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Quality of life in rural areas: A topic for the Rural Development policy?

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Abstract. Contemporary transformations of rural areas involve changes in land uses, economic perspectives, connectivity, livelihoods, but also in lifestyles, whereupon a traditional view of ‘the rural’ and, consequently, of ‘rural development’ no longer holds. Accordingly, EU’s 2007–2013 Rural Development policy (RDP) is one framework to incorporate aspects labelled as quality of life (QOL) alongside traditional rural tenets. With a new rendition of the RDP underway, this paper scopes the content and extent of the expired RDP regarding its incorporation of QOL, in order to better identify considerations for future policy making. Using novel methodology called topic modelling, a series of latent semantic structures within the RDP could be unravelled and re-interpreted via a dual categorization system based on RDP’s own view on QOL, and on definitions provided by independent research. Corroborated by other audits, the findings indicate a thematic overemphasis on agriculture, with the focus on QOL being largely insignificant. Such results point to a rationale different than the assumed one, at the same time reinforcing an outdated view of rurality in the face of the ostensibly fundamental turn towards viewing rural areas in a wider, more humanistic, perspective. This unexpected issue of underrepresentation is next addressed through three possible drivers: conceptual (lingering productionist view of the rural), ideological (capitalist prerogative preventing non-pecuniary values from entering policy) and material (institutional lock-ins incapable of accommodating significant deviations from an agricultural focus). The paper ends with a critical discussion and some reflections on the broader concept of rurality.

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Contents:

1. Introduction	26
2. Defining the scope	28

2.1. Understanding rurality.....	28
2.2. Outlining quality of life (QOL).....	30
2.3. Engineering policy.....	32
3. Methodology.....	33
3.1. Introducing topic modelling (TM).....	33
3.2. TM and Rural Development policy (RDP).....	34
3.3. Some methodological issues.....	34
3.4. Data material and processing crude topics.....	36
4. Results and analysis.....	38
4.1. RDP and QOL.....	38
4.2. TM and other audits of RDP.....	40
5. Three possible drivers.....	42
5.1. First driver: conceptual.....	42
5.2. Second driver: ideological.....	43
5.3. Third driver: material.....	44
5.4. The messiness of reality.....	45
6. Conclusion.....	46
Notes.....	48
Acknowledgements.....	49
References.....	49

1. Introduction

In civilized, democratic societies, major human actions are organized and supervised by elected governmental bodies that act upon frameworks of policies. Policies are statements of intent based on different, often fleeting, values. In other words, the ways in which different environments are managed are per definition a reflection of what is thought to be important to (some) people at a specific time and whose urgency is articulated through policy. Policy planning can be described as a complex actor-network that heterogeneously combines different interests into a unified framework. This, in turn, may encounter a series of conceptual and practical problems. One such area regards developmental strategies labelled as either *rural* or *urban*. Despite the many problems associated with the rural-urban dichotomy, major development debates are still often conducted separately (Ward, Brown, 2009), leading up to separate policies aimed at different – rural or urban – paths of development. By acknowledging that a changing society is in constant need of redefinition, any generalized attempt at social engineering based on the contentious rural-urban distinction is – due to its wide range of applications – especially

important to revisit on a systematic basis (not least when deployed in formal contexts).

This has to do with the fact that societal changes are not only the result of the changing conditions in particular places but also of the changing theoretical perspectives that frame contemporary rural-urban understanding (cf. Cloke, 2006). In that light, the concepts of rurality and urbanity are just as much materialities as they are discourses (cf. e.g., Jones, 1995), tacitly shaping our understanding of ‘rural’ and ‘urban’, including the ways in which areas so labelled should be managed to best capture the intellectual spur of time. Since both tracks – material and discursive – have a profound impact on the visceral lives of people who operate in areas subject to labelled developmental strategies, the level of convergence between assumption and application becomes particularly important to scrutinize.

Rural development – which is in the centre of this paper – refers generally to the process of improving the quality of life and economic well-being of people living in relatively isolated and sparsely populated areas (Moseley, 2003). In the European Union (EU), there is an active rural development policy that aims to help achieve valuable goals for the countryside and for the people who live and

work there. Consequently, after the strategic orientations of the Lisbon and Gothenburg European Councils (2000 and 2001) and in the wake of the 2003 Salzburg Conference, enhancing *quality of*

life (QOL) in rural areas was inscribed as one of the three core objectives for EU's 2007–2013 Rural Development policy (European Commission, 2006, 2012) (see Fig. 1).

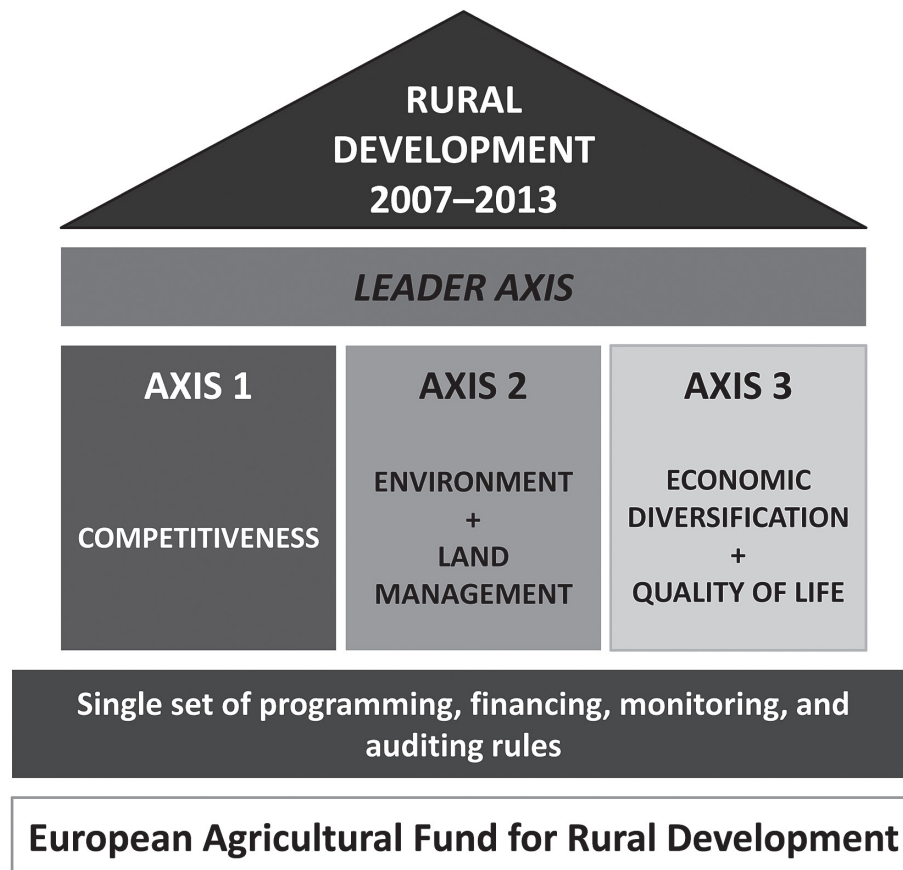


Fig. 1. The general structure of EU's 2007–2013 Rural Development policy

Source: European Commission, 2008

In order to comply with these new conceptual assumptions, the apparent refocus should, accordingly, be clearly reflected within the main body of the actual policy (i.e., the legislation documents). Contrarily, should this fail, the proclaimed developmental goals could strike as insidious political rhetoric. This has to do with the fact that if words of promise or intent lack entrenchment in action they become reduced to the role of verbal embellishment, which, in turn, may undermine trust, a basic element of democracy (in Europe, the problem of disparity between policy rhetoric and practice has been observed in a wide variety of areas; cf. Ribeiro, Marques, 2002; Gelan et al., 2008; Peckham et al., 2012; Stenseke, 2012; Bernt et al., 2014).

However, when addressing this problem, one particular aspect is vitally crucial to understand. Policy documents are often voluminous, written in a technical jargon, and are not meant to be read page by page. As such, they are not 'user-friendly' but act largely as a source of reference for specialists working in the concerned fields. Nevertheless, in order to facilitate transparency, policies are often summarized, in that way becoming accessible to the general public. Consequently, in order to *really* serve transparency, a policy summary should be an unambiguous representation of the policy as a whole. Traditional summarizations and audits, however, may prove problematic due to the various human biases that, in one way or another, may

inadvertently affect or even distort the contents of the original policy, no matter how conscientious the writer (cf. Beard, 2000). Also, traditional quantitative textual approaches (built primarily upon word/keyword frequencies) run into various problems (such as context insensitivity, multiple meanings or mechanical treatment of text) and, consequently, the insights they offer may be fairly basic (cf. Schonhardt-Bailey, 2005; Bazeley, Jackson, 2013).

To circumvent these problems, this study uses a novel method derived from the field of digital humanities called *topic modelling* (abbreviated TM). TM departs from the assumption that a body of text is comprised of a number of individual so-called *topics*, which are thought to represent the major themes present in the analysed text (Block, Newman, 2006; Blei, Lafferty, 2007; Mimno, 2012). Thus, tentatively, TM can be used as a quantitative alternative to traditional content analyses (TM is described in more detail in chapter 3).

Given this outline, the objective of this paper is to elucidate the degree of convergence between the policy content itself and its most accessible summarization, the EU 2007–2013 Rural Development policy Fact Sheet (RDP-FS) (European Commission, 2008). We are particularly interested in how much emphasis in the actual policy the novel (i.e., in the context of rural development strategies) concept of ‘quality of life’ has been given in light of the prominent place it merited in the summative RDP-FS. The major concern here is the issue of possible irreconcilability; we question the intrinsically humanistic nature of the concept of ‘quality of life’ (i.e., the cultural – individual and social – elements in the cognitive interpretation and negotiation of rurality), which nonetheless was chosen to flavour the 2007–2013 RDP – here seen as a formal representation of ‘the rural’. In that light, the general aim of our approach is to establish the ‘true’ message that saturates the most strategic policy designed to inform the path of ‘rural development’ in contemporary Europe. However, rather than focus on distilling some exhaustive definition of ‘the rural’ that would supposedly (and consciously) underpin the orientation of the RDP, we assume (using the actor-network theory) an anti-essentialist approach to rurality and instead focus on the drivers (and their signifiers) that contribute to the formation of that message.

Having categorized the TM-generated topics according to two coding matrices (1 – aspects of rural development as defined by the RDP itself; and 2 – QOL-related aspects as defined by specialist independent research), we were able to discern a number of specific themes, which, to a greater or lesser extent, impregnate the actual policy legislation. These themes could next be quantified and compared in order to evaluate the actual thematic purview of the RDP in the face of its proclaimed assumptions. Overall, the achieved results indicate a thematic imbalance (largely to the detriment of the concept of QOL), a ‘mishap’ we attempt to explain in the concluding discussion.

It should be noted that as of the date of the writing (December 2013/January 2014) the 2007–2013 RDP is no longer the latest, as the EU has just recently launched a new policy package for the period 2014–2020. Given that the application of TM must be regarded as a novel approach in the context of policy analysis (TM is still considered nascent technology; cf. Brauer, Fridlund, 2013), we concurred that the 2007–2013 RDP would also better suit the technical design of our study, in that there are other independent audits of the 2007–2013 rendition to which our results could be compared and validated against (cf. Cagliero et al., 2010; FERN, 2010; ECoA, 2011; Schuh et al., 2012; ECoA, 2013)

The disposition of this paper is as follows. Beginning with a number of theoretical perspectives on rurality and quality of life in chapter 2, we also introduce actor-network theory as a way to better understand the evolution of policies. Chapter 3 is dedicated to the methodology at hand (topic modelling), including a discussion about its benefits and shortcomings, as well as an elaboration of the categories used to interpret the topics. It is followed by a succinct presentation of the obtained results in chapter 4. A brief discussion, including three hypothetical scenarios to explain the results (chapter 5), followed by a conclusion (chapter 6), finalizes this paper.

2. Defining the scope

2.1. Understanding rurality

State’s activity in regulating its territory begins with the discursive process of constructing that territory

as an object of governance (Meeus, Gulinck, 2008: 10), which, in turn, is often organized and managed on the basis of the two conceptual spheres – the rural and the urban (cf. Moseley, 2003; Taylor, 2007). Remembering that the rural-urban divide is not some finite measure but – in this context – a practical response to bring clarity into land use policy and tenure, the first step in analysing rural policy, therefore, must be to “to interrogate the discursive assumptions and representations that underpin policy formulation” (Woods, 2011: 233-234). According to Woods (2011: 131), discursive engagement with the rural occurs on three levels: (a) constructing the problems that challenge rural areas; (b) evaluating the capacities of these areas; and (c) setting out a vision for their future. This, in turn, becomes a set of objectives of the strategy’s actions. Moreover, government’s engagement with different spatialities presupposes knowing its territory; therefore, any major societal shift requires adequate attention in this respect. Since commissioning audits from leading academics is a common way of dealing with such shifts, policies also find reflection in academic research, subject to its own warps, turns, trends, paradigms and even extrascientific peculiarities (cf. Kuhn, [1962] 1996; Foucault, [1975] 1995; Latour, 1987; Barnett, 2004; MacKenzie, 2009; Bennett, Joyce, 2010; Edwards, 2010; Asdal, 2012). Consequently, the way in which rurality is approached (ultimately influencing the development of policy) depends greatly on how rurality is understood on a theoretical (authoritative) level. The following review, therefore, aims to outline the milestones in academic treatment of rurality (particularly in the discipline of geography) and in that way cast light on its changing, ambiguous and contested nature.

According to Cloke (2006), it is possible to recognize three significant theoretical frames for conceptualizing rurality: functional, political-economic and social constructionist. Until the 1950s, studies of temporal variations in agricultural activity constituted a leading subfield of economic geography. Because of the similar methods associated with the then current belief in environmental determinism, it emphasized the role of the physical environment. The *functional* concept of rurality is very much a remnant of this epoch. Through this lens, rurality is identified via elements of place, landscape and society, whereof extensive land uses – such as agri-

culture and forestry – are a significant part (Cloke, Park, 1985; Szymańska, 2013). Beginning in the 1970s, the focus areas of rural geography came to include a new set of dimensions: accessibility, employment, housing, land use, recreation and rural planning. Towards the 1980s arose the urgency for rural geographers to be more theoretically informed and policy-oriented, in that the hitherto advocated ‘applied positivism’ (Cloke, 1994) lacked direct engagement in politics and ideology, rendering rural geography broadly theory-free (Gilg, 1985). Prompted by critical rural sociologists in the late 1980s and early 1990s, more emphasis was put on research dealing with economic restructuring, social and environmental recomposition, and the role of the state in organizing change (Cloke, 1989). From such an agenda emerged a set of new aspects (privatization, counter-urbanization, gentrification, poverty, accessibility and citizenship), including a view of the rural as an arena for experience (Cloke, 1994: 539). More recently (mid and late 2000s), rural geography has been revived as a response to various concerns seen as a “threat” to the countryside (urbanization, agribusiness, new modes of recreation, second homes, class recomposition, etc.), not least their political entanglement in the ‘production of nature’ (Gregory et al., 2009). Rurality has finally entered a phase of post-rurality (see Murdoch, Pratt, 1997) or post-productivism (see Evans et al., 2002; Mather et al., 2006). Significant changes in ideology, food regimes, agricultural policies, farming techniques and environmental impacts (cf. Wilson, 2001) made values other than production of commodities come to light, ultimately shaping ‘the new rural paradigm’ (OECD, 2006). From this epoch stems the *political-economic* concept of rurality, generally emphasizing the social production of existence and its interconnectedness with the outside world (cf. Cloke, 2006: 20). Further prompted by the blurring of the rural-urban distinction, the spatial basis for rurality as a concept was largely destabilized, spawning the idea that rural places did not represent distinct localities (Urry, 1984: 198; Cloke, 2006: 20). Inspired by the ‘cultural turn’ within the social sciences, the dominant trend, since the 1990s, has ultimately been to treat the rural as a *social construct* (cf. Rye, 2006). Ever since, the cultural turn has received its fair share of criticism for not being useful for policy-makers, and for retreating from

the ‘materialist’ analysis of power under capitalism (Barnett, 2009). Accordingly, the dematerialization of social science has even led to claims dismissing the cultural turn as intellectual dilettantism (Clope, 2006: 22). In that vein, the last decade has seen the emergence of more relational (anti-essentialist) approaches to rurality (including actor-network theory), which eschewed notions of a coherent social totality and of various conceptual binaries (e.g., human–nonhuman, material–cultural) (Bennett, Joyce, 2010: 4; Woods, 2011: 40). This erasure of the nature–society divide provided a foundation for more creative combinations, including a view of the countryside as ‘hybrid space’ (Murdoch, 2003).

In light of the most recent vicissitudes surrounding rural space, there are currently (at least) two ways of imagining it. While ‘rural’ as a space of production prioritizes activities associated with exploitation of resources for the production of commodities (mainly agriculture), ‘rural’ as a space of consumption is based on the influx of non-locals in search of multisensory experiences. Having found its way into culture, science, and planning, the ‘productive’ discourse of the rural has historically been stronger; however, the capitalist imperative and the subsequent specialization and integration of rural industries have effectively rendered large areas of rural territory “surplus to requirements as spaces of production” (Woods, 2011: 130). Moreover, the dynamism and the geographic unevenness of the ‘rural economy’ ultimately created the need for policies adequate enough to target this wide range of intertwined scales and conceptions. The task has fallen on what is widely referred to as ‘rural development’.

Rural development are actions aimed mainly at social and economic development of rural areas (Chigbu, 2012), including “sustainable economic growth and improved living conditions, bringing rural areas up to national standards of development, and *ensuring* that rural regions are attractive places to live” (Woods, 2011: 131). However, no matter how universal and rhetorically appealing, the sheer execution of these aims will also depend on the ideology underlying their formulation. Obvious ideological irreconcilabilities, such as those between neoliberal and social democratic purviews, often result in far-reaching negotiations regarding what to include and in what concentrations. Given

that the public social debate has, issue after issue, slowly shifted towards a more progressive humanistic direction, new concepts have striated the course of rural development. One of those concepts – perhaps one of the more difficult to grasp – is ‘quality of life’, elaborated next.

2.2. Outlining quality of life (QOL)

The transformation of ‘rural areas’ entailed changes in perspectives on how these areas should be organized and managed in order to best accommodate those changes. Within the EU, following significant alterations to the first pillar of the CAP (Common Agricultural Policy) in 2003 and 2004, the Agricultural Council adopted, in 2005, a fundamental reform of the Rural Development policy (RDP) for the period 2007–2013. Ultimately, the following three major objectives – articulated as three axes (1) – have been set (European Commission, 2008: 4):

1. Increasing the competitiveness of the agricultural sector;
2. Enhancing the environment and countryside through support for land management;
3. Enhancing the quality of life in rural areas and promoting diversification of economic activities.

Although the first and the second axis raise little doubt in light of the decreasing significance of European agriculture (cf. Rabbinge, van Diepen, 2000) and the highlighting of the ecological tenets of the sustainability paradigm (Paton, 2011), the third axis is more problematic in that it deals with the changing nature of ‘rurality’ in a much broader sense. Particularly intriguing is the inclusion of the contentious concept of ‘quality of life’, and how it is meant to be addressed and implemented in the context of the increasingly subjective (and equally contested) concept of rurality.

‘Quality of life’ (QOL) is a complex concept that incorporates many different material and immaterial aspects. It refers to the general well-being of people, groups or societies, and has been used widely within e.g., healthcare, policy and international development. It should be emphasized that QOL does not simply refer to income-related living standards of individuals (the economic aspect), but is a wider concept that also includes the surrounding environment, physical and mental health, education,

leisure, recreation, social belonging, and so forth (Nussbaum, Sen, 1993; Gregory et al., 2009). Such reasoning reaches back to Maslow's now classical 'hierarchy of needs' (Maslow, 1943). Today, basic human needs in developed nations – the physiological (such as food, sleep, homeostasis or excretion) and safety-related (such as security, health or employment) – viz., needs that previously were the main target areas of governance, are no longer sufficient and are now being complemented with higher levels of human well-being, such as cultural belonging, esteem and self-actualization. Such development is also in line with the now broadly accepted social sustainability paradigm (UCLG, 2008). In order to monitor this brand of development, diverse indicators of QOL have spurred interest across various disciplines and scales of inquiry, including studies on the psychology of happiness and work on the so-called SWBs (subjective well-being surveys) (Costanza et al., 2008). Perhaps one of the most famous indicators of QOL is the *Quality-of-Life Index*, surveying (on a national level) the following nine factors: health, family life, community life, material well-being, political stability and security, climate and geography, job security, political freedom and gender equality (The Economist Intelligence Unit, 2005). Being such a diverse mixture of economic and non-economic, as well as (more or less) subjective components, QOL is a delicate concept that is difficult to implement in a complex reality. In regard to policy, particularly, while having served as an explicit or implicit goal for a long time, QOL's adequate definition and measurement – as Costanza et al. (2008) have put it – “have been elusive”.

Now, how does that relate to rural development? Already back in the 1990s, Stenseke (1997) questioned the common notion that maximization of profit would be the decisive factor behind farmers' ambitions, motivations and actions, arguing for a more nuanced image. Although only farmers were implied, Stenseke's early findings seem to apply to the 'rural population' in a broader sense and in a contemporary setting as well. Indeed, in the 2007–2013 RDP, the central objective of the third axis is to “have a 'living countryside' and to help maintain and improve the social and economic fabric” (European Commission, 2008: 15), and particularly so in areas prone to depopulation. Although economic aspects of development are certainly implied (en-

couraging diversification, creation of employment opportunities and conditions for growth), the RDP – according to its summary – also highlights aspects such as capacity building, skills acquisition, organization for local strategy development and assertion of attractiveness of rural areas for future generations. In particular, the needs of women, young people and older workers are emphasized in terms of training, information and entrepreneurship (European Commission, 2008: 9). This general goal is meant to be obtained by investing in the broader rural economy and rural communities, and by improving access to basic services, infrastructure and a more desirable environment. In terms of measures applied to monitor improvement of QOL in rural areas, only two are specified: (a) support for the setting up of basic services for the economic and rural population, and (b) conservation and upgrading of the rural heritage (European Commission, 2008: 14). Such conduct is also seen as “vital to increase the quality of life in rural areas” (European Commission, 2008: 15). Although appealing through the prism of rhetoric, is QOL really a useful concept?

Three notable observations come to mind at this point. Firstly, the quality of *whose* life is implied when applied onto a rural development strategy? If we agree to adopt a more humanistic paradigm to development, but still consider the need for a *rural* development policy, does it mean that the lives of rural people are attributed some special qualities? Moreover, who are those rural people in light of the immense difficulties to define both 'rurality' and 'locality' as a result of the rural-urban blurring? And who should decide who 'rural people' are and what is considered best for them? Secondly, using the highly contested concept of heritage as a central measure of monitoring QOL (and especially so in a *rural* context, cf. Dymitrow, 2013) seems questionable in the face of the large body of critical-theoretical work on the subject (cf. Tunbridge, Ashworth, 1996; Kirshenblatt-Gimblett, 1998; Ashworth, 2007). Thirdly, despite being a timely and seemingly important concept, QOL straddles many conceptual boundaries – economic, material, psychological, moral, and so forth. Incorporating it into one functioning policy poses significant challenges, because a concept defined so broadly is most likely bound to clash with some other concept due to

imminent conflicts of interest (cf. Erjavec, Erjavec, 2007). To understand how such process is consolidated within policy formulation, we will now briefly turn to actor-network theory for an elaboration on how policies evolve.

2.3. Engineering policy

Since policy legislation is a very specific type of protocol, in order to understand the development process it undergoes, we resort to actor-network theory (ANT) for guidance. ANT can be regarded as a constructionist approach to social theory and research, most notable for its treatment of objects (non-humans) as part of social networks. Controversial due to this particular insistence, ANT is also known for its critique of both critical and conventional sociology by refraining from essentialist explanations of various social events (Law, Hassard, 1999). Developed initially to understand how scientific knowledge is consolidated, ANT has since been applied much more widely onto any social process by looking into how it is being stabilized (Latour, 2007). Since ANT assumes that many relations are both material (between things) and semiotic (between concepts), its application has been particularly fruitful to understanding the complex network of policy development (e.g., Manning, 2002; Rutland, Aylett, 2008; Young et al., 2010).

Within ANT, many different entities can represent actors; they can be animate, such as actively 'acting' humans or animals, but also inanimate matter, concepts, groups, institutions, weather conditions, etc. Classical ANT assumes that all actors have their particular strengths and weaknesses, whereupon the latter may be overcome by joining forces with other actors. This process of joining forces is called *alliance building*, as this increases the relative power position of the actors involved (Avango, 2005). Many different alliances and their associated actors make up a so-called *actor-network*. The basic idea is that one actor can *heterogeneously engineer* different alliances of actors in such a way that the resulting network becomes powerful enough to merit a dominant position (the attribute 'heterogeneous' refers to the many different spheres covered: material, social, conceptual, legislative, etc.; cf. Latour, 1987; Mol, Law, 1994; Mol, 2010). This heteroge-

neous engineering of alliance building is done by translating interests, compromises, physical bonds, etc. However, it should be noted that the process is not neutral insofar the actors are transformed by the alliances they build, and, by that, the process is largely a game of 'give and take'. The difference between ANT and other social constructionist approaches is that ANT is adamant in its requirement that each and every part of the actor-network must be materially and empirically enforced before it can impact the network. Thereby, ANT does not deny the existence of social constructionist meta-categories like discourse, habitus or culture, only their *a priori*, automatically assumed, effect upon each and every case (Latour, 2013).

In that vein, the RDP could be said to represent an actor-network that combines the interests of various stakeholders – farmers, agribusiness employees, politicians, 'rural inhabitants', second-home owners, etc., along with their material counterparts – into a uniform policy. Consequently, actors that are best fit to engineer their power position will reap the most benefit from the created policy (cf. Bowler, 1999; Morris, 2004; Juntti, 2012). However, since actor-networks (here: policy legislation) are not static, they must constantly be updated, reinforced and maintained in order to retain power (Mol, 2010). This would mean that the guidelines outlined in a policy must be followed and amended (e.g., in the form of a corrigendum), and compliance assured. Now, when a new concept such as 'quality of life' is superimposed onto an existing actor-network (here: the RDP legislation), this new concept – or, more accurately, its proponents – must create alliances strong enough for that concept to retain its intended meaning. Therefore, when 'quality of life' is introduced *and* emphasized within the RDP, it simultaneously requires significant effort in order to gain merit. This effort – i.e., the alliances built by the proponents of 'quality of life' – should consequently reverberate throughout the RDP. In the eyes of ANT, this is a necessity in order to anchor and sustain its power position. Contrarily, should this fail, it could be argued that this new actor-network ('quality of life') has no impact on the policy (it does not exist), other than in the mere rhetoric used to proclaim otherwise. Scrutinizing this interrelation is an important task of our study.

3. Methodology

3.1. Introducing topic modelling (TM)

As noted earlier, quality of life is a concept that is difficult to define; it is also new to the Rural Development policy. Nevertheless, it occupies a prominent niche in the summative RDP-FS as one of the policy's three axes. Given such a distinction, we would expect to find a substantial number of themes dealing with quality of life, and hence many interaxial linkages to benefit alliance building. To uncover such themes and relations we chose topic modelling (TM) as a suitable method. In this chapter, besides method description and a rudimentary explanation of how TM works, we also touch upon some of the benefits and problems of TM (we deliberately avoid – as much as possible – a technical discussion, such as that of algorithm construction, in order not to deter the focus from this paper's subject matter).

Contemporary TM is an outcome of the so-called 'Latent Semantic Analyses' (LSA) within natural language processing and machine learning developed in the 1990s (cf. Deerwester et al., 1990). In the most general sense, TM can be described as a

computer program that 'summarizes' text' by unravelling a series of latent semantic structures. As such, it can be used "to postulate complex latent structures responsible for a set of observations, making it possible to use statistical inference to recover this structure. This kind of approach is particularly useful with text, where the observed data are explicitly intended to communicate a latent structure" (Griffiths, Steyvers, 2004: 5228).

A body of text is uploaded to the program, whereupon a number of pre-sets and configurations are made. This ultimately generates a number of so-called *topics*, i.e., meaningful textual motifs that exemplify significant keywords of a shared theme, which may be deemed as contextually important (cf. Jockers, 2013). Within TM, a topic is represented as a 'string of words', which can be understood as a common 'theme', 'motif' or 'meaning' shared by the keywords that signify the topic. These keywords can consequently be thought to highlight the topic's intended meaning in the original text (see Fig. 2). Since the topics are generated as strings of words, they require an analysis consisting of thematic categorizations and semantic interpretations (for a more in-depth introduction to TM, see, for example, Blei, Lafferty, 2007; Blei, 2012; Mimno, 2012).

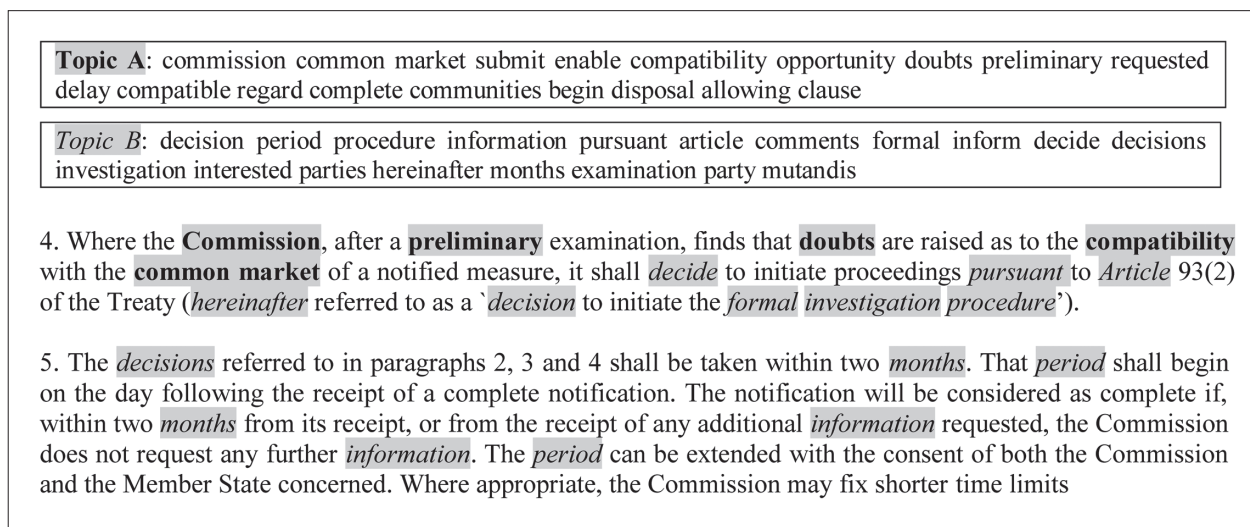


Fig. 2. An example of topic modelling in action: a text extract from the 2007–2013 Rural Development policy with a selection of uncovered topics (marked in grey). Words belonging to topic A are marked in bold text, while words belonging to topic B are in italics

Source: European Commission, 1999: 4 (one of 2007–2013 RDP's constitutive documents); own calculations

In terms of function, there are different algorithms underlying TM. The most popular is the *latent Dirichlet allocation* algorithm (LDA) (Jockers, 2013), developed in the early 2000s by a group of researchers led by David Blei. LDA treats text as ‘a bag of words’, i.e., a container where word order and syntax is disregarded (cf. Mimno, 2012). Firstly, TM removes all so-called ‘stop words’ (such as ‘the’, ‘is’, ‘at’, ‘which’, ‘and’ or ‘on’), i.e., words that only have meaning in connection with other words (removing them also speeds up the process). Next, using algorithms such as Gibbs sampling, a statistical correlation based upon word concurrence is calculated for the words in each bag. A strong statistical correlation is thereby treated as a meaningful relation between the correlated words (Blei, 2012) and the result of this calculation is an individual string of words called a *topic*. It should be noted that although there are many different TM algorithms, the most commonly applied software (using the LDA) is the open source software MALLET (MACHINE Learning for LANGUAGE Toolkit), developed in the early 2000s (McCallum, 2002). Being the most reliable TM software currently available (Jockers, 2013), it also served as the software for this study.

As more and more data become available in digital format (particularly on-line, e.g., JSTOR, Google Books, Wikipedia, WikiLeaks, various policy briefs, etc.), TM is increasingly becoming a popular tool to quickly and conveniently analyse *large* bodies of text. Consequently, using TM for data mining (scavenging large textual corpora) to uncover important semantic themes has become its most common application (e.g., Griffiths, Steyvers, 2004; Block, Newman, 2006; Blei, Lafferty, 2007) (2). Being a cutting-edge technology, there is – as of yet – no standard application of TM (Jockers, 2013). The consequence of this is that researchers often tend to take an explorative or experimental approach rather than to use TM as a concrete method to solve some particular problem. To counterweight such development, in our study, we specifically apply TM onto a formulated hypothesis.

3.2. TM and Rural Development policy (RDP)

The ideas forming our hypothesis regarding QOL in the context of the RDP are as follows:

1. QOL is a timely and therefore important aspect of rural development;
2. QOL is an abstract, subjective and holistic concept, and therefore difficult to define;
3. QOL is a new concept, and, as such (according to ANT), requires many alliances.

Being an important concept, there should, accordingly, be a substantial amount of topics related to QOL in the actual policy documents. Being also a difficultly definable concept, there should be several topics devoted to its definition when applied in a concrete context. Lastly, the issue of alliance-building (as a consequence of the concept’s novelty) should generate a great number of topics that link QOL to other developmental issues. Consequently, our choice of TM as a suitable method for this task was inspired by its ability to unravel those sought-for latent themes hidden in a voluminous body of text (the 2007–2013 RDP). One notable counter-argument in this respect could be that the sheer amount of topics within a text would not necessarily have to correlate with how ‘important’ a concept is. Although hypothetically this might be true, still, if QOL really is to be incorporated into the actor-network of the RDP, there must be traceable alliances within the text that link this part of a major policy axis to the other axes in order to solidify its position within the network (i.e., the policy). Furthermore, the more important a concept the more alliances it requires to justify its power position (cf. chapter 2.3). For this purpose, TM offers a more convenient and – allegedly – less biased alternative to traditional content analyses.

3.3. Some methodological issues

As noted earlier, TM, as a quantitative method in the context of policy analysis, is a novel approach. Although qualitative approaches are the most common ones in this particular context (most notably textual discourse analyses), quantitative alternatives have been used for a long time (see, for example, Apthorpe, 1996; Schonhardt-Bailey, 2005; Michaelowa, Michaelowa, 2011). Consequently, there is a plethora of software-assisted methods to analyse bodies of text, including official documents and transcripts of speeches and interviews (e.g., Atlas.ti, NVivo or Alceste). What they all have in com-

mon is their heavy reliance on word frequency or common phrases, an issue that becomes problematic in instances of multiple meanings, word repetitions and contextual variability. TM, on the other hand, is adamant in this particular respect in that it is based on different logical premises (3). TM is not merely searching mechanically for word frequencies or common phrases, but for *relationships* between words, which in themselves are attributed meaning (cf. Blei, 2012).

Still, TM experiences the same problems as any other quantitative method when it comes to categorization of data. In the case of TM, the rendered topics (we call them crude or intermediate results) must be categorized (or interpreted) in a certain way in order to be ascribed meaning. This, in turn, presupposes a certain level of subjectivity. In order to minimize the impact of bias, it is instrumental that categorization is done in a way that is most relevant to the aim of the research, most notably by anchoring it in specialist literature.

Besides this general problem typical of any quantitative method, TM has its own specific problems inherent to the assumptions underlying its algorithm. Despite steadily gaining in popularity, TM – for all intents and purposes – is still a technology in the making (Brauer, Fridlund, 2013). Accordingly, there are some issues involved, all of which are currently being addressed and refined by international scholarship (cf. Asuncion et al., 2011; Baillie et al., 2011; Daud, Muhammad, 2012). Nevertheless, some unresolved problems become apparent when TM is applied in a concrete research project such as this, and therefore need to be addressed.

One of these issues is LDA's (the underlying algorithm of MALLET) postulation that the amount of all topics that can be found within one and the same document is known beforehand (Jockers, 2013). This 'flaw' of LDA is the result of computational convenience (Blei, Lafferty, 2007: 19) to make LDA robust and easy-to-use. As such, it is the most widely used TM software, although there are other (more complicated) algorithms that address this issue (cf. Blei, Lafferty, 2007). The current pragmatic convention is to accept this deficiency by adjusting (i.e., experimentally specifying) the number of topics according to the specific needs of the research project, but also for the sake of manageability (cf. Block, Newman, 2006; Mimno, 2012; Jockers, 2013).

A heuristic seems to be beginning the analysis process with 100 topics, a number that is later adjusted for each individual corpus. In our case, we began with a calculation of 100 topics and subsequently increased the number to 200, 300 and 500, respectively. After an initial inspection and crude interpretation of the variability among topics (in regard to the perception of detail), as well as in terms of manageability, the number 300 was deemed an acceptable compromise (note that 300 topics should be considered on the high end within the application of TM; most experimental studies usually settle for 30 to 50 topics, as these lower numbers are less laborious; cf. Brauer, Fridlund, 2013).

Another practical problem of TM is the so-called 'granulation size' (also called 'chunk size' or 'bag size'). A 'chunk' is an analytical unit that consists of the total amount of assigned topics (in our case 300), for each and every MALLET calculates an occurrence value (in our case 300 topics represent 100%). Departing from the relative distribution of percentages between the different topics ('relative occurrence'), it is possible to determine the occurrence of each topic within any given predefined chunk. The problem lies in defining the size of that chunk, as the results will differ accordingly. One option is to use the whole original document; however, the problem is that the found topics will most likely be overly generalized. Therefore, it is "useful to divide the [documents] into 'chunks' and run the model over these chunks instead over the entire text" (Jockers, 2013: 134). Still, this problem remains largely unresolved and there are no guidelines on how big those chunks should be. In this study, we have adopted the size of an A4 page (for all policy documents), because we wanted to retain a relatively fine level of detail for our topics and, additionally, to resolve another problem, outlined next.

The last issue we would like to address pertains to the sheer interpretation of the (categorized) topics, given that the meaning is not always self-evident (cf. Chang et al., 2009). Similarly to the aforementioned issues, various pragmatic solutions have been suggested. A common solution (used e.g., by Jockers, 2013) is to visualize the topic string in a fashion akin to a 'word cloud' (i.e., a visual representation for text data used to quickly perceive the most prominent terms by means of font size or/and col-

our), whereupon the significance of a word within a topic is proportional to the size of the word within a word cloud. The problem here is that a ‘word string’ is not semantically self-evident; there are still ambiguities resulting from words not being interpreted within their right context. Given this problem, we devised a different solution, which involved revisiting the original page of the analysed text and manual highlighting of the words of the topic, whereupon its interpretation becomes a creative combination of the original text and the topic itself. Since such an approach partially aligns with traditional text analysis (i.e., involving coding; cf. Bryman, 2008), we had to find a way to subdue the impact of our subjective interpretations (which could have been problematic if they were derived directly from the word strings). Therefore, in connection with the selected proceeding, we also created a number of coding matrices for the categorization of topics (more on this in chapter 3.5). Not only did this approach facilitate interpretation; it also safeguarded it against multiple meanings and non-meaningful topics (‘noise’), which in this way became easily identifiable. As noted earlier, this approach requires going back to the original text. Although this is easily done if the text is relatively short, in larger volumes (of more than 100 pages), the process becomes much more onerous and time-consuming. However, having reduced the chunk size to the scope of an A4-page (this means in practice that each topic would also correlate to a specific page), tracing back a topic to its original context for semantic guidance was relatively easy (this was the second reason for choosing the A4 as an adequate granulation size) (4).

3.4. Data material and processing crude topics

In this study, the original 2007–2013 RDP documents served as primary data material. After initial correspondence with the European Commission for Agricultural and Rural Development, we were given access to the policy documents. The files were in the English language and all were downloaded on the 7th of May 2013. Due to server error, failed digitalization or lack of availability, 5 of the 40 policy documents were missing, and, all in all, a corpus of 706 pages could be used for the final analysis (it should be noted that several unsuccessful attempts were

made to obtain these missing files at later dates). The missing documents were primarily corrigenda to older policy sections, and given their brevity (1 to 5 pages each), their absence did not affect our results in any significant way. Since the downloaded files were in the PDF-format, for technical reasons, they had to be converted to *txt.files*. The process of conversion was done manually to safeguard it from potential OCR errors (i.e., optical character recognition), which in this way could be omitted en passant.

As mentioned earlier, MALLETT calculates an occurrence value for each topic in every chunk, whereupon the total occurrence of all topics in one chunk represents 100%. The sum of all individual occurrences hence creates a relative occurrence that denotes a topic’s ‘importance’ within the entire corpus. A topic’s absolute ranking value is meaningless, as it only represents the sum of percentiles for each individual chunk. Since only a topic’s relationship to other topics makes it meaningful (5) it is the *relative* occurrence we are interested in. By identifying topics relating to a particular axis and by calculating their relative occurrences, we obtained values whose relative sizes could easily be compared to the different axes of the RDP.

The subsequent grouping of the topics was done on the basis of their belonging to a particular theme. In order to maintain scientific consistency while defining thematic categories, we created specific coding matrices (this is a normal procedure in quantitative analyses; cf. Flowerdew, Martin 2005: 220–223). We define a category as “a somewhat higher level of abstraction than a [topic] in that it may group together several [topics] that have common features denoted by that category” (Bryman, 2008: 416). Since we were only interested in the prevalence of topics related to QOL, we departed from the thematic purview of axis 3, i.e., the axis dealing specifically with this concept. Still, in order to compare the relative occurrences of topics inherent to axis 3, we also had to categorize the themes included in axes 1 and 2, otherwise the results would be self-contained and therefore meaningless (6). Having done that, the results would now show how great a focus within its textual corpus the RDP lays on the three axes (in terms of their *specified* thematic contents), and, as such, should be an indication of which concepts are regarded more or less important, respectively.

Table 1. Coding matrix used to group thematically similar crude topics (intermediary results) according to categorization A, i.e., the semantic contents of the 2007–2013 Rural Development policy

Category	Addressed issues
Axis 1	Issues addressing food quality and safety
	Measures to increase the competitiveness of the agriculture sector
	Providing physical capital for modernization of farms
	Setting up young farmers
	Creating a framework for early retirement of farmers
	Aiding the development for new products and technologies (related to agriculture)
Axis 2	Improving infrastructure for agriculture
	Land management as means to improve the environment
	Compensation for loss of income from agriculture or forestry due to natural disaster
	Compensation for agriculture and forestry for environmental restrictions
Axis 3	Promoting sustainable agriculture and forestry
	Increasing animal welfare
	Improving infrastructure in rural areas thereby improving access to basic services
	Improving the environment and living conditions
Policy framework (axis-unrelated issues)	Promoting economic diversification
	Furthering local cultural heritage
	Financing, monitoring or auditing aspects not specific to the abovementioned axes
	Definitions of economic actors (companies, individuals, etc.)
	Funding guidelines (eligibility rules, aims, etc.)
	Layout design, descriptions of website design, etc.

Source: European Commission, 2006, 2008; authors' own work

Table 1 shows the coding matrix that was used for the categorization of topics. It should be noted, however, that this categorization was based on QOL as defined by the RDP, which may not necessarily correspond to the definitions provided by researchers who specialize in this particular area of concentration. This analytical problem was therefore amended by adding another categorization of QOL-related aspects based on specialist literature (please reconfer chapter 2.2 for a theoretical overview on QOL). By doing so, we also created premises for analysing occurrences of QOL-related topics within the *policy as a whole* and not only within their thematic allocation (axis 3) as assigned by the RDP itself. Since our aim is not to denigrate the RDP on the basis of technicalities but to provide a fair evaluation of its contents, such conduct would allow for 'misallocated' topics to re-emerge (by 'misallocated' we mean corresponding to the intellectual purview of issues linked to QOL, which in the RDP may have been allocated to axes *not* labelled

as 'QOL'). Our methodological approach would, in this way, be more "lenient" on the RDP in the analytical phase.

Such an approach, however, required selecting relevant sources for categorization. As noted earlier, defining human well-being *in general* is a very sensitive matter. The Quality-of-Life Index, the Human Development Index or the Gender Inequality Index are all examples of the more recognized indices that attempt to capture human well-being's multifarious and complex societal nature on a global level. The Quality-of-Life Index in particular, although widely recognized and acknowledged, due to its scale, breadth and mode of construction, is not fully transferrable to a strictly European rural context (Berton et al., 2011: 8). Firstly, the global scope of this index renders some of the aspects covered (particularly aspects that are inherently fundamental to Western societies) superfluous. Secondly, it departs from numerical data derived from statistics that are re-calculated in different permutations, a procedure

which is of little relevance for our study. Therefore, we only used the Quality-of-Life Index as a point of departure and as a source of inspiration when preparing our list of QOL-related themes to serve as a matrix for TM-analysis. Additionally, we also made some context-dependent modifications in accordance with the understanding provided by some leading researchers in that particular field (cf. Table 2).

In conclusion, having prepared two sets of QOL-related aspects – one based on the RDP's own definitions and the other on definitions provided by relevant research – we obtained two analytical levels subject to comparison. Such an approach gave us more legitimacy when interpreting the results as obtained by topic modelling the RDP. Those results are presented in the next chapter.

4. Results and analysis

Having applied topic modelling onto the 706-paged available version of the 2007–2013 Rural Development policy, the results will be presented according to two sets of QOL-related aspects (as defined in chapter 3.5), but also put into relation to other audits of the RDP to ensure best possible interpretation within a wider context.

4.1. RDP and QOL

Figures 3 and 4 show the main results of our analysis. Categorization A (Fig. 3) was done axis-wise on the basis of RDP's own understanding of QOL, while categorization B (Fig. 4) was done on the basis of definitions of QOL provided by specialist re-

search (7). It should be noted that the majority of the uncovered topics relate to elements categorized as noise (such as referencing structure, page layout, headings, word hyphenation, etc.) or to axis-unrelated issues, i.e., semantic elements that were irrelevant for the set purpose (such as website design, ways in which committees should be elected, which bank services should be used for particular countries, etc.). The obtained refraction of focus is primarily due to the comparatively high number of uncovered topics and was expected (see chapter 3.3 on the number of topics). Although the number of these topics is overwhelming, such outcome only ensures that all pertinent themes were registered during the process. For example, the fact that TM found a topic relating to logo design (which was merely discussed on two pages within the entire policy) only speaks for the fact that the more central themes belonging to the very bulk of the RDP (such as QOL) should be registered as well. That given, we find the deployed level of detail to be sufficient for making statements about the pertinence of issues addressed within the policy.

Having discarded noise, let us now examine the outcome of the more meritorious aspects of QOL found in the RDP. Figure 3 is a visualization of topics according to categorization A. If we disregard the topics categorized as 'policy framework (axis-unrelated issues)', it becomes clear where the major focus of the RDP lies; axis 1 (in terms of the topics pertaining to its scope) is almost three times larger than axis 2 and more than six times as large as axis 3. Since most of the topics of axis 1 dealt – in one way or another – with agriculture, the obtained results indicate that agriculture is the prime focus of the RDP despite the clearly outlined intentions to broaden its scope (cf. European Commission, 2008).

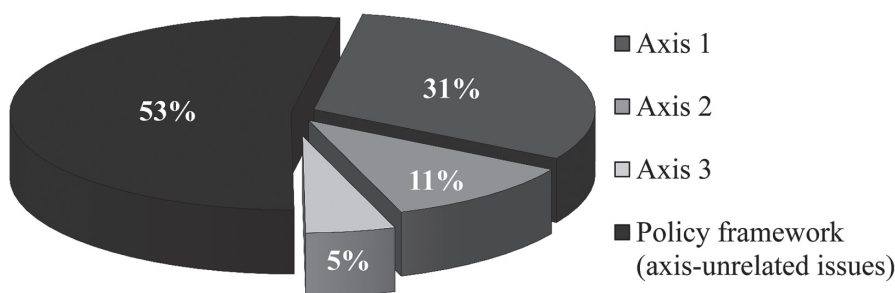


Fig. 3. Results from topic modelling according to categorization A based on the semantic contents of the 2007–2013 Rural Development policy (cf. Table 1). Percentages show the relative size of each category according to their rel. occ. (excluding noise) (7). The rel. occ. of the individual categories is as follows: Policy framework (non-axis issues) – 4.42; Axis 1 – 2.56; Axis 2 – 0.94; Axis 3 – 0.43

Source: Own calculations

Table 2. Coding matrix used to group thematically similar crude topics (intermediary results) according to categorization B, i.e., the theoretical purview of quality of life (QOL) as identified by research specializing in this area of concentration

Category	Addressed issues	Example
Health	Mitigating environmental risks to improve people's physical health Providing coverage for health care service Improving mental health and pre-emptive health care education	Decreasing pollution, providing safe drinking water and clean air Access to health care services that have specialists and are adequately equipped Addressing mental health issues, family planning, access to sport facilities
Family life	Access to childcare facilities Needs of senior citizens Family recreation facilities	Childcare in close proximity, that is open during working hours with trained staff Retirement homes in proximity to the family, senior transportation services and home services Close proximity to family friendly in/outdoor activities
Community life	Access to public services Access to cultural activities and community meeting centers Cultural heritage	Access to school, library, post office, police and fire department and there services Access to music concerts, theatre plays, art galleries, crafting seminars Local café, local pub, memorial places for local identity, cultural festivities
Material well-being	Access to commodities and services Access to Information and Communication Technologies (ICT) Affordable living conditions and adequate discretionary income	Access to services providing food, clothing, technical equipment, craftsman, repairs Satisfactory coverage of telephone and internet access at acceptable bandwidths Affordable housing, transportation and living costs, ability to take international vacation
Political stability and security	Legal protection Crime prevention and investigation Anti-corruption measures	Legal framework for the protection of property and interests of people Prevention of violent crimes, investigating and solving crimes when they occur Prevention of corruption in the political system
Natural environment	Preservation of the natural environment and protection of biodiversity Access to natural environment Measures to reduce climate change	Establishing and maintaining national parks, threatened species protection programs Creating and maintaining hiking trails, forest trails, outdoor activities Reducing cow methane, furthering wind power, solar power and water power
Job security	Right to unionize and enforcement of work safety regulations Job protection Equal opportunities	Right to create and participate in a union, worker's rights, work safety regulations Retirement schemes, protection from involuntary termination of work Projection against discrimination due to race, gender or other non-work related issues
Political and religious freedom	Freedom of political opinions Religious freedom Protection against discrimination due to political or religious opinions	Freedom to express different political opinions and ideas without fear of persecution Freedom to pursue different religious practices and customs Freedom to address controversial issues like abortion without fear of prosecution
Gender equality	Equal rights regardless of gender Preventing domestic violence Protection against sexual discrimination/orientation/gender identity	Equal access to services, opportunities, public offices Education concerning issues of domestic abuse, anger management and violence Protection against sexual harassment and discrimination, protection of different sexual preferences; lesbian, gay, bisexual, and transgender

Source: Categories based on The Economist Intelligence Unit, 2005. Content adapted from: Nussbaum, Sen, 1993; Diener et al., 1999; Gallent et al., 2003; Costanza et al., 2008; Layard, 2010; Oswald, Wu, 2010; Bereton et al., 2011

The results according to categorization B allow for further break-down as to which QOL-related aspects are particularly addressed within the RDP, and Figure 4 is a more detailed representation of this. As we can see, some important aspects of QOL like family life, community life, and political and religious freedom are entirely missing from the RDP (8). Similarly, material well-being (such as affordable housing and supply of basic services) is hardly addressed at all. The only topic relating to this particular category dealt with the increased cost of transportation for people living in remote areas; however, the issue of *how* this problem should be mitigated was not clearly outlined (it was only stated as a problem). Likewise, the scarceness of topics

dealing with health, political stability and security, and gender equality was on the verge of disappointment as these were only mentioned in the context of increased transparency (as a measure to reduce corruption). What all these aspects had in common was lacking specification as to how particularities should be achieved and implemented. Similar lack of specificity was also pertinent to issues of natural environment, the one QOL-related aspect that received more attention. However, these topics were often found in combination with paragraphs on environmental measures developed to aid agriculture and forestry, or how the latter can be protected from inclement weather and adverse environmental impacts (e.g., forest fires).

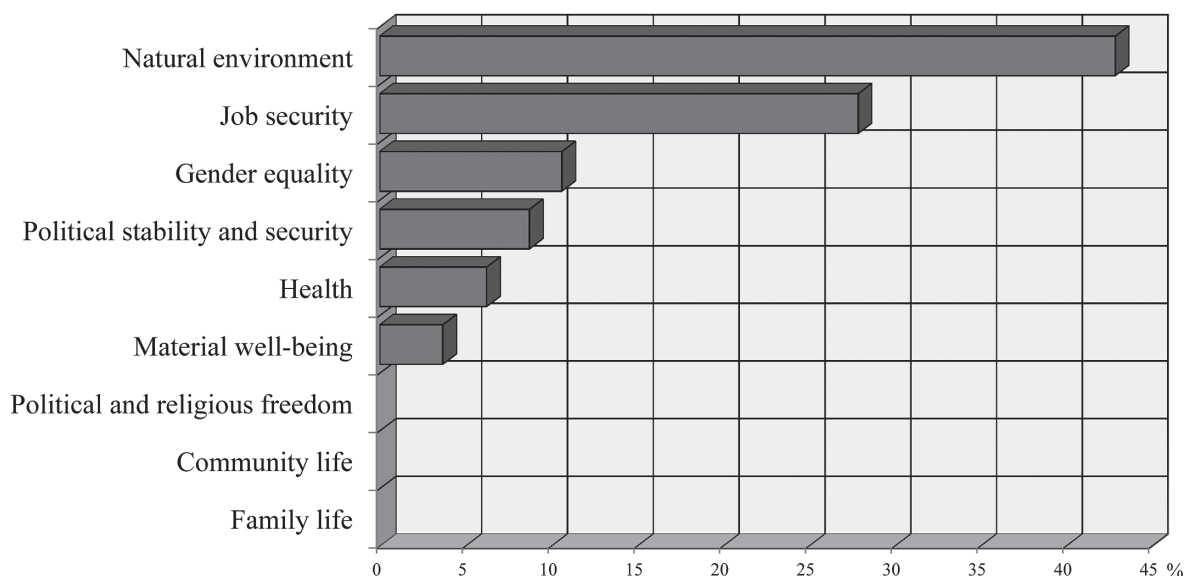


Fig. 4. Results from topic modelling according to authors' categorization B based on aspects of quality of life (QOL) as identified by research specializing in QOL-related issues (cf. Table 2). Percentages denote shares of the total amount of uncovered QOL-related topics. The rel. occ. of the individual categories is as follows: Natural environment – 0.44; Job security – 0.29; Gender equality – 0.11; Political stability and security – 0.09; Health – 0.06; Material well-being – 0.04; Political and religious freedom – 0.00; Community life – 0.00; Family life – 0.00

Source: Own calculations

The findings indicate an overall thematic emphasis on agriculture, whereas the focus on QOL was found to be largely insignificant. Such results point to a rationale different than the assumed one, at the same time reinforcing a productionist view of rurality in the face of the ostensibly fundamental turn towards viewing rural areas in a wider, if nothing else more humanistic, context.

4.2. TM and other audits of RDP

As mentioned earlier, our reason for selecting the 2007–2013 RDP as an object of study was not only its important and central role within the recent course of European development. At the brink of expiration – and thus giving way for a new rendition of the RDP – the 2007–2013 version has been

subject to a number of independent audits. As such, it could be used effectively for corroborating our results.

Since government's engagement with different spatialities (here: 'rural areas') requires knowing the territory in question, then societal shifts must be accompanied by expert scrutiny, and one way of doing it is by commissioning audits. For instance, the reviews of an audit that followed a distinct shift in the orientation of rural policy in the 1990s England unravelled a very different picture than that portrayed in conventional statistics (Woods, 2011: 234). Policy audits are therefore an extremely important part of societal development, not only in terms of controlling whether the intended goals have been achieved, but also "to enhance the quality of the policy process, at all levels" (Bradley et al., 2010: 6).

One external audit of the 2007–2013 RDP (focusing on the environmental aspects) led by the environmental NGO (non-governmental organization) Forests and the European Union Resource Network (FERN) found that "there [were] not enough incentives or safeguards in place to ensure that the policy effectively contribute[d] to enhanced forest protection and sustainable use" (FERN, 2010). This was attributed to "[t]he vagueness of concepts like sustainability and multifunctionality". Another independent (Italian) team created a quantitative model to assess the impact of QOL-related measures of the RDP in marginalized Alpine regions. The team concluded it was not possible to estimate these effects because of the very low level of implementation (Cagliero et al., 2010: 322). The issue of vagueness and insufficient implementation was also confirmed in regard to QOL. An external audit commissioned by the EU found that "[q]uality-of-life impacts were found to be highly valued in rural communities but difficult to assess" (Schuh et al., 2012: 5). Not only did the multinational team raise objections regarding the diffuse character of axis 3; their audit could only evaluate 'economic diversification' (the twin aspect of axis 3) as there were not enough data to effectively address aspects of QOL (Schuh et al., 2012: 7).

This standpoint is further confirmed by two of the 2007–2013 RDP's internal audits. In a 2011 evaluation, the European Court of Auditors (ECoA) noted that "[the] objectives determined by the Member States are numerous [howbeit] not specif-

ic enough for assessing whether or not they have been achieved" (ECoA, 2011: 7). Among other noted flaws and inadequacies, there were reservations regarding the distribution of resources amongst farmers. Despite pecuniary affluences and a well-devised structure of laws and incentives, the lack of detail regarding ways in which calculations and follow-ups should be done locally was found to be a major concern. The amount of funds allocated to axis 3 also reflects the imbalance between QOL and agriculture. As pointed out by ECoA (2011), axis 3-related issues received around 4% of the budget, while aspects relating to agro-environmental payments amounted to as much as 23% of the entire budget. This notion was corroborated by a second audit in 2013, in which ECoA deemed the RDP a major failure in terms of political transparency, in that there were few guidelines to help evaluate whether the policy has been successful. ECoA ascertains that "there was a lack of effective monitoring and evaluation of the measures" (ECoA, 2013: 8) to account for the efficacies of the 153 billion euro spent during the policy period. ECoA states that it was impossible to monitor and evaluate the policy's efficiency because of the major flaws regarding the data needed to inform decisions upon which the most efficient measures for the preparation of the 2014–2020 RDP could lean (ECoA, 2013).

Looking at the new 2014–2020 RDP, it appears that some changes have been made (at least at a first glance). In regard to QOL, specifically, the concept itself has been removed as a guiding priority within the new policy framework (European Commission, 2013). However, it is unclear whether it was removed because the thematic purview of QOL was suddenly deemed less important, or whether it was found to be an unwieldy conceptual tool in a policy context.

Indeed, as the perused audits have shown, the impact of QOL could not be estimated by the used monitoring and evaluating techniques, which led the teams to either exclude it or to state that it was impossible to assess. In this respect, TM could both corroborate the vagueness of the RDP, and provide a measurable, convenient and less biased proxy to evaluate the degree to which QOL impregnates the RDP legislation documents. For one, TM could indicate that some QOL-related aspects were not mentioned at all (family life, community life, po-

litical and religious freedom). For another, in cases when they were mentioned (health, material well-being, political stability and security, gender equality), TM could confirm it was done superficially (in name only) and in a very basic manner, without complementary suggestions for implementation. As such, TM allowed us to analyse the pre-inception phase of the political process underlying the RDP, whereupon it became apparent why its post-completion monitoring had failed. In this respect, TM has the potential to become a useful methodological addition to the extant array of eclectic methods available for policy audits.

Still, the question of *why* QOL has received so little attention in the 2017–2013 RDP remains unanswered in that TM – as any quantitative method that detects a correlation – has difficulties addressing questions of causality. Based on the theoretical framework introduced in chapter 2, the discussion section that follows elaborates on different explanatory scenarios why this could have been the case.

5. Three possible drivers

In light of the obtained results, we will now present three possible explanatory modes, identified as drivers, to interpret the imbalanced outcome. The first one departs from a now largely contested view of the rural, which nonetheless is deeply embedded in the public culture; the second one argues that in light of the capitalist prerogative it is difficult to introduce non-pecuniary concepts into policy and planning; lastly, the third revolves around the materiality of institutional networks incapable of sufficiently accommodating significant deviations from an agricultural focus. As such, the first mode is largely conceptual, the second ideological, and the third material. We end the discussion with a critical view of these modes, ultimately suggesting a possible way forward.

5.1. First driver: conceptual

Concepts, ideas and discourses that we carry around with us shape the ways in which we perceive and understand the world. Immanuel Kant

([1781] 1986) was one of the first to discuss what he called ‘the faculties of understanding’, that is, the notion that human understanding is bound by its situatedness within the human mind. This claim led to the questioning of how we perceive knowledge and objectivity, consequently rendering the latter largely impotent. In lack of metaphysical justification of how knowledge is consolidated, philosophers and sociologists alike turned to observing people in the practice of creating knowledge. Based upon insights from these inquiries, the concept of *intersubjectivity*, among other, has been suggested as a means to understand how perceptions about the world become more than just personal preferences when consolidated through customs, rituals and other social conventions (Crossley, 2002). Within social groups, everyday routines, small negotiations of work order, establishing of institutions, etc., can over time cement and create power structures that appear as objective truths. Now, when external conditions change (due to new technologies, new priorities, new demands, etc.), older conceptualizations are being questioned. Feminism in particular has used this understanding to deconstruct lingering gender roles, for instance, the role of women as natural mothers and caretakers, a socially constructed image that clashes with the more complex reality of women in a modern society (cf. Butler, 1990; Duncan, 2005; Forsberg, 2010). The main point here is that intersubjective judgements affect – often unconsciously – our understandings of the lived world, and, ultimately, the ways in which we interact and engage with it.

The same mechanism applies to the understanding of the ‘the rural’, which is largely dependent on some form of discursive classification that is fixed at some unspecified point in history (cf. Woods, 2011: 43–44). It leads to the three semantic components of ‘the rural’ – *sign* (rurality), *signification* (meanings of rurality) and *referent* (rural geographical space) – becoming increasingly detached from each another (Halfacree, 1993). This, in turn (as we noted in the introduction section), points to the fact that societal changes are just as much the result of changing material conditions as of the changing theoretical perspectives that frame our understanding of the rural. The point is when the latter fails to catch up with the former, the stereotypical image may persevere in policy making, whereas new concepts – such as

QOL – are likely to fall outside its thematic purview (other than in name only). For instance, if the RDP draws on an image of the rural as agricultural land, the focus will consequently be on agriculture: “Agriculture continues to be the largest user of rural land, as well as a key determinant of the quality of the countryside and the environment” (European Commission, 2006: 2). What follows is that the over-attentiveness to agriculture automatically turns much of the focus from ‘rural people’ to ‘rural land’, at the same time excluding the vast majority of ‘rural people’ *not* involved in areal economies. Indeed, the RDP’s axis 1 (on agriculture) wholly dominates the policy, even the most prevalent aspects of QOL (job security and environmental protection), which in the RDP are closely tied to agriculture. Not only does this conceptual frame perpetuate a historical, productivist view of the rural; it may also head off the implementation of agriculture-unrelated concepts from making due ground.

5.2. Second driver: ideological

Similar to conceptual frameworks, ideologies also have an important effect on people’s actions. The understanding of the concept of ideology has changed over time and different schools of thought describe the construction of an ideology differently. In the most general sense, it implies a combination of conscious and unconscious processes that link several conceptualizations into an apparently coherent framework ready to justify a course of action, the product of which is a comprehensive vision of how things should be understood (cf. Kennedy, 1979).

In a Marxian view, ideologies are an essential part within the superstructure of society that enables the ruling classes to retain their power position over different modes of production (Marx, [1867] 1996). Marx and Engels ([1848] 2009) famously bring forth the conflicting interests of the bourgeoisie and the proletariat. They show that interests coupled to ideologies are not the same, and that rapid capital growth (emphasized in capitalist bourgeoisie ideology) can be harmful to the workers insofar it undermines their power position. Bearing in mind that this stance is certainly debatable, the point we want to make here is that it is possible for certain ideologies to remain in an an-

tagonistic relationship with the interests of particular groups or individuals.

The seed of this classic thought can be found in a number of concrete contemporary examples. For instance, a study on the European food politics showed that the neoliberal perspective is so strong that no other aspects can gain equal amount of focus. There, “[the] ‘competitiveness’ [of the agricultural sector] is always mentioned before ‘environment’, ‘diversification’ and ‘quality of life’ in the rural areas” (Erjavec, Erjavec, 2007: 224). Erjavec and Erjavec (2007) argue that this creates an environment where – even if other aspects (like QOL) are included – they become reinterpreted through the prism of the dominant ideology. Seeing planning as part of the state apparatus, it will always be subject to the imposed constraints of that state, including the generating of “consistent biases in favour of dominant fractions of capital and class” (Cloke, Little, 1990). A Polish case study on the value of parks in Kraków showed that the political emphasis on maximizing profit has infringed upon the preservation of parks in the city centre (Hrehorowicz-Gaber, 2013). It has to do with the fact that the specific function of urban areas is expressed in territorial density and higher land prices (cf. Dymitrow, 2014), whereupon city parks are considered reserve areas for economic expansion and exploration. This, in turn, may denigrate their social and recreational value, which in view of a non-capitalist paradigm would be worthy of protection.

A similar scenario could form a possible explanation for the lack of QOL within the RDP. For example, according to RDP’s strategic guidelines, the purpose of axis 3 is to “[put] the heart back into villages” in the belief that combining diversification with e.g., business creation, infrastructure for local services and renovation can “contribute to improving both economic prospects and quality of life” (European Commission, 2006: 7). But why at all combine economic diversification with quality of life (cf. Fig. 1.), given that those concepts are only marginally related at best? Recalling once again the introduction section, maximization of profit is unlikely to be the decisive factor behind people’s ambitions, motivations and actions, and where a more nuanced image would be desirable. Even though QOL does have some economic tangibles, it is a considerably broader concept that re-

quires taking more ample account of human needs (cf. chapter 2.2).

To exemplify this, let us contrast two types of topics found in our study: topics relating to QOL and topics fraught with profit-making. Having referred back to their context within the corresponding policy text, topics of the first type were primarily only mentioned in passing (e.g., gender equality, health or material well-being), let alone the complete absence of topics such as political, sexual and religious freedom, family life, community life, and so forth (cf. chapter 4.1). At the same time, topics of the second type (regarding e.g., the specification of companies eligible for funding, the intended economic outcomes of that funding, or ways to secure branding and development of the economic sector) were elaborated in great detail. Given these examples, there is a patent over-focus on economically oriented aspects that fall under the capitalist ideology. This, in turn, may harm aspects not aligned with such priorities by preventing them from entering the public political agenda in ways other than merely rhetorical. It also signals how ‘the rural’ is framed within the capitalist production process that underlies the RDP, i.e., ‘the rural’ is commodified in exchange value terms. Whether formal representations of ‘the rural’ as “expressed by capitalist interests, bureaucrats and politicians” (cf. Halfacree, 2006; 51) are ‘right’ or ‘wrong’ is not a question to be answered at this point (or ever?). Needless to say, the balance in the RDP between aspects informed by different ideological underpinnings is clearly disturbed; a development, which, from a democratic (and possibly humanistic) point of view, might prove problematic.

5.3. Third driver: material

The aforementioned two explanatory modes drew from a social constructionist perspective. Our third approach, instead, is inspired by the ‘material turn’ (Domanska, 2006; Bennett, Joyce, 2010), i.e., “[t]he crucial intellectual move [...] that turns away from notions of coherent social totality, and towards the erasure of familiar conceptual distinctions between the natural and the social, the human and the non-human, and the material and cultural, divisions that are all predicated on the immaterial/material divide”

(Bennett, Joyce, 2010: 4). When creating laws, order and institutions, we at the same time crystallize our actions by saving them in material actors, which in themselves create restrictions (cf. MacKenzie, 2009: 49). Latour (1999) shows this relation by discussing vertical deflection traffic calming devices (‘speed bumps’), which, in direct translation from French, are also called ‘sleeping policemen’ (p. 186). The law (idea, representation, or the like) about a specific speed limit within a particular street is manifested through a material actor (the calming device), which in turn physically ‘enforces’ the assumed speed limit. In similar fashion, it could be argued that certain societal representations may have been ‘institutionally locked-in’ within policy. An institutional lock-in occurs when a network is created (in this case a policy), wherein actors enforce a self-referential system that solidifies its rules of conduct. It happens through “organizational learning processes, historical framing, and routinisation of management which creates taken-for-granted problem and solution formulations, or ‘rules of thumb’, that align with ruling institutional practice” (Essebo, 2013: 76). Ultimately, this system both creates and continuously strengthens institutional lock-in.

For instance, Unruh (2000) deliberates on the lock-in effect when discussing the idea of environmentally friendly technologies in Europe. According to him, the automobile industry has become such a major part of the politics that it is virtually impossible to introduce alternative technologies other than those adapted to the prevailing system. An example of this would be the great cost of creating new infrastructure (for example based on natural gas or hydrogen) apt to compete with the extant form of petrol filling stations. So even if there is political will to implement such changes, the material cost of manufacturing this new infrastructure is extremely significant, as it creates an obstacle for change. Similarly, Sørensen and Longva (2011) show that renewal of the transport system (in Denmark) could only be possible once organizational, contractual, partnership-wise, and discursive coordination has been achieved. Because without changing the entire material underpinning of *all* actors involved (e.g., in terms of documentation, procedures, structures, and so forth), individual actors are just changed back to the previous condition, as this represents the path of least resistance.

In our study, this line of thought could attribute the over-emphasis on agriculture within the RDP to being part of an institutional lock-in. For instance, the institution in charge of formulating the RDP is the Directorate-General for Agriculture and Rural Development within the European Commission. As we can see, 'agriculture' is clearly pre-inscribed into the institutional network whose material tenets of institutional practice RDP consequently must align with. This, in turn, may make the introduction of "alien" elements (such as QOL) highly impractical, given that the established routines and rules of conduct have been developed over time to specifically deal with agricultural issues. And in cases where impracticality can be circumvented, there may simply not be enough know-how to deal with it.

Recalling once again the independent audits of the RDP (cf. chapter 4.2), none of them were able to reach a consensus regarding the effectiveness of QOL because of lack of data. However, this could also be due to the marginal status of QOL, or simply because there is no established standard how to implement and evaluate these aspects. As such, in the absence of material means of conduct, it may be very difficult to argue for the inclusion of a concept, which, firstly, has to establish specific rules and structures, and secondly, to maintain their function. In conclusion, lest the institutions change, QOL may find it difficult to disentangle from the material web of agriculture, including its associate actors and spin-offs.

5.4. The messiness of reality

In her critique of popular feminist theory, Donna Haraway (1991) famously uses the figure of cyborg to belabour traditional notions of essentialist, one-dimensional explanatory modes. She argues that feminist theory should proceed to a post-feminist level, one that would acknowledge the interconnectiveness of the multifarious aspects of our reality.

The substance of this critique is probably largely applicable for our case study as well. For reasons of clarity, all aforementioned modes of explanation were intentionally kept one-dimensional and in the course of presentation contemplated as the sole determinants of the topical imbalance within the RDP. Naturally, the reality is much more complex and nu-

anced than that. In terms of complexity, some, all, or none of the deliberated scenarios may have been present in the process. Moreover, nuance is also part of that complexity, which hitherto (also for the sake of clarity) has not been visible in our analysis.

For one, the advent of globalization and the opening of the world market have forced European farmers to compete with the rest of the world (cf. Cruickshank et al., 2009). In order to sustain food production in Europe (and thus a greater degree of self-sufficiency) by preventing farmland abandonment (cf. Stoate et al., 2009), agriculture must become more streamlined, and thus in need of the extra politically enforced assistance. This bout of protectionism against external push factors may hence result in the observed over-emphasis on agriculture.

For another, aspects of QOL, economic interests and agriculture must not necessarily be mutually exclusive or remain in conflict. A Polish study showed how biogas plants (as a derivative of agriculture), the rural economy (monetary incentive) and environmental sustainability (an important aspect of QOL) can successfully be combined in rural areas. When biogas plants further agricultural diversification, they offer farmers a new means of income from waste products, at the same time providing them and the local community with an environmentally friendly source of energy (Chodkowska-Miszczuk, Szymańska, 2012).

Lastly, the sheer fact that relatively few QOL-related topics were found within the RDP does not automatically mean that they are totally disregarded. The RDP is only one of EU's many steering documents, and there are other, at least partially, EU-financed projects aimed at improving QOL in rural areas in a more explicit way (such as the New Bridges Project, CULT RURAL, QUALIST or ECOVAST). On the other hand, the EU also has other agricultural policies, most notably the Common Agricultural Policy (CAP), designed to deal specifically with agriculture-related programs. This in turn brings us to square one, as outlined in the introduction section. Firstly, the RDP is not an agricultural policy but a policy developed to cover and to guide a much wider range of aspects associated with the concept of rurality. Secondly, if the concept of QOL is considered important enough to warrant a separate axis within the RDP, then why are there

so few topics relating to it? We are inclined to believe that this outcome is not incidental.

Given our results and the results of other audits, more research is obviously needed to reach a definite answer. In our article, we have proposed three possible explanatory modes that could be regarded as a possible way forward. We concur it is important to contribute to an improved and more balanced RDP that is more QOL-oriented, and not only within its rhetorical frame. ‘The rural’ of today is definitely more than agribusiness; it is also about biodiversity, cultural heritage, recreation, identity, and so forth, which, all combined, produce a living landscape.

6. Conclusion

Sustainable development faces the complicated task of integrating socio-demographic, environmental and economic goals into functioning policy proposals. The challenges of the 21st century are further complicated by the new nature of rural-urban relations that render traditional dichotomous approaches counterproductive. One notable outcome of this pertains to general strategies that go under the label of certain imagined spatialities, such as ‘rural development’. Rural development becomes more and more all-inclusive, less predictable and more aligned with developmental strategies previously associated with urban areas. Accordingly, EU’s 2007–2013 Rural Development policy (RDP) proclaims itself as a fundamental break from older efforts, which primarily focused on agribusiness. This new humanistic vision includes, most notably, the addition of concepts such as quality of life (QOL), environmental sustainability and economic diversification, alongside traditional agricultural tenets. Particularly QOL – a timely buzzword – is important to look into, insofar its vagueness and catch-all character may make it both difficult to implement and, subsequently, to be monitored.

Policy planning could be described as a complex actor-network that heterogeneously engineers different interests into a unified framework. In this case, the major refocus within policy planning, including re-conceptualizations of the ‘new rural’, should, accordingly, be accommodated within the

actual policy legislation documents. If not, the proclaimed developmental goals could strike as empty political rhetoric. In this study, we have used a novel method called *topic modelling* (TM) to elucidate this potential danger, with special attention given to QOL-related aspects in the context of contemporary rural development.

Having applied TM onto the framework of EU’s 2007–2013 RDP, the policy’s developmental goals (according to its three major thematic axes) could be compared with the actual content of the (available) 706-paged policy corpus. By categorizing the uncovered topics according to two thematic matrices – (a) aspects of rural development as defined by the RDP itself; and (b) QOL-related aspects as defined by independent research – we were able to discern a number of themes, which, to a greater or lesser extent, were diagnosed to impregnate the actual policy documents. Although the results indicate that some attempts to acquiesce in the new conceptual reshuffle have been made, the major focus, however, is still on agriculture, acting largely to the detriment of the concept of QOL. Thereby, previous conjectures, such as that policy makers still treat rural development as largely synonymous with agricultural, seem to be reinforced. By adhering to a rationale different than the assumed one, such tendencies may possibly complicate the fulfilment of sustainable development goals in Europe.

So what kind of message oozes from the disrobed 2007–2013 RDP? Having in mind the three facets of ‘rural space’ as elaborated by Halfacree (2006) – ‘rural localities’, ‘formal representations of the rural’ and ‘everyday lives of the rural’ – it appears that formal representations strive to dominate both the experiential (individual and social) and the locality-based (inscribed through distinctive spatial practices). At the same time, realizing that place-based approaches, although rhetorically enticing, cannot resonate much further afield than the specific locality brings us to the issue of generalization within developmental endeavours. Due to the hitherto widespread acceptance of rational concepts of planning within policy development, the role of planning has been little questioned (cf. Cloke, 1987). However, failure to secure many planning aims in rural areas (and thus the relative inability to implement policies) has led to views of planning as “an activity in the wider context of state” (Cloke, 1994).

Therefore, seeking to crystallize some timely definition of ‘rurality’ that would supposedly guide rural development of today is, we argue, not particularly productive. Indeed, policy has always been about identifying problems, organizing resources and generating initiative; however, the addition of the immutable umbrella term ‘rural’ to a very mutable field of social action, gives in fact little insight into ‘the rural’ of today, and certainly few tools in itself to predict the course of what will be considered ‘rural development’ in the future. Instead, we believe it is more instructive to assume (using the actor-network theory) an anti-essentialist approach to rurality by focusing on some general driving forces that contribute to – interchangeably – either conceptual inertia or ‘easy come, easy go’ buzzwords in policy. Consequently, in order to deal with the thematic imbalance found in our particular example (RDP vs. QOL), we have identified three different drivers that could serve as possible modes of explanation.

The first one builds on an outdated conceptual understanding of the rural. The point is when old conceptualizations fail to catch up with new ones, stereotypical images may persevere in policy making, at the same time repelling more timely concepts like QOL. This mechanism, we argue, is not some conscious act on behalf of the policy makers, but is rather rooted in sheer unawareness of the conceptual evolution due to its fast-paced progression. This has to do with the human cognitive (in)ability to adopt new concepts and to change habits, traits and mindsets.

Contrarily, our second explanation draws on conscious decisions, arguing that in light of the prevailing capitalist prerogative it may be difficult to introduce into policy concepts that do not explicitly generate money. While social democratic politicians strive for improvement of social equity, neoliberals favour initiatives for entrepreneurship and market-led solutions. In that respect, RDP appears clearly neoliberal, whereupon its social democratic overtones remain largely limited to the use of rhetoric. This outcome, although conscious, is by no means ‘malevolent’. Although policy makers may be aware of the importance of concepts such as QOL, they nonetheless face difficulties reconciling it with the capitalist agenda based on a diametrically different ideological foundation.

The third mode eschews social constructionist explanations in favour of a material-based perspective from actor-network theory. It builds upon the idea that certain societal representations tend to institutionally lock-in within a network in which actors enforce a self-referential system that solidifies specific rules of conduct. Consequently, the state, due to its form and function, may be better designed to aid elements of production rather than consumption (cf. Cloke, Little 1990). In our case, extant institutional structures adapted to an older view of rurality (and, consequently, of rural development) are unable to sufficiently accommodate significant deviations from an agricultural focus. As such, this inability (in light of the material-based approach) is neither conscious nor unconscious but simply deals with the sheer impracticality of execution.

Naturally, the exact causes for the outcome of our study cannot be determined conclusively; at the same time, reality is much more complex and nuanced than any of the one-dimensional scenarios above (some, all, or none of the deliberated components may have been present). Nevertheless, it does not change the fact that QOL is severely underrepresented in the 2007–2013 RDP when compared to issues related to agribusiness. Seeing the contemporary understanding of ‘rural development’ as ostensibly extended towards subtleties like QOL, the apparent focus on agriculture and economy would seem counterintuitive at best and dehumanizing at worst. Whatever the reasons, the results are worrying, as of the 56% of EU’s population living in what are considered rural areas only 5% are employed in agriculture (European Commission, 2012). Consequently, a strong focus on agribusiness (to the detriment of QOL) diverts attention from ‘rural people’ to ‘rural land’, including the vast majority of ‘rural people’ *not* involved in the primary sector. Accordingly, the heralded broader humanistic view of rural areas as more than agricultural land does not appear to be strengthened. In this respect, the presented modes of explanation may act as hypothetical starting points for future inquiries on the complex actor-network that underlies policy formulation.

Last but not least, let us return to the mere issue of ‘rural’ within ‘rural development’, and not inasmuch as its conceptual contents is concerned (it only represents *one* dimension of ‘rurality’ and it has

been discussed earlier) but the sheer use of this immensely broad and highly imprecise term in policy and planning. As the breadth of research repeatedly shows, the rural-urban issue is broad, ambiguous and contentious, and there certainly is no one 'right' way of viewing it. In such light, the RDP's inability to accommodate the increasingly huge range of aspects that fall under the umbrella term 'rural' is actually of little surprise. At this point, however, one cannot help wondering what good the lingering rural-urban distinction really does, given that its definitions change at the slightest change of context. When no irrefutable definitions of the rural exist, then what exactly serves as the point of reference? What point in history provides the source for discursive classification of rural (and – analogously – urban) forms, in the name of which some generalized paths of development are being devised?

In this article, we have illustrated that conceptual concoctions, ideological upsurges and institutional lock-ins may very well act as both drivers and barriers within a general strategic endeavour to which the uni-label of 'rural' is constantly being affixed. In such set-up, attempts to implement more timely views and values may find themselves bogged down by the shackles of traditionalism, economism and materiality that bind that particular label. Whether these strategies could benefit from somewhat less ponderous labelling is definitely a question for further, and certainly much anticipated, research.

Notes

- (1) At this point, it should be noted that the sheer employment of *three* axes carries certain connotations. The number 3 has been deeply entrenched in human culture and psychology (e.g., trilogies, trios, triumvirates, etc.). Trichotomies as three-way classificatory divisions have long been pursued by philosophers. Many world religions contain triple deities or concepts of trinity. In music, a triad is considered the most harmonious set of stacked notes. In writing, 'the rule of three' is a principle that suggests that things that come in threes are inherently more satisfying and more effective than other numbers of things. Accordingly,
- when devising a tripartite model (as the three axes of the RDP), it is implied that all parts play an equally instrumental role.
- (2) Other current uses of TM include search functions and so-called 'quantitative measurements of intuitions' (i.e., the study of histories of intellectual domains; Mimno, 2012: 18).
- (3) Furthermore, TM is intended for a different magnitude of quantitative analysis; rather to be used for analysing single speeches or interviews, it works best for much larger quantities of text (of at least several hundred documents).
- (4) Each page was saved as an individual file, along with the title of the referred document and its page number. Based upon these files, MALLETT calculated the occurrences of topics, whereupon the page on which, for instance, topic no. 1 was the most prominent was 'earmarked' to aid subsequent semantic interpretation. The same was done for topics nos. 2, 3, and so forth. In cases where clues to aid interpretation of a specific topic were still insufficient, a second page with the second commonest occurrence of that topic was consulted in order to safeguard the most accurate interpretation.
- (5) For example, if topic A received a relative occurrence of 1,4 and topic B one of 0,7, the statement would be that topic A occurs twice as often as topic B in the entire corpus.
- (6) In addition to the three axes the RDP 2007–2013, also included is the so-called 'LEADER axis', which builds upon the 'LEADER Approach' (*Liaison Entre Actions de Développement de l'Économie Rurale*; in English – *Links between the rural economy and development actions*). Superimposed onto axes 1–3, the LEADER axis acts also as a general aim informing the entire policy (cf. Fig. 1). However, this previously unique approach has in the context of the 2007–2013 RDP been largely incorporated into the subordinate axes (cf. Ruszkai, Kovács, 2013: 88). This implies that the creation of a separate 'LEADER axis category' would only replicate topical themes and hence most likely result in categorization conflicts with the remaining axis categories. To avert such conflicts, all aspects relating to the LEADER axis were, when appropriate, allocated to the other axes.

- (7) The values in figures 3 and 4 are based upon the relative occurrence as calculated by MALLETT. MALLETT calculates a percentile occurrence for each of the 300 topics per page (the sum of all 300 topics equals 100%), whereupon 300 topics (i.e., one page) represent the here chosen 'chunk size'. 'Relative occurrence' is a measure of a topic's significance within the entire text corpus, and the value represents the sum of all individual occurrences. Since 'relative occurrence' represents the sum of non-related percentages, it becomes unit-less in itself (cf. chap. 3.5).
- (8) At this point, it is important to clarify that whenever issues of gender equality, as well as political, sexual or religious freedom in rural areas are deliberated we do not imply basic liberties that are protected by national constitutions. Rather, we refer to informal discrimination of people that do not conform to specific social codes and norms set up in sparsely populated areas, where monitoring and possible persecution is relatively easy. Numerous studies have confirmed this: (A) Stenbacka (2008) showed that pervasive gender ideologies in rural Sweden deemed it acceptable for men not to participate in 'traditionally female' labour even if such jobs were available (it went as far as to the local employment office naturalizing it). (B) Bereton et al. (2011) showed that the Catholic Church in rural Ireland still exerts immense influence on local people, with Catholic values clashing with concepts deemed taboo by the Church (like, for instance, the incorporation of aspects of sexuality into the care of women facing chemotherapy for breast cancer; Lavin, Hyde, 2006). (C) In pre-1989 Eastern Europe, there was a large female participation within all levels of policy. This frequency dropped sharply after the democratization process, revealing the underlying patriarchal power structures; a tendency that is only slowly changing (Lukić et al., 2006). Even in countries that are generally regarded as gender equal (like Sweden), it has been shown that within a local rural context patriarchal power structures are very difficult to change (Forsberg, Lindgren, 2013). (D) Moreover, LGBT-related issues (lesbian, gay, bisexual, and transgender), especially in a rural context, can be very problematic

in the throes of homophobia and social exclusion in a wide range of aspects, such as gender stereotypes (Cohn, Hastings, 2010), problems of coming out (Gottschalk, 2007) or HIV prevention (Williams et al., 2005).

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