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Anchoring during a storm: unveiling the role of Anchor institutions in place-based public service ecosystems during disruption

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ABSTRACT

This article investigates the role of an Anchor Institution (Anchor) within a place-based public service ecosystem (PSE) during disruption. Specifically, it examines how Anchors shape the conditions under which actors can participate in value creation. Drawing on a qualitative single-case study of the University of Siena, an Anchor embedded in a city-campus where students, services, and territorial actors are closely intertwined, we show how disruption activates the Anchor's multi-level role unevenly. While some actors are enabled to participate and mobilize resources for value creation, others are constrained from doing so. Crucially, we also theorize a new relational mechanism, which we term 'reverse anchoring'. This mechanism captures how other PSE actors mobilize resources (e.g. venues) to support the restoration of the Anchor's multi-level role. In doing so, the article offers a novel account of PSE robustness, showing that it also arises from the involvement of peripheral PSE actors.

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KEYWORDS Anchor institutions; anchoring, de-anchoring, and reverse anchoring; disruption; place; public service ecosystem

Introduction

Disruptions, such as the Covid-19 pandemic, strain public service provision, demanding swift and adaptive responses (Dudau et al. 2023; Shen, Cheng, and Yu 2023). This is especially true for Anchor Institutions (hereafter, Anchors), such as universities, hospitals, and cultural organizations, which are rooted in the local context and have the community's and local territory's well-being among their primary objectives (Birch, Perry, and Taylor 2013; Garton 2021; Harris and Holley 2016; Ruggiero, Lombardi, and Russo 2022).

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During disruptions, Anchors must uphold their core mission while also addressing conflicting local community needs and external pressures (Leite and Hodkingson 2023; Maurrasse 2021; Purchell and Lumbreras 2021). Existing research indicates that Anchors navigate these tensions by shaping who can participate in the response and by mobilizing the resources that enable such participation (e.g. Cepiku et al. 2021; Magliacani and Sorrentino 2022). They therefore play a key role not only in territorial development but also in shaping, as place-based organizations, the relational conditions through which other actors can participate in such processes. However, these place-based dynamics remain conceptually underexplored, leaving us with a limited understanding of how Anchors define participation conditions to sustain value creation during disruption.

Understanding these dynamics calls for a shift from an organization-centred view to one that examines Anchors within broader systems of interdependent actors and resources. Here, the Public Service Ecosystem (PSE) framework can be helpful, as it portrays public service provision as a multi-level system of actors and resources that align to create value (S. P. Osborne et al. 2021, 2022; Petrescu 2019; Trischler et al. 2023). Adopting this perspective is especially important during disruptions, when the relational and place-based nature of these ecosystems becomes more pronounced (e.g. S. Osborne et al. 2025). From this perspective, we can situate an Anchor within a place-based PSE and analyse how its decisions reverberate across multiple levels, altering the relational dynamics occurring therein.

Yet, Anchor research seldom takes a systemic perspective, and PSE research rarely acknowledges Anchors as distinctive place-based actors. Furthermore, most applied PSE studies depict relatively stable conditions (e.g. Liljeroos-Cork and Luhtala 2025; Sahamies and Anttiroiko 2024), and even when studies focus on PSEs during disruptions, they tend to concentrate on service-specific dynamics or modes of service provision (e.g. telemedicine or managerial response) (Leite and Hodkingson 2023; Sancino and Tasselli 2024), overlooking the broader place-based interactions that occur. As a result, we still lack a systemic understanding of these place-based dynamics, particularly the role of actors, like Anchors, in shaping the conditions of participation within place-based PSEs during disruption.

To address this gap, we develop the following research questions: *What is the role of an Anchor in a place-based PSE during disruption? How do Anchors shape the conditions of participation therein?*

Conceptually, we first map the underexplored role of Anchors, drawing on both the Anchor and PSE literature. Particularly, we conceptualize ‘anchoring’ and ‘de-anchoring’ as relational mechanisms through which Anchors shape the conditions under which actors can participate in value creation. Through anchoring, Anchor’s decisions enable certain PSE actors

to participate in and contribute resources to the value-creation process; through de-anchoring, they limit some others' ability to do so.

We explore our research questions through a single case study (Barzelay 1993) of an Anchor operating within a place-based PSE during disruption. We focus on the University of Siena (UNISI), Italy, during the Covid-19 pandemic, where the unique 'city-campus' layout exemplifies a place-based PSE, with students, services, and community actors being closely intertwined. Using an abductive approach, we iterated between data and our conceptualization, drawing on 36 in-depth interviews with 40 participants and a variety of documentary sources, including UNISI's governance minutes and other official documents, as well as newspaper articles to gain contextual nuances.

Our study makes a theoretical contribution at the intersection of the Anchor and PSE literatures. First, we offer a dynamic, time-sensitive perspective on the changing role of Anchors during disruption in place-based PSEs. Second, we illustrate that Anchors operate across multiple levels of the place-based PSE, highlighting their ability to make decisions that structure relationships and resource flows in ways that define the boundaries of participation in value creation. Here, we show that Anchors simultaneously activate anchoring and de-anchoring mechanisms that respectively enable some actors to participate in and contribute their resources to the value-creation process, while limiting others. Rather than reflecting alignment and coordination, or value creation/destruction (e.g. S. P. Osborne et al. 2022; Sahamies and Anttiroiko 2024), anchoring and de-anchoring are distinct mechanisms that operate at a prior analytical level. They illustrate how Anchors, during disruption, define the relational boundaries within which alignment and coordination can occur, and through which value creation or destruction may subsequently emerge. Importantly, our iterative abductive approach allowed us to explore an additional, previously unexplored relational mechanism, which we term 'reverse anchoring', in which other PSE actors actively mobilize resources to support the Anchor's multi-level role in the PSE, suggesting that the robustness of place-based PSE may stem from the periphery, not just the centre.

This paper is structured as follows: we outline the theoretical background on PSEs, Anchors' roles, and how Anchors shape participation during disruption. Then, we present our research design and findings, discuss these results, and unpack our contributions. We conclude with a discussion of the limitations and future research avenues.

Theoretical background

Public service ecosystems: an overview

In the '90s, the business and innovation literature began using the term 'ecosystem' to describe interdependent actors coordinating to foster

innovation (Adner 2017; Moore 1993), even when they pursue different objectives (see Adner 2017; Thomas and Autio 2014). Adner's notion of 'ecosystems as structure' is especially relevant, as it shows how diverse actors organize around a shared value proposition rather than through formal agreements. This notion aligns with the emerging PSE framework, which also stresses interdependence and interaction among actors. However, in PSEs, as discussed in the following paragraphs, value comes from ongoing interactions rather than a predefined value proposition.

A PSE is a multi-level, interconnected system of actors and resources whose interactions shape value creation in public service provision (S. P. Osborne et al. 2021, 2022; Trischler et al. 2023). Unlike traditional delivery-focused public service approaches, a PSE emphasizes the broader collaborative processes underpinning value creation (S. P. Osborne et al. 2021; Petrescu 2019; Trischler et al. 2023). Relying on a multi-level approach – including the macro (institutional and societal values, rules and norms), meso (organizational actors), micro (individual actors) and sub-micro levels (individual beliefs and values) – the PSE offers a more nuanced understanding of the complex landscape of public service provision (Kinder et al. 2022), particularly in face of the 'tectonic changes in society over the past 20 years', including Covid-19, reshaping how public management is studied nowadays (S. P. Osborne et al. 2022, 634).

Within this perspective, PSE actors are understood as being nested into a broader ecosystem, such that activities at the micro-level both shape and are shaped by dynamics at the meso- and macro-levels (Trischler and Trischler 2022). End-users are similarly conceptualized as active participants and as the ultimate arbiters of value creation and destruction in the PSE (S. P. Osborne et al. 2021, 2022). Value, therefore, emerges through ongoing interactions among actors within and across levels, rather than being produced solely by public service organizations and delivered to passive end-users (Kinder et al. 2022; Trischler and Trischler 2022; Trischler et al. 2023; Virtanen and Jalonen 2024).

In this context, value destruction is seen as a 'normal rather than divergent' (Cui and Osborne 2023b, 1220) feature of PSE, reflecting decline in individual, organizational, or societal well-being that occurs, often unintentionally, when actors adjust their initial value expectations to align with those of others (Liljeroos-Cork and Luhtala 2025) or due to misalignment of resources (Engen et al. 2021). Actors may trigger value destruction, or it may arise from the multi-layered architecture of processes, norms, and values that govern the system (Cui and Osborne 2023a). This kind of destruction often begins in one area, but its consequences may become apparent elsewhere (Liljeroos-Cork and Luhtala 2025).

The PSE's functioning depends on how actors interpret their roles and relationships (Kinder et al. 2021). S. Osborne et al. (2025) note that place-

based actors like intermediaries connect ecosystem levels, but their influence in specific contexts warrants further exploration. For instance, Sahamies and Anttiroiko (2024) show that centralized leadership by a focal organization, such as Espoo's city government, can emerge within a territory despite theories suggesting that no single organization should dominate an ecosystem (see also Kinder et al. 2021, 2022). These insights reinforce the centrality of *place*, which represents the contextual setting through which PSEs operate (Liljeroos-Cork and Luhtala 2025; S. Osborne et al. 2025; Strokosch and Roy 2025) and encompasses both relational (*habitus*) and territorial (*locus*) dimensions (see S. Osborne et al. 2025, drawing on Bourdieu). Importantly, *place* becomes especially prominent during disruptions, as these events intensify actors' territorial and relational embeddedness, shaping their responses (S. Osborne et al. 2025). Given the degree of embeddedness of some actors in such contexts, we now conceptualize Anchors as place-based organizations within these PSEs.

A conceptual framework: the role of Anchors within PSEs

Anchors, such as universities, hospitals, and cultural organizations, are 'important economic engines in many cities and regions' (Dubb and Howard 2012, 1) and have been widely examined in urban and regional development research for their territorial embeddedness (Birch, Perry, and Taylor 2013; Ehlenz 2018; Harris and Holley 2016). They interact with other local actors in the spirit of collaboration, rather than through contractual service delivery, to foster inclusive communities (e.g. Birch 2014; Koh et al. 2020; Ruggiero, Lombardi, and Russo 2022; Silverman 2014). This body of literature has evolved mainly alongside the PSE literature, with little dialogue between the two. Bringing these perspectives together allows us to examine how Anchors shape interactions during disruption, thereby indicating how value can subsequently be created or destroyed.

Anchors within PSEs: multi-level and place-based dynamics

We argue that Anchors are distinctive place-based PSE actors, whose influence stems from their territorial legitimacy, resource embeddedness, and relationships. While their territorial embeddedness provides the institutional basis for this role, their place-based influence lies in their capacity to shape the relational conditions through which other actors become engaged within the PSE (S. Osborne et al. 2025). In contrast to city governments, which may orchestrate value through formal authority and policy mandates within PSEs (Sahamies and Anttiroiko 2024), Anchors can mobilize financial, human, and intellectual capital to generate collective outcomes (Selviaridis, Luzzini, and Mena 2023; Sladek 2019). In doing so, they contribute to shaping place as a relational configuration where actors' possibilities for participation are

conditioned by their access to, and mobilization of, resources, relationships, and forms of legitimacy.

Anchors generally interact with other actors (e.g. local businesses, municipalities, and the local community) or foster relationships among them, contributing to value creation in the territory by aligning the interests, resources, and processes of these actors (Birch, Perry, and Taylor 2013; Ehlenz 2018). In this respect, Anchors may serve as facilitators of their core institutional mission (Ehlenz 2018; Zuckerman et al. 2019) or economic developers (e.g. employers or purchasers of goods) (Selviaridis, Luzzini, and Mena 2023). Due to their roots in the territory, they may also function as real estate developers (Ehlenz 2018) or as providers of other public services through community engagement (Ehlenz 2018; Ruggiero, Lombardi, and Russo 2022). This combination of territorial embeddedness and relational interdependence both enables and constrains Anchors, shaping the relational power dynamics that underpin the value-creation processes within PSE (e.g. Strokosch and Roy 2025) and positioning them as actors capable of actively reconfiguring relationships and resource flows across ecosystem levels.

Furthermore, unlike intermediary organizations that primarily bridge macro-meso levels, or mediating organizations that link meso-micro levels (S. Osborne et al. 2025), we argue that Anchors operate across all layers of the PSE, connecting the institutional, organizational, and individual domains. At the macro-meso interface, they make sense of overarching institutional and societal values and align them with organizational objectives. For example, universities often interpret national or regional policy goals, such as sustainability or social inclusion, and embed them into their strategic plans and partnerships (e.g. Ehlenz 2018). At the meso-micro interface, they translate these organizational objectives into concrete practices and collaborations with other PSE actors. For instance, hospitals operationalize their strategic priorities through collaborative networks and procurement strategies that create social value across service providers (Selviaridis, Luzzini, and Mena 2023). Also, Anchors mobilize resources and relationships to sustain engagement, for example, knowledge exchange and civic partnerships, thereby transforming collective purpose into individual participation (Birch, Perry, and Taylor 2013; Harris and Holley 2016; Koh et al. 2020; Ruggiero, Lombardi, and Russo 2022).

Collectively, these studies show that Anchors' territorial embeddedness provides the institutional basis for their role as place-based actors operating across multiple levels of the PSE. However, disruptions act as stress tests that unsettle established ways of operating (Leite and Hodgkinson 2023; Sancino and Tasselli 2024), pushing organizations, including Anchors, to make decisions under heightened uncertainty, without any certainty about the effects across the PSE. These tensions do not simply reflect breakdowns in coordination but raise the question of how pre-existing relational

configurations are changed through influential actors under disruption. We therefore develop the concepts of anchoring and de-anchoring to capture the mechanisms by which Anchors ultimately define the conditions of participation within the place-based PSE during a disruption.

Anchoring and de-anchoring during disruption

We conceptualize anchoring and de-anchoring as relational mechanisms by which Anchors, through their decisions, reconfigure relationships and resource flows, thereby defining the boundaries of participation within the place-based PSE during disruption. Anchors' decisions affect which actors are able to participate in the value-creation process and which are constrained from it by respectively 'anchoring' or 'de-anchoring' actors to the place-based PSE. These mechanisms not only reshape participation but also how resource flows – such as human capital and economic, technological, and infrastructural resources – are mobilized across the PSE (see, for example, Birch 2014; Harris and Holley 2016; Ruggiero, Lombardi, and Russo 2022).

Evidence across different types of Anchors shows how anchoring materializes during disruption. Drawing on the experience of Italian hospitals in the Veneto region, Cepiku et al. (2021) demonstrated that decisions enabled collaboration among hospitals, citizens, the third sector, and local governments, thereby mobilizing and coordinating critical resources such as care capacity, local knowledge, and community support. Ultimately, these decisions contributed to more coherent pandemic containment and expanded service coverage. Watkins et al. (2023) illustrate how public health professionals reconfigured their interactions with local administrators to improve the Covid-19 social media communication, enabling a more effective mobilization of informational resources and communication capacities. Similar findings emerged when Anchors prioritized collaboration and channelled resources for digital innovation to sustain civic engagement, such as Italian *university museums*¹ offering virtual experiences and U.S. universities acting as community testing hubs (Magliacani and Sorrentino 2022; Maurrasse 2021). Together, these studies illustrate how anchoring operates through decisions that enable some actors to contribute through their participation and resources to the value-creation process.

Conversely, de-anchoring mechanisms occur when Anchors' decisions limit the participation of some actors in the PSE's value-creation process during disruption. Cepiku et al. (2021) offer an illustration of the de-anchoring mechanism when showing that hospitals in the Lombardy region, choosing a hospital-centric approach, made decisions that excluded relevant territorial actors (i.e. community health services and general practitioners) and their resources from the emergency response, ultimately causing hospital overloads and the neglect of vulnerable people (see also Leite and

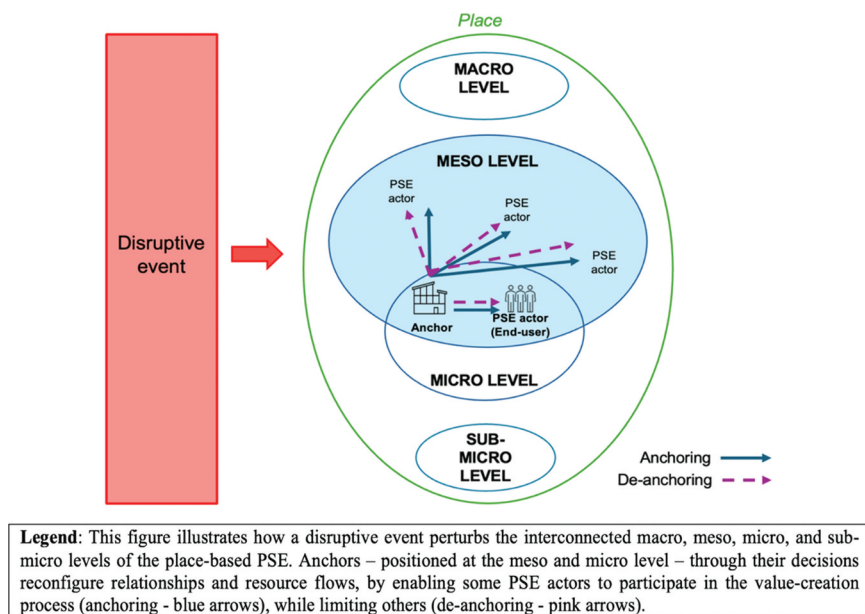


Figure 1. Anchoring and de-anchoring mechanisms. Source: adapted from S. P. Osborne et al. (2022).

Hodkinson 2023). Similarly, Maurrasse (2021) shows how campus closures involved decisions that limited the participation of surrounding businesses, thereby straining local employment and weakening procurement networks, as economic resources and demand flows were withdrawn from the local ecosystem.

Anchoring and de-anchoring thus capture the relational mechanisms by which Anchors, as place-based and multi-level actors, define the conditions of participation during disruption. Figure 1 illustrates the anchoring and de-anchoring mechanisms conceptualized above.

The research design

The method

We chose the qualitative single case study method to investigate our research questions. By providing an in-depth illustration and analysis of a concrete case that embodies a particular theory (Barzelay 1993) – in our case, the anchoring and de-anchoring mechanisms underpinning the Anchor's role within a place-based PSE – this method allows us to explore how our conceptualization unfolded in practice. Moreover, although a single case study does not allow for empirical generalizations, it nonetheless can yield valuable practical implications for contexts analogous to

the one examined, as it is grounded in in-depth observation of context-dependent mechanisms and relationships that are likely to manifest in similar settings (Myers 2019).

The justification of the case

To maximize the informational value of a single case, we selected UNISI during Covid-19 – from March 2020 to September 2021 – as a critical instance of an Anchor embedded within a place-based PSE (Flyvbjerg 2006). UNISI provides direct education services to end users (i.e. students), while other PSE actors provide additional indirect services (e.g. dining, housing, and hospitality). Together, these services reflect the shared aspiration to enhance students' educational and lived experiences. Crucially, it is this aspiration that legitimizes UNISI's influential role within this PSE.

Several reasons support our research site as a critical case. First, Italian universities operate within a context that grants them substantial financial and managerial autonomy, yet this autonomy is subject to national regulatory constraints. This makes the Italian setting especially valuable for exploring how Anchors navigate autonomy and control, since reforms have simultaneously strengthened the State's oversight over funding, curricula, and hiring, while implementing a governance model aimed at improving managerial flexibility. This model centres on three governing bodies (Rector, Academic Senate (AS), and Board of Directors (BoD)), two oversight bodies, and a General Director (Donina, Meoli, and Palearia 2015).² Second, as one of the oldest place-based universities in Italy and Europe, dating back to the 13th century, UNISI has longstanding relationships with local actors that recognize it as a cultural, economic, and political outpost. Historically managed by the municipality of Siena, UNISI's collaborations with local partners (e.g. *Monte dei Paschi di Siena*,³ city quarters known as *contrade*,⁴ the city hospital, and local firms) have since fostered technology transfers and entrepreneurial revitalization (up to 2025, 40 spin-off firms and two start-ups). Third, UNISI's governance structure reinforces its rootedness in place. Two members of the BoD represent the territory; both are appointed by the Rector, with one appointed only after consulting the mayor of Siena and the President of the Province (see Table 1, interviewees BoD4 and BoD5). Finally, the peculiar medieval layout of Siena produces a distinctive 'city-campus' (Università di Siena 2021) in which UNISI's facilities are dispersed across the urban fabric (Figure 2). This dispersion means that students demand both direct and indirect services as they move fluidly between departments, cafeterias, libraries, and accommodations. This spatial configuration, therefore, embodies the place-based PSE, linking the *locus* (the city's territorial and infrastructural layout) with the *habitus* (the social

Table 1. List of interviewees.

<i>1st Round of Interviews</i>				
N	Interview participant(s)	Reference	Duration	Output (T = transcript, N = notes, O = Other)
1	Rector	Rector	34m42s	T, N
2	Academic Senate - representative of departments' directors 1	AS 1	1h22m	T, N
3	Academic Senate - representative of departments' directors 2	AS 2	35m39s	T, N
4	Academic Senate - representative of professors 1	AS 3	31m58s	T, N
5	Academic Senate - representative of professors 2	AS 4	28m47s	T, N
6	Academic Senate - representative of professors 3	AS 5	18m22s	T, N
7	Academic Senate - representative of professors 4	AS 6	34m44s	T, N
8	Academic Senate - representative of student 1	AS 7	42 m	T, N
9	Academic Senate - representative of student 2	AS 8	40 m	T, N
10	Academic Senate - administrative staff 1	AS 9	28m23s	T, N
11	Board of Directors- representative of professors 1	BoD 1	26m30s	T, N
12	Board of Directors - representative of professors 2	BoD 2	27m08s	T, N
13	Board of Directors - representative of professors 3	BoD 3	27m05s	T, N
14	Board of Directors - external member 1	BoD 4	46m17s	T, N
15	Board of Directors - external member 2	BoD 5	27m05s	T, N
16	General Director of the University	GDU	40m19s	T, N
17	Delegate to the Budget	DB	1h30m	T, N
<i>2nd Round of Interviews</i>				
18	Business Administration Student 1	S1	51m42s	T, N
19	Business Administration Student 2	S2	51m27s	T, N
20	Statistics Student	S3	46m08s	T, N
21	Medical Student	S4	35m04s	T, N
22	Literacy Student	S5	36m58s	N
23	Pharmacy Student	S6	30m05s	T, N
24	President of the Contrada 1	C1	41m23	T, N
25	Three Executives from the Contrada 2	C2	N.G.	O (written responses)
26	President of the Council of the Contrade	PC	50m03s	T, N
27	City Major	M	39m45s	T, N
28	Vice-president of the Association of local small and medium enterprises	VP	30 m	N
29	President of the Association of local small and medium enterprises	P	20 m	N
30	Local business 1	LB	24m17s	T, N
31	Real estate agent 1	REA	11 m	N
32	Landlord	L	30m32s	T, N
33	Administrative staff 1	ADMIN1	21m28s	T, N
	Administrative staff 2	ADMIN2		
	Administrative staff 3	ADMIN3		
34	General Director of the University Hospital	GDH	23m56s	T, N
35	Local Journalist 1	LJ1	29 m	T, N
36	Local Journalist 2	LJ2	55m07s	T, N

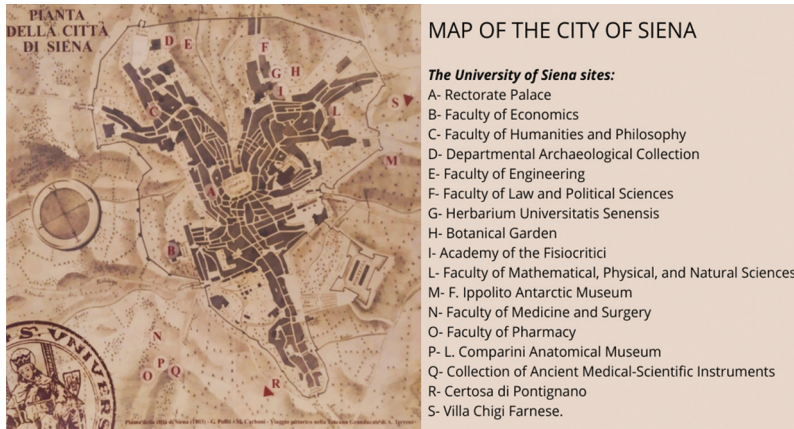


Figure 2. 'The UNISI city-campus'. Source: authors' photo of the city of Siena map and UNISI sites displayed in the rectorate palace.

practices and interactions through which PSE actors enact and reproduce their relationships within place).

Furthermore, the Covid-19 pandemic provides an ideal context for exploring the role of Anchors within the place-based PSE during disruption. Italy was among the first countries to be affected by Covid-19 (Hodges et al. 2022; Kuhlmann et al. 2021). The unexpected nature and widespread impact of the pandemic added organizational and managerial complexity to the delivery of services to students, requiring universities to rethink course syllabi and delivery modes to align with evolving student preferences (Nanath, Sajjad, and Kaitheri 2022). These circumstances made studying UNISI during the Covid-19 pandemic a particularly compelling opportunity to observe Anchors' relational dynamics.

Data collection and analysis

Overall, our data collection comprised 36 semi-structured interviews with 40 participants conducted between September 2022 and March 2025 (see Table 1). Interviews were complemented by documentary sources that supported the triangulation of insights on UNISI's decision-making and its relationships with other actors of the PSE (see Table A1).

We employed an abductive approach to analyse our collected data (Alvesson and Kärreman 2007; Alvesson and Sköldberg 2017). Abduction involves a continuous interplay between data observations and theoretical reflections, prompting the researcher to iteratively move between emerging insights and conceptual constructs. This iterative approach allowed us to gradually construct a system of analytical categories that captured how

UNISI shaped the conditions for participation within the PSE during the Covid-19 pandemic, leading us to progressively conceptualize our anchoring and de-anchoring mechanisms and to theorize an emergent relational mechanism that we term ‘reverse anchoring’. Furthermore, this approach allowed us to describe the case in depth while generating theoretically informed interpretations (Langley 1999).

At the outset of our study, we relied on our intuition that the UNISI acted as an Anchor whose decisions during the Covid-19 pandemic generated significant effects across the city, its actors, and the relationships among them. To this end, we first collected and analysed the minutes of UNISI’s governing bodies – the BoD and the AS (33 documents, totalling 2,182 pages; see Table A3 in the Appendix). These documents allowed us to identify who was involved in UNISI’s decision-making during the Covid-19 pandemic and to plan our interviews (see Table 1, 1st Round of interviews) to explore a) the main issues/topics discussed during the pandemic; b) the arguments used in favour/against key decisions during the pandemic; c) the dialogue with territorial actors other than those represented in the BoD and the AS. We initially coded the interview transcripts based on the types of decisions made by UNISI during the Covid-19 pandemic. Then, in a second round of coding, we assessed which territorial actors were positively or negatively affected by these decisions.

Our analysis of data gathered during the first round of interviews indicated two distinct phases of UNISI’s decision-making over the broader timeframe of the Covid-19 pandemic. Accordingly, we segmented the Covid-19 pandemic into: 1) an emergency phase (9 March–17 May 2020), marked by the sudden health crisis, quarantine and lockdown measures that significantly restricted personal freedom and access to service; 2) a recovery phase (18 May 2020 - September 2021), when normalcy was gradually restored addressing both its tangible and intangible consequences, including people’s sense of security, freedom, and access to regular services (see Table A2 in the Appendix) (Dynes, Quarantelli, and Kreps 1972). This temporal segmentation enabled us to analyse when and how positive and negative effects unfolded across different stages of disruption. However, rather than treating these as final analytical categories, we further examined how such effects were produced. Specifically, we traced them back to the underlying mechanism through which relationships between territorial actors were reconfigured following the Anchor’s decisions. This shift allowed us to reconceptualize these dynamics as anchoring and de-anchoring mechanisms, that is, relational mechanisms activated by the Anchors when their decisions reconfigure relationships and resources as a response to the disruption. Based on this refinement, we performed a third round of coding, linking relevant quotations on anchoring and de-anchoring mechanisms to the corresponding phases of the pandemic.

Our ongoing data analysis revealed an additional, yet unexplained, mechanism during the recovery phase – distinct from the anchoring and de-anchoring just conceptualized. At this stage, we termed it reverse anchoring to capture the supportive relationships of territorial actors within the city-campus of Siena towards the Anchor. While this phenomenon appeared intuitively significant, we found it difficult to fully interpret it within our initial conceptual frame. Constructive feedback from reviewers encouraged us to unpack its emergence further and conceptualize this mechanism more clearly. It prompted us to reflect on the reciprocal and ecosystemic nature of relationships among city actors and to seek a broader analytical lens to capture these relational dynamics. It was at this stage that we drew on the PSE framework to reconceptualize all three relational mechanisms.

We refined our conceptualization, rooting UNISI as a distinctive place-based actor within the PSE and revised the anchoring and de-anchoring concepts in terms of relational mechanisms during disruption (see Section ‘Theoretical Background’), while also acknowledging the emergence of reverse anchoring, whereby other PSE actors supported UNISI’s role in the PSE (theorized in the ‘Discussion and Contributions’ Section). This revision prompted additional data collection to include the viewpoints of other PSE actors concerning their ties to UNISI and their perceptions of its decision-making across the period examined. Accordingly, we conducted a second round of interviews with different PSE actors (see [Table 1](#), Interviewees Round 2). We also interviewed two local newspaper reporters who, although external to the PSE, were fully embedded in city life and closely observed and narrated key events of the city during the pandemic. They provided us with valuable insights into the PSE’s functioning during the period under investigation.

Following these interviews and our re-conceptualization of anchoring, de-anchoring, and reverse anchoring, we conducted two additional rounds of coding on the transcripts and notes from all 36 interviews, including those analysed earlier. In the first round, guided by the PSE literature (Kinder et al. [2022](#); S. P. Osborne et al. [2022](#)), we examined the PSE’s multi-layered structure in which UNISI is embedded. We distinguished between micro, meso, and macro levels by identifying quotes addressing: (1) how PSE actors perceived UNISI’s decisions during Covid-19; (2) how PSE actors related to one another; and (3) how societal norms and values shaped decisions and perceptions. Consistent with our focus on relational mechanisms, we excluded the sub-micro level of the PSE framework from our analysis, as it concerns individual beliefs and values. In the second round, we revisited the data through the lens of our latest conceptualization of anchoring, de-anchoring, and reverse anchoring within PSEs, assessing whether emerging patterns of interaction aligned with any one of the mechanisms.

Concurrently with the re-analysis of all the data collected, we also considered additional documentary sources (e.g. local newspaper articles), which helped us contextualize and enrich our interpretation of the place (see [Table A1](#) in the [Appendix](#)). These documents provided insights into how different actors interacted within the PSE across the Covid-19 phases.

As a final remark on our analytical approach, it must be noted that our proximity to UNISI facilitated in-depth data access and improved our understanding of the case in its real-life context from the perspective of multiple PSE actors (George and Bennett 2005; Stake 2008, 2010). To mitigate potential subjectivity bias, we applied triangulation across data sources and interpretative perspectives (Yin 2009). Triangulation across data sources (interviews and documents) reduced the risk of bias arising from reliance on a single type of evidence. In contrast, triangulation across authors' ongoing discussions and interpretations mitigated the influence of individual subjectivities on our analytical insights. These exchanges allowed us to develop a shared, rather than a singular, reading of the findings and to capture the interviewees' views as best as possible.

Findings

In this section, we illustrate how UNISI shaped the conditions of participation by reconfiguring relationships and resource flows across the place-based PSE during the Covid-19 pandemic. We organize our findings into two subsections – emergency and recovery – in line with our temporal segmentation. For each phase, we present the macro, meso, and micro levels jointly to emphasize the continuous interactions among them (see S. P. Osborne et al. 2022; Trischler and Trischler 2022), and to more clearly signpost the multi-level functioning of an Anchor across the PSE. We trace how UNISI translated emerging regulations into strategic objectives and, in turn, how these objectives produced decisions that enabled, or at times limited, the participation of some actors and the mobilization of their resources for value-creation, thereby reflecting anchoring and de-anchoring mechanisms. In the recovery subsection, we also present the reverse anchoring identified in our analysis.

Emergency phase: the interaction between macro, meso, and micro levels

In response to the health emergency, the Italian Government imposed a nationwide lockdown on 8 March 2020, interrupting, among other things, in-person teaching. UNISI was therefore required to '*close the gates*' (AS1 - Q1). As the Rector explained:

‘UNISI, like the other national universities, mainly had to decide how to implement what was decided at the national level. So, it was more about how we were going to implement it’. (Q2).

Consequently, its governing bodies translated the national regulations into decisions that enabled a swift transition to remote teaching, seen as the most effective way to ensure educational continuity during the emergency. As one interviewee noted:

‘The exceptional thing was transforming a university from in-person to online, not by choice but by decree’. (BoD5 - Q3)

To enact this transition, UNISI’s governing bodies adopted a series of decisions regarding the deployment of resources and the reorganization of activities. As the Rector explained:

The first important decision was to organise the [digital] platforms for the delivery and organisation of teaching activities remotely [...] to get all students and teachers as quickly as possible into the condition to carry out the planned educational activities. (Q4)

UNISI’s investment in digital technologies (DB, GDU), the reorganization of administrative activities (GDU, Rector, DB, BoD2), and the development of new health protocols (DB) were intended both to minimize the risk of virus transmission among students and staff, and to support the transition to remote teaching. These decisions on how to channel their resources were driven by the need to provide students with ‘*the opportunity to benefit from the same educational services they had before*’ (DB – Q5). As a member of the BoD stated:

If I were to identify a primary stakeholder, it would definitely be the students, while, of course, we cared for the safety of the entire community. [...] the decisions, the investments made, aimed to [...] ensure the enjoyment of the service. (BoD2 - Q6)

Furthermore, the centrality of students was evident in UNISI’s efforts to avoid exam and graduation delays. As reported in the newspaper article, ‘*The number of exam sessions held from March [...] was 10% higher than [...] the previous year*’ (Art. 32, [Table A1](#) in the [Appendix](#) - Q7). One student similarly noted:

‘Looking at the results and the exams I’ve taken, I was definitely more productive because I had never taken so many exams in such a short time’. (S1 - Q8)

Despite technical challenges in delivering lectures and exams, including connectivity issues and concerns about exam integrity (AS5, AS4), maintaining the quality of educational services remained a key concern for professors (DB, AS1, BoD5). The shift to remote teaching prompted the

introduction of new strategies to foster students' engagement. Overall, students recognized UNISI's effort, as the following quotes demonstrate:

'The university was quite present in delivering the lectures online, recording lectures, and also the exams were conducted through platforms' (S6 - Q9)

Group projects, which I believe the professor would not have assigned if the lessons had been held in person [...], allowed us to explore methodologies practically, giving a meaning to what we were studying. Without them, concepts would have remained purely theoretical. (S2 - Q10)

The shift also reshaped some students' social experience, as after-class group work planned by professors *'became a sort of virtual "living room" moment'* (S2 - Q11), helping sustain a sense of community during lockdown.

Driven by its core mission, UNISI's decisions ensured continuity in educational delivery, while concentrating key educational resources (e.g. teaching capacity, digital infrastructure, and assessment processes) within remote delivery systems. In so doing, the decisions enabled students' engagement in the PSE despite disruptions. More specifically, this reorganization reconfigured how students participated in educational activities, reshaping interactions between students, staff, and institutional processes. In this sense, UNISI's decisions helped anchor students and its staff in the PSE, enabling them to participate in the value-creation processes and to access or provide resources, despite the disruption.

However, the same decisions reshaped relationships among other PSE actors. Under normal circumstances, these actors, such as café, restaurant, and bookstore owners, along with landlords, would have indirectly enhanced students' experiences by offering complementary services. Though due to students being confined to their homes, the interactions on which such actors depended for economic flourishing were weakened, as demand flows and consumption-based resources were withdrawn from the local ecosystem. As the local newspaper described, *'With the lockdown, in-person teaching was replaced by remote teaching, damaging the city's economy. Many students returned home [...] This imbalance highlights the key role students play locally'*. (Art. 4, [Table A1 in the Appendix](#) - Q12). Similarly, in the interviews, the President of the association of local small and medium enterprises stated that *'the absence of students had a particular impact on service companies, except for those outside the city centre. The university [...] is a pillar of the local economy'*. (Q13), while a local entrepreneur explained that *'we are connected to the university, so if the university closes, we don't work'* (Q14). In this sense, due to the high interdependence among PSE actors, the UNISI's decision to switch to remote teaching de-anchored these actors from the PSE, limiting their ability to contribute, through their participation and resources, to value-creation processes during the emergency phase.

Furthermore, the simultaneous activation of anchoring and de-anchoring mechanisms contributed to reshaping the perceptions of the place in which UNISI is embedded. By maintaining student engagement remotely, UNISI's decisions changed how actors interacted and how the city-campus was experienced and understood. As one interviewee observed, *'academically nothing has changed [...] the physical aspect has changed: walking from one side to the other was no longer possible'* (S5 – Q15). Others stressed that *'the idea of Siena as a city-campus lost its significance without students present'* (DB – Q16) as the *'true essence of the city was undeniably missing'* (AS7 – Q17).

Recovery phase: the interaction between macro, meso, and micro levels

As Covid-19 infections gradually declined, the Italian Government began easing national containment measures in May 2020. Universities were given discretion to resume their activities. UNISI's governing bodies' decisions progressively sought to reintroduce in-person activities while strengthening health protocols, aiming to restore the PSE's functioning. As one interviewee noted: *'[The] community presence has always been fundamental, and this is demonstrated by the fact that the [Rector] tried to open [UNISI] at the first opportunity'*. (DB – Q18)

Restoring in-person activities sought to provide students with *'an ideal learning environment'* (Art.2, [Table A1 in the Appendix](#) - Q19). As many interviewees stressed (Rector, DB, BoD2, BoD3, and AS1), UNISI is *'not a telematic university'* (Q20). Continued reliance on remote activities also conflicted with its identity as a place-based institution, whose relational ties sustain the local ecosystem (Art. 24; [Table A1, Appendix](#)).

The gradual resumption of activities unfolded in different stages. First, UNISI's governing bodies decided upon the return of staff to on-site work (DB, GDU). This transition proceeded smoothly, thanks to the health protocols and the staff's willingness to return to a more ordinary work routine. As the GDU explained, UNISI's staff *'asked to return to service [...] to return to a more normal life.'* (Q21). Next, libraries and study rooms were reopened under strict sanitation and distancing protocols. This decision shaped how students could engage with UNISI and the student community beyond purely digital platforms and proved particularly important for students who, during the lockdown, were confined to small or shared rooms in Siena (Rector).

Plans were subsequently developed for the full resumption of in-person teaching in the 2020/2021 academic year. This prospect was extensively debated within UNISI's governing bodies. Some emphasized the importance of in-person teaching for *'improving the relationship between students and having an engagement also with the professors'* (S4 - Q22). Others expressed

concerns about a hasty return to in-person teaching, given the uncertain trajectory of the pandemic and frequent regulatory changes, which could create logistical difficulties for students returning to Siena and discourage enrolment in the following year (DB, BoD1, BoD3). Consequently, a hybrid teaching modality – that is, a mixed mode in which lectures are delivered simultaneously in person and streamed online via interactive platforms – was deemed the most viable option, although subsequent infection waves forced repeated returns to remote teaching.⁵

Hybrid teaching enabled multiple modes of engagement, providing students with greater flexibility and allowing them to remain connected to UNISI both physically and remotely (AS3) by redistributing access to educational resources across physical and digital spaces. In this sense, UNISI's decision sustained students' participation and learning continuity by stabilizing their engagement despite the ongoing disruption. By accommodating students' diverse logistical and health-related needs, UNISI's decision anchored students to the PSE, ultimately enabling them to participate in the value-creation process in person or remotely during the recovery phase.

As the following quotes exhibit, students' participation depended on the flexibility of these interaction arrangements:

'Many foreigners, for various legal reasons in their countries or due to different needs, weren't able to come immediately'. (S1 - Q23)

'I practically never went there [...] until the end of the year because I feared contagion'. (S2 -Q24)

'I wanted to go back to the classroom [...] I wanted to see the professors, the university environment'. (S3 - Q25)

'Many of the out-of-town students found themselves in the situation of having left home and therefore opposed the idea of 100% in-person because it would have forced them to find a home again' (DB – Q26)

Where in-person activities were mandatory, UNISI also strengthened health protocols to protect students' safety. As one student explained:

'Most [internship activities] took place regularly, simply with variations on the number of students participating or the requirement to, for example, have a swab before starting'. (S4 - Q27).

However, restoring the 'city-campus' required more than just teaching flexibility; it depended foremost on students' physical presence (AS5, GDU), which sustained the rental market, local businesses, and the city's social life (Rector, AS1 and AS5, LJ1, LJ2, S1). There was a perceived need for the local community to repopulate the city with more students. As the GDU recalls, people in Siena would ask the Rector, '*Are you bringing students back to Siena?*' (Q28). Because of hybrid teaching and ongoing pandemic

uncertainty, students' return was only gradual. As a newspaper reported, *'The current situation [of uncertainty] does not allow for a significant return of students'*. (Art. 3, [Table A1 in the Appendix](#) - Q29). An interviewee added:

The return of students was gradual. They come to Siena based on their needs: whether it's to attend a course, take an exam, or work on their thesis. However, their attendance wasn't exactly regular; it was more staggered. But when there was the possibility to move around more freely, their presence increased. (L - Q30)

Local businesses commenced resuming their activities. As explained by a representative of local entrepreneurs, *'Students are an added value. [...] They represent a significant economic cycle through rent, daily expenses, shopping, and even nightlife activities like having an aperitif or going out for pizza'* (Art. 4, [Table A1 in the Appendix](#) - Q31). In this sense, the decision to adopt the hybrid teaching modality anchored these territorial actors to the PSE, enabling them, once more, to contribute through their participation and resources to the value-creation process during the recovery phase, a role they had previously been restricted from.

However, providing in-person teaching also brought significant challenges for UNISI. Given UNISI's city-campus configuration, with dispersed and unevenly sized departments and facilities (GDU, Rector, DB), and the national distancing requirements in place, UNISI lacked sufficient space to accommodate all students safely. Facing this difficulty, PSE actors – i.e. the Municipality, the contrade, and clerical institutions – offered their own spaces, mostly free of charge or for a symbolic fee, to support UNISI. As recalled by some interviewees:

The contrade care a lot about the local institutions, including the university. [...] Many of us Sienese have studied or worked at UNISI or have relatives who have. So, lending a hand to the university [...] becomes a simple, spontaneous gesture that does not require any particular solicitation. (C1 - Q32)

Thanks to the contrade, the social fabric, the Municipality [...] we did get a lot of help [...] we found Santa Maria della Scala⁶ [...]. The parish of San Miniato⁷ provided [...] a pseudo-warehouse that we equipped for use. (GDU - Q33)

Several interviewees noted UNISI's influential role in sustaining the local economy, particularly through students' presence, and its deep embeddedness within the city (AS1, BoD2, GD, LJ2). As one member of the AS explained, the contrade's participation and mobilization of resources occurred *'both for cooperation and [...] because having the students here in Siena had a different economic impact compared to having students studying remotely'* (AS5 - Q34). In other words, their support was rooted in a broader recognition of UNISI's territorial embeddedness, reflected in what one described as *'a general awareness that the University is an integral part of*

the urban territory, of the community' (AS3 – Q35). This awareness underscores the strong sense of mutual belonging and shared responsibility typical in a place-based PSE, as noted, '*UNISI is located in a small city [. . .] where the integration between approximately 15,000– 16,000 students and a local population about three times larger makes the university an integral component of Siena's social and urban fabric*'. (AS4 – Q36). Taken together, this sense of mutual belonging and responsibility underscores the activation of an additional relational mechanism during disruption in place-based PSEs, i.e. the reverse anchoring. Through this mechanism, other place-embedded actors mobilize resources (e.g. venues and spatial capacity) to sustain the Anchor's role and the functioning of the PSE.

Discussion and contributions

We integrated the literature on Anchors and PSE to explore our initial intuitions about the role of Anchors within place-based PSEs during disruption and to conceptualize how Anchors' decisions shape the conditions of participation in the value-creation process. Our abductive approach enabled us to progressively construct an analytical framework that reveals how Anchors' decisions can enable or limit actors' contribution to the value-creation processes. In doing so, we provide a theoretical contribution at the intersection of these two literature streams.

While most Anchor studies look at continuity and long-term positive contributions to the territory (Birch, Perry, and Taylor 2013; Ehlenz 2018; Selviaridis, Luzzini, and Mena 2023), our findings show that Anchors' contribution to place cannot be understood only through their physical and institutional presence. The temporality of disruption also matters. Temporality shifts the focus from steady-state territorial contributions to adaptive, dynamic ways in which Anchors shape place as a relational configuration within the PSE over time, thereby opening new questions about the relational mechanisms at play in a place-based PSE. Similar to the study by Sancino and Tasselli (2024), the disruption unsettled UNISI's territorial and relational dimensions of the place-based PSE (Q15, Q18, Q20), as regulatory changes and shifting actor needs at times challenge its alignment activities across the ecosystem. However, while recent studies of Anchors under distress tend to examine snapshot responses to disruption (e.g. Cepiku et al. 2021; Magliacani and Sorrentino 2022; Maurrasse 2021), our study suggests that the role of an Anchor changes across different phases of disruption. We show that UNISI adopted phase-contingent roles: in the emergency phase, it prioritized its core mission and regulatory compliance (Q4-Q6), whereas in the recovery phase, the gradual easing of restrictions allowed for renewed engagement with the surrounding community (Q19). By

pointing to this temporal distinction, the UNISI case offers a dynamic, time-sensitive perspective that has been less explicitly mobilized in existing Anchor scholarship.

Building on this insight, our findings expand current PSE literature by shifting the analytical focus from interactions within ecosystems to the relational mechanisms that define the conditions under which such interactions become possible and generate value within the PSE. In this regard, we account for the distinct role of Anchors in place-based PSEs during disruptions. Despite PSE research arguing against the existence of focal organizations (Kinder et al. 2021, 2022), the UNISI case suggests that, during disruption, an Anchor may contribute to the functioning of the PSE rather than merely participate in it (Sahamies and Anttiroiko 2024; see also S. Osborne et al. 2025; Strokosch and Roy 2025). It is through its territorial influence and relational embeddedness that it acts across multiple levels of the PSE, functioning simultaneously as translator and mediator (S. Osborne et al. 2025). As a translator, UNISI interpreted macro-level regulations (e.g. lockdown measures) and translated them into meso-level strategic objectives such as the shift to remote and later hybrid teaching (Q1–Q3; Q19–Q21). As a mediator, it gradually resumed its role as an economic engine for the local community (Dubb and Howard 2012; Ehlenz 2018; Selviaridis, Luzzini, and Mena 2023) by balancing the expectations of meso- and micro-level actors, including students, landlords, and local businesses. For example, the broader engagement during the recovery phase – reflected in the progressive reopening of study spaces, students’ partial return to Siena (Q25–Q27, Q29–Q30), and the gradual resumption of activities by local businesses (Q31) – helped re-enable relationships which were suspended during the emergency phase, eventually restoring the functioning of the place-based PSE.

Crucially, the multi-level work by Anchors underscores their potential to activate anchoring and de-anchoring mechanisms across the place-based PSE through their decisions, thereby reconfiguring relationships and resource flows during disruption. Our findings show that these two mechanisms are not mutually exclusive but can be activated simultaneously. The shift to remote teaching anchored students by ensuring educational service continuity and quality, fostering interactions, and maintaining a sense of community through the deployment of resources like digital platforms (Q7–Q11), while weakening ties between students and local businesses, thereby withdrawing access to resources previously available within the local economy (Q12–Q14). This illustrates how a single decision by an Anchor may activate divergent relational mechanisms across different parts of the PSE. In turn, this helps explain why value destruction, as described by Cui and Osborne (2023a, 2023b) and Liljeroos-Cork and Luhtala (2025), materialize in parts of the ecosystem distant from the initial decision, even when unintended.

Importantly, anchoring and de-anchoring differ from emerging constructs in the PSE literature, such as alignment, coordination, and value creation/destruction. Anchoring and de-anchoring are relational mechanisms that reconfigure relationships and resource flows within the PSE during disruption. In so doing, they establish the conditions under which PSE actors can participate in the value-creation process. They therefore do not simply reflect alignment or misalignment among actors, nor do they describe mere coordination. Alignment captures the degree of coherence in actors' orientations or interactions, while coordination refers to the organization of these interactions (e.g. S. P. Osborne et al. 2021; see also Sahamies and Anttiroiko 2024; Liljeroos-Cork and Luhtala 2025). By contrast, anchoring and de-anchoring operate prior to these processes by shaping which actors and resources can enter into, or are excluded from, the interactions through which alignment and coordination occur.

Anchoring and de-anchoring also differ from value creation/destruction. Value creation and destruction are evaluative outcomes that materialize primarily at the level of end-users, the ultimate arbiters of value (S. P. Osborne et al. 2021, 2022).⁸ In our case, these evaluative outcomes are reflected in students' recognition of UNISI's efforts to sustain its core mission across both phases of disruption (Q7–Q11; Q22–Q26). However, this recognition is grounded in how UNISI initially reconfigured the boundaries of participation for value creation, which enabled some actors and their resources to contribute (e.g. through digital platforms, venues) while constraining others. Anchoring and de-anchoring, therefore, explain how access to value-creation processes was structured before value was ultimately experienced or evaluated by end-users.

Taken together, our findings corroborate that anchoring and de-anchoring capture an analytically distinct level of PSE dynamics. They are ecosystemic mechanisms that precede alignment and coordination and shape the conditions under which value may be created (or destroyed). By defining *a priori* which actors and resources can contribute to the value-creation processes and which cannot, anchoring and de-anchoring establish the boundaries of participation through which alignment, coordination and value outcomes subsequently emerge in a place-based PSE. In doing so, we extend PSE theorization by identifying an implicit analytical layer that has remained unexplored in existing work.

However, anchoring and de-anchoring alone do not fully explain how place-based PSEs respond to the disruption. As shown above, Anchors' decisions can simultaneously enable and constrain participation, promoting the deployment of resources or withdrawing them, generating imbalances they cannot fully resolve on their own. These dynamics raise the question of how the PSE's functioning is sustained when a focal, place-based actor becomes temporarily constrained and call for considering alternative ways

of mobilizing surrounding actors and resources to restore the PSE during disruption (see S. Osborne et al. 2025).

Our findings point to such an alternative mechanism. When distancing requirements temporarily constrained UNISI's ability to resume fully in-person teaching, Anchors' operational capacity as a place-based Anchor was significantly limited. In response, a range of PSE actors mobilized their resources to sustain UNISI's role in the city-campus of Siena. Territorial actors such as the contrade, the municipality and the parish provided alternative physical spaces to host teaching and exams (Q32–Q34), often extending beyond formal contractual obligations. These interventions were not purely transactional but drew on longstanding civic ties and shared place-based histories (Maurrasse 2021). We conceptualize this emerging mechanism as reverse anchoring: a relational mechanism through which surrounding PSE actors provide material resources to support an Anchor whose ability to operate across levels has been temporarily disrupted (Figure 3). Rather than co-producing services, actors adapted their roles and contributions by employing resource substitution (Q33), relational realignment (Q32), and identity-driven mobilization (Q35–Q36) to restore Anchor's role as a multi-level, distinctive place-based actor in the PSE.

This finding aligns with Kinder et al.'s (2021) intuition that leadership in PSE is about helping others exercise power through dialogic processes,

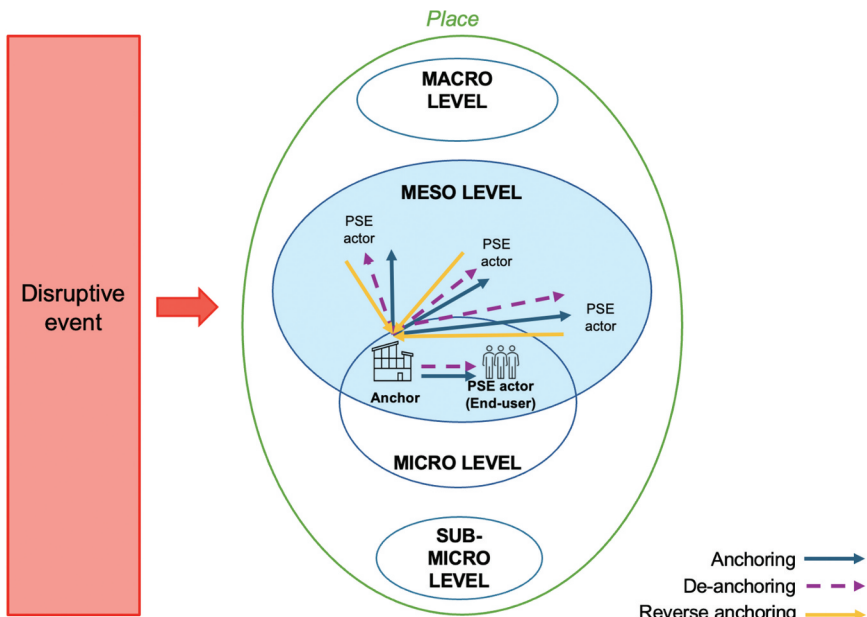


Figure 3. Anchoring, de-anchoring, and reverse anchoring within a place-based PSE during disruption. Source: adapted from S. P. Osborne et al. (2022).

legitimization, and shared understanding, rather than exercising power. Because many of these actors provide complementary services to students (e.g. accommodation, food) – pointing to students’ presence being central to the city (Q16-Q17) – the most effective way to restore the PSE for them was to support the Anchor’s role in the PSE and mobilize resources towards it so that it could resume in-person teaching and sustain the rhythms of the city-campus. In the UNISI case, voluntary mobilization of resources by other PSE actors was, thus, guided by the profound interdependence of the Anchor with PSE actors (Q14) and by the shared interest in bringing students back (Q28).

Reverse anchoring extends place-based PSE theorization by showing that its relational dimension during disruption is not solely dependent on the adaptive capacity of a single focal actor. Prior research notes the coordinating role of public authorities (Sahamies and Anttiroiko 2024; Sancino and Tasselli 2024) and the importance of multi-actor coordination during disruption (Cepiku et al. 2021). Reverse anchoring, in contrast, reveals how, in a PSE, an Anchor can temporarily become an object of anchoring, and that PSE robustness arises through mutual anchoring among embedded actors in the PSE. Unlike S. Osborne et al. (2025), who conceptualize robustness as an ecosystem-wide adaptive capacity that supports a public authority’s response to turbulence, robustness in our case emerges when surrounding actors mobilize resources to support the Anchor’s role and thereby restore its ability to function as a multi-level actor at all times. This reveals a distinct relational mechanism through which ecosystem robustness can originate from the periphery rather than the centre. In so doing, this finding invites re-considering how PSEs’ stability under disruption has so far been conceptualized, particularly given recent debates on PSEs’ resilience and robustness (Leite and Hodgkinson 2023; S. Osborne et al. 2025; Sancino and Tasselli 2024; Strokosch and Roy 2025) and value destruction due to misalignment (Cui and Osborne 2023b; Engen et al. 2021).

This paper also offers a practical contribution, primarily directed at Anchors’ managers, who must be prepared to mitigate the consequences of the temporary de-anchoring of some actors from the PSE during disruption. Managers, when deciding on services to be provided to end-users, should mediate between relationships with meso- and micro-level actors by carefully evaluating and balancing diverse needs, expectations, and constraints across the various phases of disruption. To strengthen the robustness of the place-based PSE, managers should also focus on building solid, enduring relationships with other local actors, rooted in shared place-based embeddedness, mutual dependence, and a collective sense of responsibility towards the local community. Taking these efforts proactively helps the PSE anticipate future disruptions and creates the conditions for reverse-anchoring mechanisms to develop.

Limitations and future research

This study has some limitations stemming from our research design choices and the method adopted. Although data collection and analysis reached theoretical saturation, we may still have overlooked the perspectives of some PSE actors. Additionally, our conceptualization focused on anchoring, de-anchoring, and reverse anchoring as relational mechanisms through which Anchors' decisions reshape participation in place-based PSEs under disruption. As a result, we examined how PSEs function during disruption rather than their outcomes in terms of value creation or destruction in such periods, an area that future research could explore more deeply.

Furthermore, our theoretical and practical contributions are based on a single case of UNISI as a critical instance of an Anchor within a place-based PSE. The critical nature of the UNISI case – reflected in its embeddedness and interdependencies – maximizes the informational value of our analysis. The UNISI case also allows us to suggest that if our findings are valid in such an information-rich setting, they are likely relevant to analogous contexts (Flyvbjerg 2006). By analogous contexts, we mean environments that share the structural conditions supporting the mechanisms identified here: a place-based Anchor embedded within a highly interdependent PSE, facing a disruptive event that unsettles established arrangements. In these cases, mechanisms like anchoring, de-anchoring, and reverse anchoring are likely to be activated, even if their specific forms may differ across locations. To enhance empirical generalizability, future research should investigate Anchors in other PSEs during different types of disruptive events. As we finalize this paper, PSEs worldwide are increasingly exposed to disruptions of various kinds occurring at unprecedented rates, such as wars and natural disasters. Improving our understanding of how such disruptions impact place-based PSE and the actors therein is essential for ensuring that academic research effectively informs practice and supports responses that maintain PSE functioning and value creation during disruptions.

Notes

1. University museums are museums owned, managed, or affiliated with a university. They combine the preservation, research, and public communication of collections with the university's educational and scientific missions.
2. Traditionally, public Italian universities operated under a highly centralized model, functioning as state-dependent bureaucratic entities with limited autonomy (Capano, Regini, and Turri 2017). Law n. 168/1989 represented a turning point by recognizing universities as autonomous institutions with their own legal personality, granting them managerial and organizational independence from the Ministry. This shift, however, led to heterogeneous governance models across public Italian universities. In response, unlike other European countries' policy trends, Law n. 240/

2010 (known as the ‘Gelmini Reform’) reintroduced stronger State control and standardized governance structures across the university system.

3. The *Monte dei Paschi* di Siena is an influential financial institution, known for being the world’s oldest bank.
4. The *contrade* (pl.; sg. *contrada*) are more than just city neighbourhoods; they are historical communities with a strong identity, traditions, symbols, and social structures. Since the Middle Ages, the *contrade* have competed in the Palio (the renowned horse race held twice a year in Siena), embodying the cultural and historical spirit of the city.
5. In November 2020, the Italian government introduced a ‘traffic-light’ system that assigned each region a colour (red, orange, yellow, and later green and white), based on epidemiological and healthcare-capacity indicators. The colours determined the level of restrictions that regions needed to adopt. Red zones applied the strictest measures (mobility limits, closure of non-essential activities, remote education); orange zones imposed intermediate restrictions; yellow zones applied milder limitations; green zones, introduced later, indicated minimal restrictions; and white zones no restriction. Regions shifted between colours as their conditions changed. Under this system, the Tuscany Region, where Siena is located, became a red zone twice, first in November 2020 and again in March 2021.
6. Santa Maria della Scala is a museum complex in the city of Siena.
7. San Miniato is a parish close to UNISI’s scientific departments (e.g. medicine, pharmacy, biology).
8. S. P. Osborne et al. (2022) show that value in PSE may arise in different forms (value-in-context, value-in-use, value-in-production, value-in-society), none of which are directly ‘produced’ by single organizations. Instead, some organizations contribute by shaping the relational and institutional conditions that enable these various forms of value to emerge through interaction (S. Osborne et al. 2025). Anchors, therefore, influence not the value itself, but the configuration of resources and relationships that enable value creation/destruction.

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Appendix

Table A1. List of relevant articles from a local newspaper.

N	mm/ yyyy	Article Subject	Emerging actor's perspective
1	06/ 2020	Reopening of study rooms	Rector
2	06/ 2020	In-person lectures	University
3	07/ 2020	Local rents	Real estate agents
4	07/ 2020	In-person lectures	President of a business association supporting local entrepreneurs
5	07/ 2020	In-person exams	Rector
6	07/ 2020	University enrolment – In-presence lectures – Collaboration	Rector
7	07/ 2020	In-person lectures	Rector
8	07/ 2020	Contrade's collaboration for in-person lectures	President of the 'Magistrato delle Contrade'
9	07/ 2020	Financial measures favouring students	Rector
10	07/ 2020	Incoming Erasmus students	President of incoming Erasmus students' association
11	07/ 2020	University enrolment opening	University
12	07/ 2020	City's role in the recovery of the University	Rector
13	07/ 2020	In-person lectures – Available spaces in the city	Local councillor for school and university
14	07/ 2020	In-person lectures	Rector
15	07/ 2020	University enrolment opening	University
16	08/ 2020	In-person lectures	Local association
17	08/ 2020	Education service during Covid	University data
18	09/ 2020	Gradual library re-opening	University
19	09/ 2020	In-person lectures	Rector
20	09/ 2020	Hybrid teaching modality and financial support to sustain University's recovery	University
21	09/ 2020	In-person lectures	Rector
22	09/ 2020	In-person lectures: Collaboration between Municipality, University and Contrade	City Major
23	09/ 2020	University enrolment	Rector
24	09/ 2020	University of Siena promotion: The City-campus	University
25	10/ 2020	Financial measures supporting students	University
26	10/ 2020	University enrolment	Rector

(Continued)

Table A1. (Continued).

N	mm/ yyyy	Article Subject	Emerging actor's perspective
27	11/ 2020	Covid Investments	University
28	11/ 2020	University and Research	Rector
29	11/ 2020	University online services	University
30	11/ 2020	DPCM and Hybrid modality	Rector
31	02/ 2021	Digital Open day University	University
32	03/ 2021	Safety and In-person lectures after easter vacations	Rector
33	04/ 2021	University's financial performance and students' enrolment	Rector
34	04/ 2021	Hybrid teaching modality	University
35	04/ 2021	Financial measures to support students	University
36	06/ 2021	In-presence graduation ceremony	University
37	09/ 2021	Green Pass and University access	Rector

Table A2. Relevant national and local measures introduced during Covid-19.

<i>Relevant documents issued by the Italian government during Covid-19</i>	
Date	Document
01/03/ 2020	Decree of the President of the Council of Ministers: Additional implementing provisions of the decree-law of February 23, 2020, No. 6, containing urgent measures for the containment and management of the COVID-19 epidemiological emergency
02/03/ 2020	The Order of the President of the Tuscany Region No. 6: 'Measures for the prevention and management of the COVID-19 epidemiological emergency. Order pursuant to Article 32, paragraph 3, of Law No. 833 of December 23, 1978, on hygiene and public health. Revocation of Order No. 5/2020'.
03/03/ 2020	The note from the Minister of University and Research, urging Rectors to take all necessary initiatives to ensure education through remote learning methods.
8/03/ 2020	Decree of the President of the Council of Ministers: Further implementing provisions of the decree-law of February 23, 2020, no. 6, containing urgent measures regarding the containment and management of the COVID-19 epidemiological emergency.
26/04/ 2020	Decree of the President of the Council of Ministers: Gradual easing of restrictions, including for university
03/11/ 2020	Decree of the President of the Council of Ministers: Imposition of a regional colour-coded system based on the severity of infections
13/11/ 2020	Ordinance of the Ministry of Health with which Tuscany is declared a red zone.

Table A3. Relevant UNISI's measures introduced during Covid-19.

<i>Relevant documents issued by UNISI</i>		
Date(s)	Document(s)	Description
from March 2020 to September 2021	Minutes of the BoD meetings	Minutes
from March 2020 to September 2021	Minutes of the AS meetings	Minutes
04/03/2020	Rectoral Decree XI/1	Suspension of didactic activities, closure to the public of libraries, reading rooms, and front-office activities that involve in-person reception of students. Cancellation of all conferences, training courses, lectures, and any other events that involve excessive gatherings of people. Activation – where possible – of remote learning for the curricular courses of study programs.
06/03/2020	Press release	Student of the Physiotherapy degree program tests positive for nCov-19.
09/03/2020	Rectoral decree XI/11	Further urgent measures regarding the containment and management of the COVID-19 epidemiological emergency signed by the Rector and the General Director
11/03/2020	General Director's disposition VII/11	Urgent Organizational measures regarding the containment and management of the COVID-19 epidemiological emergency
11/03/2020	General Director's guidelines	Agile working – FAQ
11/03/2020	Rector's communication	Operative guidelines for curricular traineeships
11/03/2020	Rectoral decree V/8	Final exams for obtaining the degree remotely
11/03/2020	Rector's communication	Operative guidelines for exams
14/04/2020	General Director's disposition VII/11	Further extension of the organizational measures and urgent service provisions adopted for the containment and management of the COVID-19 epidemiological emergency.
26/04/2020	UNISI's communication	Guidelines for phase 2 (from 4.05 to 30.08) and phase 3 (from 1.09 to 31.01 but with possible extension to the entire academic year).
04/05/2020	Rectoral Decree VII/12	Adoption of the shared protocol for regulating measures to contrast and contain the spread of COVID-19 in the environments of the University of Siena.
04/05/2020	UNISI's communication	Operational Vademecum for the Management of In-Person Activities at the University of Siena (In-presence lectures are still suspended)

(Continued)

Table A3. (Continued).

<i>Relevant documents issued by UNISI</i>		
Date(s)	Document(s)	Description
14/05/2020	Rectoral decree V/6	Measures regarding curricular and extracurricular internships and mandatory laboratory teaching activities within university study programs during the COVID-19 emergency period.
15/05/2020	General Director's disposition VII/11	Extension of further organizational measures and urgent service provisions adopted for the containment and management of the COVID-19 epidemiological emergency in the 'Phase 2'.
21/09/2020	Prot. no. 0159689 of 21/09/2020	Shared protocol for regulating measures to contrast and contain the spread of COVID-19 in the environments of the University of Siena.
16/11/2020	Communication following the joint meeting of the Academic Senate and the Board of Directors of the University of Siena.	Suspension of in-presence lectures due to the implementation of the red zone for the Tuscany Region
30/11/2020	General Director's disposition VII/11	Extension of the measures until 09/12/2020