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THE “REGION-IN-ASSEMBLAGE”: OPERATIONALISATION OF ASSEMBLAGE THEORY IN REGIONAL STUDIES

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The article addresses a pressing methodological issue in regional studies related to overcoming reductionism and constructing a comprehensive profile of a region. Modern regional studies, as a transdisciplinary field of knowledge, faces challenges in providing a coherent description of regional space, often fragmented by the approaches of various scientific disciplines. This research aims to develop a methodological framework for analysing regions based on the principles of Manuel DeLanda’s assemblage theory. The authors adapt the core concepts of assemblage theory — the exteriority of relations, the heterogeneity of components, emergence, and contingent necessity — to the conceptualisation of the region. As a key analytical toolkit, the article proposes examining the region through the lens of four dimensions of an assemblage: the axes of materiality — expressivity, territorialisation — deterritorialisation, coding — decoding, and connectivity — segmentation. Additionally, temporal characteristics of a region’s existence, such as the relative duration of events and their relative stability, are taken into account. The main result is an operational protocol for constructing an assemblage profile of the region, which allows for the empirical identification of (re)assembly episodes. The protocol establishes minimum data requirements, integration procedures, and criteria for identifying and recording change. It is concluded that the application of the assemblage approach

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makes it possible to overcome the essentialism of traditional social science, offers a holistic understanding of the region as a socio-spatial phenomenon, and opens new avenues for transdisciplinary regional studies.

Keywords:

assemblage theory, region, regionology studies, regional space, operationalisation

Introduction

The discipline of regional studies is undergoing its methodological and theoretical renewal; its growing transdisciplinarity is driving the integration of new theories and the reconfiguration of established paradigms. This creates the need for new tools designed to meet the discipline's current challenges. One such tool, applicable to the study of regional space, may be found in Manuel DeLanda's assemblage theory.

Today, the main task of regional studies is to provide a coherent, legible profile of a region while preserving its multidimensionality and complexity. While existing approaches describe individual aspects of a region reasonably well, they rarely offer a fully comprehensive picture of it. Assemblage theory proposes the following framework: by treating a region as a temporarily stabilised configuration of heterogeneous elements (actors, infrastructures, meanings, practices, etc.), it allows perspectives from different disciplines to be combined within a single approach, thus forming a distinctive transdisciplinary optic for viewing spatial processes [1].

Within social sciences, "a region" is frequently treated as a given [2], with no regard for its social complexity. Such an approach inevitably leads to reductionism, truncating the breadth of analysis of both internal composition and external relations of a region. As long as such presuppositions persist, "ecological" fallacies and inappropriate extrapolations remain unavoidable. Assemblage theory provides a framework that allows regions to be examined in their full social complexity, thereby minimising such distortions.

In this paper, assemblage theory is not seen as an off-the-shelf explanatory "theory of a region," but rather as an operational framework for describing the processes of assembly and reassembly of regional configuration. Following this logic, we do not adopt the theory as a given and *a priori* suited to regional studies; rather, we attempt to translate some of its most significant concepts into methodological solutions [3]. To this end, we proceed in three steps: first, we establish a set of working propositions (exteriority, heterogeneity, emergence, and the four axes); second, from these we derive a set of principles for the analysis of a region; third, we identify research procedures and designs that allow episodes of (re)assembly to be empirically registered. This defines the framework's range of applicability and prevents it from collapsing into the universal metaphor of "everything is an assemblage."

The ontological turn, flat ontologies, and regional studies

Assemblage theory is typically associated with the ontological turn in the social sciences, i.e., with a shift towards the construction of fundamentally new concepts of social ontology, those that allow the nature and structures of social reality to be examined as they are [4]. In the early twentieth century, as positivism-driven ontological argumentation entered the language of the dominant approaches within the social sciences, a number of principles emerged that came to define a new implicit ontology. The foundational conviction of this implicit ontology is essentialism, or the search for a basic first principle of social phenomena. Such determining elements may be identified in Marx's concept of "production", Durkheim's "social facts", or Weber's "social action". All of these approaches reduce objects and phenomena to manifestations of a single social essence [5].

Regional studies of that period likewise sought a determining element. For many schools, economics occupied the foreground as the primary factor in regional social development: the regional school developed by Baransky in the USSR was grounded in economic zoning and the spatial organisation of production, while Isard's American regional science was built around the spatial organisation of economic activity [6], and so forth.

Subsequently, it became clear that elevating a given essence to the status of the first principle of social ontology produces a twofold consequence. On the one hand, essentialism conditions the identification of such properties of an object under scrutiny that science is able to explain, thereby enabling the construction of a working model of that object. On the other hand, the introduction of a "universal equivalent" inevitably leads to reductionism (that is, the reduction of complex relations to simple ones and the elimination of the singularity of the objects under study), thus flattening the full diversity of the palette of social phenomena.

All of the social sciences of the first half of the twentieth century experienced reductionism: by claiming a certain universality for their object, they simultaneously asserted the universality of their proposed first principle. Early social anthropology, for instance, conceived the societies it studied as stages in a single linear "savagery — barbarism — civilization" social evolution, in which contemporary Western society was taken as the benchmark, the pinnacle of development, while the "primitive" societies under investigation were treated as living relics of the past, useful for identifying universal social laws.

Reductionism revealed itself quite strikingly in regional studies, too. The visible and documentable specificity of its object, a region, generated debates about whether it was at all possible to speak of general principles of regional development. This placed regional studies in a position of choice. Some schools of thought aligned themselves with particular social disciplines, adopting their respective "first principle" of regional development: for political regionalism, these were regional political regimes [7], for sociocultural area studies, the

language and culture of the region [8]; and so on. Other approaches in regional studies continued the search for the general essence of the region, while remaining on the periphery of social sciences.

Alongside these processes, the mainstream twentieth-century theory of essentialism was acquiring its critics. They viewed social reality as complex and irreducible to any set of essences. Contrary to essentialists, some proponents of the ontological turn would speak of a “flat” ontology, best understood as an approach whose priority is horizontality, or the placement of everything under investigation on a single level. It is precisely the absence of verticality, the impossibility of identifying any overarching determining principle, that becomes a factor in avoiding reductionism within theoretical constructions. Flat ontology implies equal status of all objects and leads to the dissolution of the distinction between culture and nature [9], the human and the non-human [10], and so forth. This carries particular significance for regional studies, whose key object — a region — constitutes an indivisible multiplicity, yet continues to be “pulled apart” by representatives of various (not only social) sciences.

At the same time, any object of regional studies research, be it regional discourse [11], spatial development [12], regional identity [13], regional ideology [14], or anything else, falls under the influence of the entire ensemble of local factors. The shift to flat ontology thus opened up new possibilities for regional studies in terms of constructing a coherent object, which is what a region essentially is. It should be noted that calls to overcome reductionism were heard in regional studies from the earliest stages of the discipline’s development. Baransky, for instance, wrote of the inadmissibility of researchers excising important elements of regional life — gastronomy, clothing, religion, forms of housing, and so forth — as early as the first half of the twentieth century [15]. Yet the absence of a clear methodological framework prevented such studies from crossing the threshold from the factual to the analytical and theoretical.

In developing this framework, given the inefficiency of operating with objects of reality directly, flat ontologies turn to the use of such constructs as “assemblages” (or their synonyms: “networks,” “associations,” “multiplicities,” “machines,” and others [16; 17]). Assemblages are defined by relations of exteriority among their components, and are themselves nested within other assemblages in a heterogeneous network [18]. Any assemblage is situated along the line of ascending and descending, partially overlapping assemblages. There is neither an upper nor a lower limit to the multiplicity, and no level of assemblages can be considered more real or more decisive than any other. We invoke this proposition in a methodological rather than a metaphysical sense: that is, it prohibits the *a priori* designation of a “decisive” level of explanation (micro / macro) and requires that scale be chosen in accordance with the research question. “Levels,” as used hereafter, are not strata of reality but analytical cross-

sections constructed by the researcher and verified against data. The regional assemblage in this article is therefore not an ontological “thing” but a working model, assembled and reassembled in the course of research.

Assembling an assemblage

Henceforth, assemblage is viewed not as a “general theory” but as a configuration of heterogeneous components held together by stable articulations [19]. Assemblage is the process by which components are drawn into such articulations, while reassemblage is the reconfiguration of those as observed over time: a change in the composition of components and/or in the regimes of territorialization/coding that alters the profile of connectivity and boundaries. What interests us is not the reproduction of DeLanda’s theory as such, but those distinctions that allow the region to be operationalised as a dynamic assemblage.

The foundational text for the assemblage theory is DeLanda’s *A New Philosophy of Society: Assemblage Theory and Social Complexity*, published in 2006. In this work, the author synthesises the ideas of Deleuze and Guattari [20], whose writings contained the seeds of assemblage theory’s conceptual apparatus in dispersed form, and supplements them with his own commentary.

DeLanda’s “assemblage” can be regarded as one of the most operationally viable concepts in the assembly discourse. In this article, it is used instrumentally, as a schema for describing configurations and the mechanisms of their stabilisation and dissolution. Assemblages are constructions or dynamic relations existing as autonomous wholes, composed of heterogeneous parts that are themselves, in turn, assemblages [21]. The elements that constitute assemblages may simultaneously enter several assemblages. Assemblages always exist in populations of varying sizes, produced by the repetition of the same processes. Interaction among the members of a collective may give rise to more or less stable articulations, producing micro-assemblages that possess their own properties and capacities.

Particular attention is drawn to the exterior nature of the assemblage. The relations of exteriority among the parts of an assemblage, which are themselves also autonomous assemblages, preclude any explanation of the relations through which the whole was formed by reference to the properties of the individual parts that constitute it [22]. In other words, a component part of an assemblage can be detached and placed within a different assemblage, giving rise to different forms of interaction within that assemblage. Relations of exteriority imply that the relations themselves may vary while their terms remain unchanged. When applied to regional studies research, exteriority not only allows a region to be examined as a complex ensemble of other assemblages, but also enables inter-regional interaction to be deconstructed as such an ensemble. Thus, it is possible to overcome the problem of searching for various “civilizational” optics, often required to explain how dissimilar regions operate, and, more specifically, how

“Western” and “non-Western” regions relate to one another [23]. Such optics will be incorporated into a general picture of interaction, rather than treating regions as isolated, self-defining entities.

One important feature of the relations among assemblage components is their contingent obligatoriness, i.e., a condition when the binding character of any given set of relations among assemblage elements is grounded in contingency rather than logic, and is therefore more amenable to empirical investigation than to logical analysis [24]. This property reinforces the significance of fieldwork in regions, as is frequently emphasized by leading regional studies scholars [25]. It is fieldwork that makes it possible to identify both the singular processes of individual regions and the regularities in the development of regions across the world.

Another feature of assemblages is the heterogeneity of their components, the diversity of their kinds. Best understood as a variable characteristic, heterogeneity in assemblages is capable of taking on different values. This allows the assemblage to be used for describing both biological species and individual organisms. In regional studies, this makes it possible to resolve the tensions between approaches to the delimitation of regions: for instance, between paradigmatic (conventionally established) and conceptual (researcher-defined) grounds for such delimitation [26].

Emergence is a further property of assemblages, understood here as the irreducibility of the characteristics of an assemblage to the characteristics of its elements. This manifests itself when assemblages combine: the resulting assemblage may possess properties that were not characteristic of the assemblages composing it. The recognition of this property of the region-as-assemblage by regional studies scholars becomes a significant factor in global research on inter-regional blocs [27]. The latter, as new assemblages, frequently behave in an unpredictable way since predictions about their behaviour will have typically been derived from the predictions about the behaviour of the regions constituting the bloc rather than being predictions about the behaviour of the bloc as a whole.

In addition to the four properties outlined above — exteriority, contingent obligatoriness, heterogeneity of relations, and emergence — the concept of assemblage is further defined by four dimensions, through which its relations with other assemblages and the dynamics of its change are examined.

The first dimension of the assemblage, the material-expressive axis, defines the roles of its components. The material components of assemblages are taken to include human bodies, tools and machines, buildings and districts, physical labour, and the physical objects that are produced by it. Expressive components, in turn, may take linguistic forms (for example, the documentary registration of an assemblage's existence) and non-linguistic forms (behaviour that implies recognition of the existence of a given assemblage) [22]. Describing the material and expressive components of an assemblage requires the identification of its constituent elements and the subsequent examination of each element's role. All

of the components enumerated above are, as we can see, also constituent parts of any region which possesses both material and non-material components. In other words, whereas prior to flat ontologies the social was conceived as an ensemble of exclusively human relations, assemblage theory in effect describes a region-as-social-formation as encompassing all the material and non-material objects that shape it.

The second dimension of the assemblage, the territorialization — deterritorialization axis, defines the processes that affect the internal homogeneity and boundary clarity of the assemblage. The concept of territorialization is to be understood as the delineation of the assemblage's boundary and the determination of its permanence [21]. In addition to the processes that directly define the spatial boundaries of the assemblage, territorialization encompasses those phenomena that increase its internal homogeneity. These include the selection of assemblage members (where interpersonal networks or organisations are under consideration) and residential segregation of populations along racial or ethnic lines (for example, in urban districts). The processes of deterritorialization, by contrast, encompass all processes that destabilize spatial boundaries or increase internal heterogeneity. An example of such a process is the blurring of the boundaries of social relations associated with the development of communication technologies. Applied to a region, the territorialization — deterritorialization axis makes it possible to trace the invisible frontier between the region's internal and external space. Territorialization allows the region to be described as a distinct assemblage; deterritorialization enables the articulation of the pathways and modalities of inter-regional interaction.

The third dimension of the assemblage is the coding — decoding axis. It reflects a synthetic process that complements territorialization: the role of production and maintenance of identity by means of specialised expressive entities, such as genes and words. Genes are the condition of the biological distinctness of assemblages. Words, in turn, are the consequence of the emergence of the autonomy of information from its material substrate; they give linguistic form to assemblages. As factors of assemblage expression, genes and words are in the business of coding, which ensures the consolidation and stabilisation of identity. In other words, together with territorialization, coding is the key factor in the synthesis of social entities [22]. When used in regional analysis, this axis provides a theoretical and methodological foundation for such regional identity, which is, in essence, a process of coding (while the dissolution of regional identity constitutes decoding). At the same time, the identity of any assemblage at any scale is always the outcome of a process (of territorialization, or in some cases coding) and is never secure, since it may be destabilised by other processes (of deterritorialization and decoding). This idea makes it possible to overcome this specific brand of essentialism in regional studies when researchers seek to describe the region as an object possessing permanent and stable qualities.

The fourth dimension (and the one that has generally escaped DeLanda's scrutiny) is the connectivity — segmentation axis. Regional life is determined by the degree to which regional components are connected or segmented: territories; population strata inhabiting different territories and interacting or not interacting with one another; internal and external regional cultures and discourses.

In addition to the factors listed above, which relate to the material, spatial, and informational aspects of assemblages, one should not disregard their temporality, which is expressed through two aspects reflecting the characteristics of the assemblage in different ways.

The first temporal aspect of assemblages is the relative duration of the events capable of changing them. According to the presence or absence of human intentionality, these events can be divided into two broad categories: slow cumulative processes that are the outcome of repeated interactions (such changes being the consequence of the unintended effects of actions taken), and changes that are the result of some form of intentional activity [28]. The second category of such changes requires mobilisation of resources and may encounter inertia as expressed by traditions and individual interests affected by the changes.

The second temporal aspect of social assemblages is their relative stability. This aspect constitutes a source of debate concerning the lifespan of an assemblage and its dependence on the spatial scales of its elements. There is no determinate, uniform relationship between the duration of an assemblage's existence and its scale [22]. The lifespan of any given assemblage will differ from that of others and will depend on the individual characteristics of the assemblage's structure and its external interactions.

One observable trend in the lifespan of an assemblage is the longevity of codified assemblages. Genetic codification allows for self-replication of an assemblage: thus, assemblages based on genetic kinship (e.g., families) persist and extend their lifespan. Linguistic codification makes it possible for the information about the assemblage that sustains its existence to be transmitted through language. Religious traditions, for instance, can be transmitted in this way to maintain the existence of a given denomination: both vertically (between generations) and horizontally (within a single social stratum). Similarly, regions are also capable of self-replicating through language, reconstituting a cross-section of their own culture in proximate and distant territories. Such replication has been observed historically (in colonies, in host cultures, and so forth) and continues to be observed today in diaspora communities.

In addition to their capacity for replication, assemblages are distinguished by their ability to function simultaneously across multiple spatial dimensions. Genetic codification describes changes at the level of individual cells, of an organism as a whole, or at the level of a species. Linguistic means may be employed at the level of individual beliefs, of group traditions, and even at the level of the formulation of rules governing entire polities in inter-regional relations [28].

Assembling a region

Here, a region is understood as a significant part of some spatial whole [29]. In order to apply our framework appropriately to a region-as-assemblage, it is necessary to attend to the types of regions and the criteria determining these types, of which there can be many. Specifically, one may draw on the ideas proposed by Stiftel, Watson, and Acselrad [30]. Building on their studies, three basic types of regional specificity can be identified: natural-geographical, cultural-historical, and socioeconomic. The same region may be examined through all three lenses; the analysis of a single region as an assemblage will entail the examination of regional space from all three perspectives. Space is understood as both open and relational, encompassing “multiple forms of spatiality” [31]. Its boundaries are effects of relations rather than primary entities; a position consistent with the logic of the assemblage [31].

For regions delimited by their natural-geographical specificity, material components (the ensemble of geographical features) predominate over expressive ones (which may include the ensemble of landscapes within the region). The processes of territorialization in such regions may be identified as the formation and maintenance of natural geographical boundaries, while the processes of deterritorialization will include the erosion of such boundaries and changes in climatic conditions. The codification of such regions is carried out through genes, that is, the ensemble of flora and fauna populations characteristic of the conditions of a given locality. The connectivity axis of the natural-geographical region may be expressed through the continuity of the region’s spatial boundaries and the contiguous disposition of its defining geographical features.

In cultural-historical regions, material components may be represented by individuals and groups, while expressive components may be represented by the ensemble of signs and symbols that form the basis of identity for the region’s culture. The territorialization of such regions is usually the outcome of historical events that have led to the formation of a localised cultural figuration, while deterritorialization can be the outcome of processes that “blur” cultural boundaries. The codification of such regions occurs primarily through language: for example, through the dissemination of a unified literary canon [32] that constructs a local “imagined community” [33]. In the cultural-historical region, connectivity may arise from the extended existence of material objects that form part of the region, such as surviving historical architecture [34].

The material components of socioeconomic regions may include the region’s labour force, technologies, and productive resources, while the expressive components may include the disposition towards economic interaction or the social climate. The territorialising processes in regions of this type are the demarcation from other regions and the threat of armed conflict; the deterritorializing ones are the blurring of economic boundaries, the development of inter-regional economic interaction, as well as migration. The codification of such regions occurs mostly

through words: in particular, in legal documents defining the basis of interstate alliances (such as the Treaty on European Union). The connectivity of such regions is a consequence of the development of the region's transport system and the system of intra-regional communications [34].

The analysis of the key components of the assemblage within a multi-scalar understanding of the region establishes a universal and flexible framework for the study of regional space, one that overcomes reductionism and essentialism. What, then, are the principles underlying the construction of a methodological framework through which assemblage theory may be effectively applied to regional reality?

The assemblage method of regional analysis makes it possible both to systematise existing knowledge by mapping it onto a conceptual framework and to generate new data through the application of a varied interdisciplinary toolkit. If one were to focus exclusively on the first of these options, the boundaries of what may be classified as knowledge about the realities of regional space could be drawn quite widely. The approaches of transdisciplinary regional studies make it possible to draw on the knowledge and methods of various scholarly disciplines [6]. The formation of such an extensive knowledge base from which information about a multiplicity of phenomena may be drawn will enable the selection of already processed data that constitute components conducive to an adequate rendering of the assemblage profile of a region. Diversity of sources is the most important condition for the application of assemblage theory: it is this diversity, together with the reflection of the different factors bearing on the regional space under analysis, that lies at the heart of the full expression of the social complexity of a region.

Within the scope of one study, a certain allowance may be made with respect to the regional typology. Three types of regions defined by their determining specificity have been identified above: natural-geographical, cultural-historical, and socioeconomic. However, for the purposes of conducting regional analysis using the assemblage method, it is more productive to apply these not as distinct types of regions, but as expressions of the same spatial phenomenon through three different *foci*.

Adding existing knowledge to the elaborated conceptual framework means locating the realities of the actual spaces under investigation in relation to the four axes of the assemblage. Determining the place of such realities within the overall structure of the region-as-assemblage requires a comprehensive approach encompassing the following elements: traditional document analysis of sources containing information about the phenomenon or process within the region under investigation; comparison of that phenomenon or process with others (including those whose position within the axial model of the assemblage will be more readily apparent); and the generalization of several elements based on their combined influence on the key characteristics of the assemblage.

Everything set out above establishes the parameters of methodological principles: what is to be counted as a component of a region, how to work with boundaries and dynamics, and which axes to register. We can now translate these principles into procedures: a data collection design and rules for data integration that allow episodes of assembly/reassembly to be empirically identified as stable shifts along the axes and within event sequences.

In its most general form, this translation involves the following cycle: (a) preliminary desk-based assembly of the profile; (b) field-based refinement of nodes and boundaries; (c) codebook and the “components / axis / time” matrix reassembly; (d) repeated iterations of the above until the model is saturated. Such a cycle transforms reassembly from a metaphor into a procedure for revising the profile to accommodate new data [35].

The unit of analysis is the assemblage profile of the region as a configuration of components distributed across the four axes and tracked over time. Data are drawn from three types of sources: a corpus of documents, statistics, and maps; digital traces; and field observations and interviews. Each data fragment is coded by axis and anchored to a time and place [36]. The outcome of each analytical cycle is an updated components / axis / time matrix and an event sequence in which episodes of (re)assembly are marked. An episode of (re)assembly is registered when a stable shift is observed across at least two axes simultaneously; for example, boundaries/connectivity or coding / materiality.

We believe that the most relevant methodological basis for constructing the assemblage profile of a region is the integration of desk-based and field methods within a unified iterative design. The desk-based stage should begin with the formation of a corpus of sources: scholarly publications, reports, regulatory documents, statistics, and cartographic materials. The selection of materials should be conducted according to a list of keywords encompassing toponymic and thematic markers (transport, migration, conflicts, etc.) alongside methodological descriptors (historical analysis, time series, etc.). In the same timeframe, research should be conducted in digital fields: local social media, forums, photo archives, hosting platforms, and geotags. On this basis, a codebook can be assembled in which each code and category is “anchored” to the axes of the assemblage and to the relevant analytical *foci*.

To ensure that neither the subjects nor the researcher is rendered invisible, we distinguish two types of assemblage: subjective / emic assemblies (how actors themselves delineate the region, its boundaries, identities, and problems) and analytical (how the researcher constructs the profile along the axes). These two layers are compared: divergences are interpreted as data about conflicts of coding and boundary-formation, rather than as “errors” in the sources.

The researcher’s decisions on the choice of scale, corpus, and codes are recorded reflexively and constitute an integral part of the protocol.

The field stage makes it possible to saturate the material gathered during the desk-based stage with “live” (firsthand) data and to test any preliminary hypotheses.

Expeditions can refine the nodes of formal and informal infrastructure, physical and symbolic boundaries, and sensitive zones [37]. Participant observation allows for the registration and description of routine rules, divergences between overarching “strategies” and local “tactics” of spatial use [38], local codes, and practices of boundary maintenance and dissolution. Biological description of key species and biotopes provides an understanding of the bioenvironmental profile of the region. Semi-structured (both spontaneous and in-depth) interviews and focus groups with representatives of government, business, NGOs, and local residents should be conducted according to guides derived from the analysis of the assemblage’s “axes”; the sample may reflect its heterogeneity.

The integration of data obtained across these stages is performed with the components/axis/time matrix and event sequences that reflect the trajectories of the formation, stabilisation, and dissolution of configurations [39]. Triangulation of desk-based, field, and digital sources reveals points of emergence and divergence, which are to be interpreted as analytically significant information rather than noise or anomalies.

Artificial intelligence may assist in such research. It helps with topic modelling, clustering of assembled corpora, annotation according to the codebook, and identification of patterns of connectivity and cyclicity. The ongoing training of models on regional material will allow researchers to generate various configurations within the assemblage model and multiple scenarios of internal and external interaction. Such a coherent tool may provide a non-reductionist, multidimensional description of the region.

Conclusion

This research has yielded the following methodologically relevant results: (1) a critical framework for the application of assemblage language has been established, one that avoids the ontologisation of “flatness”; (2) a minimal set of working concepts suitable for operationalization has been identified (four properties, four axes, and temporality); (3) an operational protocol for constructing the assemblage profile of a region has been formulated, along with a criterion for registering episodes of (re)assembly seen here as stable shifts across at least two axes.

Assemblage reasoning of a “postmodern” variety requires critical reassessment. In this article, such reasoning is deliberately reduced to operationalizable distinctions and is not treated as a “cosmology” of flat ontology. “Flatness” is employed solely as a methodological rule; i.e., one that prohibits the *a priori* designation of a decisive level of explanation, requires that scale be chosen in accordance with the research question, and demands that all key ideas be tested against empirical data. To avoid the reification of the assemblage, subjective

assemblages of actors / subjects and the analytical assemblages of the researcher are distinguished and compared; divergences between them are treated as data about the competition of codes and boundary-forming practices.

The transition from theoretical ideas to methodological orientations is registered through the codebook and the rules of coding, while the transition from methodology to methods is established by the iterative cycle of procedures. Finally, the validity of conclusions is ensured through the triangulation of sources and the testing of the stability of the assemblage profile against changes in scale and data corpus, making the results not a set of aspirations, but a reproducible framework for the empirical investigation of regional phenomena.

The proposed protocol for constructing the assemblage profile of a region establishes a reproducible procedure for mapping the mechanisms of stabilisation and dissolution of regional configurations. The methodology addresses a broad range of tasks: from the diagnosis of infrastructural nodes, barriers, and problems to the support of territorial planning. The concrete output of the methodology's application is the components / axis / time matrix, the event sequence of (re) assembly, and the map of nodes and boundaries, both formal and subjective. This makes it possible to verify conclusions through the comparison of sources and to repeat the procedure across other cases.

DeLanda himself notes that the work of Deleuze and Guattari, on which he, in turn, draws in developing his assemblage theory, does not quite constitute a fully-fledged theory [21]. This is an important caveat: in regional studies, the assemblage approach is productive not as a universal explanation of "everything indiscriminately," but as a discipline of analysis of the mechanisms of assembly and reassembly; that is, of precisely how the boundaries, connectivity, and identity of regional configurations are temporarily stabilised.

The critical node here is the risk of explanation dissolving into descriptiveness: the rejection of fixed essences increases sensitivity to variability, but reduces the rigour of conclusions if focus is not maintained on recurring mechanisms. Furthermore, the choice of axes and sources is inevitably performative and asymmetrical: documents and digital traces "see" formal actors and institutional practices more readily, while *métis*, the informalized "knowledge of how things are actually done" [40], informal practices, and subaltern groups tend to be underestimated or rendered invisible. The absence of traces in the data, therefore, cannot automatically be interpreted as the absence of components or relations within the regional assembly itself.

Finally, the reproducibility of results is constrained by situatedness. Repeated studies conducted at different temporal cross-sections will predictably yield different assemblies even where the general contours are preserved. The practical conclusion from this is straightforward: restraint in generalisations must be practised, mechanisms must be foregrounded, the stability of the profile must be tested against changes in scale and sources, and zones of "not knowing" must

be explicitly registered. When these rules are observed, the limitations become not a weakness but a resource: they discipline interpretation and establish the boundaries of the validity of conclusions.

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