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SHORT ARTICLE



Levelling up in a ‘decentralised’ England: place-based or ‘one-size-fits-all’ strategies?

Shivani Sickotra 

ABSTRACT

English policymaking has traditionally been centralised, assuming homogenous needs across regions and contributing to economic inequalities. The Levelling Up Agenda aims to address these disparities through a place-based approach using devolved Combined Authority (CA) organisations. Despite being the first national strategy with an extensive place-based focus, it faces criticism as a potentially centralised political tool. Concerns also exist about whether Combined Authorities can deliver regional economic development as they have centrally controlled aspects. If regional planning approaches are identical, decentralisation through Combined Authorities would essentially be futile. This paper uses a novel quantitative method with Strategic Economic Plans to determine if regional planning inhibits a place-based or ‘one-size-fits-all’ approach, contributing data-driven insights to the debate regarding the efficacy of Combined Authorities. Through exploratory text analysis, hierarchical and K-means clustering, findings indicate regions adopt place-sensitive planning with varying sector priorities. A northern-southern and an inland-coastal distinction emerge, with London as an outlier. This suggests Combined Authorities are fit for purpose at this quantitative clustering level and do consider their geographical context in planning despite a devolved yet centrally controlled oxymoronic landscape. Collaborations like an inland and a coastal CA network are recommended to potentially maximise place-based growth.

ARTICLE HISTORY

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R58; H77; O18; R11; C38

1. INTRODUCTION

Over the last half-century policymaking within England has been driven by a hierarchical top-down Governance system, disregarding place differences by assuming homogenous needs across regions (Martin et al., 2022). This centralised approach has contributed to the development of persistent interregional economic disparities, particularly between northern and southern

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England, to the extent that they can be considered the most severe among the developed countries (McCann et al., 2023). Numerous attempts at decentralisation have been made to combat these inequalities, including targeted devolution through Regional Development Agencies (RDAs), which were later abolished by the Localism Act (2011) following a change in Government (HfC, 2013). The 'churn' of these implementations has faced criticism for occurring within a highly centralised, politically driven Government, which has limited their effectiveness (Martin et al., 2022).

England's current regional organisations are Combined Authorities (CAs), first introduced in 2011. CAs were leveraged in the national Levelling Up Agenda which aims to reduce economic disparities by providing extensive devolution deals to generate tailored economic development (DLUHC, 2022). The agenda has become a prevalent discussion topic amongst the academic and political communities as it has a greater place-based focus than prior national strategies (Gray & Broadhurst, 2023). Primarily there are concerns that the agenda is still a centralised political tool hidden behind place-based economic promises likely to join the historical 'churn' (Martin et al., 2022).

Local Enterprise Partnerships (LEPs) are separate non-statutory organisations that work with businesses within the area to increase economic growth. Introduced after the dissolution of RDAs, they attracted similar scepticism regarding their role in decentralisation (Pike et al., 2015). Where CAs exist, LEPs have overlapping geographic boundaries and work with the relevant CA. Each LEP was required to produce a Strategic Economic Plan (SEP) mapping out their foreword view for economic development (Shutt & Liddle, 2019). SEPs were designed as longer-term planning documents that covered region-specific priorities to generate place-based economic growth. Although SEPs were published by LEPs, those created with CAs are particularly important, as CAs hold the devolved powers needed to meet the outlined priorities. Similar to the Levelling Up Agenda, SEPs may be viewed as a centralised political instrument disguised by the rhetoric of place-based promises, raising concerns about whether CAs are truly equipped to deliver the intended regional economic growth (Shutt & Liddle, 2019). Despite the risk of joining the policy 'churn', SEPs remain relevant because they represent the CAs current stance on long-term planning.

This paper aims to answer whether a place-based or homogenous planning approach is adopted within the devolved yet centrally controlled oxymoronic landscape using a theoretical and conceptual lens of metagovernance and 'soft' planning. It intends to contribute to the debate regarding the efficacy of CAs by using a novel quantitative text and cluster analysis of CA SEPs to provide a nuanced understanding of planning priorities.

Firstly, the existing literature is reviewed with a focus on metagovernance and soft planning. Then the data, quantitative text and cluster analysis methodology and its limitations are presented. The results, discussion and conclusions follow. The findings indicated a place-based approach is present within CA planning and revealed an inland-coastal distinction between strategies overlaid by a northern-southern distinction, with London as an outlier. At this quantitative clustering level, it suggested CAs take their unique context into account when developing regional economic strategies rather than conforming to a centralised ideology, and hence are fit for purpose. Additionally, it indicates that collaborations like an inland and a coastal CA network could maximise place-based growth.

2. LITERATURE REVIEW

The CAs have experienced scrutiny regarding whether they are fit to deliver place-based economic development as intended (Shutt & Liddle, 2019). Demazière (2021) explored the formation of CAs against devolution in Italy and France and concluded that England showed a top-down government-controlled structure. Gray and Broadhurst (2023) conducted semi-

structured interviews with CAs and non-CAs alongside qualitative document analysis of regional policy grey literature. One finding was a clear tension regarding the devolution rhetoric and centrally controlled regional policy. Moreover, McCann et al. (2023) found that an overly centralised government has resulted in a lack of clarity when thinking through place-based problems and policy implementation.

Encapsulating this is the theory of metagovernance, which refers to governments indirectly controlling decentralisation (Cavaco et al., 2023). CAs are still centrally controlled under the guise of devolution, since they must competitively bid for funding and require approval of economic plans (Martin et al., 2022). 78% of CA funding is centrally obtained and so they are held significantly accountable for satisfying central directives (Paun et al., 2022). Due to this dependency, local planning and hence policy risk becoming homogenous. Place-sensitivity requires strategies to account for their own geographical context to achieve local and national economic growth over assuming homogeneity. Previous applied research on historic Local Industrial Strategies using panel data found that the broader approach of CAs was place-blind without sufficiently accounting for their geography (Nurse & Sykes, 2020).

Following the abolition of RDAs, 'soft spaces' and 'soft planning' emerged as distinguished concepts in planning theory. 'Soft spaces' refer to new geographies typically based on common socio-economic goals that transcend traditional administrative 'hard' boundaries. 'Soft planning' relies on flexible, adaptive, and context-specific collaborative strategy formulation in these spaces (Allmendinger et al., 2015; Cavaco et al., 2023). From this lens, LEPs can be seen as soft spaces that emerged, with SEPs as soft planning documents aimed at collectively increasing place-based regional economic growth. CAs can be seen as a hybrid of 'soft' and 'hard' spaces where regional SEPs leverage soft planning within a devolved administrative boundary. Therefore, from the conceptual and theoretical framework of metagovernance and soft planning, there is potential for regional planning to inherently reflect a homogenous design abiding by any underlying central agenda despite place-based aspirations.

Prior qualitative research has compared the development of northern Local Industrial Strategies arguing that each region produced documents reflecting their individual history, culture and socio-economic profiles (Shutt & Liddle, 2020). Schneider and Cottineau (2019) investigated decentralisation versus territorial inequality in England using a mixed methods approach. Limited to exploratory quantitative text analysis, they used only a selection of SEPs and found that although objectives were similar across CAs, the strategies for planning and delivery were diverse. Whilst qualitative and mixed methods have been used to compare CA planning documents, there is an absence of studies adopting a purely quantitative approach.

This paper aims to address this by performing quantitative text and cluster analysis using SEP documents to answer whether CA planning inhibits a place-based or a 'one-size-fits-all' approach. It aims to contribute to the debate on whether CAs are fit for purpose by offering a unique data-driven perspective and comparison of regional priorities. If planning approaches are homogenous, then decentralisation through CAs would essentially be futile. It is important to understand CA planning approaches, particularly considering their role in the Levelling Up Agenda and reducing regional inequalities in England.

3. METHOD

3.1. Data

Figure 1 presents the ten CA boundaries in England and respectively the geographical locations of the ten SEP documents used in the analysis. Each CA had at least one LEP representing the area that published a corresponding SEP. The North of Tyne was covered by the North East's SEP. The SEP documents used were from the West of England, Leeds City Region, Greater Cambridgeshire and Greater Peterborough (GCGP), North East, Sheffield City Region,

Combined Authorities (CAs), 2021

- 1 North East
(SEP covering North of Tyne)
- 2 Tees Valley
- 3 West Yorkshire
(Leeds City Region LEP)
- 4 Liverpool City Region
- 5 Greater Manchester
- 6 South Yorkshire
(Sheffield City Region LEP)
- 7 West Midlands
(Greater Birmingham & Solihull LEP)
- 8 Cambridgeshire & Peterborough
- 9 West of England
- 10 Greater London LEP

-  CA Strategic Economic Plan (SEP)
-  North of Tyne CA
-  London Economic Action Plan (LEAP)

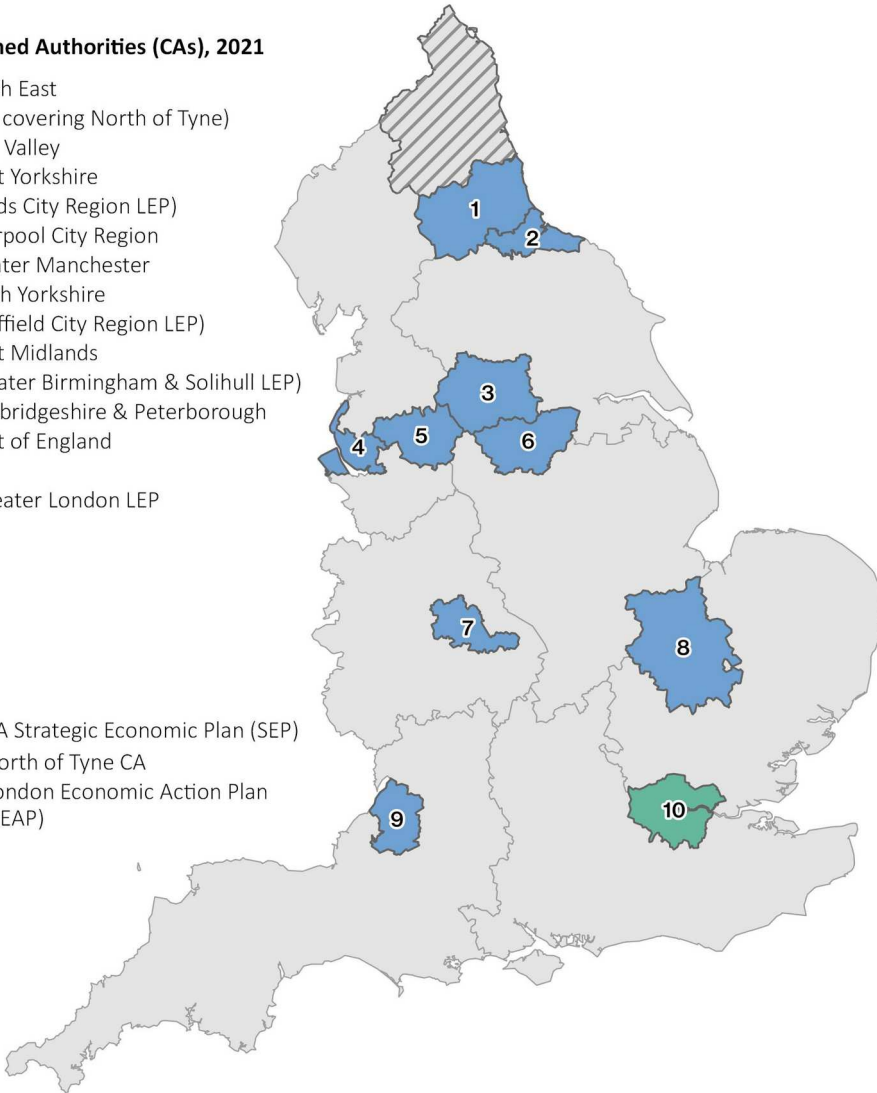


Figure 1. Combined Authority SEPs in England, 2021. Source: Produced by the author using data from Office for National Statistics (Open Geography Portal) licensed under the Open Government Licence v.3.0. Contains OS data © Crown copyright and database right 2021.

Greater Manchester, Tees Valley, Greater Birmingham and Solihull (GBS) and Liverpool City Region LEPs. The London Economic Action Plan (LEAP) by Greater London’s LEP was used for the Greater London region. The SEPs were prepared using standard text pre-processing techniques before quantitative text and cluster analysis (see the Appendix in the online supplemental data).

3.2. Exploratory text analysis

The SEP word counts, along with the most frequent words within the collective texts and the relative frequency of selected ‘key’ words per document were explored. The ‘key’ words to investigate in the SEPs were derived from research by Taylor et al. (2021). Their international

study was relevant to CA planning priorities as it identified sectors vital to levelling up local economies as a guide for the UK. The factors identified by Taylor et al. (2021) within the remit of SEPs were ‘skills and future sectors’, ‘universities and innovation’, ‘transport/digital infrastructure’ and an ‘attractive place to live’. I refined these factors in the following way to determine the ‘key’ sectors to explore in the SEPs. *Skills*, *Transport*, *Digital* and *Infrastructure* emerged naturally, where the ‘universities and innovation’ factor was merged with *Skills*. Within the ‘attractive place to live’ factor, the arts and culture sector was dominant and hence *Culture* was used. Since the goal of CAs is to advance economic growth, the *Skills*, *Digital*, *Transport*, *Infrastructure* and *Culture* sectors derived from prior international lessons in place-based levelling up were deemed fruitful to explore in the planning strategies. Exploratory text analysis was used to compare the relative frequencies of these ‘key’ sectors within the SEPs to imply their level of priority to the CAs. The actual CA policy priorities linked largely to these derived ‘key’ sectors (see the Appendix, Table A2 in the online supplemental data).

3.3. Cluster analysis

The technique to quantitatively cluster text documents has been utilised in wider fields, for example to analyse political reactions using social media posts (Irawan et al., 2020). However, the approach has not been leveraged in the English regional planning realm. As a result, it was chosen to adopt a purely quantitative approach involving cluster analysis to extract valuable insights from traditionally qualitatively analysed documents. This algorithmically grouped the ten SEPs based on underlying textual patterns and aimed to provide an alternative data-driven perspective into planning approaches.

3.3.1. Hierarchical clustering

Hierarchical clustering partitions data into coherent groups which contain entities as similar to one another as possible, whilst maximising the difference between the clusters themselves. An agglomerative approach was taken where each SEP was regarded as an individual cluster and the most similar clusters were iteratively merged until all SEPs were cluster members (Zhang, 2018; Appendix in the online supplemental data).

3.3.2. K-means clustering

The K-means algorithm aims to partition data into k clusters which are also statistically similar to one another and least statistically similar to other clusters but using a centroid-based rather than a hierarchical approach. The k value must be supplied prior to running the algorithm. It then randomly selects k centroids and assigns other data points to the nearest centroid to form k clusters. The algorithm updates the centroid values for the k clusters and repeats this process until cluster allocations stabilise. In this analysis, $k = 3$ was identified as the optimal number of clusters (Appendix, Figure A1 and Table A3 in the online supplemental data). The overall essence is to iteratively assign each SEP to one out of three clusters in a way that minimises the variance between a particular SEP and the defined cluster centroid SEP based on the words within them.

The hierarchical and K-means clustering algorithms are popular methods used to compare textual data (Irawan et al., 2020). The advantage of hierarchical clustering over K-means is that the cluster number does not need to be pre-defined. It produces a set of nested clusters which are arranged in a tree structure, whereas K-means clustering divides the SEPs into non-overlapping groups (Zhang, 2018). This analysis leveraged both techniques to explore relationships within and between the clusters produced.

3.4. Limitations

Quantitative text analysis lacks the context of the words analysed, allowing for subjective interpretations. The importance of 'key' sectors was implied through relative word frequency. Moreover, text within images were omitted and some inaccuracies were introduced through SEP appendices. The West Midlands consisted of three LEPs but only the GBS LEP was used, and the North of Tyne CA was represented within the North East's SEP, which limited some granularity in CA comparisons.

4. RESULTS

4.1. Exploratory text analysis

From all ten documents, the West of England SEP had the highest count of 16,686 words and Liverpool City Region with the lowest count of 5467 words. The document development dates ranged from 2014 to 2020 (Appendix, Table A1 in the online supplemental data).

Figure 2(a) shows words which appeared at least 600 times within all SEPs and provide some insight into the topics most important to all CAs. The terms *growth* and *business* are the most popular appearing over 2000 times. This is unsurprising since the focus of LEPs is to drive economic growth through a business lens for the CA region. Figure 2(b) shows the relative occurrence of 'key' sectors within each SEP. Higher relative frequency is used to imply a higher level of priority to the CAs. The *Skills* and *Transport* sectors were focused on the most by the majority of CAs, with the *Cultural* sector mentioned the least. The *Transport* sector was considered the most important by GCGP, North East and Sheffield City Region over the other 'key' sectors. The *Skills* sector was the most important for the remaining CAs. In particular, the West of England, Tees Valley, Liverpool City Region and Leeds City Region aim to prioritise *Skills* the most compared to the other CAs. *Culture* had no presence within the GCGP SEP and although this sector is of overall low priority, Liverpool City Region and Tees Valley were exceptions. The former ranked *Culture* over *Digital* and the latter ranked *Culture* over *Infrastructure*. Tees Valley also differs from the other CAs as developing *Skills* is the primary long-term focus for the region, with relatively little mention of the other 'key' sectors.

Moreover, Sheffield City Region appears to equally address all the 'key' sectors and refer to these within their SEP the most compared to the other CAs. This suggests universal local economic development was sought out by this region. Contrastingly, LEAP referred sparingly to the five sectors, most likely because Greater London relatively requires the least overall development since it is already economically powerful. LEAP's differing priorities are seen in Figure 5(a).

4.2. Cluster analysis

Figure 3 presents the hierarchical cluster analysis results in a dendrogram. To interpret the dendrogram, the relative height at which two SEPs are joined together should be analysed. Lower heights indicate SEPs have greater similarity and higher heights show SEPs that sit within wider groups in a tree-like structure. Since an agglomerative approach was taken, each SEP begins as a single-entity cluster, before being grouped hierarchically. Therefore, the dendrogram should be interpreted from the lowest to the greatest heights.

Figure 3 shows that four main clusters emerged. GCGP and West of England had SEPs better related to each other as these were initially clustered together. LEAP began and remained as a single entity cluster, highlighting the difference in economic strategy from those of the GCGP and the West of England cluster. Despite this, the hierarchical analysis found that these southern regions had SEPs better related to each other than the remaining CAs.

The Greater Manchester and Sheffield City Region SEPs were found to be most similar, followed by North East and Liverpool City Region to create another cluster. GBS was grouped

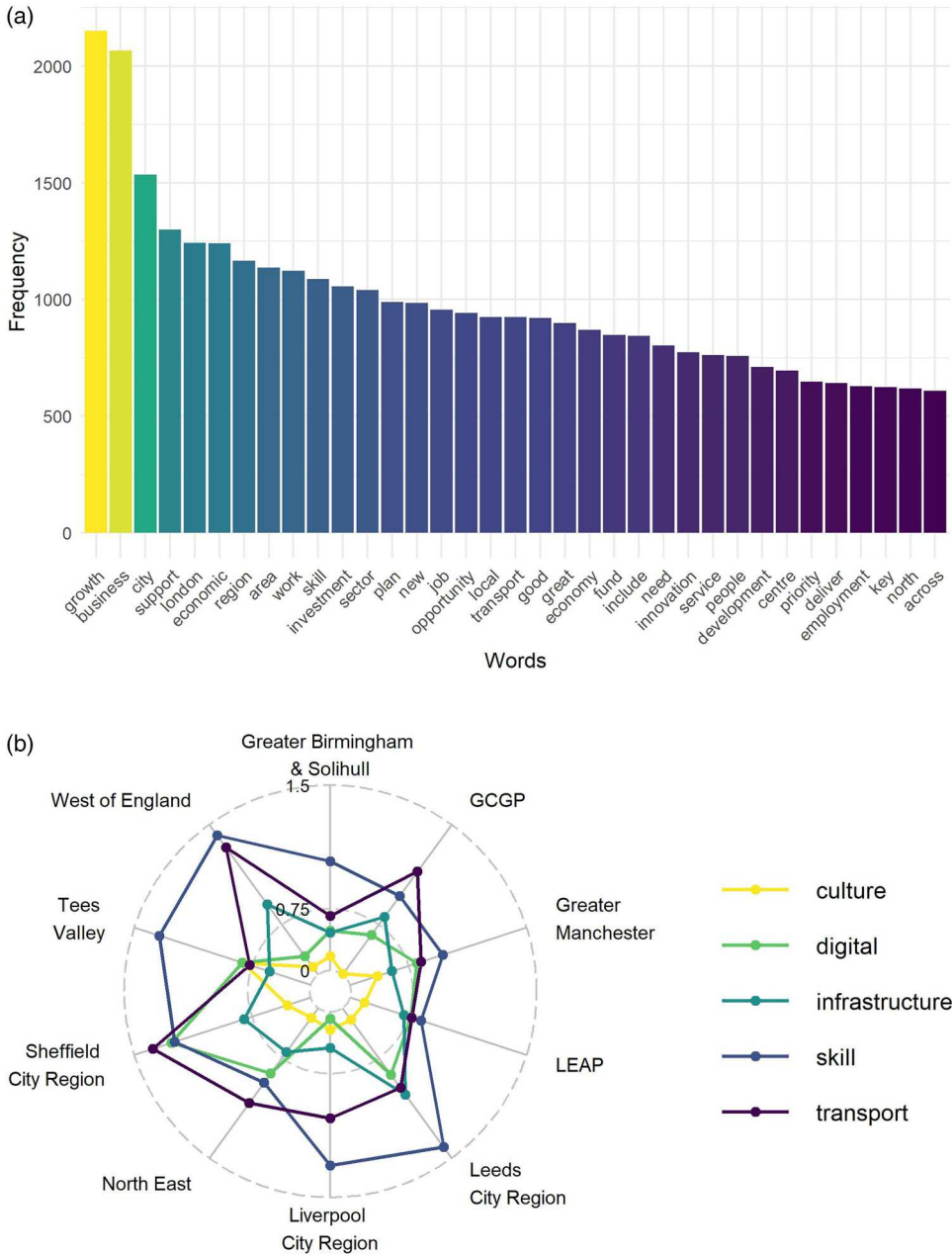


Figure 2. (a) Most frequent words across all SEPs. (b) Combined Authority relative 'key' sector priorities.

with Liverpool City Region, with similarities then found with Tees Valley to create a fourth cluster. An interesting observation was the allocation of the North East and GBS SEPs. Considering the local landscapes and the proximity of North East with Tees Valley, it was expected that these strategies would cluster together. This may derive from the differences found in the Tees Valley SEP during the exploratory analysis stage. Nevertheless, these two clusters were

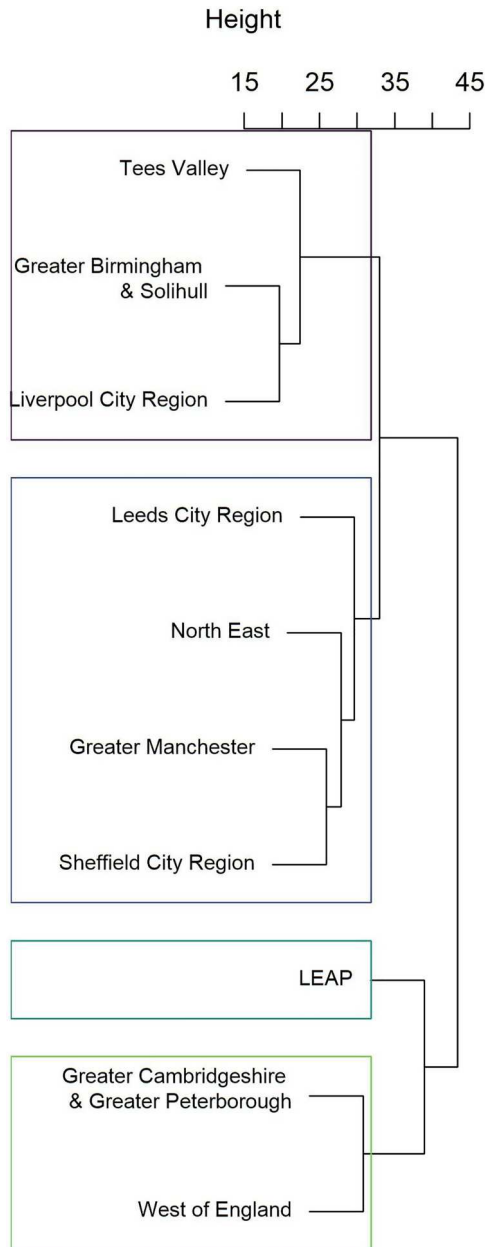


Figure 3. SEP hierarchical cluster dendrogram.

found to sit within a larger northern and midland CA grouping separate from the southern LEAP, GCGP and West of England grouping.

Figure 4 provides a two-dimensional visualisation of the SEPs after K-means clustering, where $k = 3$. The results reinforced that the content of the LEAP SEP was substantially divergent since it was assigned the distant solitary Cluster 1. Unlike the hierarchical cluster analysis results, Tees Valley shared cluster assignment with the North East. Cluster 2 SEPs consisted of CAs located predominantly in coastal areas of England, whereas SEPs allocated to Cluster 3

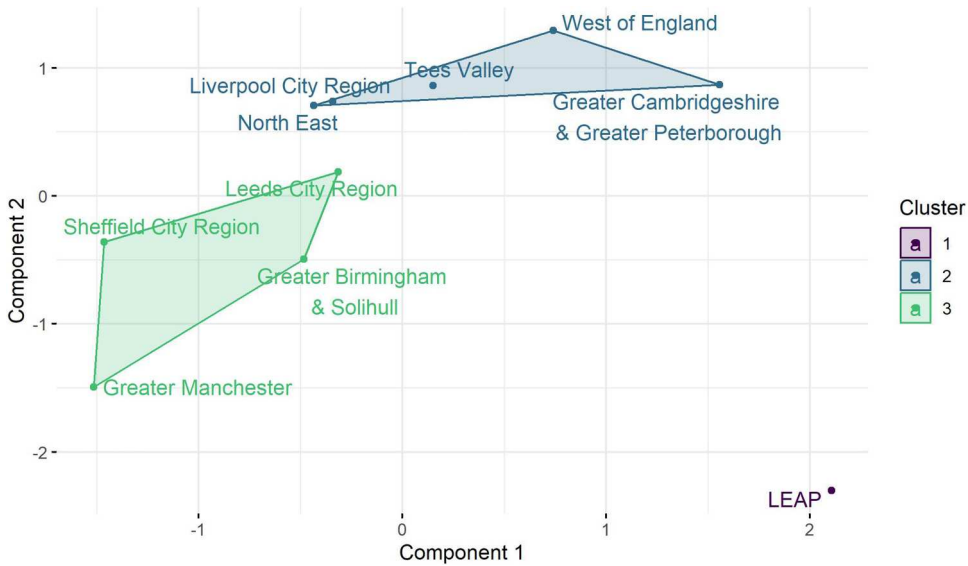


Figure 4. SEP K-means clustering, $k = 3$.

had CAs geographically located inland. Comparative analysis of the words within each cluster assignment was conducted to further explore this finding.

Figure 5 word clouds show the most frequent words in each SEP within the K-means clusters produced. Cluster 1 in Figure 5(a), involving only the LEAP SEP included many international references such as *Dubai, Asia, Singapore and Paris*. As London is the English capital, it is feasible that the SEP had a more global rather than an interregional focus. The words present indicate why LEAP was divergent from the other SEPs during exploratory text and hierarchical cluster analysis.

It can be inferred that the Cluster 2 coastal regions were grouped together as these collectively need to consider similar issues, such as *ports, subsea and offshore* energy. As a result, the emphasis within the SEPs on the *Skills* sectors seen in Figure 5(b) may reflect the increased role science and technology plays in addressing such issues within these regions. GCGP can be regarded as an outlier amongst the shoreside SEPs, potentially because it is largely rural with a rapidly expanding town rather than a major city, making it unique from the other CAs. This SEP may have been assigned to Cluster 2 due to the University of Cambridge being within this region and its contribution to the national and global skills sectors.

Contrastingly, the most frequent words in the Figure 5(c) inland cluster, including *hydrogen, family and crime*, can be seen to reflect those related to the Green Industrial Revolution and community safety (DLUHC, 2022). Within landlocked and denser metropolitan areas, a greater focus is typically required on reducing pollution and improving social welfare. The place-specific priorities referred to in these inland SEPs effectively reflect this requirement.

5. DISCUSSION

Whilst qualitative and mixed methods studies to compare regional planning documents exist, there was an absence of studies adopting a purely quantitative methodology to provide a data-driven perspective to the debate surrounding the efficacy of CAs in delivering region-specific economic growth within a devolved yet centrally controlled governance system. This study investigated whether the planning priorities of CAs inhibited a place-based or a 'one-

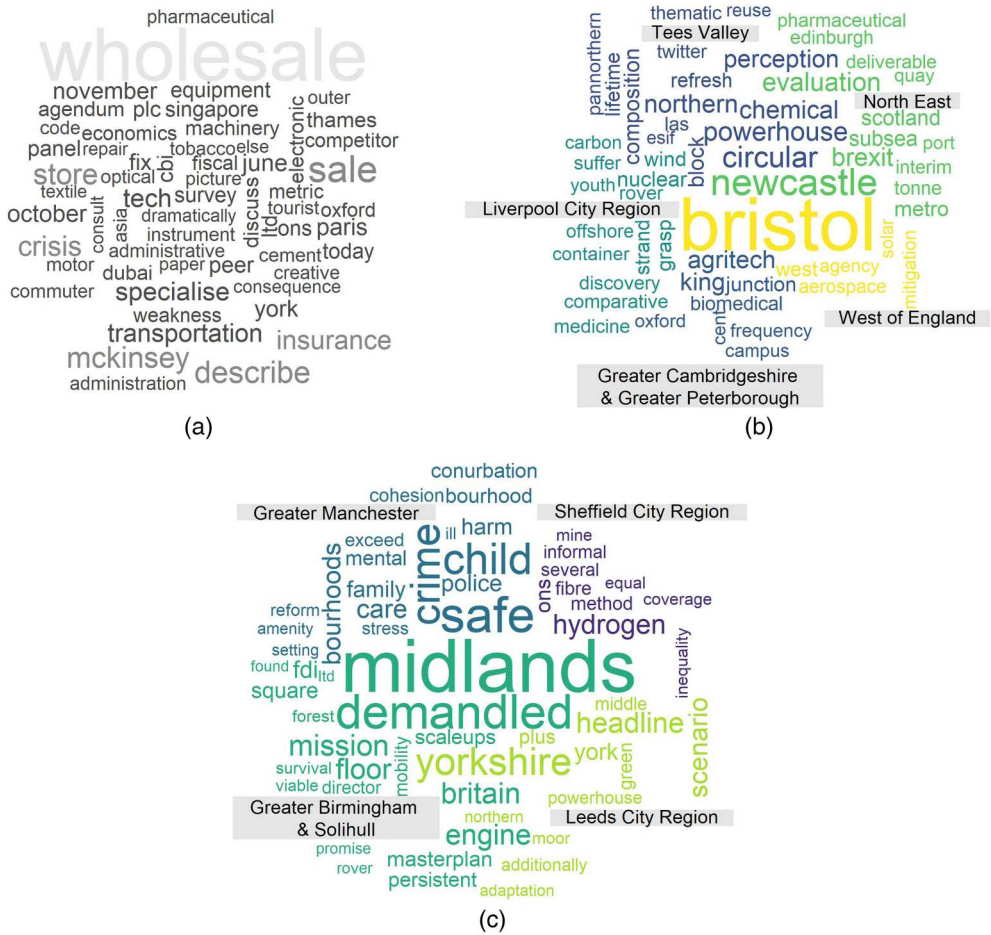


Figure 5. (a) K-means cluster one word cloud – LEAP, London. (b) K-means cluster two word cloud – Coastal. (c) K-means cluster three word cloud – Inland.

size-fits-all’ approach by performing quantitative text and cluster analysis using the SEP documents for each region.

Exploratory text analysis allowed an overview of general trends across regional strategic planning integrated with place-specific trends. Investigation of the relative occurrence and order of the *Culture, Digital, Infrastructure, Skills and Transport* ‘key’ sectors provided a comparative insight into the region-specific economic development priorities and their implied importance for each CA. The variation in ‘key’ word frequencies evidenced each local economy had differing priorities. This supported the view that CAs are adopting a more place-based ‘soft’ planning approach versus a place-neutral design by addressing the sectors that require the most development for their region, despite the presence of metagovernance.

Cluster analysis of SEPs also reinforced that regional devolution has led to place-based economic strategies across two dimensions. Firstly, hierarchical clustering results found northern and midland regions had similar strategies and differed from the southern regions, reflecting the embedded north–south economic divide. Secondly, K-means clustering revealed that there was a divergence between inland and coastal strategies, driven by their contrasting priorities seen through word clouds. In both cases, Greater London’s approach to economic development was fundamentally different and consisted of priorities specific to a well-developed capital region.

Although Greater London is the source of centralisation, by default this suggested a place-based approach is adopted since the local priorities were severely different from the rest of England.

Although Nurse and Sykes (2020) suggested CA planning strategies displayed place-neutral approaches, my results supported the place-based findings by Shutt and Liddle (2020) and show that CAs fundamentally accounted for their regional context when developing economic strategies over a centrally controlled directive at this quantitative clustering level. In response to the question of whether strategies are place-based or homogenous, it suggests CAs do show a level of autonomy in regional planning through place-based approaches and are fit for purpose to an extent. However, this does not necessarily mean CAs do not conform to other aspects of the central Government's agenda as the issue of metagovernance in England undoubtedly persists.

Furthermore, the clustering results can suggest potential collaborations of new soft spaces that could benefit the English economy by partnering CAs that have similar place-sensitive priorities. Fluidity and flexibility are characteristics of soft spaces and planning, where new geographies with common purposes can emerge naturally (Cavaco et al., 2023). In this regard, the northern-southern and inland-coastal distinctions found within the SEPs could be regarded as new soft planning divisions. Previous planning proposals have mirrored this northern-southern distinction but have had limited success, such as The Northern Way initiative (Allmendinger et al., 2015). Although a viable division, it could be restricted by metagovernance and may exacerbate existing regional disparities further by pitting the two localities against each other.

Instead, the inland-coastal soft space division could be more advantageous as this spans across both northern and southern English regions. It is recommended that Greater Manchester, Sheffield City Region, Leeds City Region and West Midlands CA's partner to share knowledge and resources to tackle similar inland policy priorities. In the same manner, a partnership with the Liverpool City Region, Tees Valley, North East and West of England CA's could facilitate economic growth from a coastal perspective. The research by Fiorentino et al. (2023) on coastal towns being regarded as 'left-behind' places and the existence of communities like the Coastal Special Interest Group (LGA, 2024) substantiates the requirement for such strategic soft spaces and planning. Forming an inland and a coastal CA network could enable place-sensitive collaboration between regions and foster a more cooperative inclusive attitude towards levelling up.

To extend the analysis, future research could investigate the nuances between the specific policy aims for CAs within the inland and coastal soft space clusters observed. This would highlight more local-level differences and help to formulate CA-sensitive policies that can lead to economic growth. Word correlation and bigram analysis could add more context and clarification to the frequent words identified. A wider range of 'key' sectors could also be explored, such as *Environment* or *Energy*, to gain targeted insights. As the majority of the SEPs were written before the COVID-19 pandemic, the analysis conducted may not reflect the current economic environment, revised aims or any subsequent administrative changes from the time of this analysis. The methods should be explored using Economic Recovery Plans or updated SEPs, to investigate the effect of sudden economic shocks and whether regions continue to adopt a place-based strategy or default to a more homogenous centralised approach within the context of metagovernance. Comparisons to other clustering methods could also be explored, which may find further dimensions of similarities or soft spaces.

6. CONCLUSIONS

England has suffered from persistent regional inequalities for many decades that have emerged from a traditionally centralised approach towards economic development. The most recent solution to counteracting embedded regional inequalities has been through CAs. LEPs have

supported CAs to formulate SEPs designed to achieve regional economic development. By nature, SEPs are soft planning documents intended to serve as long-term, geographically sensitive blueprints for this purpose. The national Levelling Up Agenda has taken centre stage in rebalancing the economy utilising CAs, albeit controversially. Debates surrounding hidden political agendas and underlying centralised thinking continue. In the same regard, CAs and LEPs have also been under scrutiny to understand whether they are fit for purpose and can deliver place-based economic growth as designed. Existing literature has found metagovernance is present and that CAs are still centrally controlled under the guise of devolution. Therefore, there is potential for CA SEPs to inherently reflect a homogenous design catering to the Government. If planning strategies are identical, decentralisation through CAs would essentially be futile and hence unfit for purpose. Understanding the economic planning approaches of the organisations is important due to their role in the Levelling Up Agenda and in successfully reducing regional economic disparities in England.

This paper extended the literature regarding the efficacy of CAs in England by adopting a novel quantitative text and cluster analysis methodology to deliver a nuanced perspective on regional economic priorities. It aimed to illuminate whether the devolved, yet centrally controlled oxymoronic landscape has led to CAs designing 'one-size-fits-all' or place-based economic strategies for regional development.

Exploratory text analysis found differing levels of priority in the 'key' sectors *Culture, Digital, Infrastructure, Skills* and *Transport*. This supported the notion that CAs were adopting a more place-sensitive method when creating their SEPs. Cluster analysis also reinforced CAs were planning through a place-based lens across two dimensions. Firstly, hierarchical cluster analysis results suggested an overarching north–south divide between CA planning. Secondly, K-means clustering revealed an inland-coastal distinction in the SEPs that led to recommendations for an inland and a coastal CA network to maximise place-based growth. In both clustering cases, London was an extreme outlier, which by default demonstrated the capital region tailoring strategic planning to its own context. Overall, quantitative text and cluster analysis to investigate traditionally qualitatively analysed documents found CA planning does display a level of autonomy through place-based tendencies despite central restrictions and can thus be considered fit for purpose.

To generalise, the text analysis methodology used in this study could be replicated in a European context. For example, the strategies of Italian provinces could be compared in relation to the Smart Specialisation Strategy (OECD, 2013). This strategy requires regions to identify priority areas to drive place-based economic development. Such quantitative techniques could draw out differences within planning documents, potentially indicating the effectiveness of Smart Specialisation.

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DATA AVAILABILITY STATEMENT

The data used within this research was extracted from Strategic Economic Plans that can be found on the relevant Combined Authority/Local Enterprise Partnership webpages. These are collated in a GitHub repository available at: https://github.com/sickotra/SEP_Data.git.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author(s).

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REFERENCES

- Allmendinger, P., Haughton, G., Knieling, J., & Othengrafen, F. (2015). Soft spaces, planning and emerging practices of territorial governance. In P. Allmendinger, G. Haughton, J. Knieling, & F. Othengrafen (Eds.), *Soft spaces in Europe* (pp. 3–22). Routledge.
- Cavaco, C., Mourato, J., Costa, J. P., & Ferrão, J. (2023). Beyond soft planning: Towards a soft turn in planning theory and practice? *Planning Theory*, 22(1), 3–26. <https://doi.org/10.1177/14730952221087389>
- Demazière, C. (2021). Exploring the creation of the metropolitan city-region government: The cases of England, France and Italy. *European Planning Studies*, 29(11), 2038–2055. <https://doi.org/10.1080/09654313.2021.1923666>
- Department for Levelling Up, Housing and Communities (DLUHC). (2022). *Levelling up the United Kingdom*. Crown.
- Fiorentino, S., Sielker, F., & Tomaney, J. (2023). Coastal towns as ‘left-behind places’: Economy, environment and planning. *Cambridge Journal of Regions, Economy and Society*, 17(1), 103–116. <https://doi.org/10.1093/cjres/rsad045>
- Gray, N., & Broadhurst, K. (2023). Post-Brexit regional policy in England: Exploring ‘levelling up’ in practice. *Regional Studies*, 57(12), 2551–2562. <https://doi.org/10.1080/00343404.2023.2179031>
- House of Commons Library (HfC). (2013). *The abolition of regional government*.
- Irawan, E., Mantoro, T., Ayu, M. A., Catur Bhakti, M. A., & Permana, I. K. Y. T. (2020). *Analyzing reactions on political issues in social media using hierarchical and K-means clustering methods*. IEEE. <https://doi.org/10.1109/ICCED51276.2020.9415839>

- Local Government Association (LGA). (2024). *Coastal SIG*. Retrieved February 18, 2024, from <https://lgacoastalsig.com/>
- Martin, R., Pike, A., Sunley, P., Tyler, P., & Gardiner, B. (2022). 'Levelling up' the UK: Reinforcing the policy agenda. *Regional Studies, Regional Science*, 9(1), 794–817. <https://doi.org/10.1080/21681376.2022.2150562>
- McCann, P., Ortega-Argilés, R., Sevinc, D., & Cepeda-Zorrilla, M. (2023). Rebalancing UK regional and industrial policy post-Brexit and post-Covid-19: Lessons learned and priorities for the future. *Regional Studies*, 57(6), 1113–1125. <https://doi.org/10.1080/00343404.2021.1922663>
- Nurse, A., & Sykes, O. (2020). Place-based vs. place blind? – Where do England's new local industrial strategies fit in the 'levelling up' agenda? *Local Economy: The Journal of the Local Economy Policy Unit*, 35(4), 277–296. <https://doi.org/10.1177/0269094220955113>
- Organisation for Economic Co-Operation and Development (OECD). (2013). *Innovation-driven growth in regions: The role of smart specialisation*.
- Paun, A., Nice, A., & Rycroft, L. (2022). *How metro mayors can help level up England*. Institute for Government.
- Pike, A., Marlow, D., McCarthy, A., O'Brien, P., & Tomaney, J. (2015). Local institutions and local economic development: The local enterprise partnerships in England, 2010–. *Cambridge Journal of Regions, Economy and Society*, 8(2), 185–204. <https://doi.org/10.1093/cjres/rsu030>
- Schneider, C., & Cottineau, C. (2019). Decentralisation versus territorial inequality: A comparative review of English city region policy discourse. *Urban Science*, 3(3), 90. <https://doi.org/10.3390/urbansci3030090>
- Shutt, J., & Liddle, J. (2019). Are combined authorities in England strategic and fit for purpose? *Local Economy: The Journal of the Local Economy Policy Unit*, 34(2), 196–207. <https://doi.org/10.1177/0269094219839956>
- Shutt, J., & Liddle, J. (2020). Comparing the development of local industrial strategies across the northern powerhouse: Key emerging issues. *Local Economy: The Journal of the Local Economy Policy Unit*, 35(4), 297–315. <https://doi.org/10.1177/0269094220959299>
- Taylor, A., Sampson, S., & Romaniuk, A. (2021). *What does it take to "level up" places? Evidence from international experience*. Industrial Strategy Council.
- Zhang, Z. (2018). *Text mining for social and behavioral research using R: A case study on teaching evaluation*. Zhang, Zhiyong.