

# Narrative dynamics in European Commission AI policy—Sensemaking, agency construction, and anchoring

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## Abstract

Artificial Intelligence (AI) is arguably one of the most powerful and disruptive technologies of our times which may pose challenges as well as opportunities to contemporary political organizations. Studying AI from a lens of perceived uncertainty, this article studies the policy response of the European Commission toward this fast-paced emerging technology. By empirically focusing on the Commission's policy process from start to end, from initial communication to concrete proposal, the article shows how different types of narratives are used to construct the new policy area of AI policy. A novel theoretical framework is constructed building on a combination of narrative organizational studies and narrative policy studies, displaying how narratives play a key role in organizational sensemaking, agency construction and anchoring. The paper finds that the Commission broadly makes sense of AI technologies with a future-oriented discourse, establishes agency to existing and new forms of political organizing and anchors the policy response within the overarching frame of the EU single market policy. The main contribution of the paper is that it shows how political organizations settles uncertainty through narratives and sketches a way forward through establishing policy

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goals and anchoring them within pre-existing lines of political mobilization.

#### KEYWORDS

Artificial Intelligence, European Commission, policy narratives, uncertainty

## INTRODUCTION

Artificial Intelligence (AI) has emerged during the late 2010s as allegedly the most disruptive emerging technology which we might face as a society. Techno-optimistic accounts narrate AI as tool for achieving societal growth, sustainability, and wellbeing, highlighting how it can contribute to a restructuring of societal systems across sectors and contribute to an overall “better society” (Kim, [this issue](#); McAfee & Brynjolfsson, 2018; Schwab, 2017). Other scholars emphasize how AI systems are key technologies in capitalizing on behavioral data—contributing to surveillance capitalism, racist biases, increasing polarization, arbitrary decision making and that AI technologies ultimately may fundamentally alter and pose large scale challenges to democracy processes (Buolamwini & Gebru, 2018; O’Neil, 2018; Ulnicane & Aden, [this issue](#); Zuboff, 2018). While scholars have emphasized how governance narratives have framed the AI issue to resolve some of these controversies (Ulnicane et al., 2021), the technological developments and contemporary socio-political discourses remains in flux, creating a policy issue which is uncertain and highly volatile. The AI issue has emerged as a top policy priority within the corporate world, international organizations, as well as national governments but these are mostly examples of soft policy, that is, guidelines and not regulation (Jobin et al., 2019; Zhang et al., 2021). Arguably, the “primeval soup” of public policy has reached a boil (cf. Kingdon, 2014).

Seeing AI as an uncertainty, this paper is set out to explore how political organizations construct policy within uncertain issues through their employment of different types of policy narratives. How organizations handle uncertainty has been a long-standing and widely studied issue within the social sciences (Farjoun, 2010; Kahneman et al., 1982; Knight, 2013 [1921]; March, 1991; Schumpeter, 1943[1976]). Policy narratives scholarship has made great effort to show how socially constructed stories (narratives) can be utilized strategically by political actors and coalitions to influence politics; expand or shrink agenda characteristics, enhance legitimacy of policy proposals, blow new life into old policy issues with a new “framing” (Jones et al., 2014; Radaelli, 1999; Radaelli et al., 2013). However, to employ policy narratives strategically rests on the assumption that the ones that constructs the narratives (e.g., actors or coalitions) have clear interests and preferences. An assumption which is problematic in issues which are perceived as uncertain. This article argues that within uncertain situations, policy narratives which responds to this situation also reflect a process of organizational sensemaking which forms an ideational “backdrop” of the policy response.

The aspects of sensemaking and identity formation within narratives has been realized by sociologists and organization and management scholars widely (Abolafia, 2010; Beckert & Bronk, 2018; Boje, 1991; Czarniawska, 1998, 2004; Vaara et al., 2010, 2016; van Hulst & Yanow, 2016). This article therefore argues that the policy narratives literature can benefit from expanding the concept of policy narratives to incorporate such qualities. This paper incorporates these aspects into a novel theoretical model which expands and nuances the understanding of policy

narratives to also cover policy responses to uncertainty and organizational processes of narrative sensemaking. The article argues that political organizations in uncertain situations utilize narrative *both* through strategically motivated interests, but also as a more fundamental process of making sense about uncertain developments. In this process of narration the different narrative qualities reinforce each other and serve different purposes within the policy process.

The paper showcases how narratives corresponds to different needs and functions within political organizations, the need to make sense, the need to construct agency, and the need to anchor these new narratives. The case study is empirically motivated by the European Commission's (EC) policy process and covers the whole process from its initial Communication *Artificial Intelligence for Europe* in 2018 to their final regulatory proposal, the "AI act" in 2021 (EC, 2018a, 2021c). The research question is *how does the European Commission construct AI policy from initial conceptualisation to concrete policy proposals using different types of narratives?*

The paper finds that three narrative types are present; *sensemaking narratives* which constitutes the "ideational backdrop" of the policy, *agency construction narratives* which crafts new forms of organizational roles for existing actors, and *anchoring narratives* which ties the new narratives to already established forms of policy coordination. The main contribution of the article is that these different types of narratives are mutually reinforcing each other and enables the Commission to construct a policy response toward AI development as an uncertainty. The empirical contribution is therefore to show that policy narratives in uncertain situations also encompasses more fundamental and existential qualities beyond being simply strategically and (boundedly) rationally employed policy tools. Results show that (1) the Commission makes sense of AI with transformative and future-oriented narratives and that (2) the disruptive narratives calls for the establishment of a broad European policy coordination on AI with a broad stakeholder mobilization, suggesting (3) a policy integration toward the EU Single Market Policy with clear coordination on the EU level as opposed to what is narrated as "divergent" or "fragmented" approaches.

The paper proceeds as follows. First, the novel theoretical model will be outlined with emphasis on the sense-making aspect of policy narratives. Secondly, the methodology will be presented and discussed. Thirdly, the empirical analysis follows which covers both two stages; descriptive statistics as well as more in-depth analysis of the Commissions policy narratives. Lastly, the article concludes with crystallizing out the main contributions, the empirical and theoretical added value, and suggests areas for further research.

## THEORY

In this theory section, a new conceptual framework is developed which ties organizational narratives scholarship together with policy narrative scholarship. First, a general introduction regarding narratives and narratives within public policy is presented. Secondly, the sense-making aspect of narratives is outlined that display how broader narratives function on a more perceptual level, by reducing uncertainty for stakeholders and suggesting broad ways of understanding specific uncertain developments. Thirdly, the framework suggests how narratives work in establishing more specific instances of agency. Fourthly, it is shown how narratives work more concretely to anchor an uncertainty into pre-existing lines of political mobilization by narrating the uncertainty as "a case of" something which is pre-existing. Lastly, a summary of the theoretical model is presented alongside a conceptual model.

## Grounding a narrative approach

Narrative analysis has its roots within literary studies and encapsulates different ways of reading a text to facilitate a meta-level understanding of the text (Czarniawska, 2004). White (1987) uses the term *emplotment* when arguing that historians does not “find” historical events, it is through emplotting them within larger narratives that gives them explanatory potential. Narrative analysis has been employed in social sciences in general (Czarniawska, 2004), especially within organization and management studies but the full narrative potential is yet to be unleashed (Vaara et al., 2010, 2016). Therefore, this contribution draws on a larger body of narrative literature, also linked to sociology and organization and management studies, to draw attention to narratives as building blocks for the process of organizing. Narratives are therefore viewed as co-constituted by beliefs, preferences, values, and knowledge more broadly, and is accordingly also constitutive of institutions (Bevir & Rhodes, 2002). A standard definition pointing in that direction is the Merriam-Webster online dictionary, a narrative is “a way of presenting or understanding a situation or series of events that reflects and promotes a particular point of view or set of values”. The reason to employ such a broad definition is to underline the co-constitutive nature of narration, understanding, sensemaking and emplotment. Such a definition also encompasses seeing narratives as a “mode of knowing” (Czarniawska, 2004, p. 6), as underlined by various scholars (Bevir, 1999; Bevir & Rhodes, 2002; White, 1987).

Within public policy and European studies, narrative scholarship has recently experienced a burgeoning utility (García, 2017; Radaelli, 1999; Radaelli et al., 2013). From a policy studies perspective the narrative perspective can be seen as an evolution of “the argumentative turn” in public policy (Fischer & Forrester, 1993; Hajer, 1993, 1995). The narrative understanding in this paper rests very much on the poststructuralist scholars which has influenced a lot of the contemporary narrative studies (Jones & McBeth, 2010). For example, a centre idea in Fischer (2003) is that it is through retaining critical awareness that scholars can unearth values and worldviews which are assumed and underlying in specific policy narratives. From these “roots”, this paper develops a novel theoretical framework which contributes to outline narratives’ more fundamental role in constructing policy within uncertain contexts. The remainder of the theoretical section will unpack three different aspects of *how* narratives function to construct policy more broadly, which will guide the empirical analysis.

## Sense-making narratives

Complexity, risk, uncertainty, and turbulence are concepts which increasingly are used to describe the volatilities of modern-day societies and their consequences and challenges for governance processes (Ansell et al., 2017; Beck, 1992; Trondal et al., 2022). As early as in 1921, Frank Knight explained the difference between on the one hand risk—which is measurable—and uncertainty which escapes measurability and poses barriers to rational economic decision making (Knight, 2013 [1921]). Keynes (1936) builds on and develops this notion of uncertainty, working with incorporating the notion of expectations within (economic) decision-making. In Keynes view, there were three ways to handle uncertainty—(1) to assume that things will continue as before and act on convention, (2) to base decisions on emotions (his famous notion of “animal spirits”) or (3) that investors base their expectations on the expectation of other investors (Beckert, 2016, pp. 147–162; Keynes, 1936). The notion of uncertainty has also been developed further by Joseph Schumpeter in his classical term “creative destruction”—arguing that decision-making in modern capitalism constantly faces a fundamental form of uncertainty about the future (Schumpeter, 1943[1976]).

Therefore, perceived uncertainty delimits strategic and rational action, due to the inability of actors to determine the best cause for action a priori. These theoretical developments have incited a great deal of scholarly interest into how organizations make decisions *despite* uncertainty.

Abolafia (2010) identifies that actors engage in a sense-making process based in a shared narrative construction within uncertain situations. Along the same lines, Beckert and Bronk (2018) argue that actors need expectations and anticipative structures to make decisions about uncertain futures. Such expectations are key in coordinating action both within and between organizations. By creating shared expectations, narratives help to coordinate actors to decide on a course of action, making them instruments of governance and power. Therefore, narratives themselves function as complementary tools for decision making. Outcomes of such decision making are therefore contingent on narratives due to the narrative ability to reduce uncertainty (Beckert, 2016; Beckert & Bronk, 2018). As argued by Mark Blyth “the reduction of uncertainty and the generation of collective action create the necessary conditions for institutional transformation” (Blyth, 2002, p. 39). This relation will be spelled out in a bit more detail below.

Grounded in a constructivist mode of reasoning, any ongoing process may be laced with uncertainty, depending on the extent to which actors treat it as such. Uncertainty may therefore be defined relationally, and organizations understood as structures which “absorbs uncertainty” to facilitate decision making (March & Simon, 1993). It is hereby argued that uncertainty is constructed and perceived in the recognition of its existence, which spurs actors in organizations to engage in different practices (discursive and others) to absorb such uncertainty. On the contrary, where actors do not perceive a policy issue as specifically uncertain, there would be less need for sense-making narratives and less need for engaging in creating a novel conceptual apparatus. Encountering something which is novel is a key component within what has been described as sensemaking, such as asking the two interrelated questions “what’s going on here? [and] what do I do next?” (Weick et al., 2005, p. 412). Such processes is expressed through the employment of certain actual or discursive acts, some of which corresponds to the classic notion of sensemaking (Weick, 1995; Weick et al., 2005). The output of such processes among others is what is defined as “sensemaking narratives”—which subsequently can be studied as expressions of actual public policy. The extent to which actors recognize, define and reify an issue as uncertain, would reflect in the extent to which actors employ sense-making narratives. This paper argues that such narratives play a key role in structuring public policy and organizational life through the establishment overarching heuristic frames and anticipative structures as one case of “uncertainty absorption” (March & Simon, 1993).

Thus, sense-making narratives materialize meanings which in turn constrains and enables identities and certain actions for organizations (March, 1997; Weick et al., 2005). Within the context of emerging technologies, it is impossible beforehand to consider all the possible outcomes, within a highly complex sociotechnical setting. Emerging technologies therefore always bear with them a future-oriented uncertainty (Rotolo et al., 2015). When reducing *technological* uncertainties (as in our case), the policy relevant knowledge often draws on contemporary narratives rooted in (late) modernist and technologically optimistic ideas regarding the possibilities of technological and political progress (Giddens, 1991; Jasanoff, 2004, 2020; Jasanoff & Kim, 2015; Kim, *this issue*). Thus, policy narration about technological progress expresses assumptions regarding how technological developments relates to societal development and sketches out roles for governments, companies, and the public (Bijker, 1992; Borrás & Edler, 2020; Bowker & Star, 2000). A classic trope in such narration is how the public sector is the sluggish and inert “ugly sister” which needs to follow the lead of the more flexible and innovative private sector (Czarniawska, 1985). Such assumptions may provide legitimization for providing leeway to the private sector to not “stifle innovation”, as well as legitimizing certain efficiency-related reform programs for the public sector. As argued by for exam-



ple Leonardi (2010) technological advancements are often narrated as inevitable, leaving no room to opt-out of the developments, but constructs technological change as a discourse of inevitability implicitly stating a normative urgency for organizations to harness, reap the benefits of and jump on the bandwagon of an inevitable, yet uncertain technological change (Leonardi, 2010).

Thus, when organizations make sense of uncertain technological developments, they engage in narrative sensemaking which expresses underlying assumptions about the role of technological and societal development. Sense-making narratives thus establish a conceptual apparatus as an answer to what is perceived as uncertain developments and thus reduces the perceived uncertainty. Such narratives simultaneously enable and constrain organizational identity and action and sketches out broad heuristic frames and roles for certain stakeholders, often engaging in technologically optimistic narratives, establishing urgency for organizations to react and to harness the fruits of technological progress.

## Agency construction narratives

Narratives also have a more constitutive aspect, in relation to how issues are constructed or framed. This aspect of narratives differs from sensemaking as it expresses more concrete forms of coordination. As recognized by Vaara et al. (2010), self-authorization is one way of constructing legitimacy in policy text. The mechanism is to use meta-level tautologies to construct discursive legitimacy by defining a specific concept as the solution to a policy problem. This shows how narration can be employed in a more direct sense to more bluntly express that a certain goal or a certain course of action is relevant to achieve a specific result. One example is how the development of strategy texts seen as central to lead a city administration are legitimized by bluntly stating that “strategy is a central tool for leading a city” (Vaara et al., 2010, p. 690). Narration in this sense means ascribing a concept (e.g., strategy) as something which is inevitably needed when engaging in the process of “leading a city”. Through ascribing certain policy concepts with functions they may become central in coordinating policy responses, also stating why such concepts should be considered policy goals, who should pursue them and what such actors need to do. While sensemaking establishes more broad visionary roles and frames, agency construction asserts causality on a concrete level. This is also emphasized by Cooren, suggesting that text in itself is an actor, and that through itself it can establish other forms of agency (Cooren, 2004). In a more concrete way argued by Deborah Stone, narratives establish goals, assign roles to show who is going to do what in the policy efforts (Stone, 1989, 2012).

Public policy is constructed by a variety of actors—individuals or collectives such as organizations, networks or coalitions—and their attributes, including their knowledge, values, beliefs, interests, strategies, and resources (Weible, 2017). In this context, a policy text can be understood as the result of a process of assemblage of actors, interests, causal ideas, institutional norms, practices, values, and ideas. However, as noted by Deborah Stone, the text “genre” of public policy often aims to narrate/frame the course of action which is promoted as “rational”. Policy text may thereby serve to conceal the “political side” and frame itself as the inevitable course for action, while obscuring other potential understandings, rationalities, and practices (Stone, 2012). This is a commonly recognized narrative strategy within narrative policy scholarship and one of the main contributions from Stone’s (1989) original article which states that agency is constructed through narrating something as amenable to human action (Stone, 1989). Blyth (2002) argues along the same lines, saying that a specific way in how new ideas gets introduced within institutions is through critiquing existing frameworks to open the space for new action, arguing that current measurements are “insufficient”, current organizations too “slow” to deal with the new challenges which are posed toward them (Blyth, 2002).

Summarily, when establishing policy goals and roles within public policy, agency construction narratives are structured more in the traditional sense as a plot; a policy stance, an actor, and a related behavior (Shanahan et al., 2017). Thus, agency construction is more actionable and direct than narratives for sensemaking and incorporates specific, rather than overarching roles for policy stakeholders. Narrative agency construction can either (1) create new roles or practices within existing institutions or (2) establish new organizational actors and structures.

## Anchoring narratives

Organizations are oftentimes sluggish and inert; they need to engage in specific processes to enroll external and internal stakeholders. This process has been referred to by organizational researchers as “anchoring” (Czarniawska, 1999, 2004; Kain et al., 2016) and aim to signify efforts to translate new ideas and frames into existing institutional arrangements. This includes to strengthen cooperation, build coalitions, and overcome resistance. Narratives for anchoring are therefore a way of re-activating pre-existing organizational routines, structures, and modes of collaboration as adequate to deal with a novel and uncertain phenomenon or context. If new narratives are established in specific policy documents such as visionary strategies without being firmly anchored within the organization, they might be subject to decoupling, or forms of strategic defiance (Brunsson, 1989; Meyer & Rowan, 1977; Oliver, 1991). To counter such organizational processes, it is hereby suggested that organizations engage in “narrative anchoring”. Narrative anchoring can be observed when an issue (AI in this case) is linked with existing organizational structures or lines of mobilization or pre-existing norms. Uncertain policy problems need to be translated into “a case of” something, and this is the process of anchoring narratives within existing processes of political mobilization and organizational competencies. Anchoring is similar to the notion of congruence as introduced by Jones and McBeth (2010), with the exception that congruence is linked to belief systems and anchoring is linked to organizational norms and structures.

Anchoring can therefore be understood as a narrative strategy to both counter organizational decoupling and to facilitate organizational cooperation and coalition building. In its most fundamental sense, organizational theory in political science hold that “organizations matter”, so narrating an uncertain issue a “social”, “economic” or “labour market”, has large consequences for how a policy area will develop (March & Olsen, 1989). Thereby it articulates what competencies should be enabled and is therefore the ultimate expression of politico-organizational mandate. In this light, narrative anchoring have a potential to bend new narratives to fit into an existing organizational fabric. If organizations succeed to link new narratives with existing logics of organizing and collaboration, they will gain legitimacy and is more likely to get a foothold in the organization.

This theory section has described three narrative types when constructing policy in uncertain areas. The three narrative types outlined above are analytically distinct but empirically overlapping. Sensemaking is hereby seen as the “backdrop”—the visionary and general process of making sense of uncertainty. Agency construction and anchoring are seen as two more concrete ways of how narratives are employed either by (1) outlining roles and mobilizing stakeholders, structuring who is to do what in specific policy efforts and (2) using narratives to describe uncertainties as “a case of” an already existing overarching policy area which outlines and delegate’s specific organizational mandate. Figure 1 outlines the novel conceptual apparatus employed in the empirical analysis.

To sum up, when political organizations engage with new and uncertain contexts or issues it is expected that the policy needs to contain all three aspects of both broad and imaginative sense-making, specific agency construction, as well as narrative anchoring. For example, if political organizations purely employ overarching sense-making narratives, the policy may be expected

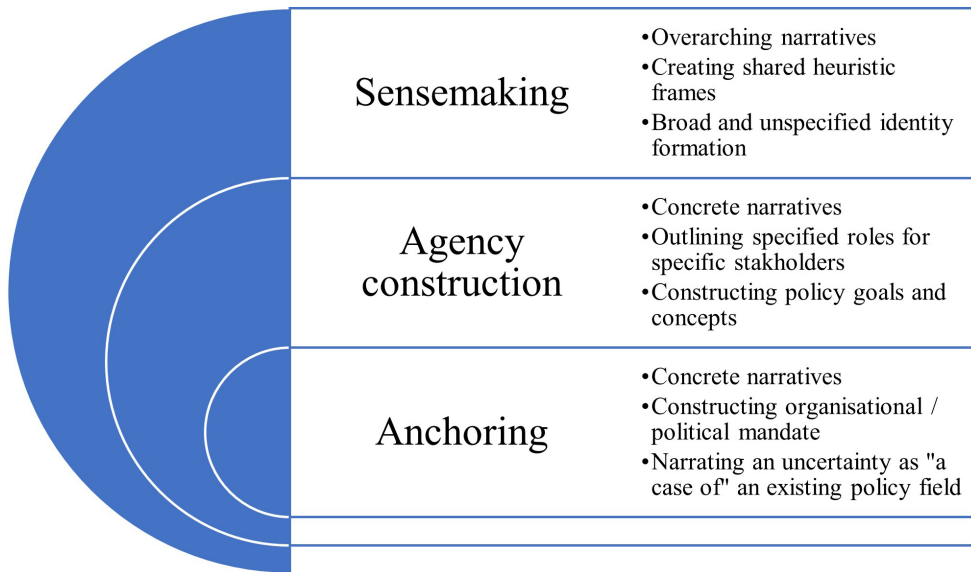


FIGURE 1 The three narrative types

to become decoupled by stakeholders due to it being too unspecified. On the contrary, if a policy simply constructs specific agency toward concepts and stakeholders and anchors an uncertainty within pre-existing routines without explaining the overall *why*, internal and external stakeholders may not be convinced that it is relevant to engage in specific practices. Therefore overarching sensemaking is also essential for policy to be successful within uncertain contexts. Given that organizations both have a need to reduce uncertainty as well as to construct agency and delegate authority—all these three aspects are expected to be present for a policy to provide accurate guidance for internal and external stakeholders within uncertain contexts.

## METHODOLOGY

This section outlines the methodological considerations, the more concrete operationalization of the theoretical framework and describes the overall process of data gathering, data analysis, as well as a description of the research context.

### Description of the case: The European Commission's AI policy

There are several important reasons for why the study of the AI policy within the European Commission is relevant. One main empirical reason is the fact that the Commission is first out globally with presenting an actual proposal on AI regulation (Meltzer & Tielmanns, 2022). As the article is interested in how political organizations deal with new and uncertain policy issues, The AI policy of the Commission therefore makes for a highly relevant contemporary object of study. The Commission has also shown to influence the general direction of AI policies of member states (af Malmberg & Trondal, 2021). It is also increasingly active in shaping global regulation for digital markets in international fora (Brattberg et al., 2020). Recent policy changes in AI are also typical for policy processes on emerging technologies in the EU (Justo-Hanani, 2022; Justo-Hanani



& Dayan, 2015). Furthermore, considering the Commission as a generic form of governmental administration (see Balint et al., 2008) could suggest that similar dynamics found in the case at hand may be present in similar political administrations. This is however an empirical question which needs further research. The Commission's portfolios are formally structured through specialization of competencies, suggesting that depending what Directorate General (DG) AI policy will be anchored in will have the main ownership of the AI issue. This would most likely also have consequences for AI policymaking in Europe at large. As argued by Kassim (2013), the European Commission is one of the most powerful international administrations. It has major executive and enforcement responsibilities, plays a key role in managing the EU, has a monopoly in bringing forward proposals in most areas of EU legislation, but the Commission's power also extends far beyond Brussels. It influences the domestic policies of the EU member states, has consequences for international regulation, bilateral and multilateral international negotiations, and relations between Europe and other regions of the globe (Kassim, 2013, p. 1).

The Commission set up a High-Level Expert Group on Artificial Intelligence (AIHLEG) in conjunction with the presentation of their communication in 2018 which guided the Commission in the policymaking effort. Not at least by providing the formal definition of AI:

Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans<sup>3</sup> that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information, derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analysing how the environment is affected by their previous actions.

As a scientific discipline, AI includes several approaches and techniques, such as machine learning (of which deep learning and reinforcement learning are specific examples), machine reasoning (which includes planning, scheduling, knowledge representation and reasoning, search, and optimization), and robotics (which includes control, perception, sensors and actuators, as well as the integration of all other techniques into cyber-physical systems).

(AIHLEG, 2019c)

The AIHLEG, tasked with steering the EU AI Alliance (a broad multi stakeholder forum for policy learning) consisted of 52 AI experts ranging from academia, NGOs and former public servants. The AIHLEG was set up with the dual task of delivering policy proposals directed both toward the Commission's own effort but also to guide member-states toward the process of establishing and coordinating AI policy (EC, 2022a, 2022b). Because the AIHLEG provided policy guidance to the Commission in this policy area, two of their reports are included in the data analysis (see Table 1).

## Selection of data and limitations

The European Commission has since 2018 released 14 policy documents, covering different aspects of AI policy (EC, 2022c). This number includes the production of policy documents from the Commission's High level expert group on AI (AIHLEG) as well as specific safety and liability

TABLE 1 Corpus of policy documents (sorted by date of release)

Name	Issuer	Year	Pages	References to AI <sup>a</sup>
<i>Communication: Artificial Intelligence for Europe</i>	The European Commission	2018a	20	247
<i>Coordinated plan on Artificial Intelligence</i>	The European Commission	2018b	23	271
<i>Ethics guidelines for trustworthy AI</i>	The European Commission High Level Expert Group on Artificial Intelligence	2019b	41	612
<i>Policy and investment recommendations for Trustworthy AI</i>	The European Commission High Level Expert Group on Artificial Intelligence	2019a	52	625
<i>Communication: Building trust in human-centric Artificial Intelligence</i>	The European Commission	2019	11	143
<i>White paper: On Artificial Intelligence—A European approach to excellence and trust</i>	The European Commission	2020	27	316
<i>Communication: Fostering a European approach to Artificial Intelligence</i>	The European Commission	2021a	10	152
<i>Review of coordinated plan on Artificial Intelligence</i>	The European Commission	2021b	66	1060
<i>Impact assessment accompanying the proposal for a regulation of the European Parliament and of the council laying down harmonized rules on Artificial Intelligence (Artificial Intelligence act) and amending certain union legislative acts</i>	The European Commission	2021c	96	1348
<i>Proposal for a regulation of the European Parliament and of the council laying down harmonized rules on Artificial Intelligence (Artificial Intelligence act) and amending certain union legislative acts</i>	The European Commission	2021d	108 (16)	849

<sup>a</sup>Based on Nvivo word search.

reports. Because the paper is aimed at understanding the broader strokes of the overall policy-making, the selection of policy documents was based on documents which address these issues from an overarching view. The paper has not considered the technical and judicial aspects per se. Policy documents cover a wider array of different narrative genres. For example, the justification for the AI proposal is analyzed but the actual judicial text is left out of the analysis, as it is strictly a judicial text. Including this in the empirical analysis would therefore possibly have skewed the analysis, not only in terms of the sheer vastness of the actual policy content, but also because the theoretical framework is not addressed at covering that specific kind of policy. Table 1 outlines the total of 10 policy documents analyzed.

## Coding and analysis in Nvivo

The 10 policy documents selected were uploaded into the Nvivo 12 software. In order to focus more concretely on how the policy documents narrate AI per se, a word search was conducted to focus on the specific instances in the policy documents containing AI. The following search string was used: <“AI”, “artificial intelligence”>. This broad search generated 5263 instances in which the policy documents mention either the “artificial intelligence” or the abbreviation “AI”.

In the next step, all the 5263 instances were reviewed and manually coded to fit in the three deductively defined categories *sensemaking*, *agency construction*, and *anchoring*. When coding manually, it was found that a substantial part of the 5263 instances were non-pertinent for analysis. Exclusion criteria in the coding process were part of hyperlink, part of reference, part of heading or title, or just not fitting the narrative definition employed in the paper. In total, 670 narratives were coded as relevant for the analysis. Nodes include at minimum a sentence and maximum a paragraph and oftentimes include multiple mentions of the search word. This strategy was employed for two reasons; to specifically extract the narratives focused on how AI is narrated and therefore relevant for the analysis, and to focus the qualitative analysis more specifically from a vast collection of policy documents ranging 362 pages.

## Qualitative analysis of narratives

The qualitative analysis employed here is based on hermeneutical principles of facilitating a meta-level understanding of the text (Czarniawska, 2004). Guided by White (1987), the analysis aims to uncover how AI is “emplotted”—that is how the Commission conveys meaning through binding concepts, values and actors together in policy narratives. This is a research strategy focus on zooming in on linguistic micro processes and textual features of the policy texts inspired by Vaara et al. (2010) putting focus on *how* purpose, legitimation, and agency are sewn together to construct textual agency through a pre grounded and theoretically informed interpretation of the texts (Bevir & Rhodes, 2002; Cooren, 2004; Hacking, 1999; van Leeuwen, 2008).

The narrative analysis conducted in this study is therefore rooted in the theoretical model above and draws on heavily on critical discourse studies (Fairclough, 2003; van Leeuwen, 2008) and aims at lifting out specific instances of the policy documents which both examine how the pre-grounded categories sensemaking, agency construction, and anchoring are constructed and how they are sewn together. Policy documents are therefore read deductively, with a pre-grounded understanding of how policy documents use these three specific types of narratives. This is how the theoretical framework is tested against the empirical data. It should be noted that a vast amount of differing narrative analyses exists and that depending on the theoretical underpinnings, other aspects of the policy documents may be brought to the fore. The main reason however to employ this technique is to unearth nuances and variation in a larger policy corpus to examine how a policy discourse around AI is constructed.

## EMPIRICAL ANALYSIS

The empirical analysis is divided into two parts. The first one is based on descriptive statistics which aims to show an overview of the number of narratives within the corpus generally, across policy documents and across years. The second part of the empirical analysis aims to go deeper

into the actual content of the policy analysis through describing the different categories closer, provide some descriptive content and showcase main findings from the coding.

## Overall policy content analysis

The empirical analysis confirms that narrative categories suggested in the theoretical framework are found within all the studied policy documents. This means that the European Commission utilizes all the three different narrative aspects or genres proposed. The proposed narrative categories are also somewhat empirically overlapping. They are mutually reinforcing aspects relevant for the Commission to narrate AI as a novel policy area. For example, a paragraph might be coded as sensemaking may incorporate some aspects of agency construction and anchoring. For example, the excerpt below suggests how the relation between beneficiaries of public sector support and authorities may improve due to AI; both suggest a future-oriented vision for the relationship between authorities and beneficiaries; at the same time, it implicitly advocates for the construction of a new role between the two, which could be considered a case of agency construction.

For beneficiaries of public support, AI-enabled decision can simplify the relationship between authorities and beneficiaries through the integration of wider public interest or regulatory considerations in daily decision-making through targeted communication, behavioural nudges etc.

(EC, 2018b, p. 18)

Studying the categorizations by year, it is found that documents generally encompass narrative fragments of all the proposed narrative categories across the policy process, while a certain extent of variation is present. Some years are more leaning toward the purpose of anchoring, making sense or construction of agency. These mechanisms are generally widespread in all the policy documents. An interesting finding is that the beginning of the policy process sees a larger extent of narratives for overall sensemaking and visionary statements. Toward the end of the policy process, it is anchoring and agency construction categories which dominate the policy documents. What this suggests is that through the studied period from 2018 to 2021 the Commission employs these narrative strategies differently. One suggestion is that the Commission puts more emphasis on making sense, setting agenda, and sketching out the vision within the proposed policy in the beginning of the policy process, and more concretely outlines agency and delegates organizational mandate toward the end of the policy process, especially in 2021. Figure 2 shows the Narrative categories by year, below.

Going more into detail in the empirical analysis on the document level, we can see that there is consistent variation between the documents. This is partly explained by the variation in number of pages in different documents, but some categories are more or less frequent within the documents. What stands out as more or less clear cases of agency construction discourse are the *Policy and investment recommendations* (2019), *The review of the coordinated plan* (2021), and the *Impact assessment* (2021). When it comes to anchoring, the documents in 2021 have a slightly higher frequency of these kinds of narratives. Figure 3 shows narrative categories by policy documents, seen below.

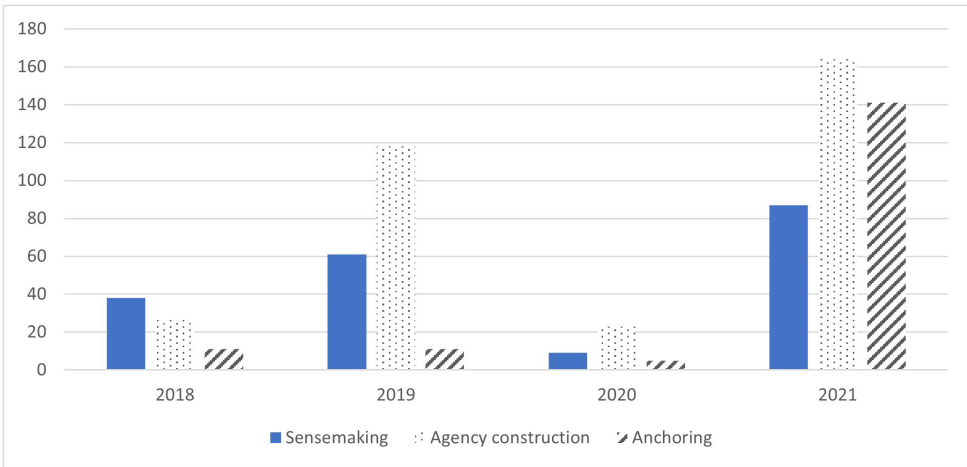


FIGURE 2 Narrative categories by year

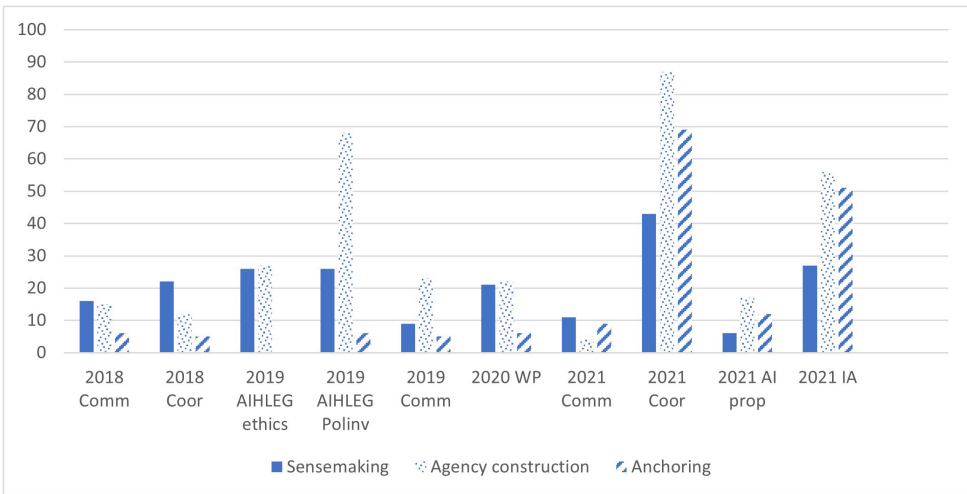


FIGURE 3 Narrative categories by policy documents

## Qualitative narrative analysis

In the section below, the qualitative analysis of the Commissions AI narratives will be outlined along with quotes from the policy texts.

### Sensemaking

The first thing to conclude is that sense-making narratives are found all across the policy corpus. This shows that the Commission has consistently employed narratives in order to make sense about AI as an uncertainty. Although not explicitly using the concept of uncertainty, the Commission often narrates AI in a future-oriented and highly technology optimistic manner. This can be observed in the following excerpts:



Beyond making our lives easier, AI is helping us to solve some of the world's biggest challenges: from treating chronic diseases or reducing fatality rates in traffic accidents to fighting climate change or anticipating cybersecurity threats [...] Like the steam engine or electricity in the past, AI is transforming our world, our society and our industry. Growth in computing power, availability of data and progress in algorithms have turned AI into one of the most strategic technologies of the 21st century. The stakes could not be higher.

(EC, 2018a)

Narratives such as the one above are clear cases of a construction of an overall heuristic frame regarding the contemporary AI development. The narrative suggests the technology is transformative toward all societal sectors, that this technological development is inevitable, it creates a space for policy action in this policy area without stating any specific actors which should engage in specific practices. The reference to the steam engine and electricity suggests that AI is a technology which is on par with those highly transformative innovations which drove earlier industrial revolutions.

We believe that AI has the potential to significantly transform society. AI is not an end in itself, but rather a promising means to increase human flourishing, thereby enhancing individual and societal well-being and the common good, as well as bringing progress and innovation. [...] In particular, AI systems can help to facilitate the achievement of the UN's Sustainable Development Goals, such as promoting gender balance and tackling climate change, rationalising our use of natural resources, enhancing our health, mobility and production processes, and supporting how we monitor progress against sustainability and social cohesion indicators.

(AIHLEG, 2019a)

This section describes AI as a technology which will lead to increasing human flourishing and a general trend to improve society across sectors. In the same way, the narrative has a clear technologically optimistic framing and establishes urgency and actorness toward AI as a concept without constructing specific agency toward specific stakeholders. What is clear is that the Commission narrates AI technology as highly disruptive on a societal level—that is not just focusing on one sector but across society. Another example of this kind of visionary narration is showed in the following excerpt in the White Paper, see below;

Artificial Intelligence is developing fast. It will change our lives by improving health-care (e.g., making diagnosis more precise, enabling better prevention of diseases), increasing the efficiency of farming, contributing to climate change mitigation and adaptation, improving the efficiency of production systems through predictive maintenance, increasing the security of Europeans, and in many other ways that we can only begin to imagine.

(EC, 2020)

This is another example of how the Commission in policy text utilizes narratives which are normatively positive toward technological progress in general and uses it to frame the development of AI as something which needs further attention and further action.

Another central feature of the Commission's agency construction narratives is how the Commission narrates the potential harms of AI through narrating them as risks rather than uncertain development. In the excerpt below from the White paper (EC, 2020) the Commission clumps a bunch of potential harmful AI practices together and creates a narrative which suggests that the current policy effort has the potential to mitigate those risks. It is hereby also important to note the way which the Commission's narrative reduces uncertainty (which is not measurable in accordance with the definition used in this paper) to the notion of risk (which is measurable).

While AI can do much good, including by making products and processes safer, it can also do harm. This harm might be both material (safety and health of individuals, including loss of life, damage to property) and immaterial (loss of privacy, limitations to the right of freedom of expression, human dignity, discrimination for instance in access to employment), and can relate to a wide variety of risks. A regulatory framework should concentrate on how to minimise the various risks of potential harm, in particular the most significant ones.

(EC, 2020, p. 10)

Within the different policy documents, the overarching AI narrative which creates heuristic frames and makes sense of AI developments is that AI is a hugely disruptive technology and a process which is ongoing and inevitable. A common theme is that the disruptive consequences of AI technology will have broad consequences for all areas of society. Due to this disruptive change, there is a need for coordinate action at the European level. According to the disruptive framing, all different sectors have roles to play in this transformation and through policy coordination, scaled benefits can be achieved. Stakeholders are thereby encouraged to “reap the benefits of”, “harness” and make the best of the opportunities created by this disruptive technology, while some of the more uncertain developments are narrated as risks which can be mitigated through the proposed policy measures.

## Agency construction

The Commission's narratives also construct agency toward specific practices, concepts, or specific actors by narrating them necessary for good AI development. Agency construction is also found across the whole of the Commission's policymaking process. One way that agency construction is facilitated is through straight up telling specific actors what to do in the face of this technological disruption. A case of this is the following:

By mid-2019 all Member States are encouraged to put in place—and share with other Member States and the Commission—national AI strategies or programmes or add AI dimensions in other relevant strategies and programmes outlining investment levels and implementation measures, taking into account this coordinated plan. The exact form, contents and governance of the national AI strategies will be up to each Member State to decide based on national characteristics.

(EC, 2018b, p. 5)

Even though it is a rather broad application, the Commission hereby constructs agency by encouraging Member States to act in a certain way; establish AI strategies and take inspiration from the Commission document. The Commission leaves room for differentiation on the Member State level, as long as the roots are established in the European Commission coordinated plan. What

is assumed here in a sense is also that “AI strategies” broadly is a certain practice which certain actors (Member States) should engage in.

It is also found that the Commission utilizes the concept of “Trustworthy AI” which is something that organizations and stakeholders need to pursue. This is a concept originally developed by the AIHLEG (AILEG 2019a). This gives agency and sets standards for actors which are expected to coordinate policy toward this goal. In further constructing agency toward this technology there are narratives which point toward the uncertainty of the future and the need to trust emerging technologies such as AI. This is elaborated upon within the White Paper:

As digital technology becomes an ever more central part of every aspect of people's lives, people should be able to trust it. Trustworthiness is also a prerequisite for its uptake. This is a chance for Europe, given its strong attachment to values and the rule of law as well as its proven capacity to build safe, reliable and sophisticated products and services from aeronautics to energy, automotive and medical equipment.

(EC, 2020, p. 1)

This is a case of tautological self-authorization since a policy concept—Trustworthy AI—is created and reinforced with narratives. The concept Trustworthy AI is narrated as central to the European AI efforts. This is a way for the Commission to establish policy focus; trustworthiness is a prerequisite for AI uptake, and then it is said that this is what EU policy coordination need in order to be successful. As trustworthiness is established as a policy goal, it is an establishment of discursive authority. This opens up for an increasing amount of narratives continues to explain why it needs to be achieved or why it should be the centre of the policy effort. The policy narrative establishes its own authority and importance by referencing itself as a solution. This is how discursive agency is constructed through self-authorization. This is one way how agency is constructed by ascribing certain traits toward certain concepts and activities within the policy effort. Trustworthy AI is a central piece of the policy effort and appears in the title of four out of the 10 analyzed documents. Somehow the notion of trust is peculiar due to its centrality in the policy effort as it is stated as a key policy goal in the future development of AI technologies. In the White paper, the policy goal of trustworthy AI is central to the development of AI in Europe.

The key elements of a future regulatory framework for AI in Europe that will create a unique ‘ecosystem of trust’. To do so, it must ensure compliance with EU rules, including the rules protecting fundamental rights and consumers' rights, in particular for AI systems operated in the EU that pose a high risk. Building an ecosystem of trust is a policy objective in itself, and should give citizens the confidence to take up AI applications and give companies and public organisations the legal certainty to innovate using AI. The Commission strongly supports a human-centric approach based on the Communication on Building Trust in Human-Centric AI and will also take into account the input obtained during the piloting phase of the Ethics Guidelines prepared by the High-Level Expert Group on AI.

(EC, 2020, p. 3)

In establishing more concretely *how* this policy goal should be implemented, the AIHLEG suggests three broad categories which should guide the policy goal of Trustworthy AI; lawful, ethical, and robust. The policy goal creates agency in that it centralizes policy issues around a specific target at the European level and thereby creates structures and norms for stakeholders across sectors to act in harmony with the proposed approach. The AIHLEG policy

documents from 2019 both elaborates what it means and what needs to be done in order to achieve this goal (AIHLEG, 2019a), as well as draws on more concrete policy and investment recommendations (2019b).

In sum, grounded in disruptive sense-making narratives, a call for broad mobilization of stakeholders is suggested. The proposed AI policy constructs new roles for existing stakeholder, sets out specific actions, practices and coordination mechanisms which spurs stakeholders to act in specific ways. By emplotting certain concepts (such as Trustworthy AI, capacity building, broad economic investment) as necessary for AI development thereby making them desirable elements of organizational and political action. In addition, narratives expand roles for existing collaboration frameworks and actors through saying that for example Horizon Europe should prioritize and stimulate Research and Development of AI-related research activity. Also, it creates new organizational functions or bodies based on the need to coordinate the European AI agenda, such as the establishment of a European Artificial Intelligence Board (EC, 2021d, p. 3).

## Anchoring

Anchoring is seen as the narrative function of determining what a novel policy should be understood as “a case of”. Similar to sensemaking and agency construction narratives, anchoring narrative is also spread across the corpus. Anchoring is the way in which the policy text narrate AI into already existing modes of collaboration and lines of political mobilization. The following excerpt shows an example of how AI is seen as a key driver for industry, which will need to be developed within the context of the digital single market.

Industry, and in particular small and young companies, will need to be in a position to be aware and able to integrate these technologies in new products, services and related production processes and technologies, including by upskilling and reskilling their workforce. Standardisation will also be essential for the development of AI in the Digital Single Market, helping notably to ensure interoperability.

(EC, 2018b, p. 3)

The same market-focused narrative is present in the AIHLEG Policy and investment recommendations from 2019 shown in the following excerpt:

This more holistic vision lends itself to the creation of a European Single Market for Trustworthy AI, where Europe is in an exceptional position to put tailored policy and investment measures in place that can enable it to seize the benefits and capture the value of AI, while minimising and preventing its risks.”

(AIHLEG, 2019b, p. 7)

In this instance, AI is anchored with a focus on the single market, we can also see some of the future-oriented and visionary language which would suggest that this also is a case of overall sensemaking of AI. This excerpt also shows that the categories are empirically overlapping to an extent. The next excerpt also shows a case of this empirical overlap.

A major achievement in Europe over the last few decades has been the creation of the Single Market, which—as we move into the new economic and technological wave that is created by AI—must also focus on a Single European Market for AI.

This is a complex and multifaceted undertaking which includes the avoidance of market fragmentation [...] Establishing a level playing field for Trustworthy AI across Europe can benefit individuals and organisations by removing barriers to procure lawful, ethical and robust AI-enabled goods and services.

(AIHLEG, 2019b, pp. 47–48)

This is a case of how we can see overlapping sensemaking and anchoring process of making sense of the “overall picture”, while at the same time firmly anchoring AI policy within a specific field. We may also notice a slight change within narrating AI itself. In more clear cases of sense-making narratives, AI is narrated with agency to transform society, be good for all, create sustainability and human flourishing—that is, an independent variable. Within the instance above, AI is narrated as an independent variable depending on the integrated functioning of the free flow of goods and services within the single market. In the White paper released the year after (2020), the Commission makes an even stronger positional statement on this and concretely describes “home-grown” initiatives as a threat to legal certainty, citizenship trust and dynamic industry, seen below;

A common European approach to AI is necessary to reach sufficient scale and avoid the fragmentation of the single market. The introduction of national initiatives risks to endanger legal certainty, to weaken citizens' trust and to prevent the emergence of a dynamic European industry. (EC, 2020, p. 2)

A similar market-focused narrative is also present in the AI proposal from 2021.

The nature of AI, [...] entails that the objectives of this proposal can be better achieved at Union level to avoid a further fragmentation of the Single Market into potentially contradictory national frameworks preventing the free circulation of goods and services embedding AI. A solid European regulatory framework for trustworthy AI will also ensure a level playing field and protect all people, while strengthening Europe's competitiveness and industrial basis in AI. Only common action at Union level can also protect the Union's digital sovereignty and leverage its tools and regulatory powers to shape global rules and standards. (EC, 2021d, p. 6).

In summary, the narratives suggest that AI policy is anchored within the single market policy in the EU. While broad mobilization is encouraged, narrating it as a market-issue brings with it a specific form of organizational mandate as well as a specific form of competence as well as roles for both governments and stakeholders. We can also note the difference between how AI is narrated as an independent variable in sense-making narratives, and as a dependent variable in anchoring narratives.

## DISCUSSION

Drawing attention to *how* policy narratives are constructed is additionally a way to draw attention toward the processual nature of *political organizing*. This perspective goes *against the inevitability* of a certain result of a political process and beyond “power politics” and puts focus on the process of constructing policy (Hacking, 1999). By constructing a discourse which links purpose



and action together (van Leeuwen, 2008) this article shows how the European Commission creates policy in a novel area from initial visionary statements to concrete proposals. Studying policy narratives as building blocks for policy, allows us to understand contemporary political organizations as construction sites rather than timeless and stable entities (See Olsen, 2007; Trondal, 2010). Narratives reduce uncertainty and make action possible through creating shared expectations (Beckert, 2016; Beckert & Bronk, 2018), absorbs organizational uncertainty and constrains and enables both organizational-political action and identities (March & Olsen, 1989).

The article argues that narratives are key building blocks in the establishment of novel policy by (1) constructing broad overarching heuristic frames as a sense-making “backdrop”, (2) constructing new roles for stakeholders through describing what needs to be done and who should do it, and (3) narrating a policy issue as “a case of” an existing organizational structure and mode of collaboration is the ultimate narrative expression of organizational mandate. A key notion here is the role played by uncertainty. A great deal of policy narratives scholarship has considered narratives as strategically employable tools. This puts actors’ themselves front stage and it delimits the ideational power of narratives. This paper nuances such a stance by exploring the possibility of narratives to function on a more fundamental level—as *constructing* heuristics thereby framing interests, rather than narratives being *put to use* within pre-defined interest spheres.

As AI developments are increasingly becoming a part of global politics (Tinnirello, 2022), we can argue that the Commission has seen this policy effort as an urgent matter to set the European AI agenda and establishing itself as the focal point of the European AI policy effort. The Commission in all stages of narration argues for a coordinated European approach to AI, thereby declaring themselves the owner of the AI policy agenda as well as the organizational/institutional hub for European policy efforts. The need for raising the AI agenda at the EU level can be explained through what Natalie Smuha (2021) has described as the “race to AI regulation”, emphasizing how regulators across the world has put AI on top of their strategic agenda triggering a global competition for setting standards within AI regulation (Smuha, 2021; Ulnicane, 2022).

As the Commission has anchored AI policy as “a case of” EU single market policy, some specific modes of political mobilization should be expected to come to the fore. For example, the anchoring of AI policy within the single market strategy may reinforce a neoliberal “master narrative” within the European Union (Hay, 2004; Thatcher, 2013). Narrating AI as dependent on the functioning of the single market also establishes new urgency to pursue this EU single market policy, but also grants AI policy a legitimization through narrating it a case of one of the most central policies within the Union with arguably the largest organizational and institutional competence and organizational capacity. Further research on this could therefore employ a public/private toward narratives to explore what roles more concretely are suggested. Another potential area for further research is to apply the theoretical framework to other cases in which political organizations construct policy in uncertain contexts.

## CONCLUSIONS

In summary, we can conclude that the Commission has utilized narratives to make sense of AI as a disruptive and societally transformative technology—trying to mitigate risks and harness possibilities. The level of inevitable disruption present in the Commission’s sense-making narratives has legitimized a broad stakeholder mobilization across societal sectors. The Commission has used agency construction to mobilize existing institutions by narrating their relevance within

the emerging issue of AI and has created new organizational norms such as trustworthy AI as a policy goal, as well as suggested new organizational structures at the EU-level such as the European Artificial Intelligence Board. Lastly, the Commission has anchored AI toward the overarching policy of the European Single Market, displaying AI policy as “a case of” EU single market policy. This will inevitably have substantial consequences for how this policy area will develop within the context of EU policymaking at large, given the Commissions relative power over the European policy agenda (Kassim, 2013).

Overall, since the Commissions policy process contains all three different narrative building blocks, the paper concludes that the policymaking employs different types of narratives which mutually reinforce each other and constructs a policy response within the emerging technology of AI. Based on the findings, we cannot therefore brush off broad and visionary policy as mere buzzwords, but rather see how they are part of an intricate and dynamic policy-making process. The article therefore argues that political organizations which face uncertainties need to both engage with all these three types of policy narratives as well as tie them together to succeed to make sense, construct agency, and anchor novel policy approaches.

This article contributes to seeing narration of AI as a process and AI policy as a policy area which is in flux (Ulnicane & Erkkilä, [this issue](#)). As Ulnicane et al. (2021) finds, the concept and technology of AI posits policymakers with controversies which they try to “frame away” by diagnosing problems and offer solutions in a policy field which is highly in flux—“a boiling primeval soup” (cf. Kingdon, 2014). When AI is increasingly becoming part of the public policy vernacular, a wide-ranging heuristic umbrella is needed to understand its materialities and emerging discourses, including policy scripts and metrics (Erkkilä, [this issue](#)), traveling imaginaries, (Kim, [this issue](#)) as well as how automation translates into local contexts (Giest & Samuels, 2022) as how biased sorting mechanisms in AI artifacts and systems affects the materiality of politics (Ulnicane & Aden, [this issue](#); Winner, 1980). As a contribution to this special issue, this article contributes to this through examining how contemporary forms of political organizing take stock of such developments and translate imaginaries and scripts into concrete public policy with policy narratives as their principal building blocks. It shows how AI can be flexibly interpreted and used by policymakers to pursue a wide variety of both organizational and political goals and argues that the construction of such performative policy narratives directly influences the process of political organizing.

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