a really limited geographical scope [53].

What is clear is that, in view of the number of entries in Table 4, the phenomenon of projectification at different levels needs to be adequately studied and monitored, as many references point to negative and undesirable effects, especially at the individual level. Although the first studies, whose seed was planted by Miller, focused especially on projectification as a model of organisational transformation, it is clear that studies and research on the sociological, labour and individual level need to be developed since any transformation at a higher level, directly and indirectly, affects workers (the cascade effect between the components of the different levels presented).

Table 4. Characteristics of the various level and perspectives of projectification.

Level of Analysis	Perspective	Focus of Projectification	Implications
Micro	Individual Approach	The consequences of strengthening project discussions on individuals	An overwhelming dialogue with many drawbacks
Meso	Organisational approach	A restructuring plan that aims to improve the frequency of projects in an organisation	A constructive approach that empowers flexibility and cooperative understanding
Macro	Organisational approach	An organisational proposal to improve projects in a sector or industry	A constructive approach that empowers flexibility and collaboration in each sector
Mega	A social structure change	The lasting consequences of implanting project procedures in society	An inevitable solution with both advantages and disadvantages
Meta	A social structure change	A change in the experience of work–life, and countries	A trend that profoundly changes society with complicated outcomes

4. Discussion

4.1. Bibliometric Analysis Discussion

The results reveal that studies on projectification topics have grown steadily over the years from 1995 to 2015 after that and show a rapid increase in the number of publications tackling the studied topic. This increase expresses itself in various ways, as it has led to an expanded range of research areas. This interest is closely related to the growing number of projects in all organisations [6] due to the intervention of both internal and external agents and drivers [10].

Investigations on the topic started using a qualitative approach and then shifted to include more quantitative analysis (as the keywords show). Adding to the above, the cooperation among authors outlines the bibliometric networks of projectification through several parameters, whereas the examination of the citation network designates a variety of topics in this research domain, such as the construction industry, automotive industry, project management (business) and health system. These various topics reveal the widespread nature of the studied subject and demonstrate a broadening of disciplinary interests. The fundamental reason for the conceptual diversity in this field can be found in the growth of the number of projects affecting all organisational levels and models [40].

This fact makes it necessary to analyse the effects of projectification in very different areas and with different points of view.

Keywords are organised into six clusters (Figure 3), each focusing on project governance, human beings, project management, programme management, information systems and innovation.

Regarding project governance, Hedborg Bengtsson et al. [34] examined how organisations could best orient themselves toward projectification and developed a conceptual framework that focused on the importance of project governance as a central issue. Müller et al. [33] proposed a framework that was structured by the concepts of governmentality and the governance of projects. Wagner [19] examined the impact of projectification on societal developments in Germany and found that almost 80% of working time in the construction industry was spent on project work, which is the highest among all sectors.

In relation to the human cluster, Packendorff et al. [35] examined the actions of the people participating in project-based work. In this human-related cluster, we observed how theoretical inspirations that have their source in psychology. Waring and Thomas [82] were concerned about the well-being of the human being engaged in projects and therefore examined the psychological and health aspects of project work.

In the project management cluster, the level of analysis that was adopted by the researchers focused on the project as the centre point, such as the challenges or implications of project intensification on the human resource management practice of the companies [38]. Bredin and Söderlund [36] proposed that the increased use of project management in almost all societal sectors resulted in a powerful and well-established practical knowledge field that set out to provide project managers with tools and methodologies for achieving project success.

Lundin [3] reported that projectification emanates out of a strategy that invests in the deployment of a portfolio of projects and stated that the approaches needed to achieve projectification are: (a) the increased use of the project structures, processes, and project forms of organising; (b) the presence of a strategy that could enact the deployment of a portfolio project, (c) and the preparation of the needed risk assessment. By arranging and combining all the data concerning the projects, project portfolio managers are now able to provide forecasting and business analysis for companies looking to invest in new projects. Hodgson [39] studied the risks of projectification policies and stated that the government offers the prospect of enabling policy makers to control the risks of new policies while also creating a space for policy experimentation. Jacobsson and Jałocha [12] stated that the risk might be transferred from companies to individuals. Hodgson [39] said that rolling financial and resource forecasts based on project plans are mandated. Therefore, this cluster focused on the changes in the organisation which made it possible for the company to better control its projects, which mainly included (a) the institutionalisation of structures for governance and the control of project and project portfolios and (b) the integration of project financial planning and reporting with the corporate financial system [3].

On the information systems cluster, project-based organisation processes generate a huge amount of information that need to be supported by effective information systems to reduce the loss of project knowledge [3]. Information systems are a useful tool to enable project-based organisation processes. Packendorff and Lindgren [2] provided a framework to guide project-based organisations to change their organisational and information systems processes, employing a portfolio, program, and project management processes, and adjusting them to unstable business environments. Superior quality and adaptable processes rely on the assistance of project management information systems and must be combined with additional business processes and information technologies.

Regarding the innovation cluster, projectification is understood as a bigger trend that can help change society and the individual's way of life, as it shows the social changes associated with projectification. These changes were examined by Meinert and Whyte [42], who built on the thought of projects for strategic development in our societies; for example,

a projected approach to reacting to epidemics such as COVID-19 may have broad social effects linked to the temporariness of project tasks.

The clusters analysis shows different perspectives of projectification and reveals various aspects of it, such as a structural approach, which can help restructure the organisation. Additionally, it shows projectification as an essentially socially changing trend.

4.2. SLR Discussion

The results demonstrate that projectification phenomena can be made at five levels: (a) Micro; (b) Meso; (c) Macro; (d) Mega and (e) Meta. At each of these five levels, a different approach to projectification is portrayed. The review of the literature revealed projectification from three different perspectives: (a) an organisational style, (b) an individual state, and (c) a societal structure change. Each of these perspectives presents different definitions and consequences for the researched topic. Each perspective embodies a unique perception of what projectification is, and all together, determines how projectification is understood today. In the below discussion, the authors present and portray "projectification" according to these three perspectives to present a better understanding of it and its implications.

4.2.1. An Organisational Approach

Projectification was initially perceived as an organisational approach or managerial procedure that aimed to expand the number of projects within an organisation. Therefore, researchers focused on its implication for processes, organisational learning, and governance.

Scholars who focused on projectification as an organisational or a managerial approach adopted the meso-level in their analysis which is the level at which projectification was first observed. Initially, it was claimed that the changes associated with Projectification were propelled by variations in the global competitive environment. Within perceiving projectification as an organisational tactic, the main unit of analysis were contemporary and global organisations, with a focus on the meso-level in their discussions, and all the advocators of this view took the organisational or the meso-level as their focal point.

Bredin and Söderlund [36], for instance, examined the consequences of project growth on the human resources management of organisations. Midler [38] described the significance of the organisation's projectification qualities as an essential path for effectively employing the companies' internationalisation approaches. Moreover, when examining the studies that focused on the implications projectification (as an organisational or managerial approach), most scholars showed the positive impact of projectification on organisations, while only a minority of them highlighted the adverse effect on organisations while also taking into consideration the vast advantages of projectification during their evaluation [5,81].

All of the above studies adhere to the belief that projectification is an organisational restructuring change aimed at managing projects and to surge the importance of project processes within an organisation [55]. The adopters of this view focused on the organisation as the focal point and centred on inter-organisational challenges rather than intra-organisational issues, and therefore grounded their theoretical inspirations on the mainstream project management and management theory. This viewpoint was criticised by many authors, as they considered organisational projectification "a tight view" of projectification.

Within perceiving projectification as an organisational tactic, another cluster of studies focused on contemporary and global organisations, and these also focused on the Macro level in their discussions. Researchers contributing to this image of projectification showed an interest in examining an industry that had a sectoral focus, such as public corporations [101], the construction industry, the automotive sector [1], education institutes, and research associations. Studies in the public sector centred on the changes in the operation and delivery of public services because of the expanded volume of projects as a response to New Public Management reforms [101]. For the education sector, most of the studies concentrated on the effects and results of the changing organisational structures

of universities. At the Macro level, industries and sectors, such as the construction sector, were also affected as project-based funding shaped it into projectified forms that could not conform with strategic objectives. The studied topic also earned a high degree of maturity in the automotive sector, where many papers assessed the current industrial encounters of innovation-based competition and the way the automotive industry reacted to these encounters by increasing the project-based mode of operations [1].

4.2.2. An Individual Approach

Apart from the above view, many scholars perceive projectification as an individual state. Academics adding to this view were interested in the implications of projectification on individuals.

The adopters of this focused on the micro-level projectification and concentrated on the people, while the main unit of analysis was the human. The micro-level focused on the responsibilities and attitudes of the individual within the project. At the micro-level, projectification affected employees' skills, task organisation, workload, and projectified governance models based on a multitude of short-term projects. Therefore, the focus of these scholars was on individuals who were struggling to be a component of the projectified world.

Within this context, many scholars described individual projectification by examining the actions of the people participating in project-based work. The central component of their assessment was certainly how individuals were facing troubles. Perceiving projectification as a human state meant withdrawing from monotonous activities and integrating into distinctive projects, which implied the necessity to be in continuous collaboration with shareholders and the readiness to work overtime and fulfil an individual's life to the project which in turn resulted in the loss of work–life balance.

Irrespective of the business, sector, or location of the studied humans, they all encountered similar negative consequences of projectification [35]. Thus, researchers focusing on this view learned to focus on the disadvantages rather than the advantages of projectification, as they took the human being as their focal point of interest, and most of their focus was on special groups of individuals such as patients and immigrants. Therefore, studies that perceived the subject as a human state stood in absolute contrast to the recognised advantages of projectification as a managerial approach.

Advocators of this view grounded their theoretical inspirations in psychology. Concerns regarding the welfare of people engaged in projects attracted attention to the psychological and health facets of project-based work. Supporters of this viewpoint believe that project discussions can have additional far-reaching pragmatic effects on workers, as project-based work could generate circumstances that are tough to deal with, firm to explain, and difficult to manage [5]. Therefore, scholars have dedicated a lot of interest in examining the harmful effects on individuals and the negative implications of projectification for engineers, educators, musicians and workers, in general [2,5].

Baur et al. [102] noted that the projectification of work–life might lead to a drop in people's feelings of progress, desire and self-assessment. Packendorff and Lindgren [2] examined the sleeping behaviour of workers and confirmed that workers in project-based work were subject to sleeping troubles and mental stress.

Adding to the above, discrimination, career insecurity and redundancy were also found as the results of projectification, which is seen by this group of researchers as "a composite ethical dilemma that has implications on the sustainability of organisations and exposes workers to susceptible conditions" [5].

As mentioned earlier, scholars who perceived projectification as a human state raised the question of whether or not project-based work was as attractive as it seemed [5] and confirmed that projectification subjects employees to more failures and increases their mental stress [103]. The key drivers of the latest are open environments, interconnected contracts, mental and physical fatigue, lack of resources, overwhelming deadline stress, and increased psychological stress [5].

At the micro-level of projectification, scholars noted that the latter increases workers' inefficiency as it requires them to operate numerous projects at the same time [35]. Projectification necessitates elevated flexibility, self-organisation, and improved collaboration, for the projects not to overlap, which, in turn, overloads the workers and creates a stressful workplace [103]. In such an environment, workers start to assess themselves based on entrepreneurial behaviour and the ability to adapt to change [35].

What makes employees' work–life worse is that leaders tend to concentrate on the interest of powerful stakeholders and disregard the interests of workers, causing a low level of employee engagement and a reduced chance of expressing their career needs and therefore reducing opportunities to enhance processes and resolve challenges [81]. The above-mentioned practices lead to wasting organisational resources [104], which eventually causes conflicting goals, resource scarcity and unachievable goals and knowledge-sharing challenges.

Maylor et al. [93] investigated the bureaucracy surrounding projects, particularly the inconsistencies and tensions that arise from embracing a project structure to deal with an "unbureaucratisation" approach. The same authors analysed the contradictions of a project-based organisation and examined the characteristics of project management in a projectified context by focusing on the theory and practice of project management essentials. Maylor et al. [93] described the project as a prison and stated that a projectified society contains the mainstream of institutional members, which include project workers and project managers, which, in turn, affects the identity of the person, and, later on, its community.

To summarise, projectification can affect all members of society, leading from long-term steady and unrestricted working contracts to temporary work in temporary businesses.

4.2.3. A Social Structure Change

Advocators of this view understood projectification as a societal trend and examined the long-term effects of implanting projects in social structures. Their examinations assessed the mega and the meta-levels and revealed a lean toward examining the results of projectification on parts of society or the whole society.

At the mega level, projectification boosts individualisation and makes an urge to continually develop and overachieve. At its foundation, this viewpoint remains to be closely related to the micro and meso-level changes of managing projects; however, it brings a wider scope of implications.

Advocators of this view examined projectification in a large range of circumstances, such as the implications of projectification in fighting COVID-19 (an international epidemic) [105], or projectification and international aids, in addition to other trending research domains such as projectification outcomes in creating restoration landscapes, ecosystems and sustainable development [9]. This wider perspective eased the comprehension of the complicated trend as well as its outcomes on the progress of society.

The outcomes of projectification on the mega level, reflected in this view, were examined, grounded in the belief of a project society and the cruciality of projects for strategic growth in global society [54]. Researchers contributing to this perspective of projectification proposed that society had to acknowledge that some projects could affect the allocation of capital and cause changes in the existing power distribution. Winch et al. [105] stated that a projectified approach to reacting to COVID-19 or any other epidemic could have far-reaching social outcomes linked to the transient phase of project activities.

Apart from the above, Szanto [106] examined a project society at a country level and concluded that a society stemming from the projectification of aid activities after a war brings complications to the process of the actual progress of a country's situation. The advocators of this view refer to projectification as a cultural and conversational phenomenon and define projectification as "a process or development toward greater social, cultural, and political importance of projects".

Especially within the meta-level, projectification was perceived as a way of thinking that could cause a meta-habit in perceiving the work area. Examinations at this level

described how the project semantics turned out to be prevalent in a way that infiltrated into people's everyday dictionary (used terminologies), society, and natural life [107]. Scholars, while trying to fit projectification in this view (project society) or level (meta), see that the social group is shifting from having a social class, faith, or race as its background toward having the project culture as their socialisation and confirm that some properties of a projectified reality translate into the nature of social reality [73].

As in this view, projects may be realised anywhere and at any time, but the borders between what is personal and what is cooperative, and what is work time and what is free time, are continually abused [2]. Research topics in this view were related to examining the (re-) masculinisation of post-bureaucratic work practices [108] or "building more power relations in improving standardisation" [73]. At these meta and mega levels, many scholars emphasised the fact the reality of a projectified world appears to be a perilous dystopia or a nightmare.

Apart from the above important mega and meta-level investigations, there is much room for future examinations of what is projectification, such as examining the main receivers of it and the real consequences of projectification on our time, work, and space in the long run.

4.2.4. Projectification at Multi-Levels

The above examination of projectification at different levels and from three different perspectives establishes an essential viewpoint on the status quo of the projectification research domain. Blending the three represent a synthesis along this line and presents a novel framework for future research on this topic. The above three viewpoints of projectification reveal the diversity in academic backgrounds tackling the same topic.

To summarise the discussion, Table 4 underlines and contrasts the basic features of each viewpoint by highlighting the level of analysis, the apparent value, and the recognised outcomes of each viewpoint.

Shifting to a multilevel analysis, the discussion reveals that understanding projectification and defining its implications depend on the perspective and level of evaluation taken. Therefore, projectification is seen as a status with three heads, each one looking in a different direction. Along with this, this study aims to deliver a comprehensive and holistic understanding of the projectification topic by presenting it from three different perspectives. The rationale behind taking various perspectives is that projectification currently is not only one of these portrays but, in fact, is all of them. Each of these three perspectives denotes one direction of research and therefore adds another piece to the puzzle of building a complete understanding of the complicated interpretations of projectification.

5. Conclusions

The phenomenon of projectification has been studied in recent decades. Although it is not a new concept (Daniel Defoe describes the 17th century in his work "Essay on Projects" as the "Projecting Age"), interest in its evolution and consequences at different levels has become evident in the present research.

Projectification is promoted by pushing and pulling actions at micro and meta-levels, affecting individuals, companies, societies, countries, and the world. These effects are positive but also negative, both on individuals and institutions.

The process of projectification in society is a complex issue that must be studied from multiple fields of knowledge. From each of them, it is possible to highlight advantages and disadvantages. In this sense, it will be interesting to carry out actions that optimise the results obtained, reducing the negative effects that cannot be ignored.

The initial idea for this assessment was to provide a synopsis of the status quo of projectification research. In this research, we tried to answer the question of what are the key concepts of projectification?

By conducting the needed research, the authors observed that investigations on projectification topics had increased steadily since 1995. This development reveals itself in various

examples. It has led to an improved range of study areas, an evolving concern in the application of theory, and a widening of disciplinary concerns. A key reflection in this respect is that an increased number of papers are now published outside of the conventional project management fields than within. Furthermore, the authors found that the analysis level of projectification has changed from the structural path in institutional restructuring toward seeing this topic as an essentially socially changing trend with complicated outcomes.

In any case, the present research has made it possible to obtain an updated list of advantages derived from the phenomenon of projectification as well as those aspects that may have a negative impact on any of the levels studied. In this way, an instrument for monitoring the degree of projectification in its specific context has been provided. From the point of view of negative consequences, it seems reasonable to establish structures and/or mechanisms for monitoring the quality of life and the work of employees who carry out their activities in a projectified environment, with the aim of finding out whether some of the undesired effects pointed out in this research (stress, excessive control, uncertainty in career development, lack of identification with the organisation in the medium and long term) are produced. From a positive point of view, it is important for individuals and organisations to articulate procedures that highlight the advantages of project work, such as ensuring permeability between working groups on similar projects, the continuous sharing of lessons learned, the optimisation of the resources needed in each of the project phases, among others.

Finally, the study has drawn and discussed five levels of projectification (Micro, Meso, Macro, Mega and Meta), and also the study linked each level to a given perspective of projectification (individual approach, organisational approach and societal structures change). Every perspective characterises a different yield on projectification with some predominant features. This makes possible an interdisciplinary comprehension where projectification can be perceived from all these points of view.

These attributes underscore several common features for each of the perspectives and also suggest that the way projectification is realised varies depending on the paradigmatic perspective carried by the academics. Projectification has no apparent borders and has good as well as bad consequences.

This research has tried to discuss the process of projectification and possible future lines of research. In this way, some agents that have promoted the use of project management will have additional information available to improve the consequences of certain policies, both public and business.

Additional studies are necessary to know the real effects of projectification on individuals and their work conditions. These studies could have a quantitative orientation, allowing objective measurements of the effects of projectification in different scenarios and at different levels.

This deficiency has also been detected at a social and global level, as has become evident when studying the advantages and disadvantages of projectification, as there is a significant lack of quantitative studies related to this issue.

The limitations of this study are derived from the methodology used, which could be solved in future research by using a systematic literature review, quantitative methods and surveys, given the social nature of the problem under study.

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