



As Above, so Below? Narrative Salience and Side Effects of National Innovation Systems

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Title:

As Above, so Below? Narrative Salience and Side Effects of National Innovation Systems

Abstract:

This paper furthers previous attempts at integrating narratology in policy analysis. Embracing an open-ended definition of narrative, it stresses the importance of maintaining distinct narrative levels and, more generally, of taking into account the pragmatic dimension of narration as an activity, including the often-implicit role and focalisation of the policy analyst. Developing a conceptual analogy between storytelling and the exercise of power, it argues for a critical use of practical imagination in 'cold' situations of 'narrative salience', characterized by the absence of controversy or uncertainty, an uneven distribution of the power of scenarisation. These propositions for a 'revisited' approach to policy narratives, equidistant from the positivist and post-positivist dichotomy, are tested on the case of 'narrative salience' where a particular storyline, national innovation systems, is so dominant that there appears to be no 'counter-story'.

Keywords:

Policy narratives; national innovation systems; hegemony; narrative salience; narrative policy analysis; narratology; power of scenarisation.

As above, so below? Narrative Salience and Side effects of National Innovation Systems

1. Introduction: Retelling the story

'We humans are always entangled in stories' (Schapp, 2004: 1). For the last twenty years, cognitive research and neuroscience have kept confirming this statement by German phenomenologist Wilhelm Schapp. It is now beyond dispute, and nonetheless always worth restating, that narrative functions as a primary, universal and probably vital means of structuring information. Stories and storytelling help us make sense of our individual and social existence¹. Judging by the number and variety of approaches of the narrative phenomenon in political processes, it would seem that policy analysis contributed in its own way to acknowledge this central role. Yet, the dichotomy between positivist and post-positivist approaches has long hindered the development of an integrated theoretical paradigm capable of building on formal and positive knowledge of narrative. As Patterson and Monroe underlined it, narrative 'is associated with a kind of knowledge that post-structuralists champion', [which is] part of the challenge to universal theories' (1998, 318). With their focus on the social construction of facts, post-positivist scholars found in narrative a concept that seemed tailor-made for them. This, in turn, could only get positivists to frown at such a confused and ill-defined concept, though they generally fail at providing a more operative version themselves².

Jones and McBeth (2010) recently made a good case for 'ameliorating the historical tension'

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3 between the two approaches. With this in mind, they developed a 'Narrative Policy Framework'
4 (NPF) as an empirical research agenda aiming at applying positivist criteria of validation, using
5 testable hypotheses, to the study of narratives in political processes, especially in terms of
6 influence on public opinion. In a series of publications (McBeth *et al.* 2007; Shanahan *et al.*
7 2011a and 2012b), they and their collaborators demonstrate, convincingly enough, that there is
8 room for work in policy literature that would use narratives as 'a causal variable for policy
9 outcomes' (Shanahan *et al.* 2011a, 375). Far from altogether dismissing the research results of the
10 post-positivist approach of policy narratives, they rather stress its ability to understand 'the
11 importance of stories in public controversies' (Jones and McBeth, 2010, 337). For that matter,
12 NPF clearly echoes, not to say pays homage to Emery Roe's own Narrative Policy Analysis
13 (NPA, see Roe 1992, 1994), which remains 'the most fully articulated' and 'influential' (Jones and
14 Mc Beth 2010, 335) methodology for policy narratives. However, insofar as 'narratives matter',
15 they rightfully deserve a proper, systematic, replicable methodology NPA cannot provide.
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36 A promising example of such a research programme can be found in the theoretical framework
37 developed by Sheaffer *et al.* (2011) and Shenhav *et al.* (2014) to explain voting behaviour and
38 coalition-formation by the 'narrative proximity' between voters and parties. Here, the
39 methodological challenge comes down to the *measure* of the similarity between political stories,
40 in a multiparty system (in the case of Israel), at various levels of aggregation: each party is
41 operationalized as the sum of its voters' story preferences, called a *story-party*, forming *story-*
42 *coalitions* with parties that either (1) contribute the most to the perpetuation of the *dominant story*
43 (in terms of the party's relative shares of the dominant story and relative size in parliament), (2)
44 contribute the least to the *competing* story, or (3), as the analysis shows, with parties 'that are
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3 closer to them on the various dimensions of national stories' (Shenhav *et al.* 2014, 664-667).
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5 Conversely, the lack of narrative proximity between a party and its voters, or a lasting drift away
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8 from the voters' narrative identity, could lead to a significant decline in parliamentary power (as
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10 illustrated by the example of the Israeli Labor party).
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15 The *story-coalition* model is conceived as an empirically grounded, quantifiable way to 'bridge
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17 narrative approaches and coalition-formation theories' (Shenhav *et al.* 2014, 664): using simple
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19 metrics, bivariate analysis and some logistic regressions, it successfully predicted the *formateur*
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21 party in the 2009 Israeli government coalition (the *Likud*, since it displayed 'the minimum total
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23 distance from all other parties in parliament'). More broadly, it also presents itself as 'an attempt
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25 to capture the transition from the microlevel of individuals' stories to the macrolevel of political
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27 stories' (655).
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34 Interestingly, though, at some other points of their argumentation, Sheaffer, Shenhav and their
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36 colleagues shift from the vocabulary of aggregation, metrics and causation to adopt a more
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38 holistic language in which partisan story coalitions 'reflect' or 'mirror' the individual voters'
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40 stories: in their interplay, 'it is of no consequence whether parties adopt the stories of their voters
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42 or the other way round. (...) the macrolevel reflects the microlevel' (Shenhav *et al.* 2014, 664).
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45 The image is too pervasive to be incidental: part of the lasting fascination for narratives comes
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47 from the conceptual promise that they could operate as the much sought-after, but ever-elusive
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49 mediation between the individual and the collective. Follow the stories, and the distinction itself
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51 will get blurred. As above, so below.
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3 We do think narratives have the potential to provide that kind of pathway. However, we have at
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5 least two reasons to doubt it will prove to be as seamless as these images suggest.
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10 First, the reflection metaphor itself has gone stale: sociocriticism and, on the whole, sociological
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12 approaches to the study of literature have long denounced its reductionist character and instead
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14 emphasized the role played by specific mediations, such as Bourdieu's logic of 'fields', granting
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16 relative autonomy to the field of cultural production, assessed in its capacity to *refract*, rather
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18 than mechanically reflect, external determinations from the field of power (Bourdieu 1996). We
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20 may even prefer the more sophisticated notion of 'prismatic effects' (Viala 1988), as long as it
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22 helps us consider stories in all of their dimensions, external as well as internal, including their
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24 rhetoric and poetic features – all aspects that, as we will see, have been deliberately left out of the
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26 policy analysis picture so far. Admittedly, policy stories often lack any kind of literary value or, if
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28 they do, it would not be the main reason to investigate them. But this does not mean they emerge
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30 in a sort of cultural void, as the NPA or NPF would lead us to think. Nor that their discursive
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32 features would be unworthy of consideration.
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41 The second set of reasons to doubt the innocuous character of the epistemological leap from
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43 individual to collective stories, or from text to context (and back again), is that stories are not
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45 only original forms of representations used by individuals to shape and reflect their social and
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47 political identity. They are also speech *acts* that individual as well as collective agents *perform* to
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49 achieve determined effects on other agents, especially in power struggles. There is, of course,
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51 nothing new to the idea that stories can be used to affect, influence, control or manipulate people,
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53 in many overt and covert ways, so as to secure their compliance. In less trivial words: unequal
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3 capacities in telling collective stories account for asymmetrical, uneven distributions of power –
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5 so much for the ‘reflection’ metaphor. What we are more specifically hinting at is that stories
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7 function as scenarios or scripts containing instructions for action. Narratives, especially the ones
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9 we tell ourselves about the past and the future of our political communities, are worlds in which
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11 we project ourselves. Our sense of what is possible and what is not, what is desirable and what is
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13 not, is in great part configured by stories. Storytelling is just as much about sense-making as it is
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15 about world-making.
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22 What is true of the exercise of power is also true of the telling of stories. Power can be exerted in
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24 such a way to prevent conflicts from arising (think of agenda setting and, more generally, what
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26 Bachrach and Baratz [1970] called 'nondecision-making'). A narrative can be so dominant and
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28 prevalent (*salient*, as we will call it later) that it exhausts the whole space of possibilities and
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30 make alternatives literally unthinkable. The difficulties are also very similar: how do we study the
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32 power effect of narratives in the absence of observable conflict? How do we know whether
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34 alternatives would otherwise emerge since, by definition, the salient narrative has no contender?
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36 How do we even know there is any issue at all if it remains potential and unexpressed?
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44 Our strategy to tackle these problems is (1) to go back to a more literal definition of narrative, as
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46 structural narratology first developed it, and then (2) to examine how it can be related to the
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48 concept of power. In the later part of our paper, we will test our ideas on the case of National
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50 Innovation Systems (NIS), which is precisely marked by *narrative salience*.
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56 This paper pursues two objectives. The first objective is conceptual and theoretical: in a sideways
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3 shift to avoid the divide between positivist and post-positivist approaches of policy narratives, we
4 wish to go back to structural narratology in order to bring clarity to some of the issues at stake.
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8 To quote Schapp again, 'a story and being entangled in a story are so intimately connected that
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10 we perhaps cannot even disconnect them in thought' (2004, 1, quoted and translated by Snaevarr
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12 2010, 252). We address this entanglement by focussing more specifically on the issue of narrative
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14 voice and perspective (Genette 1980). Is the 'power of narratives' really a matter of discursive
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16 influence (Fischer 2003)? What is the relation between telling someone's story and framing his or
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18 her actions? At what point does framing stop and 'scenarising' begin (Citton 2010)?
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25 Our second objective is empirical: though policy narratives prove to be very helpful in the face of
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27 uncertainty and controversy, where different stories are in conflict, they turn out to be much more
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29 difficult to use in 'cold situations' where a particular storyline is so dominant that there appears to
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31 be no or very limited alternative.
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37 This is where National Innovation Systems come in. NIS are a policy approach developed in the
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39 late 1980s/early 1990s, with an emphasis on the multidimensional and systemic character of the
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41 innovation process, and a practical commitment to societal change linked to innovation. It was
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43 developed concomitantly to the rapid expansion of innovation studies, and it first aimed at the
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45 design and the evaluation of public policies in industrialised countries. In a second step, from the
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47 late 1990s on, it soon became a one-size-fits-all solution for innovation policies at any national
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49 level and in global policy arenas. For historical reasons, the NIS approach is currently unrivalled
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51 as a general script for initiating technological and social change in a given country. This is
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53 especially true of its widespread influence in Western countries, but also in South America,
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3 where even scholars urging for alternative, 'Southern' ways of thinking remain trapped in the NIS
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5 categories.
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10 Since it lacks a proper opposition in the form of a 'counter-narrative', NIS would make a poor
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12 candidate for an empirical study of NPA. We hold that a more 'literal' take on narrative makes it
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14 possible to use the notion in such areas of narrative salience where it otherwise would be useless.
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16 In our view, the most recent developments in narrative approaches to policy analysis put
17
18 excessive emphasis on stories as causal variables (with supposedly measurable effects) and
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20 identification props. In contrast, we will focus on more pragmatic aspects entailed by storytelling
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22 considered as a practical accomplishment, along the lines of a 'performance turn' in narrative
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24 studies (Peterson and Langellier 2006).
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31 The next two sections of the paper (section 2 and 3) will detail how we depart from NPA and
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33 what we expect to gain from that shift. In the last part of the paper (sections 4 and 5), we will
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35 apply this revisited policy narrative approach to the study of National Innovation Systems,
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37 particularly in the South American context.
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46 2. Departing from Narrative Policy Analysis

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50 As a structural and deductive approach, narratology has already been used to bring additional
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52 clarity, formalism and fresh conceptual rigor to policy analysis. Relying on a vast array of
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54 references, Shenhav (2005) identified three strategies to defining the concept of narrative and two
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3 levels of narrative analysis: a 'thin' level concerned with the basic elements that, according to the
4 first, 'minimal', strategy, are enough to characterize a narrative message, and a 'thick' level which
5 is concerned by components in the wider storytelling process. We agree that a narrative policy
6 does not need any more content specifications than the 'representation of at least two real of
7 fictive events in a time sequence, neither of which presupposes or entails the other' (Prince 1982:
8 4, quoted in Shenhav 2005, 79). The last clause has the merit of rejecting causality as a defining
9 feature, which, as we will see, fits our own conception of narrative as an open-ended sequence.
10 No pre-existing structure (e.g. a setting or context, a plot, characters such as heroes, villains and
11 victims), nothing like a 'moral' of the story (advanced as a policy solution): at the deepest logical
12 and semantic level of a narrative, there is nothing else than two events displayed on a time line.

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29 However, narratives do not only consist in semantic units abstracted from their context of
30 communication: they need discursiveness (a particular ordering of words) to be mediated and
31 performance (a particular form of speech act) to be transmitted. This distinction between
32 narrative *levels* is, rightfully so, part of Shenhav's minimal strategy as well.

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41 In this section, we will first examine why these two features (open-endedness and narrative
42 levels) implied by the minimal definition mark a significant progress from NPA, and what room
43 for improvement is left. In section 3, we will then suggest extending these defining features to the
44 empirical study of power, through the notion of 'scenarisation' developed by Citton (2010).

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53 Our first divergence from NPA bears on the *open-ended* nature of stories. Roe's criterion for
54 defining stories is that they must have beginnings, middles and ends (Roe 1992: 563). However,
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3 from the agents' internal perspective or 'focalisation' (Genette 1980), stories are always unfolding
4 to an uncertain end. Sometimes individuals are just too 'entangled in stories' to make any use of a
5 clear, explicit, elaborate ending. During a course of action, agents exercise their 'sense of
6 possibility' (Chauvier 2010), ponder the consequences of various sequences of action based on
7 their perception of what is 'possible' and what is 'necessary'. If they were asked to tell their own
8 story at any given time during the process, they would have to envision different scenarios with
9 branch points, bifurcations and contrasted endings. They would assign degrees of probability and
10 desirability to them according to their evaluation of the situation and to their objectives, interests
11 and values. Nevertheless, in Roe's terms, these open-ended stories are reduced to 'non-stories' –
12 the narrative equivalent to circular arguments. Roe does pay attention to the multiplicity of
13 perspectives, but considers that his job as a policy analyst, when confronted to conflicting stories
14 and non-stories, is to propose a 'meta-story' that can be used to reframe the issue, favour
15 consensus and eventually facilitate the decision-making process. This could actually be one of the
16 strongest biases of NPA. We think dissensus and open-endedness are valuable in themselves.
17 Informing decision-making does not necessarily need to be consensus seeking; in the same way,
18 policy narratives should not be bent to fit the analyst's particular conception of social order.
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43 What we propose is to keep Roe's perspectivism but to broaden it so as to grant non-stories the
44 same cognitive value as 'genuine' stories (with beginnings, middles and ends). This widened
45 scope considers narratives as *pathways*, i.e. an open-ended sequence of possible changes or
46 events constituting a progression. What the progression is needs not be specified beforehand.
47 Pathways are open-ended and can be made explicit by taking their open-endedness into account,
48 from the agent's perspective.
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6 The benefit of giving open-ended stories the same consideration as 'closed' stories is to
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8 emphasize their *directionality* and *path-dependency*. The latter notion means that “future
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10 developments are influenced, enabled and constrained by structures and patterns that have grown
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12 out of particular [previous] developments [of the story]” (Voss and Kemp 2006, 13). Common
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14 sense tells us that stories, be they closed or open-ended, are embedded in the past and oriented
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16 towards the future. But it is perhaps even truer of open-ended stories, for which individuals have
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18 to articulate necessity and possibility, synthesizing and forecasting, as the sequence of action
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20 unfolds. These cognitive activities are also at play when we read or listen to a story. Even if we
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22 don't know the end, we anticipate and develop, in coordination with the text, strategies of
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24 interpretation that clear paths among the possible worlds made accessible by the narrative (Eco
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26 1985; Gerrig 1993). From the perspective of the reader, the lack of an ending is not determinant
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28 to discriminate between candidates for a story: it is even precisely how narratives are meant to
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30 function. '*What will happen next?*' is a question the reader repeatedly asks himself throughout his
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32 reading. That said, any story contains a set of 'endogeneous futures' (Rip and Te Kulve 2008:
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34 51): the present situation contains the seeds of the future and some futures appear more or less
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36 likely than others, according to the pattern of the present situation. Choices, contingencies and
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38 irreversibilities are *path-dependent* but *opened*, as part of the potential directions of the story.
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49 The best illustration of this feature is that individuals sometimes imagine the worst possible
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51 scenario and picture it as unavoidable *just to prevent it from happening* (Claisse 2010; Claisse
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53 and Delvenne 2015). In a similar way, the past can be the object of the same kind of thought
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55 experiments: '*What would have happened if... ?*' is another typical question individuals ask
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3 themselves when entangled in stories³. If narratives were to be restricted to stories with
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5 beginnings, middles and ends, these attempts at *counterfactualising* the past (or the future) would
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7 be irrelevant and meaningless.
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12 Conversely, there are contexts in which agents seem deprived of this sense of possibility as if it
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14 had withered or were atrophied. As we shall see in our analysis of NIS, this could be the sign that
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16 a dominant or 'salient' narrative was successful enough to silence or reduce alternatives.
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18 Paradoxically, salient narratives can lead to a sense of powerlessness even among its promoters
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20 and beneficiaries. In these situations, imagination seems scripted by pre-existent plotlines and
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22 patterns of causation. The emergence of a counter-story could then reveal a latent conflict,
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24 possibly restoring open-endedness and empowerment.
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32 Our second divergence from NPA (as well as from most narrative policy approaches), also
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34 paralleled in Shenhav's minimal definition of narrative, is the consideration of *narrative levels*. In
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36 narratological terms, the *story* (Genette 1980) is the very sequence of actions, the 'content' of the
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38 narrative, so to speak. The *narrative* level itself is the discursive reality, the very words by which
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40 the story is told – the oral or written discourse in charge of 'telling the story'. The third level is the
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42 *narration* itself as a speech act, a particular performance situated in time and space. There are
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44 obvious overlaps in the terminology: Rimmon-Kenan (1983), for one, prefers 'text' to 'story', but
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46 follows Genette for the other two terms. Without necessarily summoning the whole Western
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48 tradition going back to Aristotle's idea of plot-structure, we can trace back these distinctions to
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50 Russian formalism's seminal opposition between *fabula* (akin to the 'story' level: the raw, skeletal
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52 material constituting the fundamental events in the chronological order) and *syuzhet* (the ordering
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3 of events as they are deployed in what Genette calls the 'narrative'). Another useful,
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5 complementary concept to this already rich terminology would be Genette's (again) *diegesis*, to
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7 denote the internal world-universe of the story (1980, 27).
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12 Again, policy analysts are no strangers to these works, often recalled in the theoretical section of
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14 many papers, especially in the pioneer era (Franzosi 1998, 519; Barry and Elmes 1997, 434).
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16 Once the existence of these levels has been acknowledged, though, the policy analyst will usually
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18 stay focussed on the interaction between the first and second levels, and ignore the third,
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20 performative level. Shenhav explicitly proposed to adopt this heuristic strategy as a preference
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22 for a '*thin*' level of narrative level, as opposed to the '*thick*' level 'concerned with an aggregate of
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24 components involved mainly in the storytelling process' (2005: 87). Practically, this reductionist
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26 approach leads to an almost exclusive focus on the first, abstract level where a story can be
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28 formalised and reduced to its basic components – i.e. at least two events displayed on a time line.
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30 This comes as no surprise. Policy narratives are not narratives *per se*, or only in a loose,
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32 metaphorical way: it is the analyst who transforms heterogeneous sets of representations and
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34 discourse into narratives, in an attempt at ordering the social world. The fact that narrative
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36 content can be extracted from all kinds of discursive sources, even though some of these sources
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38 do not appear as generic, explicit narrative material, is probably one of the reasons for the
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40 popularity and apparent simplicity of use of narratives in policy analysis. For this reason, the
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42 policy analyst tends to pay no practical attention to the existence of various narrative levels. But
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44 the analytical distinction between story, narrative and narration deserves to be maintained if we
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46 want to give the notion of narrative more than just a metaphorical dimension. Otherwise, it is
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48 likely to serve only as a convenient but nebulous substitute to notions such as ideologies,
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3 paradigms, referentials, or other forms of pre-reflexive mental structures that do not have to be
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5 exteriorised in discursive forms to have an influence on beliefs, opinion and values.
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10 Even though positivist and post-positivist scholars alike regularly cite it, we think narratology,
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12 understood as the study of the articulation between distinct analytical levels of narration (Genette
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14 1980), has been underused in policy theory, and that both approaches have missed some of its
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16 essential features. These articulations are yet to be explored in our narrative approaches to policy
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18 analysis, particularly in terms of *voice* (who tells the story and from where? is the narrator a
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20 character within the story or not? does the narrative voice come from inside or from outside the
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22 'story?') and *mode* (the perspective of the narrator, i.e. the type of focalisation).
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29 In addition, these distinctions should help us policy analysts not only clarify the notion of
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31 narrative we refer to but also, maybe more importantly, identify ourselves as 'ghost narrators' in
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33 the policy narratives machine. To put it bluntly, for a story to be heard, it first has to be *told*. By
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35 constantly bypassing the narration level, we obscure our own role as a narrator (with the
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37 exception of Roe, who wholeheartedly sees himself as a kind of meta-narrator) and create
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39 misleading assumptions about the intrinsic power of narratives. In this regard, van Hulst's
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41 clarification about storytelling as a model of planning (describing what planners do) and for
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43 planning (claiming that it 'should be used applied to improve planning') is exemplary (2012, 302-
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45 303). The first thing to do when we talk about narratives in policy analysis is to determine
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47 whether we mean to use it as a conceptual instrument, as an object of empirical study (a resource
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49 used by agents or institutions), or as a normative model. This basically amounts to identifying
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51 and maintaining separate narrative levels.
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3. Storytelling as power of scenarisation

How could we extend these reflections about narration as an inescapable dimension of policy narratives? And how could they help us deal with situations of narrative salience in a more satisfying way? As a possible line of approach, in this section, we will suggest a parallel between storytelling and the exercise of power.

Clearly enough, policy narratives are not 'free-floating' (Radaelli 2000, 262): they have to be backed up by actors and institutions in order to be fully efficient as components of a cognitive structure and qualify as strategic instruments of knowledge. Radaelli, e.g., reminds us that hegemonic narratives are powerful not only for what they say, but for what they do – and what they do best is perhaps to reduce rival or alternative narratives to silence (2000, 269), securing the position we call 'narrative salience'. Importantly, as Paul (2009, 243) highlights, 'this process will not be of linear nature, nor will it produce a coherent and ultimate outcome. Instead, the continuous struggle to hegemonise the discursive field and the very impossibility of discursive closure implies that the policy process is dynamic and marked by a continuous contestation about meanings'.

As any speech act, narrations have powerful perlocutionary effects (Austin 1962): narratives can persuade, scare, inform, enlighten, entertain, and in general get someone to do something he or she would not have done *otherwise*. It is no coincidence that we used that word, central as it is to

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3 Dahl's classical definition of power in terms of *A* getting *B* to do something he would not
4 'otherwise' have done (1957, 202-203). Dahl's definition works best in the case of observable
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6 conflict, where *B*'s preferences for another course of action have been made explicit and are
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8 publicly available. The problem arises when *B* has no articulated grievances against *A*. Under
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10 what conditions can we say that *B*'s apparent compliance with *A*'s plans for *B* mask a potential
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12 conflict or a latent dissensus? Is there any sense to say that *A*'s course of action regarding *B* is
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14 against *B*'s 'real' or 'objective' interests, even though *B*'s subjective interests seem to meet *A*'s?
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22 In his three-dimensional conception of power, Steven Lukes (2005) greatly contributed to clarify
23
24 these issues and gave indications as to the kind of answer an empirical study of power should
25
26 work toward. Starting with Dahl's definition, Lukes states the conditions to satisfy if we wish to
27
28 keep attributing the exercise of power to certain situations where there is no observable conflict
29
30 between *A* and *B*. In essence, the solution lies in the *counterfactual* structure of Dahl's definition:
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32 'we need to justify our expectation that *B* would have thought or acted differently from the way
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34 he does actually think and act; and we also need to specify the means or mechanism by which *A*
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36 has prevented, or else acted (or abstained from acting) in a manner sufficient to prevent, *B* from
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38 doing so' (2005, 44). In other words, we have to find a way to explain *B*'s political inactivity,
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40 'things that do not happen', but somehow could.
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48 This is where *storytelling* can help us. Recent trends in social criticism emphasized the power of
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50 storytelling as a tool used by marketers, Human Resources managers, journalists and spin-doctors
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52 to manipulate public opinion (Salmon 2010). Properly speaking, we do not subscribe to this
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54 rather simplistic theory, but to his rebuttal by Yves Citton in a short political essay entitled
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3 *Mythocracy* (2010), in which he demonstrates the deep homology between narrative and power.
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8 According to Citton, narrative and power share the same set of basic components. This can be
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10 inferred from modern definitions of power in terms of relation (as opposed to definitions in terms
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12 of substance), but especially in Foucault's term: 'The exercise of power consists in guiding the
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14 possibility of conduct and putting in order the possible outcome'; 'To govern, in this sense, is to
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16 structure the possible field of action of others' (Foucault 1982, 790). Citton translates this
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18 definition in narrative terms: any relation of power can be boiled down to a capacity to *scenarise*
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20 someone's action. The aim of *A*, in a power relation, is to 'scenarise' *B*'s action, to write his/her
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22 story, to impact his/her narrative world or *diegesis*. But *B* tries to do the same in return:
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24 depending on his margin of manoeuvre, *B* tries to 'counter-scenarise' *A*, i.e. to modify *A*'s actual
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26 and possible world in retaliation. The activities of *A* and *B* imply a mutual transformation of
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28 states unfolding in time, which is enough to constitute the embryo of a narrative. Citton calls
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30 *power of scenarisation* this asymmetrical but reciprocal form of power.
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39 Cognitive approaches to public policy had already stressed the circular relationship between
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41 meaning and power (Muller and Surel 1998). But Citton's 'power of scenarisation' goes one step
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43 further with the claim that power *functions* as a narrative, reduced to the same elementary
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45 components. This deep homology between narrative and power has interesting consequences on
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47 our 'revisited NPA'. Since it is the very nature of storytelling to imply power relations, one could
48
49 say that, if some tell stories, others *are told* by stories. The main issue at stake for any agent
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51 involved in a relation of power could be phrased as: '*Who is telling my story?*', '*Whose story am I*
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53 *caught in?*' For anyone caught up in somebody else's story, the first thing to do is to develop a
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3 *counter-story* that will open up possibilities and modify the directionality of the narrative. In this
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5 view, counter-stories are reflexive, self-conscious attempts at empower oneself. In turn, self-
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7 empowerment leads to a redefinition of one's own narrative identity.
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12 This could provide a partial answer to the difficulty of elaborating a relevant counterfactual in
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14 situations of narrative salience. Counter-stories emerge from the realization that the space of
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16 possibilities is more open than the dominant, hegemonic story claimed it was. The fact that this
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18 space of narrative possibilities could not be accessed for a long time – precisely because of the
19
20 hegemonic character of the dominant story – does not mean that it could not be accessed from an
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22 outer, 'extradiegetic' perspective – precisely the kind of perspective a policy analyst adopts when
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24 confronting and comparing narratives from a distance. Being a 'ghost narrator' allows the analyst
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26 to deploy a much broader sense of possibilities than the actors who remain entangled in their own
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28 narrative worlds. In terms of focalisation (Genette 1980, 188-189), it would obviously be
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30 excessive to assimilate that position to the one of an omniscient, knows-all, sees-all narrator. But
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32 there is no reason either to adopt the opposite kind of objectivist or behavioral stance that limits
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34 the narrator's field of vision to what is strictly observable or measurable. The policy analyst has
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36 the privilege of adopting multiple perspectives. This multiple focalisation gives him or her access
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38 to a wider, structural space of possibilities from which to imagine alternative courses of action,
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40 other ways of telling the story from the actors/characters' points of view. He is, by definition, in a
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42 position to sidestep, imagine, scenarise, think in terms of 'what if' when the actors/characters
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44 most of the time do not have that luxury.
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55 We now see how the issue of counterfactuals and counter-stories is also related to our previous
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3 discussion on the open-ended nature of narratives. From *B*'s point of view, a counter-story means
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5 alternate, more favourable ways of telling the story – one's story –, new pathways and courses of
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7 action previously unimaginable. Formerly caught in someone else's story – *A*'s story –, in a
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9 position of being narrated and incapable of finding his own voice, the once powerless, now
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11 empowered *B* occupies the role of the narrator. This is not only a change in focalisation, but a
12
13 transgression of narrative boundaries – a metalepsis, in narratological terms (Genette 2004).
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15 Although this goes beyond the scope of our paper, such a process also deeply 'refigurates' the
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17 agents' identity (Ricoeur 1992) and, more generally, could offer insight into the way narratives
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19 are used as tools for identity construction (Bamberg 2011).
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27 At this stage, we can affirm that narratives are not only objects of knowledge, cognitive
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29 instruments or strategic resources, but are located at the heart of power and of its distribution.
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31 Our discussion has converged on two main concepts, which also mark our departure from NPA:
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33 'narrative salience', on the one hand, will be developed in the next section along with a
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35 presentation of our case study of National Innovation Systems, whereas the last, conclusive
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37 section of our paper will focus on 'counter-story', as an exercise of practical imagination about
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39 alternative policymaking in the face of narrative salience.
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48 **4. Narrative salience: scenarising National Innovation Systems**

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53 National Systems of Innovation (NIS) provide a good example of a policy-approach characterised
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55 by narrative salience. This salience can be observed in OECD countries, where the concept
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3 originated, but also, and more problematically, beyond OECD countries where the narrative is
4 reified rather than questioned regarding its adequacy to other contexts (Delvenne and Thoreau
5 2012). Narrative salience characterises situations that attest to the domination and prominence (at
6 the discursive level, in the strategic plans, in the institutions and actors' repertoires) of one single
7 narrative, which acts as a well-routinised script that nobody questions anymore. In fact, since the
8 adversarial perspective is a sort of default-mode of the narrative battleground, every narrative
9 naturally tends to achieve salience by supplanting its rivals⁵. This is what happened with NIS, and
10 our attempt at scenarising the powerful NIS narrative will account for the current impossibility
11 for Southern scholars in Science and Technology Policy studies (STPS) to unfold an alternative
12 narrative identity when dealing with NIS.
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29 The NIS approach first appeared in the late 1980s (see Freeman 1987 for a first formal
30 occurrence) and was mostly developed in the 1990s within the frame of a global renegotiation of
31 the social contract between science and society (Guston and Keniston 1994; Guston 2000), the
32 former being increasingly oriented toward objectives of economic growth, wealth creation and
33 improvement of the quality of life. One of the merits of this new policy approach was its
34 emphasis on multidimensional and systemic character of the innovation process. The definition of
35 NIS from Edquist and Lundvall (1993) denotes the wide ambition of the approach: 'The national
36 system of innovation is constituted by the institutions and economic structures affecting the rate
37 and direction of technological change in society'. Though it can be limited in scope to the mere
38 mapping of institutions and structures, the NIS approach is practically committed to societal
39 change in relation to innovation (either technological or social). The rationale behind NIS –
40 providing the *diegesis* of its narrative – is that a set of interdependent actors and institutions
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3 needs to be aligned together for a dynamics of technological (and societal) change to be set in
4 motion. The actual *narrative* as it is told by the actors who convey it goes far beyond a limited
5 focus on R&D and companies only (Freeman 1995, 9). It carries an almost transparent political
6 agenda that Lundvall, in an attempt at disclosing it, describes as a 'critical social engineering with
7 theoretical ambitions' (Lundvall 2005, 4). In the Latin American context, theorisation contributes
8 to 'masquerade' (Strang and Meyer 1993, 500) this policy-oriented innovation as mere diffusion.
9 As a speech act, the reiterated *narration* of NIS by an identifiable group of storytellers has a
10 powerful performative value.
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24 Indeed, when one looks at Science and Technology Policy studies, there is little contestation of
25 the approach of NIS, either from the actors or from the analysts. The approach is rather even
26 reified; it circulates as a one best way of performing innovation worldwide. In a very revealing
27 metaphor, Albert and Laberge compared NIS to 'a sort of gospel that nobody questions anymore'
28 (2007, 230). This narrative salience can be traced back to the building of an epistemic community
29 (Haas 1992; Alder and Haas 1992) of storytellers. Its founding father is Christopher Freeman,
30 former Professor of Science Policy at University of Sussex, who coined the concept of NIS (see
31 Freeman 1987). As the first Director, from 1966 to 1982, of the Science Policy Research Unit
32 (SPRU), Freeman mentored several generations of economists and social scientists working on
33 technical change, innovation and the knowledge society. At the same time in Paris, in close
34 connection to the burgeoning NIS community, the OECD launched its famous policy document
35 entitled 'Science and Technology Policy for the 80s' (drafted, among others, by Jean-Jacques
36 Salomon), which stressed the need for industrialised countries to foster more active industrial
37 policies, looking for a broader and deeper cooperation between universities and industries. These
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3 institutional loci helped anchor the NIS narrative and diffuse it worldwide from the 1990s on.
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8 Delvenne and Thoreau (2012) find a similarly high degree of penetration of the NIS narrative in
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10 Latin American countries, with a strong presence of key NIS figures like Lundvall and Soete in
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12 the worldwide research network 'Globelics'⁶. This partly explains the difficulty to find examples
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14 of alternatives to non-NIS inspired policies in today's Latin American countries that have
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16 advanced regimes of science, technology and innovation (STI). This does not mean that it
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18 happened without academic resistance to the coming era of such 'pre-packaged thinking' models
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20 (Shinn 2002). But the 'anti-mimetic movement' (Albornoz and Gordon 2011) could not stop the
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22 institutional mimesis of NIS. In fact, critical reflection on the relevance of NIS-inspired politics,
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24 when it occurred, tended to criticise mere duplication but not the concept of NIS itself (Arocena
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26 and Sutz 2000; 2003). This creates a paradoxical situation, where scholars stress the pressing
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28 need to develop an innovation agenda for Southern countries with a 'Southern mindset', but from
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30 within the reductionist NIS approach whose local relevance is never really challenged.
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39 In summary, we observe a clear narrative salience in the case of NIS, related to the influence
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41 exerted by a particularly successful epistemic community. This diffusion of a one-size-fits-all
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43 model has obvious side effects in terms of scenarisation, especially considering the way it came
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45 to structure the policy agendas and the capacity of action of Southern countries. The salience
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47 paradoxically leads to a sense of disempowerment among scholars who seem unable to imagine
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49 alternative pathways. From the policy narrative analyst's point of view, the situation looks
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51 desperately disentangled. In the face of this absence of public controversy and uncertainty, NPA
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53 seems to reach its limits of relevance. The same goes for Actor-Network Theory (ANT), which
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3 'prefers to address changing, fluid, "hot" situations to stable, articulated, "cold" situations' (Rip
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6 2010, 1). Still, this is no reason to disregard them. We agree with Rip that transitions from hot to
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8 cold situations, or from 'translation' to 'diffusion' processes, can be just as interesting for the
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10 analyst. A stable, dominant, salient narrative is power solidified.
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15 Diffusion processes such as the one that can be witnessed with the NIS approach seem to abide
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17 by the 'as above, so below' principle. The narrative equation at the heart of the NIS narrative is
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19 the same everywhere: fostering innovation, therefore investing so as to strengthen its place in the
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21 national economy, is supposed to mechanically lead to further economic benefits that will
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23 ultimately help improve the level of social welfare – from top to bottom. Besides, it is a policy
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25 approach that circulated from 'above', the North (OECD countries to 'below' (the South, Latin
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27 America in particular), with the help of international institutions (OECD, UNESCO, European
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29 Commission, Inter-American Bank for Development, Organisation of American States). Whereas
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31 the NIS framework of analysis proved to be helpful for the design and evaluation of STI policies
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33 in OECD's industrialized economies, where it could build on background practises and
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35 consequently reduce complexity in a productive way, the *ex ante* promotion of NIS in Latin
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37 America, with OECD countries serving as models, implied a normative agenda of what *had to*
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39 happen (Arocena and Sutz, 2000), which was simply inadequate, as it entailed a counter-
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41 productive reduction of complexity.
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51 **Going back to our initial metaphor: if, in the case of NIS, 'That which is Below corresponds to**
52 **that which is Above, and that which is Above corresponds to that which is Below', it is not**
53 **because of a secret, hermeticist form of correspondence between the microlevel and the**
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macrolevel, mirroring each other through the mediation of a narrative. The apparent symmetry between the global and the local, the collective and the individual, is only a side effect of an uneven distribution of power and unequal capacities of scenarisation. It does not mean that the validity of National Innovation Systems, both as a scenario and as a public policy for innovation, cannot be disputed. This requires an exercise of our 'sense of possibility' – our own capacity, as policy analysts, to imagine how things could be done 'otherwise'. As we will show in the next and final section, counter-stories already exist, in a latent state, or could re-emerge from pre-NIS states.

5. In conclusion: towards a counter-narrative approach of NIS?

From our overview of NIS, we could see how an epistemic community of storytellers participated in the worldwide reification of the NIS narrative, giving it a salient position. The script is now well embedded in Latin America, where scholars are caught into others' (policy) stories, making it hard for them to depart from this situation. This would be inconsequential if the NIS approach could actually address the crucial STI-related issues in these countries. Now there are good reasons to doubt it. A number of scholars stress that NIS in Latin America remain rather weak and unarticulated. Some of them, like Arocena and Sutz (2003), advocate the '[creation of] a Southern framework of thought that could benefit from incorporating some of the premises of the Latin American underdevelopment theory' (Lastres and Cassiolato 2002, 5). Still, along with many others, Lastres and Cassiolato, in spite of good intentions of 'developing new conceptual, methodological and analytical frameworks to deal with the new pattern' (2002, 6), fall back on

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3 stressing the 'usefulness of the concept of (national) system of innovation' (2002, 6-7). This
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5 cognitive path-dependency impacts Latin American scholars' ability to develop counter-stories as
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7 proper attempts at re-empowering themselves. Consequently, policy narrative salience coming
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9 from Northern epistemic places prevents them from building their own narrative identity in
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11 science and technology policies.
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17 However, this does not mean that narrative salience will forever hinder the emergence, or rather
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19 the re-emergence of counter-stories. In this regard, as noted by Delvenne and Thoreau (2012),
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21 there are signs attesting that a renewed version of dependency could be underway – or, at least,
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23 renewed interest in it, as the recent publication of the famous book coordinated by Jorge Sabato
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25 in 1974, recently reedited by the Argentinean Ministry for Science, Technology and Innovation
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27 can attest (Sabato, 2012). Dependency theory arose as a reaction to modernization and
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29 development theories. It argues that underdeveloped countries are not merely primitive versions
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31 of developed countries, but have unique features and structures of their own. Their heritage of
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33 being former colonies, whose economies were built to serve primarily the interests of Northern
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35 countries, would be one cause of their dependent position in the global economy.
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44 The question of dependency also sheds light on the directionality of the NIS narrative. When
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46 anticipating on alternative directions for Latin American science, technology and innovation
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48 policies, one has to keep in mind that counter-narrative resources shall, in all likelihood, work to
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50 reduce social inequalities and empower Latin American countries to manage their own destiny.
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52 Amilcar Herrera and his collaborators were already concerned with these risks when they
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54 opposed the Club of Rome's conclusions in *The Limits to Growth* and suggested a counter-global
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3 model, originating from Latin America (see Herrera *et al.* 2004). If today's Latin American
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5 scholars were to revisit these theories, new counter-narratives could follow, with potential
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7 empowering effects.
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12 Throughout this paper, we tried to remain equidistant from both positivist and post-positivist
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14 takes on narratives. The reason for these reservations stems from our dissatisfaction with the way
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16 the two approaches would have, according to us, overlooked some key features of narratives, be
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18 they envisaged as strategic resources or as objects and instruments of knowledge. Structural
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20 narratology and Science and Technology Studies (STS) helped us revisit NPA by better taking
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22 into account the open-ended character of narratives, the levels at which they can be analysed and
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24 their intricate relation to power. Clarifying these dimensions allowed us to analyse national
25
26 systems of innovations as a case of narrative salience, underlying the powerlessness of its critics
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28 and the urgency in developing a counter-narrative. Our study of NIS shows that a revisited NPA
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30 can be applied beyond the controversial, 'hot' cases with conflicting narratives it generally
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32 investigates. The narrative policy analyst can describe narrative issues, not only when situations
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34 heat up and become controversial, but also when they cool down and temporarily crystallise in an
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36 even more unbalanced distribution of power. Because they are, without contradiction, truth-
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38 sensitive and constructivist, these propositions could appeal to positivist and post-positivist
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40 scholars alike. Whatever comes next, narratives will keep illuminating the pathways between the
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42 actual and the possible worlds of policymaking.
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6¹ Since the pioneer work of Jerome Bruner (1987), the prominent role of narration in cognition
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8 has been widely acknowledged. In the recent years, cognitive cultural studies emerged as an
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10 interdisciplinary field between narrative theory, linguistics, neuroscience, cognitive psychology
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12 and anthropology (Zunshine 2010; Herman 2003).
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17² This statement does not do justice to the vast literature dealing with risk perception and
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19 narrative. Though the same divide between positivist (represented by cognitive scientists, see e.g.
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21 Dieckmann *et al.* 2009, who measure the impact of narratives on risk assessment), and post-
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23 positivist (rather cultural studies minded, see e.g. Corvellec 2011) approaches can be observed in
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25 the field, narrative issues are generally tackled with clear methodological guidelines.
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31³ In the vast literature on cognition and counterfactuals, Kray *et al.* (2010) and Roese and Olson
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33 (1995) provide good starting points.
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39⁴ Oddly enough, narrative identity and policy narratives never intersect in the literature.
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41 Hammack and Pilecki (2012) recently proposed an integrative framework for a conceptual and
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43 methodological approach to narrative research in political psychology. Though narrative identity
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45 represents one of the four principles of their framework, they do not quote the literature on policy
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47 narratives.
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52⁵ See Radaelli (2000, 264) for a classical case of narrative salience, regarding the role of the
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54 *vincolo esterno* (external constraint) narrative in the European Monetary Union process.
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6⁶ See the website: www.globelics.org
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