New Working Spaces Typologies Beyond Core Cities

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Abstract Technological development, global economic restructuring and the changing nature of work are three main factors prompting new working spaces (NeWSps). In this text, we explore the phenomenon of NeWSps beyond the core cities in the European context. We aim to understand how new ways of working spur NeWSps, focusing on their spread and impact on peripheral and rural areas. We organize the chapter into two parts. First, we present a brief overview of typologies and characteristics of new working spaces beyond core cities. Second, we introduce two case studies conceived in rural areas of Portugal. Beyond their distinct features, the success of these examples relies on the virtuosity of the networks and connections that have evolved around these spaces so as to root them in the territory and local communities.

1 Introduction

The leveraging of new working spaces beyond core cities is a subject that has been discussed and strengthened within the scope of several objectives, such as, for instance, territorial balance, environmental sustainability, economic development, technological innovation, employment and working conditions, well-being and quality of life. The expansion of digital technologies and the considerable advances of telecommunication networks have improved the mobile technology needed to work in a globalised and digitalised world. As a result, new ways of working became accessible for a broad number of professionals who can work in decentralized geographies, stimulating the emergence of new working spaces (NeWSps) out of the major urban areas.

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The focus on sharing lies at the foundation of the NeWSps, insofar as they can be seen as collaborative work environments [14], regardless of the typology they may adopt. For instance, the Maker Movement [12, 15] is at the basis of the typological diversification of NeWSps and their evolutionary dynamics. NeWSps are characterized by a set of services that may vary in form but follow a similar rationale, usually gathering individuals who aim to develop networks and collaborative work practices in spaces that inspire creativity and stimulate innovation.

Despite the acknowledged relevance of the phenomenon, research on NeWSps in non-core cities still requires further development. In this paper, we explore the literature on the European context to understand how new ways of working spur the creation of NeWSps, focusing on their spread and impact on peripheral and rural areas. The chapter has two parts. First, we present a brief overview of typologies and characteristics of new working spaces beyond core cities; second, we introduce case studies from rural areas of Portugal.

2 The Emergence of New Working Spaces

The emergence of new working spaces is tied to three interdependent conditions. First, technological development has triggered changes in several aspects of society, mainly due to the digitalization of processes and progress in mobile devices [31]. In addition, the economy has been restructured following large-scale events such as the 2008 global financial crisis and, more recently, the Covid-19 pandemic [27]. Finally, the changing nature of labor comprises new forms of work, including independent work, outsourcing, and project-based contracts, resulting in different professional identities and new life conditions [5]. Considering this matrix of events, we will start the discussion by addressing key elements referred to the wider phenomenon of new ways of working and how they engage people in creating spaces to welcome peers.

2.1 From New Ways of Working (NWW) …

The role of the corporate office has been debated since the 1960s. Initially supported by science fiction, technology was expected to be revolutionary for several levels of life, and especially to be able to allow managers to run companies from anywhere [9]. In the 1970s, with the spread of flexible modes of production, companies initiated a movement of reorganization of the workplace. For instance, IBM invested in non-territorial offices, including open space areas and non-dedicated desks and rooms [34].

Not only was technology becoming cheaper and speeding up working practices, but the possibility of outsourcing part of the production also allowed to reduce costs of both personnel and facilities [20]. Though, at the time, the argument was built in a different direction, addressing the opportunity for workers to choose where they

wanted to live instead of moving closer to where work was. Nevertheless, such reverse migration, especially among knowledge workers, requires several improvements in infrastructure and accessibility in non-core areas, which remain a challenge for public administration [3].

The 1990s represented a spur moment for new ways of working. The world wide web (www) and the new mobile devices were vectors that spread digitalized practices [31]. If the ideological setting of this new era was built on the previous decades' values and views, the transition to the digital economy also triggered narratives that favored self-employment and increased the mobility of freelancers [4]. In that sense, we understand that the emergence of new ways of working implies office transitions enabled by business solutions connecting technology and architecture [19]. Moreover, these new ways of working are part of a broader trend of flexibilization of working practices such as remote working [28] and the adoption of non-traditional work arrangements related to the sharing economy [2].

2.2 … to New Working Spaces (NeWSps)

New working spaces (NeWSps) emerged in large cities [24, 29, 32] sustained by tech accessibility and a different mindset, aiming to increase the work performed with computers and allowing workers to feel more free in geographical terms. [27] present some general characteristics of NeWSps. They feature openness and collaboration, they trigger the sharing of knowledge and skills while using common tools and platforms. Usually, they are self-organized environments where technology plays a key role. Currently, coworking spaces represent the most popular type of NeWSps, though their roots are found in two working/playing contexts. Hackerspaces are pointed out as one of the central inspirations [11] for coworking, mainly for their spirit of community and collaboration. Moreover, *barcamps* (a type of unconference) are recognised as influential in creating more permanent yet temporary experiences of work aiming to foster creativity and innovation [1].

New types and variations of these flexible working spaces emerge daily around the globe, as illustrated in this book on the taxonomy of NeWSps [26]. To some extent, the typological diversity represents the theoretical efforts to understand how changes at work stimulate workers to create alternative ways of organising. This is important to support policymakers, founders, and other actors in their decision-making, either to create policies and funding opportunities to strengthen such initiatives and improve local development or to inspire people to create favorable circumstances to work together. In the next section, we explore more specifically the context of NeWSps in non-core cities.

2.3 NeWSps in Non-Core Cities

Coworking spaces represent the most widespread type of new working space, also in non-core areas. [14] is one of the first authors to have explored the role of coworking spaces in fostering entrepreneurship in the South of Wales, a region also studied by Merrell et al. [25], with a special focus on well-being in coworking. [13] approached the peripheral areas of Rome to identify different typologies of coworking spaces. [30] focused on broad urban spaces in Turin to understand their role in cultural production development.

The Covid-19 pandemic slightly transformed the scene of NeWSps with an increased number of coworking spaces in peripheral [23, 35] and rural areas [7, 33], although most spaces remain located in urban areas [17, 23]. The substantial impact of Covid-19 in major cities due to high population density is the origin of the increase in the use of teleworking, first as a mandatory rule, and then as an option for many workers who can perform their functions even remotely. Teleworking also allowed many people to move to more peripheral territories [22]. For example, according to OECD, the success of remote working and the desire to work at least half the time away from the corporate office is one of the main reasons that pushed many workers to move to the countryside [6, 25]. Developing NeWSps in non-core areas requires a consistent approach to a set of preconditions. Heikkilä's [16] research on coworking spaces shed light on several elements that shall be considered when creating NeWSps in non-core areas.

First, the community is central to creating NeWSps in peripheral areas. Therefore, one of the first aspects managers should contemplate is gathering people committed to building a community by adopting bottom-up governance and allowing members to actively participate in decisions regarding the common workspace. Second, the centrality of the location is relevant for its connectivity. Third, engagement with the municipality to create funding opportunities is crucial in non-core areas. Finally, reliable internet connection and infrastructure are key to attracting remote workers and other actors [16].

According to the latest Deskmag report (2021/2022) [10], coworking spaces in suburban areas mainly focus on offering individual offices (52%), followed by meeting rooms (49%). In rural areas, the coworking space's most used services are meeting rooms (58%) and individual offices (48%). The data indicates that NeWSps have the potential to grow in non-core cities. For them to grow, it is crucial to educate and motivate potential users about the benefits, such as collaborative work, sense of community, exchange of thoughts, and expansion of job and social connections. In the following section, we introduce two case studies from Portugal to illustrate the relevance of these elements for the success of NeWSps in non-core cities, and highlight other particular aspects of the individual cases.

3 Exploring Portuguese Cases

In Portugal's mainland and outside the major cities, there are only a few NeWSps that fit into the different typologies mentioned above. It is a fact that the recent years of the pandemic have highlighted several advantages of remote working, and its continued practice has helped demystifying the many reasons for opposing it, both among employers and workers.

In recent years, the number of NeWSps has increased substantially in Portugal. Between 2010 and 2020, 184 CWs were created on Portugal's mainland, from which 62 opened during 2020–2021, with an increase slightly greater than 25% in the pandemic period. Additionally, these spaces have gained more supporters and have conquered a growing interest among public entities. In terms of public policies, it should be highlighted the creation of the network "*Teletrabalho no Interior: Vida Local, Trabalho Global*" (Telework in the Interior: Local Life, Global Work), which consists of a national network of workspaces created under the initiative of the Ministries of Territorial Cohesion and Labor, with the involvement of public entities on a regional and municipal scale.

This network of workspaces in inland territories and outside core cities today involves 88 municipalities. Most of these spaces are located in municipal vacant buildings or in buildings rehabilitated for this purpose through the installation of office furniture and improved digital infrastructure, or simply through the provision of reserved desks in municipal libraries. Despite the high number of municipalities involved, the places effectively opened and functioning normally vary significantly from region to region (NUTS II), with usually low occupation rates.

However, the relevance of this political initiative should be stressed, not only by providing a policy framework for new workspaces and teleworking, but also by highlighting the potential contribution of these workspaces to boosting the socio-economic, creative and entrepreneurial growth of rural inland territories. However, this requires much more than providing desks in reserved spaces. As ([8], 154.) stated, "in some municipalities, where the opening of a space has been prioritized instead of a previous identification of interested people, the development of a community represents a greater difficulty for the success of the project".

3.1 A Top-Down and Extended NeWSp in Fundão

The municipality of Fundão, in the Central Region of Portugal (NUTS II) (c.f. Fig. 1), illustrates how NeWSps can assume a dynamic role in inland territories as long as they are duly framed by municipal strategies and integrated with other socioeconomic components. The greatest virtue of this top-down governance example is to demonstrate the need to involve workspaces in a local and collaborative ecosystem [8]. This ecosystem combines multiple dimensions of the community's daily life in order to increase interactions between the users of these spaces and foster the

Fig. 1 Location of Fundão and Messejana in Portugal mainland (own elaboration)

relationship of workspaces with other community actors [8], thus ensuring means of underpinning and strengthening their evolution.

In short, the path that led to this result began just before 2016, when Fundão was awarded the "Municipality of the Year" for the relevance of the *Academia do Código* (Academy of Code) project. Academy of Code was a youth employability project developed as a Bootcamp for intensive training in computer programming, lasting about 14 weeks and supported by the public policy initiative *Portugal Inovação Social* (Portugal Social Innovation). Initially aimed at university students, in the first two years this project did not reach the expected number of participants; therefore, in 2016 the municipality decided to also open the project to unemployed people from all scientific areas interested in investing in training in computer programming and new technologies, which proved to be a real success in terms of participation.

The positive effects achieved with this social innovation project were the necessary impetus to add value to an inland rural territory, now recognized as a (somewhat "cosmopolitan") specialized technological training center. Fundão's technological center and the five coworking spaces developed for its support can offer training, attract

skilled labor and companies, and retain qualified people from abroad to enhance the local economy. Behind the initiative's success is a strategic and well-articulated vision between a set of local public policies and well-used opportunities for regional European funding attraction.

One of the most relevant actions in this process was rehabilitating about 150 houses in Fundão's city center to integrate a public rental stock to host the engineers who moved to Fundão with their families to develop the *Academia do Código* project. Including new members in the local community involved exceptional circumstances of housing provision and required school integration strategies for newcomers' children. For instance, all children in Fundão have access to bilingual education. Additional broader community initiatives involve mediators in different dimensions of daily life to improve reception of foreigners that settle in the region.

Nowadays, Fundão is developing an Integrated Technological Campus, better known as Hub. This Hub will comprise spaces for business hosting and NeWSps dedicated to incubation and acceleration, training, education and laboratory areas. Furthermore, the municipality of Fundão has 26,503 inhabitants [18], and continues to attract people from abroad, especially with jobs in technological areas. For example, around 1,000 engineers from 67 countries live and work in Fundão. Such multiculturality gives the rural inland territory a cosmopolitan face. Notably, the municipality's success in attracting qualified people and entrepreneurial and creative initiatives cannot be isolated from a socio-territorial ecosystem resulting from a strategic governance program.

3.2 The Bottom-Up Case of Buinho in Messejana

Buinho's creative Hub (FabLab and Creative Residency) in the Alentejo region is another Portuguese example of a NeWSps in the rural inland territory. Founded in 2016 in the village of Messejana, Buinho was one of the very first rural FabLabs in Portugal. It became a European reference place for enhancing creative and technological experimentation (e.g., 3D Printing, CNC, Laser cutting).

Messejana is a rural village of Aljustrel Municipality (c.f. Fig. 1) with 811 people (Census, 2021) and from where the closest university, in Évora, is 100 km away. Despite the remote location and the focus on the creative sector, Buinho's development was boosted mainly by solid connections with other FabLabs, hackerspaces and makerspaces from Portugal and abroad (e.g., Erasmus programs, MIT Network, VULCA and other NGOs). Interestingly, creating a Fablab in a rural area presents several challenges, and one of the most significant is the need for connections and partnership networks.

The strategy followed by the founders of Buinho was to create a mobility program for makers, i.e., an Artist In Residency (AIR) program. Through the AIR, they started to develop mobility programs for makers, putting them in interaction with other actors in the cultural and creative industries and other activity sectors. From one house to accommodate two residents, they evolved into three houses, including shared

and individual studios, digital fabrication and exhibition spaces. More recently, the narrow collaboration with the local municipality has provided access to a metal-working workshop dedicated to sculpture and plastic recycling (c.f. https://artistcommunities.org/directory/residencies/buinho-residency-program-portugal).

While this strategy of attracting stakeholders from abroad was taking shape, the founders did not neglect the local component. They considered the partnerships needed to pursue the objectives of Buinho FabLab (e.g., local parishes, municipalities, schools, environmental groups, NGOs, other FabLabs and makerspaces). Additionally, they focused on reverting benefits to local communities. An example is an Erasmus project for youth exchange better addressed to the local youth community.

In remote places like Messejana, most young people only complete secondary education, which results in low skills, lowly qualified jobs and high migration to major cities. Buinho's founders' aimed to change such context, presenting new perspectives for young people and seeking to retain some of them in that depopulated territory. They created a strategy focused on youth exchange programs, mainly on technological projects (e.g. 3D printing, plastic recycling and transformation). Soon, they became popular among European communities of makers and fostered connections with European Fablabs for the Adult Education Sector.

The international projection of this workspace demonstrates that the territorial conditions and the constraints usually attributed to rural and peripheral areas can be overcome with good projects and properly designed socio-economic and territorial development strategies focused on the local community. In the words of the Buinho's founder, Carlos Alcobia:

> *(…) from the very beginning we faced the challenge of constructing a community around us and engaging with the locals too. Sometimes people would like to visit Buinho and experience the contrast of having access to all the labs and high-tech equipment to develop their project, while at the same time knowing the locals by name, having kids playing right outside their door in the night and similar things that you don't usually see in bigger cities. There is this sense of being part of a community, which is not necessarily a maker community, that brings a lot to our project* (Makersxchange - Buinho, an interview with Carlos Alcobia [21]).[1]

4 Final Notes

The emergence of NeWSps is linked to urban spaces, with a clear predominance in medium and large cities. However, non-core cities and rural areas have also seen an increased interest in attracting different types of workspaces. This opens numerous possibilities and connections for the digital and technological development of more peripheral areas. Moreover, it allows access to policies and financial programs aimed at the installation of these news workplaces. Ultimately, the emergence of NeWSps offers several advantages to potential users in terms of quality of life, mobility, and other values associated with less urbanized spaces.

[1] http://makersxchange.eu/buinho-an-interview-with-carlos-alcobia/

The Covid-19 pandemic has triggered several initiatives to bridge the "digital divide" and re-emphasize the advantages of non-core territories. Meanwhile, remote work has become widely accepted, promoting drastic changes in the economic and labor dynamics towards the post-pandemic world. On the one hand, the use of traditional and large corporate offices is questioned, and several organizations are reducing office areas or abandoning the costly city locations. In that case, alternative workspaces in peripheral regions emerge with benefits related to the physical and digital infrastructures and connectivity. Additionally, NeWSps encourage collaboration, sharing of ideas and networking among an increasing range of professionals. In this sense, users of these workspaces also benefit from the conditions that are offered by non-core cities, such as reduced traffic.

In this chapter, we have provided a brief overview of the main typologies of workspaces that fit in the NeWSps spectrum, especially regarding their existence in non-core cities and rural areas. As a result, we noticed that so far, neither the quantity nor the diversity of NeWSps in peripheral and rural areas have been explored. More research is needed to better understand existing initiatives and suggest new ones based on local characteristics. Indeed, a partnership between researchers and local actors can increase NeWSps availability beyond core cities.

Additionally, some studies have described recently launched workspaces which are still consolidating and experiencing different issues. For instance, one of the biggest challenges is creating a community of users which can guarantee NeWSps' sustainability and their involvement in the local ecosystems. In parallel, the projection of NeWSps through national and international networks can give them a global scale and better connectivity conditions, regardless of the peripheral territories where they are located.

Finally, from both the Portuguese cases analyzed herein, we contend the *glocal* potential of NeWSps. On the one hand, the initiatives' success depends on the refinement of digital technologies connecting individuals and organizations from different points of the globe. On the other hand, they thrive because they are tied to the local traditions and communities. In this sense, we underline the importance of involving these new spaces in broader territorial projects with a solid connection with individuals belonging to the local context. Regardless of typologies or governance strategies, it becomes clear that the greater or lesser success NeWSps may achieve depends on multiple factors, actors, and investments (i.e., socioeconomic, political, cultural). Importantly, we highlight that a peripheral location does not represent a condition for failure, and the typology or the financial investment does not necessarily imply the success of NeWSps. Alternatively, developing NeWSps with the support of integrated initiatives may represent a source of resilience for non-core cities.

References

1. Aguiton C, Cardon D (2008) Web participatif et innovation collective. Hermès, La Revue 1(50):75–82. https://doi.org/10.4267/2042/24155

2. Aroles, J, de Vaujany FX, Dale K (2021) (eds) Experiencing the new world of work. Cambridge University Press, Cambridge
3. Avdikos V, Merkel J (2020) Supporting open, shared and collaborative workspaces and hubs: recent transformations and policy implications. Urban Res Pract 13(3):348–357. https://doi.org/10.1080/17535069.2019.1674501
4. Baines S (1999) Servicing the media: freelancing, teleworking and 'enterprising' careers. N Technol Work Employ 14(1):18–31. https://doi.org/10.1111/1468-005X.00050
5. Barley SR, Bechky BA, Milliken FJ (2017) The changing nature of work: careers, identities, and work lives in the 21st century. Acad Manag Discov 3(2):111–115. https://doi.org/10.5465/amd.2017.0034
6. Bart M (2022) The workers leaving cities in favor of the countryside—and what it means for business. [Online]. Available at: https://oecdcogito.blog/2022/03/25/the-workers-leaving-cities-in-favor-of-the-countryside-and-what-it-means-for-business/. Accessed January 17, 2023
7. Bosworth G, Whalley J, Fuzi A, Merrell I, Chapman P, Russell E (2023) Rural co-working: new network spaces and new opportunities for a smart countryside. J Rural Stud 97:550–559
8. Capdevila I (2022) Building communities in rural coworking spaces. In: Merindol V, Versailles DW (eds) Open labs and innovation management: the dynamics of communities and ecosystems Routledge, London, pp 146–168. https://doi.org/10.4324/9781003125587-10
9. Clarke A (1964) Arthur C Clarke predicts the future | BBC Archivele
10. Deskmag (2022) 2021–22 Coworking space trends. [Online]. Available at: https://www.deskmag.com/en/coworking-spaces/2022-results-of-the-coworking-space-business-trends-survey
11. Di Risio A (2021) History of Coworking spaces: from 2005 to 2021 [Online]. Available at: www. coworkingresources.org/blog/history-of-coworking. Accessed: January 17, 2023
12. Dougherty D (2012) The maker movement. Innovations 7(3):1–14
13. Fiorentino S (2019) Different typologies of 'co-working spaces' and the contemporary dynamics of local economic development in Rome. Eur Plan Stud 27(9):1768–1790. https://doi.org/10.1080/09654313.2019.1620697
14. Fuzi A (2015) Co-working spaces for promoting entrepreneurship in sparse regions: the case of South Wales. Reg Stud Reg Sci 2(1):462–469. https://doi.org/10.1080/21681376.2015.1072053
15. Hatch M (2014) The maker movement manifesto: Rules for innovation in the new world of crafters, hackers, and tinkerers. McGraw-Hill Education, New York
16. Heikkilä J (2012) Preconditions for sustainable rural coworking spaces in Southwest Finland, field study England—case study Mietoinen. Master's thesis in rural development, HAMK University of Applied Sciences
17. Hölzel M, Kolsch K-H, de Vries WT (2022) Location of coworking spaces (CWSs) regarding vicinity, land use and points of interest (POIs). Land 11(3):354
18. INE—Instituto Nacional de Estatística (2021) Censos 2021. XVI Recenseamento Geral da População. VI Recenseamento Geral da Habitação: Resultados definitivos. [Online]. Available at: https://censos.ine.pt/xportal/xmain?xpgid=censos21_dados_finais&xpid=CENSOS21&xlang=pt
19. Kingma S (2019) New ways of working (NWW): work space and cultural change in virtualizing organizations. Cult Organ 25(5):383–406. https://doi.org/10.1080/14759551.2018.1427747
20. Lonsdale C, Cox A (2000) The historical development of outsourcing: the latest fad? Indus Manag Data Syst 100(9):444–450. https://doi.org/10.1108/02635570010358384
21. Makersxchange—Buinho, an interview with Carlos Alcobia (2020). [Online]. Available at: http://makersxchange.eu/buinho-an-interview-with-carlos-alcobia/
22. Mariotti I, Akhavan M, Rossi F (2023) The preferred location of coworking spaces in Italy: an empirical investigation in urban and peripheral areas. Europ Planning Studies, 1–23.https://doi.org/10.1080/09654313.2021.1895080
23. Mariotti I, Di Vita S, Akhavan M (2021) New workplaces—location patterns, urban effects and development trajectories a worldwide investigation. Cham: Springer. https://doi.org/10.1007/978-3-030-63443-8

24. Merkel J (2015) Coworking in the city. Ephemera 15(2):121–139
25. Merrell I, Phillipson J, Gorton M, Cowie P (2022) Enterprise hubs as a mechanism for local economic development in rural areas. J Rural Studies 93:81–91.https://doi.org/10.1016/j.jrurstud.2022.05.016
26. Micek G, Baycan T, Lange B (forthcoming) Taxonomy of new working spaces. In: Mariotti I, Tomaz E, Micek G, Mendez-Ortega C (eds) Evolution of new working spaces: changing nature and geographies, SpringerBrief
27. Micek G, Mariotti I, Di Marino M, Akhavan M, Di Vita S, Lange B, Paas T, Sinitsina A, Alfieri L, Chebotareva M (2020) Definition and typologies of the new working spaces. Deliverable D1.1. Internal working paper. COST Action CA18214: the geography of new working spaces and impact on the periphery (2019–2023)
28. Mitev N, Aroles J, Stephenson K, Malaurent J (2021) New ways of working: organizations and organizing in the digital age. Palgrave Macmillan, Cham
29. Parrino L (2015) Coworking: assessing the role of proximity in knowledge exchange. Knowl Manag Res Pract 13(3):261–271. https://doi.org/10.1057/kmrp.2013.47
30. Salone C, Bonini Baraldi S, Pazzola G (2017) Cultural production in peripheral urban spaces: lessons from Barriera, Turin (Italy). Eur Plan Stud 25(12):2117–2137. https://doi.org/10.1080/09654313.2017.1327033
31. Schlagwein D (2018) "Escaping the rat race": Justifications in digital nomadism. Research-in-Progress Papers, 31. https://aisel.aisnet.org/ecis2018_rip/31?utm_source=aisel.aisnet.org%2Fecis2018_rip%2F31&utm_medium=PDF&utm_campaign=PDFCoverPages
32. Spinuzzi C (2012) Working alone together: coworking as emergent collaborative activity. J Bus Tech Commun 26(4):399–441. https://doi.org/10.1177/1050651912444070
33. Tomaz E, Moriset B, Teller J (2022) Rural coworking spaces in the COVID-19 era. In: Mariotti I, di Marino M, Bednář P (eds) The COVID-19 Pandemic and the future of working spaces, Routledge, pp 122–135. https://doi.org/10.4324/9781003181163-12
34. Van Meel J (2011) The origins of new ways of working: office concepts in the 1970s. Facilities 29(10):357–367.https://doi.org/10.1108/02632771111146297
35. Vogl T, Micek G (2022) Why do they go to the peripheries? Studying the relations between the real estate market and coworking spaces in the peripheral areas of Germany. J Property Invest Finance 40(5):479–492. https://doi.org/10.1108/JPIF-11-2021-0095