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Adopting social process tracing in applied linguistics: Lessons from an English-medium Instruction policy case study

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Despite English-medium instruction (EMI) being one of the fastest growing phenomena in global higher education, there is still little clarity about what triggers universities to implement it. This is partially due to a lack of tools in EMI research for the investigation of causal relationships. This paper showcases how a rigorous adoption of social process tracing (SPT) can prove an effective tool to investigate causality in areas of applied linguistics that focus on decision-making around language, such as EMI language policy. We utilize the Polytechnic of Milan court case as a case study to show (1) how SPT can be adopted by applied linguists in practice and (2) how, by foregrounding causality, it can unveil new relevant findings. In breaking down the steps of SPT implementation, we discuss some key tenets of the process tracing method and some potential challenges of its adoption by applied linguists. Results indicate that SPT has significant potential to support applied linguists in pushing research about real-life language policy decisions in novel directions.

Introduction

Applied linguistics has been considered an intrinsically interdisciplinary area of study by virtue of its continuous interface and overlap with other disciplines (e.g. Grabe 2002; Bradley 2024). This propensity seems to have been strengthened by the 'methodological turn' (Amini Farsani et al. 2021: 2) of the 2010s, which placed renewed emphasis on research practices and orientations. The desire for conceptual and methodological innovation has further increased the calls for inter-disciplinary exploration in various areas of applied linguistics research (e.g. Salnaia et al. 2021; Hiver et al. 2022; Hultgren et al. 2025). Nevertheless, epistemological and methodological differences can be difficult to reconcile between the various academic tribes, placing obstacles on the road to interdisciplinary research that require *ad hoc* discussion.

For example, while causality has been framed as an inherent concern of applied linguistics (Bouchard 2021), in much research focused on the linguistic outcomes of social change the investigation of causality is not pursued as a direct focus. Some have argued that this may be the result of prevailing philosophical and analytical orientations, as well as a lack of methodological tools (Thomas et al. 2024). As a possible solution, recent research has proposed the adoption of the method of process tracing (PT), already in use in psychology, policy studies and business studies, as a potential tool to support causality-centred investigations in areas of applied linguistics that have struggled to engage with it, including for example language policy and English-medium instruction (EMI) (Hultgren and Wilkinson 2022; Hultgren et al. 2023; Thomas et al. 2024). The method shows a broad range of applications; political scientists, for example, tend to adopt it to analyse social and political phenomena (e.g. the path between a political decision and its outcome), while psychologists typically use PT to investigate cognitive and psychological phenomena (e.g. tracing the process from thought to action, see Schulte-Mecklenbeck et al. 2017). These are also common areas of interest in various subfields of applied linguistics.

PT has seen a handful of applications in applied linguistics (arguably starting from Hiver and Al-Hoorie 2016); however, careful examination of the literature suggests the presence of some challenges in the adoption of the method, leading to unfavourable outcomes such as lack of clarity as to the processes investigated and weak (or absent) connections between causes and outcomes (see Thomas et al. 2024, for a comprehensive literature review). Furthermore, while PT is commonly referred to as one method, there are known differences in the way it has been used, in terms of both what is traced at the theoretical level and how the tracing is done empirically (Beach 2022). It is important, then, for researchers to ensure coherence between their ontological and epistemological positions (Kaas et al. 2024). In the present paper, we focus on social process tracing (SPT) as a variant of PT that encompasses the method's understanding of mechanisms, as well as an interpretivist focus on the social context and its meaning-making—which is in itself at the heart of many areas of applied linguistics.

Upon rigorous application, SPT appears to have great potential for the investigation of causal processes behind real-life decisions made about language. This article provides an illustration of how it can be used in practice to investigate the causal dynamics of language policy outcomes. Far from claiming a flawless or final understanding of the method, we offer an example of how SPT was adopted in the interdisciplinary research project *English as the Language-of-Education Mechanisms in Europe: New Transdisciplinary Approaches in Linguistics* (ELEMENTAL), showcasing the key steps in its implementation and its contribution towards a complete reconstruction of the process investigated. ELEMENTAL investigated the triggers for the increase of EMI at European universities, one of the most significant and hard-to-address research gaps in the field. The project's starting hypothesis of a causal connection between decentralizing initiatives in higher education (HE) governance and an increase in EMI was tested on various case studies (see Hultgren and Wilkinson 2022; Thomas et al. 2024; Yuksel et al. 2024a,b). In this paper, we focus on the adoption of SPT in a case study on Italian HE to display a real context application, from inception to full reconstruction of the causal process. By breaking down the proceedings step by step, we hope to offer a demonstration of our use of SPT in as simple and transparent terms as possible, which may facilitate further engagement with the method by applied linguists, ultimately leading to more complex understandings of decision-making processes about language. The paper addresses the following research questions: how can SPT be adopted in practice by applied linguists to investigate decisions made around language? What novel contribution can it offer?

Background

At their core, all variants of PT seek to draw causal inferences about various actions (and the entities performing them) to shed light on the workings of causal processes and, potentially, on the conditions under which they operate. PT typically operates qualitatively, within-case. Nevertheless, it can offer some generalizable contributions, in the shape of partially abstract

causal mechanisms (a terminology generally used interchangeably with the aforementioned 'causal processes') that can be recognized at work in different contexts. Once unveiled, the workings of the causal process can be recognized at work in other case studies as well. This is representative of a regularity-based understanding of the world. PT, however, does not imply a purely mechanistic worldview: while causal mechanisms are the focus of PT, they are considered processes connecting causes to outcomes, not causes themselves (Beach and Pedersen 2019).

A significant point of departure between different types of PT approaches lies in their conception of the relationship between the natural and social world. Kaas et al. (2024) argue that the majority of PT methods can be broadly considered positivist, as they tend to downplay the role played by the interaction of actors and their social context in the workings of the mechanism; this can be said to result into 'under-socialized' analyses (2), which may be of little interest for applied linguists. On the other hand, accounts which foreground the social context as the determinant structure in the actors' behaviours return 'over-socialized' analyses, which do not account for the causal drivers of the process (3). As a solution to these fallacies, the *Social* variant of *PT* (known as *SPT*) has recently been proposed (Kaas et al. 2024), which aims to make the contribution of the social context to the mechanism explicit, so that it can be evidenced, while also maintaining a language that accounts for the processual agentive component in a mechanism. In other words, SPT views interpretivist approaches to PT as supplemental to the more positivist ones, for a nuanced (and, as much as possible, accurate) reconstruction of causal processes. Epistemologically, SPT's positions about the interconnectedness of agents' motivations for action (and impacts of such action) are derived from critical realism; however, SPT diverges from critical realism in its view of mechanisms as observable and in its focus on evidencing the causal linkages between causes and outcomes. In both PT and SPT, the causal relationships between the different actions should not only be assumed but explicitly theorized to lead to 'observable' clues (Kaas et al. 2024).

Despite SPT's increased attention for the social component of processes, the PT method as a whole can still raise doubts among those social sciences and humanities scholars used to more interpretivist positions. In that sense, the idea that agents' motivations can be 'known' may in itself be questioned by some, who may perceive PT as a reductionist technique, excessively simplistic in its views of interaction and in its demarcations of processual change. Such differences in orientations could be traced back to core epistemological differences between disciplines: taking as an example the fields of governance and sociolinguistics (both relevant to the case study here discussed), it could be noted that while the first would typically seek its explanatory strategies in the frameworks of behaviouralist or systems theory, the latter would operate in terms of social constructionism, discourse, and language ideology (Hultgren 2023, drawing on Miller 2018). Some of these differences may be irreconcilable, and ultimately, we do not aim to express the superiority of one paradigm over the other. What should be noted—and may be of comfort to some—however, is that PT does not intrinsically shun the complexity of the real world; rather, it seeks to lay it out, as much as possible, for all to see. The method can—especially in its SPT variant—integrate interpretivist perspectives and complex realism views of causality that include a focus on agency in the social context and a dynamic understanding of reality (see e.g. Norman 2021; Van Meegdenburg 2023; Kaas et al. 2024). Additionally, PT relies heavily on the iteration between phases of theorization and empirical investigation, constantly putting the researcher's assumptions and hypotheses under scrutiny, precisely to ensure the robustness of the reconstructed causal process.

Overall, PT represents a detailed and transparent framework for the study of how particular actions are causally connected one to another, providing some clarity to often very complex outcomes. Its linear representation of causal mechanisms is a contribution towards that clarity and does not imply a linear understanding of reality, much like a painting does not imply a bidimensional understanding of a landscape. Similarly, while the chronological component is present in a reconstructed causal process, the generative source of a linkage between different parts of the process is not temporal, but causal (as also noted in Thomas et al. 2024); this can allow the modelling of technically non-linear processes (e.g. to include feedback loops as part of the process).

The emphasis on causality rather than on chronology represents perhaps the key difference between an account of events obtained from other methods and a PT-based reconstruction of a mechanism.

There are many areas in which the ability to investigate why certain decisions about language are made could be beneficial, and perhaps chiefly among these language policy. Every time there is interest in investigating what led to a particular real-life situation (i.e. when some process of action/interaction between people or entities seems connected to an outcome), the adoption of PT could be considered. Furthermore, in cases where particular effort to gain an understanding of the social context and of the *meaning* of actions is required to identify the causal process, SPT is likely to represent the most suitable variant of PT. SPT itself does not generate a simplistic account of observable processes: in addition to the investigation of observable traces, SPT probes at actors' perceptions of their reasons for acting in a certain way, as well as at how such actions are perceived by other actors who respond to them.

By relying on a constant feedback loop between theory and empirics, PT does not intrinsically direct the researcher towards existing theoretical frameworks in his/her discipline; this facilitates the breaching of disciplinary boundaries, bringing to light possible blind spots and pushing research forward in innovative directions, returning comprehensive and complex investigations. The ELEMENTAL project, for example, investigated the rise of EMI at European universities, shedding light on previously unexplored connections with a set of HE governance reforms implemented in Europe since the 1980s. In this instance, the adoption of PT (ELEMENTAL's case studies generally relied also on interpretivist positions and methods that set them close to SPT. Nonetheless, some of ELEMENTAL research predates the formalization of SPT as a PT variant achieved by Kaas et al. (2024), which has implications for the language adopted in such research.) pushed EMI research beyond the explanations previously put forward in the field, which typically foregrounded processes of internationalization and did not explicitly investigate causal relationships. Additionally, the PT analysis complemented and strengthened the quantitative findings of the project, which identified university autonomy as a predictor of EMI increase in public European universities (see Wingrove et al. 2025a). While the regression modelling adopted in the quantitative research easily lends itself to generalization, it can only speculate about the mechanism at play. PT, instead, is able to unveil such a mechanism and illustrate its workings, by identifying the causal linkages that lead to the investigated outcome and shedding light on their role in the entire causal process. Having acknowledged the general contribution that PT can make to certain areas of applied linguistics, in the rest of this paper, we will often foreground SPT as a tool that, by factoring in not only the actions performed by actors but also their meaning in the given context, provided a way to tackle effectively the complex case of Italian HE. The breakdown of our procedures in the coming sections will consistently show that a focus on the social environment in which the actors operated was key to reconstructing the investigated mechanism. In the next section, we start by introducing the case study and providing relevant background information about the context.

The case study

The case of Italian HE was originally selected because it appeared relevant for the testing of the ELEMENTAL project's underlying hypothesis, namely that decentralized university governance approaches in Europe, such as steering-at-a-distance (An approach characterized by the increase of institutional autonomy, counterbalanced by the implementation of accountability instruments such as performance indicators. In this approach, the government is only one among many actors influencing institutional decision-making (Kickert 1995).), trigger, perhaps unwittingly, the increase of EMI (see Hultgren et al. 2023; Wingrove et al. 2025a). The findings of the project exceed the scope of this paper, which focuses instead on showcasing the contribution of SPT in addressing questions of language policy and practices, relying on a specific real-life case study.

Italian HE and EMI

Research about European EMI has often been conducted in early adopter countries (chiefly Scandinavian countries like Sweden or Denmark) which, despite different histories of HE governance, present various contextual similarities (e.g. similar policy features and values, as well as a tendency of HE policies to be 'rather insulated from party politics', Bleiklie and Michelsen 2019: 195). However, this is unlikely to be representative of all European countries that engage in EMI. Italy, for example, is part of a different governance tradition than Scandinavian countries, and it is a late adopter of EMI. Additionally, the country has a very long history of HE, in fact, including the oldest university in Europe. Thus, this context lends itself particularly well to offer different, perhaps complementary, insights into the trajectory of EMI in Europe.

In Italy, EMI has grown in the last few decades but also faced some resistance. The country was involved in the 1999 Bologna process, and both recent institutional and national policies framed internationalization as a goal for Italian universities, although often leaving the reasons for such objective implicit and language policy implications somewhat vague (e.g. Zuaro et al. 2022). In terms of public governance, Italy had its last major reform of HE in 2010 (with law 240/2010, often referenced as 'Gelmini law'). The reform generated some controversy, particularly for the reduction of public funding towards education and for the 'managerial' view of HE that transpired from it. It, nonetheless, set as an objective the strengthening of internationalization 'also' (art. 2.2.l) through the use of foreign languages in a variety of activities. Regarding EMI, in 2017 Italy appeared to have increased its number of EMI courses, but also to have 'reached a certain saturation level (much lower than in Nordic countries)' (Broggini and Costa 2017: 256). Recent data also show that, while EMI in Italy registered a 25 per cent increase in the last decade, currently 50 per cent of Italian HE institutions offer EMI, characterizing the country as a medium-EMI context by European standards (Wingrove et al. 2025b). It should also be noted that Italy is one of the few countries in Europe where the legitimacy of EMI has been discussed in court, as a result of a bottom-up action from the academic staff of a public university, the Polytechnic University of Milan (also known as Polimi).

The court case stemmed from the refusal of part of Polimi's academic staff to adhere to a new institutional policy, promoted by the then rector and approved by the academic senate, which aimed for all MA and PhD courses at the university to be taught exclusively via EMI. In 2012, 100 academics sued their institution, resulting in a court case spanning six years and involving three different courts. Eventually, the Council of State found the policy illegitimate on the basis of the country's broader legal framework, essentially finding degree programmes that completely exclude the national language (i.e. Italian) from education unconstitutional. While this cannot be said to have wiped EMI out of Italian HE—which was never the verdict's intention—it does assert some limits to its implementation. It is certainly difficult to trace the effects of the ban on exclusive EMI at Italian universities, particularly because different institutions will have implemented different strategies to adjust to it. Equally difficult has also been identifying clear reasons that led to this outcome in the landscape of European HE. Various studies from applied linguistics scholars reported the events of this litigation, discussing the legal principles behind the verdicts and the perspectives of different stakeholders (e.g. Molino and Campagna 2014; Pulcini and Campagna 2015; Santulli 2015; Murphy and Zuaro 2021; Zuaro et al. 2024). Nevertheless, available research has not connected this particular event with the broader context of the changes that Italian HE governance was undergoing at that time. Additionally, while the outcome of the court case benefited from much analysis in the literature, virtually no research is available about the mechanism that led to the promotion of the EMI-only policy in the first place (but see, for some insight into the ideological positions pro and against the policy, Zuaro et al. 2024).

The adoption of SPT can make a unique contribution to the study of the Polimi court case by providing useful tools to shed light on the causal process of this episode. Additionally, as a contribution to language policy and EMI research in general, the Italian context offers an opportunity to investigate the relationship between public governance and EMI implementation in a complex, non-linear, case. As mentioned above, ELEMENTAL's original hypothesis posited a positive

relationship between decentralizing forms of public management, which rely on universities' autonomy to steer them towards certain objectives via incentives rather than tight regulation, and the increase of EMI. The Italian case study potentially challenged this hypothesis by presenting a situation where, in a context of a HE reform that had arguably stimulated EMI, an intervention of the central authority had proceeded to limit its expansion. In the next section, we introduce our data, as well as the methods of data collection and evaluation. It is, however, important to stress that our effort to describe the information that we had and the datasets that we drew from for this case study in a clear fashion constrains us to a rather linear and neat presentation, that does not translate the abductive component of SPT. In reality, during data collection and analysis, the theorizing of the causal process was constantly informed by newly acquired evidence; similarly, developments in theorization sought validity in additional empirical evidence. This process was also in continuous interface with our investigation of the social context and of the actors' perceptions of the meaning of actions.

Data

In all PT variants, data selection is typically non-random and theory-driven, in that evidence is sought in order for the hypothesized theories to be tested (Beach and Pedersen 2019). Additionally, certain uses of PT (e.g. Beach and Pedersen 2019) adopt different nomenclature for data before and after they are assessed by the researcher. This can be useful to make the distinction between general information about a series of events and information that actually points to the workings of the theorized causal process. All information encountered (and collected) by the researcher can be considered an *observation*; however, only observations that carry inferential value are considered *evidence* (see also Waldner 2015). The process of data evaluation relies on a Bayesian logic of inference: evidence is confirming of the theory when there are not plausible alternative explanations for finding the evidence. Here, too, knowledge of the context is crucial to inform the researcher's judgement of the likeliness of a piece of evidence.

The non-random approach to data collection can represent a limitation of PT, potentially leading to selection biases. However, in PT, any observation ultimately needs to be logically justified in the context of the causal process. Additionally, there are various strategies that can help mitigate the risk of bias or incorrect source evaluation. For example, evidence about a case should include sources that are independent of one another, since it would be unlikely for independent sources to return the same evidence, unless it was relevant (Howson and Urbach 2006). Additionally, the potential *reliability* of data sources (which is connected to non-deliberate bias, such as recall issues) can be evaluated against several criteria that are familiar to historians. Among these, how informed the source is and how close to the actual events: participants who have immediate knowledge of events can be considered more reliable than sources several steps removed. Sources that are recorded close to events in time are more reliable because they can be expected to remember events, whereas interviews many years after events run into problems related to human memory. *Validity* problems (connected to deliberate bias) increase when sources have motivations to distort accounts, for example, to protect participants in events.

To address these challenges, PT encourages the cross-checking of accounts from multiple sources. Additionally, SPT approaches this issue by also making a specific investigative focus of the source's perceptions of the events and of their positioning in the context. Moreover, evidence evaluation in PT involves assessing whether there are plausible alternative explanations for finding a given piece of evidence. Unless alternative explanations can be ruled out, the researcher should not claim that the evidence provides strong support for the theory. Overall, the mindset adopted in empirical research in any variant of PT should be very self-critical about the evidentiary value of found evidence and one of cumulation: the discovery of new evidence should be welcome, as conducive to a better understanding of the mechanisms investigated.

In our case study, we faced the disadvantage that the end of the court case dated over five years prior to our data collection. We, however, managed to counterbalance this challenge by securing

Table 1. Evaluation of various data sources.

	Official documents	Participants	Press/public
Informed	–	X	–
Close	X	X	–
Reliable	X	–	–
Honest	X	–	–
Cross-checkable	X	X	X

several primary sources (in the shape of individuals who had been directly involved in the events investigated, as well as official documents published specifically in relation to those events). We took care to gather information from both sides of the controversy, to cross-reference the recollections of our participants and establish their potential independence as sources. Additionally, we obtained the participation of three elite participants who directly shaped some of the key moments in the process investigated. In agreement with SPT's epistemological positions, we sought to gain rich data as to the ideological positions of our participants and of their interpretations of particular events, which we analysed via interpretive approaches such as qualitative discourse analyses. Given the amount of time since the events transpired, we also sought to cross-check interview accounts with accounts in documents produced during the events.

It seems important to stress here that the terms of ethical participation in PT can vary from what may be considered common in applied linguistics, particularly when involving so-called elite participants. Elite participants are individuals with key roles or knowledge in a particular process (Beach and Pedersen 2019). Their eliteness is determined by their 'occupying a position that provides them with access and control, or [their] possessing resources that advantage them' (Khan 2012: 362). If the elite participants recruited happen to be publicly exposed figures, which is not unlikely when policy decisions are investigated, maintaining their anonymity can be impossible and/or detrimental to the research. In our case, the participants' names had been made public years prior in official documents as well as interviews to the press; some of them had held official positions of responsibility that needed to be disclosed in the research but which, together with the chronology of the events, inevitably made their identities clear. Informed of these complexities, some of these participants decided to waive their right to anonymity to participate in the study. After recruitment via purposeful sampling (Creswell and Plano-Clark 2011), our participants joined one-on-one semi-structured interviews, which allowed them to expand freely on relevant points. The interviews were all conducted in Italian, keeping in mind the complexity tied to L2 interviews as a data generation method (see Welch and Piekkari 2006; Zhang and Guttormsen 2016). Official law texts and documents from the court case were publicly available online and were all analysed in the original versions. Interviews and statements reported by the media at various points during the events of the court case were initially considered as potential data sources but, scoring quite low on desirable features upon evaluation (see Table 1, see also Beach and Pedersen 2019), they were excluded from the study.

Data collection stopped after saturation appeared to have been reached, i.e. when no new information about which actors had played a role in the case (or their motivations for doing so) appeared to surface from either participants' interviews or document analysis. In its final composition, the dataset included interviews with the rector of the Polytechnic who had promoted the EMI-only policy, some of the lecturers who had petitioned in court against the policy (one for each of the four departments that had hosted petitioners), one of the two lawyers who had represented the lecturers (namely, the one who was also employed at the Polytechnic) and a ministerial policy maker with relevant knowledge about the case; additionally, documentary evidence included the text of the Italian constitution and of the Gelmini reform (law 240/2010), the verdict

Table 2. Summary of initial mapping out of potential actors and sources of evidence.
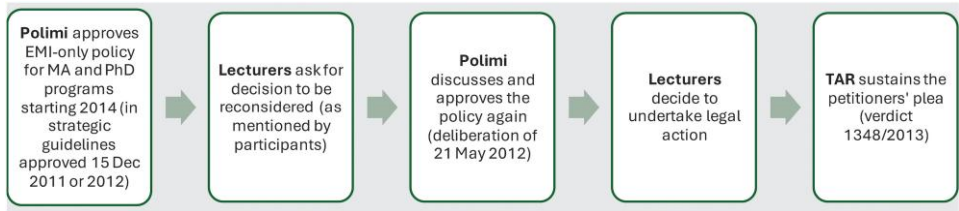
Agents/entities	Fingerprints
Rector/academic senate	Rulings/verdicts
Petitioning lecturers	Deliberations
Local administrative court	Appeals
Ministry of education	Laws
Council of state	Ordinances
Constitutional court	Interviews/press statements

of the TAR regional court (1348/2013), the verdict of the Constitutional court (42/2017) and the ordinance of the Council of State (242/2015). While this was the evidence that was considered to hold sound inferential value, knowledge of previous literature about the case and public governance system, as well as of other relevant laws, also contributed significantly to our general understanding of the events. Furthermore, as previously mentioned, our analysis of the evidence was constantly accompanied by a study of the social dimension of the actions reported.

Tracing the process

PT is often likened to detective work, as it relies on evidence and probabilistic reasoning to disregard the impossible and test whatever remains. In our case, we had a fairly defined outcome (i.e. the ban on EMI-only degree programmes), as well as some guidance from previous research as to how the events had played out chronologically. Thus, we started by mapping out all of the agents and entities that appeared to have had significant involvement in the process. Additionally, we identified the types of documentary evidence that we believed we would need access to, as fingerprints of the potential process (see Table 2). The outcome of the ban was placed as the ending temporal bound for the case. An initial round of empirical work was conducted to achieve access to relevant documents and participants, as well as to try and position the key nodes of the events in relation to one another.

At this stage, the PT method encourages the formulation of a hypothesis that provides a simplified causal account of the process, or the adoption of an existing theory in the literature to test. In our case, we presumed a breakdown of the theory proposed in ELEMENTAL (namely, the shift to a steering-at-a-distance governance regime resulting in an increase of EMI) due to the different behaviour of one of the entities, or to a key contextual difference. Additionally, we started tentatively connecting single actions into episodes, i.e. simplifications of the key causal dynamics, which can be considered *typical* of a given mechanism (A comparison to the romcom genre can perhaps help explain the logic behind key episodes: while the details of each romcom will tend to vary, there are key plot points that can be expected to make an appearance. The love interests meeting, falling in love, facing a fall out, reconciling, are all usual occurrences that come to represent typical episodes.) (Kaas et al. 2024; Raimondo and Beach 2024). The process of retracing the chronological connections of different parts of the mechanism showed us that we could not always establish why certain entities had behaved in a certain way, which gave us insight into areas that needed further empirical exploration and raised awareness of gaps in our own expertise. As a result, we continued our rounds of data collection specifically seeking out those participants who might help us understand certain episodes; we also branched out of applied linguistics to explore public governance literature and seek assistance from experts of the context investigated. As Kaas et al. (2024) note is often the case at this point, we had no clear perception of which episodes of this series of events would be key to the mechanism.

Figure 1. Detail from the initial chronology of events.

We initially positioned the approval of the EMI-only policy by the Polimi as a starting bound of the process; as will be shown, this would later be edited, as a result of theoretical revisions. Additionally, we started mapping the various events that had taken place since the approval, in a typical **entity** *performs action* formulation (e.g. **Lecturers** *ask for decision to be reconsidered*, **Lecturers** *decide to undertake legal action*; see Fig. 1).

However, the initial mapping shown in Fig. 1 still resembles more an account of events, than a hypothesized causal process: the graph details activities, but not why an activity leads another actor to do something in response; in other words, the causal linkages are not explicit. Furthermore, the evidence for the actions described is incomplete or uncertain, and the level of detail is very high and case-specific.

Subsequent rounds of data collection progressively informed our general knowledge of the events; however, as mentioned in the Data section, not all observations made during fieldwork turn out to be evidence of the causal process. One example of this in our case study is the involvement of the public in the debate. Our observations showed that both the press and some academic circles expressed polarized opinions on the matter of the EMI-only policy (to the point that key exponents of both factions of the debate reported feeling much negative judgement on themselves, see Zuaro et al. 2024). Nevertheless, there is no real evidence of such public commentary making a causal contribution to the ban on exclusive EMI. It bears repeating that in PT, and indeed in SPT, something merely happening is not enough to establish a causal linkage.

Much like observations needing to be evaluated, theories need to be tested. This was especially important in our case when it came to understanding the role played in the process by the Ministry of Education. The official record (ordinance of the Council of State 242/2015) showed that the Ministry had sided with the Polimi administration: they had presented a joint appeal (5151/2013) against the first verdict of the TAR, which had supported the petitioning staff. Such direct involvement could suggest that the intense promotion of EMI was actually a ministerial strategy, rather than an institutional initiative, leading to theorize a stronger control of the central authority on the university than originally thought. However, interviews with our elite participants did not substantiate this. On the contrary, emphasis was placed by the participants on the role played by institutional autonomy.

Extract 1 (All extracts are translated into English by the corresponding author.)

Interviewer: And the strategic plan, which included this internationalization, where did it get it from as a goal? Were these ministerial guidelines?

P2: No, no, no, no, no, it was absolutely our choice, meaning that, I have to say, in the… even during the election, i.e. in my electoral program, one of the points was: I want to implement a reform of the Polytechnic's educational process […]. So, in terms of goals, it was already there even at the proposal stage … in the electoral phase.

(Polimi rector, henceforth P2)

A certain level of endorsement at the ministerial level is acknowledged, but not framed as a decisive factor:

Extract 2

P2: Honestly, my view is that … Well, internationalization was in all the Ministerial plans, so from that point of view there was a favourable environment. What mattered the most, however, was autonomy, meaning that autonomy gave the possibility for those who wanted to build their own trajectory to do so.

Even at the ministerial level, emphasis is placed on the role played by autonomy, which is described as having very real implications in the process:

Extract 3

P1: [The appeal being co-signed by the Polimi and the Ministry] means autonomy. And autonomy is not just words, it's substance. I believe that the observation of the then rector was- he's a very competent person, he's good…
I: So you agreed with the perspective of the rector?
P1: [Hums in agreement]
(Ministerial policy-maker, henceforth P1)

At this stage, it was clear that autonomy had played a key role in enabling the promotion and defence of the EMI-only policy. What was not as clear was what had motivated this particular use of institutional autonomy. In other words, many possible factors could have led the rector to see this policy as the way forward for the university, but the causal linkages were yet to be established. To do so, we re-theorized the approval of the EMI-only policy not as a starting bound of the mechanism, but as one of its key episodes. We then proceeded to map out what actions (performed by which entities) could have led to this episode. Some examples included: the **EU** *promoting the internationalization of HEIs*, the **Ministry** *having recently introduced a reform of HE (which also promoted internationalization)*, **HE rankings** *effectively favouring HEIs with more EMI*, **other reputable HEIs** *in Europe having opted for EMI*, the **rector** *wishing to improve the Polimi's ranking to increase attractiveness of the university*. These are in line with what is often posited in EMI research about the rise of the phenomenon, namely that it stems from various processes of change occurring in global HE, such as the marketization of education and the race for internationalization. Nevertheless, the causal relationship between such phenomena and EMI has often been black-boxed in previous research, leaving some opacity around the process through which EMI is brought into being and its purposes. With regards to our case, it is reasonable to assume that all the aforementioned factors may have contributed to informing the rector's decision to implement the EMI-only policy; however, an attempt should be made to understand what actually brought the rector to action.

One of the challenges of PT as a method is to avoid over-determining the outcome by laying out several potential causal factors at play, without identifying which ones are decisive triggers (Jacobs 2014). For this reason, PT distinguishes triggers (or causes) from *scope conditions*, or contextual circumstances that allow for the mechanism to take place. Using the phenomenon of fire as an example (already proposed in Beach and Pedersen 2019), scope conditions can be identified in the presence of oxygen, or fuel: while these contribute to the breaking out of fire, in and of themselves they are not enough to cause it. This is not to mean that the result of PT should always be a single cause for a process, since mechanisms can be the result of different triggers operating in tandem, and interactions between different mechanisms can also be established. Nonetheless, the correct identification of scope conditions has important implications, not only for the case study, but also for generalizability. Matching scope conditions in different contexts may suggest the possible presence of the same mechanism in action. However, they are not enough to establish such a presence, since they neither trigger the mechanism, nor necessarily imply the presence and behaviours of specific entities.

A question that, like historians looking for proximate causes, we found can be helpful to ask when trying to work out the differences between our potential scope conditions and triggers is: why now? Looking at our case, the internationalization of HE had been an EU value for over a decade (if we are to take the Bologna process as a reference point in time) when Polimi tried to implement the EMI-only policy; similarly, university rankings were not a new introduction in 2012.

Therefore, it would be harder to credit them with prompting specific action at that point in time. It is certainly to be acknowledged that policy changes can take time and that, sometimes, individuals can pursue their own ambitions for unpredictable reasons. Nevertheless, the motivations for the introduction of the policy in question were not completely extravagant, it must be noted, nor was the policy the result of several years of design and attempted approval. Thus, a specific cause can be expected to have triggered *that* particular decision around *that* particular point in time. This in itself is no obstacle to the potential generalizability of the mechanism identified. If a different case with similar conditions were to be exposed to causally equivalent triggers, the same mechanism could be expected to take place.

University autonomy *per se* was not a novelty of the 2010s (having been formally introduced in Italy with the law 168/1989) and neither was the adoption of foreign languages (and English itself) as the medium of instruction at Italian universities. Accounts from several of our participants (including the lecturers, the lawyer, and the rector) agree about the sudden increase of EMI at the Polimi, representing a strategy to climb the university rankings and maintain/increase a reputation of excellence for the institution.

Extract 4

P2: We had it as an objective to rank among the first ten technical universities in the QS rankings. And this of course meant opening up internationally. […] And [international faculty] too needed courses in English, because only having courses in Italian would have very strongly limited our ability to attract lecturers.

Excellence, or merit, is an important aspect of Italian higher education institutions (HEIs) performance in the current governance regime. Even before law 240/2010 was approved, Minister Gelmini had stated in her programmatic lines presented to the Chamber of Deputies [18 June 2008 (https://documenti.camera.it/_dati/leg16/lavori/stencomm/07/audiz2/2008/0617/s010.htm last accessed 7 March 2025.)] that 'in order to reward virtuous universities according to the criteria of merit and responsibility and to encourage those less virtuous to adopt better policies, it is necessary to face effectively the problem of evaluation'. Connected to the idea of excellence is that of *premialità*, a reward mechanism whereby funds are allocated to reward the performance of academic staff (as regulated by institutional guidelines).

Extract 5

P1: In our country, we have a very high degree of university autonomy. […] So the Ministry can give indications, but most of all it can place elements that value this kind of activity within the premialità *criteria. This is what pushed universities. It's not like they had so… spontaneously {laughing} undertaken this path. With a few exceptions.*

This is where internationalization comes into play an especially important role, as 'the level of internationalization was starting to be one of the evaluation criteria of institutional quality' (P1).

Extract 6

P1: No doubt the Ministry formalized—and it's been that way for many years—that one of the evaluation criteria for premialità *is the level of internationalization. And this certainly helps. […] Before that there was no 'merit' {laughing}. Meaning that* premialità *essentially did not exist, so there wasn't an element that little by little… Resources are a very attractive element.*

'Resources', or funding, are a sensitive aspect of university governance as their allocation is often perceived as a reflection of particular ideological (and political) positions. This may make them difficult for many participants to discuss; nevertheless, at least at the ministerial level, the connection is quite clear:

Extract 7

P1: [In terms of the ability to regulate universities' autonomy], premialità *was a theme that stimulated this too. Clearly, some were left a bit behind. In some cases, perhaps they should be helped, in other cases … you do what you can.*

While *premialità* is not the only funding mechanism, as public funding for HE in Italy is partially based on a principle of continuity (i.e. what universities have received in previous years), it is important:

Extract 8

I: In practice this translates into… the allocation of funding by the-

P1: Yes, yes, the quota of transferred funds is not decided exclusively on a historical basis, but there's an increasingly growing quota that is on the basis of premialità.

Thus, if at face value the 2010 reform of HE does not explain the increased promotion of EMI, putting evidence about various entities' behaviour together reveals the existence of causal connections between the changes in university governance and the policy adopted by the Polimi. In particular, it sheds light on why, despite the fact that processes of internationalization and adoption of EMI already existed in Italian HE, a sudden increase of EMI was triggered: in a system that increasingly rewards 'excellent' (and, as a proxy, international) universities, leaving it to them to figure out how to meet that target, EMI becomes a promising and seemingly within-reach strategy for decision-makers.

We proceeded in our SPT investigation as described, until we had defined and connected all of the key episodes to the outcome of the ban on exclusive EMI. Relying on Italian law and governance literature, and reaching out to experts in those fields, we isolated the peculiarities of law 240/2010 and of Italian national legislation that actually constrained university autonomy in matters of language policy, trumping the rector's initiative. Subsequently, we attempted to abstract from the events of the case study to what we believed was an evidence-based theory of the mechanism linking the causes and outcome together. In doing so, we moved from particular individuals or groups and their actions to abstract descriptions of types of entities that perform activities. The point was to formulate a middle-range theory (see Merton 1948 and subsequently, among others, Kaidesoja 2019a) that can potentially hold true for a bounded population of similar cases.

According to Kaidesoja's (2019b) interpretation, middle-range theories entail three components: a conceptual framework about social phenomena, a mechanism schema, and a cluster of mechanism-based explanations. In the case of ELEMENTAL, a conceptual framework was developed drawing on concepts from applied linguistics and political science to describe a mechanism schema that could provide explanations for the social phenomenon of the increase of EMI in European HE. The project was thus able to establish previously overlooked connections between various phenomena in European HE (e.g. the rise of EMI, the massification of HE, the switch to decentralized public governance approaches) into what could be considered an autonomy theory of HE language policy. Each of the case studies contributed to the mechanism schema, identifying the key actors, their activities, and relations in the various contexts, but the mere description of such elements would not have been enough to generate the theory itself. Figure 2 represents our rendering of the causal process in the Italian case study and showcases how we moved from the case study description to the mechanism schema by making explicit connections between the particular individuals acting in the context and the corresponding types of entities and activities.

The graph is split in half by a dotted line that signifies the point of abstraction: above it is the causal process identified, below the 'material' way in which each of the key episodes of the process manifested in the real context investigated. At the two extremities of the dotted line are positioned cause and outcome of the process: these bound the particular process investigated, but naturally each cause is also the outcome of another mechanism and vice versa. Four key parts of the process are identified, all described according to the aforementioned *entity performs action* formulation. It should be noted that this formulation not only makes entities and actions explicit
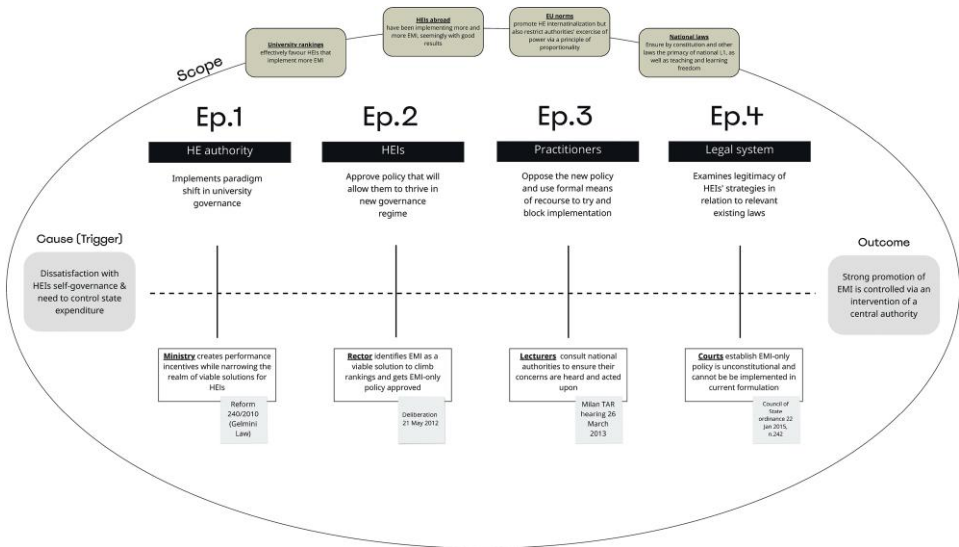
Figure 2. Full representation of the mechanism.

but also encourages clarity in the connections between actions and reactions. For example, looking at Episode 3 in the upper tier, the formulation is not limited to reporting malcontent among the lecturers, but openly mentions the roots of what is to follow in Episode 4. In the lower tier information about official documentation relevant to the actions described is added; given the relative notoriety of the Polimi litigation, we believe this could help future research locate our placement of the various steps of the court case, but place no additional value on the mention of that information. Finally, the entire process is enclosed by four scope conditions, which, despite not directly triggering the episodes, contribute to the mechanism occurring in the way it does.

This final iteration of the mechanism satisfies the SPT requirements of being evidence-based, making the linkages between episodes explicit, differentiating between components of the process and background conditions that allow it to operate, and establishing connections between events on the basis of causality, all of this having factored in the social dimension of the actions performed by the actors in the context. As a result, the analysis of this process not only adds clarity to the events of the case investigated but also lays promising grounds for future research in other contexts with similar characteristics.

With regards to the case itself, as shown in Fig. 2, the adoption of SPT made it possible to identify a crucial connection between the parable of EMI promotion and resistance in Italy and the specific features of Italian university governance. This finding is highly significant, as it bids an expansion of the discussion around Italian EMI from the somewhat vague arguments of internationalization and language proficiency, to broader issues of university governance and autonomy. In this sense, SPT confirms its great potential in helping to address very complex questions about real-world language issues.

Discussion and conclusions

In the present article, we have showcased how SPT, as a variant of PT, can be adopted in applied linguistics case studies to investigate causality in decision-making processes around language. In particular, we have relied on one of the ELEMENTAL project case studies to show how the adoption of SPT managed to shed some further light on the complex case of EMI promotion/resistance

in Italian HE. In unravelling the Polimi case study, we have broken down some key aspects of the implementation of SPT (and, in some cases, of PT in general), including the retrieval of evidence, identification of key episodes, definition of scope conditions, and formulation of theory. This is intended to offer some guidance to applied linguists who may be looking for detailed examples of SPT application in their discipline.

In terms of its significance for our case study, the adoption of SPT proved instrumental to reaching a new understanding of the reasons behind the strong promotion of EMI. SPT's contribution is multifaceted: firstly, as a result of its PT-derived epistemological orientation, SPT can reposition causality as not only a legitimate, but a central focus of research on decisions made about language, as is often the case in language policy and EMI research. Previous research discussing the Polimi court case, for example, had usually foregrounded the complexity of the case, without prioritizing a deep engagement with the causal dynamics that characterize it. Secondly, precisely due to its focus on causality, SPT comes with an effective toolkit of concepts and practices that can supplement the lack of such tools in some areas of applied linguistics, such as EMI research. Turning again to the existing applied linguistics literature about the Polimi court case, it can be noted that even when the question of why certain decisions were made is raised explicitly (e.g. Molino and Campagna 2014; Pulcini and Campagna 2015; Zuaro et al. 2024), it tends to be addressed by drawing from theoretical discussions in the field or via exclusively interpretive analytical approaches that, while delivering valuable insight about the context, ultimately do not draw explicit causal connections. Thirdly, SPT integrates the investigation of causal linkages between actors' actions typical of the PT method with an in-depth analysis of the social dimension; this leads the researcher(s) to pay specific attention to the social fabric of the causal process, encouraging them to probe into the actors' perceptions and orientations. In our case study, some of the more complex nodes of the causal process (e.g. the role of the Ministry, or different actors' reasons for the EMI-only policy promotion or resistance) would have hardly been possible to clarify without careful interpretive work.

Overall, our study indicates that the combination of adopting a new analytical focus (i.e. causality) and new analytical tools (i.e. SPT) returns novel knowledge about the investigated phenomenon (in this case, the role played by university governance), pushing the field forward in new directions. As mentioned, prior to the adoption of this approach in the investigation of the Polimi court case, it had not been possible to unveil the connection between seemingly unrelated changes in public governance at the national level and language policy initiatives at the institutional level. Some pieces of the EMI puzzle had been named (e.g. internationalization, university rankings, funding), but, even then, their role remained unclear. Thus, SPT offered a path to find some explicit answers to the who, why, and how of EMI in this case study.

The PT method naturally presents some limitations, including challenges in drawing strong causal conclusions, risks of running into confirmation biases, and the problem of omitted variables (whereby it is impossible for a researcher to know that they have omitted a variable that they are not aware of). In general, these limitations can be mitigated by maintaining a high level of methodological rigour and by combining PT with other qualitative or quantitative methods. As mentioned in the Background section, it should also be noted that PT may pose specific challenges to applied linguists by virtue of its different epistemological and methodological foundations. For example, it may be difficult, perhaps more so in matters of language than in other cases, to clearly establish the evidential strength underlying claims about the existence of a mechanism. In addition, while tracing a mechanism may seem relatively straightforward from the examples typically encountered in educational PT literature, the process is often quite articulated when facing the complexity of a real-life case study. Furthermore, while PT's protocols would presumably be welcomed by those seeking to engage in rigorous qualitative research, in some variants of PT, they can rely on logical tools that may be foreign to the majority of applied linguists (e.g. knowledge of counterfactuals or Bayesian probability; see Runhardt 2024, for a study discussing both). It should also be noted that PT can be costly in terms of both time and resources, particularly regarding its involvement of elite participants.

Nevertheless, the involvement of participants with significant decision-making power (such as policy makers) can in itself be a trigger for innovation in applied linguistics research about policy and education, which typically recruits participants among practitioners. Furthermore, the SPT variant of PT shows promise of both compatibility with and fruitful applicability in applied linguistics research, as we have shown in our case study. Thus, overall, the challenges and limitations mentioned here do not, in our view, deny the benefits of engaging with this variant of the method. In our case study, adopting SPT allowed us to retrieve an entire layer of meaning that had not surfaced in previous readings of the event, namely the role played by the local public governance landscape. This in turn allowed us to reframe an unusual case of grassroots resistance against institutional policy, into a broader case of incoherent public policy. This is stressed not to disregard the previous research about the case, which this study itself benefitted and drew from. Rather, with the present article we highlight how the change in perspective that SPT induces can contribute something to certain areas of applied linguistics that would otherwise be lacking. In this complementarity, we see fruitful opportunities for the field of applied linguistics to tackle difficult questions with new, interdisciplinary methods.

We conclude that SPT demonstrates great potential as a method in applied linguistics to support the investigation of how decisions around language are made. Its rigorous methodological protocol arguably does not constrain but probes the complexity of causality in social processes, encouraging attempts to move past plausible hypotheses and towards sharper readings of particular real-world outcomes. The PT method, in its multiple variants, continues to evolve as a result of its contact with different epistemological paradigms and methodological challenges. We hope the present paper will encourage the involvement of applied linguists in this process.

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References

Amini Farsani, M. et al. (2021) 'Methodological Orientations, Academic Citations, and Scientific Collaboration in Applied Linguistics: What do Research Synthesis and Bibliometrics Indicate?', *System*, 100: 102547. https://doi.org/10.1016/j.system.2021.102547

Beach, D. (2022, November 22) 'Process Tracing Methods in the Social Sciences', in *Oxford Research Encyclopedia of Politics*. Retrieved 3 Oct. 2025, from https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-176

Beach, D., and Pedersen, R. B. (2019) *Process-Tracing Methods: Foundations and Guidelines*. Chicago: University of Michigan Press.

Bleiklie, I., and Michelsen, S. (2019) 'Scandinavian Higher Education Governance-Pursuing Similar Goals through Different Organizational Arrangements', *European Policy Analysis*, 5: 190–209.

Bouchard, J. (2021) *Complexity, Emergence, and Causality in Applied Linguistics*. Cham: Springer.

Bradley, J. (2024) 'Extending Applied Linguistics for Social Impact: Cross-Disciplinary Collaborations in Diverse Spaces of Public Inquiry' by D. S. Warriner and E. R. Miller (Eds.) (2021)', *Journal of Language and Discrimination*, 8: 121–5. https://doi.org/10.1558/jld.26240

Broggini, S., and Costa, F. (2017) 'A Survey of English-medium Instruction in Italian Higher Education: An Updated Perspective from 2012 to 2015', *Journal of Immersion and Content-Based Language Education*, 5: 238–64. https://doi.org/10.1075/jicb.5.2.04bro

Creswell, W. J., and Plano-Clark, L. V. (2011) *Designing and Conducting Mixed Method Research*. Thousand Oaks: Sage.

Grabe, W. (2002) 'Applied Linguistics: An Emerging Discipline for the Twenty-First Century', in R. Kaplan (ed.) *The Oxford Handbook of Applied Linguistics*, pp. 3–12. Oxford: OUP.

Hiver, P., and Al-Hoorie, A. H. (2016) 'A Dynamic Ensemble for Second Language Research: Putting Complexity Theory Into Practice', *The Modern Language Journal*, 100: 741–56. https://doi.org/10.1111/modl.12347

Hiver, P., Al-Hoorie, A. H., and Larsen-Freeman, D. (2022) 'Toward a Transdisciplinary Integration of Research Purposes and Methods for Complex Dynamic Systems Theory: Beyond the Quantitative–Qualitative Divide', *International Review of Applied Linguistics in Language Teaching*, 60: 7–22. https://doi.org/10.1515/iral-2021-0022

Howson, C., and Urbach, P. (2006) *Scientific Reasoning: The Bayesian Approach*, 3rd edn. Chicago: Open Court.

Hultgren, A. K. (2023) 'Tracing the Drivers of English as a Medium of Instruction in European Higher Education', in *Keynote at Oxford EMI Symposium*. Oxford: University of Oxford.

Hultgren, A. K. et al. (2023) 'New Insights Into the Trend Towards English as a Medium of Instruction in European Higher Education Through Transdisciplinary Participation', *AFinLAn vuosikirja*, 80: 318–31. https://doi.org/10.30661/afinlavk.127850

Hultgren, A. K. et al. (2025) 'Opening Up Research on English-medium Instruction: New Interdisciplinary Perspectives', *Journal of English-Medium Instruction*, 4: 1–15. https://doi.org/10.1075/jemi.24025.hul

Hultgren, A. K., and Wilkinson, R. (2022) 'New Understandings of the Rise of English as a Medium of Instruction in Higher Education: The Role of Key Performance Indicators and Institutional Profiling', *International Journal of the Sociology of Language*, 2022: 47–59. https://doi.org/10.1515/ijsl-2021-0082

Jacobs, A. M. (2014) 'Process Tracing the Effects of Ideas', in A. Bennett and J. T. Checkel (eds) *Process Tracing: From Metaphor to Analytic Tool*, vol. 2, pp. 41–73. Cambridge: CUP.

Kaas, J. G., Cecchini, M., and Beach, D. (2024) 'Elucidating the Social—Developing Social Process Tracing as an Integrative Framework', *Sociological Methods & Research*, 54: 605–45. https://doi.org/10.1177/00491241231220732

Kaidesoja, T. (2019a) 'Building Middle-Range Theories from Case Studies', *Studies in History and Philosophy of Science Part A*, 78: 23–31. https://doi.org/10.1016/j.shpsa.2018.11.008

Kaidesoja, T. (2019b) 'A Dynamic and Multifunctional Account of Middle-Range Theories', *The British Journal of Sociology*, 70: 1469–89. https://doi.org/10.1111/1468-4446.12621

Khan, S. (2012) 'The Sociology of Elites', in J. Scott (ed.) *Annual Review of Sociology*, vol. 38, pp. 361–77. Cheltenham: Edward Elgar.

Kickert, W. (1995) 'Steering at a Distance: A New Paradigm of Public Governance in Dutch Higher Education', *Governance*, 8: 135–57. https://doi.org/10.1111/j.1468-0491.1995.tb00202.x

Merton, R. K. (1948) 'Discussion', *American Sociological Review*, 3: 672–82. https://doi.org/10.2307/2084686

Miller, R. C. (2018) *International Political Economy: Contrasting World Views*. Abingdon: Routledge.

Molino, A., and Campagna, S. (2014) 'English-Mediated Instruction in Italian Universities: Conflicting Views', *Sociolinguistica*, 28: 155–72. https://doi.org/10.1515/soci-2014-0013

Murphy, A. C., and Zuaro, B. (2021) 'Internationalization Versus Englishization in Italian Higher Education: Reframing the Issue', in R. Wilkinson and R. Gabriëls (eds) *Englishization of Higher Education in Europe*, pp. 163–88. Amsterdam: AUP.

Norman, L. (2021) 'Rethinking Causal Explanation in Interpretive International Studies', *European Journal of International Relations*, 27: 936–59. https://doi.org/10.1177/13540661211006454

Pulcini, V., and Campagna, S. (2015) 'Internationalisation and the EMI Controversy in Italian Higher Education', in S. Dimova, A. K. Hultgren, and C. Jensen (eds) *English-Medium Instruction in European Higher Education. Language and Social Life*, pp. 89–114. Berlin: Mouton de Gruyter.

Raimondo, E., and Beach, D. (2024) 'Process Tracing Methods in Evaluation', in K. E. Newcomer and W. Mumford (eds) *Research Handbook on Program Evaluation*, pp. 570–86. Cheltenham: Edward Elgar.

Runhardt, R. W. (2024) 'Concrete Counterfactual Tests for Process Tracing: Defending an Interventionist Potential Outcomes Framework', *Sociological Methods & Research*, 53: 1591–628. https://doi.org/10.1177/00491241221134523

Salnaia, L., Sidelnik, E., and Lutsenko, N. (2021) 'Interdisciplinary Approach in Teaching Foreign Languages At a Non-Linguistic University', in D. K. Bataev, S. A. Gapurov, A. D. Osmaev, V. K. Akaev, L. M. Idigova, M. R. Ovhadov, A. R. Salgiriev (eds) *Social and Cultural Transformations in the Context of Modern Globalism European Proceedings of Social and Behavioural Sciences*, vol. 117, pp. 1336–43. London: European Publisher.

Santulli, F. (2015) 'English in Italian Universities: The Language Policy of PoliMi from Theory to Practice', in S. Dimova, A. K. Hultgren, and C. Jensen (eds) *English-Medium Instruction in European Higher Education. Language and Social Life*, pp. 269–90. Berlin: Mouton de Gruyter.

Schulte-Mecklenbeck, M. et al. (2017) 'Process-Tracing Methods in Decision Making: On Growing Up in the 70s', *Current Directions in Psychological Science*, 26: 442–50. https://doi.org/10.1177/0963721417708229

Thomas, N. et al. (2024) 'Process Tracing for Applied Linguistics', *Research Methods in Applied Linguistics*, 3, 100118. https://doi.org/10.1016/j.rmal.2024.100118

Van Meegdenburg, H. (2023) 'Process Tracing: An Analyticist Approach', in P. A. Mello and F. Ostermann (eds) *Routledge Handbook of Foreign Policy Analysis Methods*, pp. 405–20. Abingdon: Routledge.

Waldner, D. (2015) 'Process Tracing and Qualitative Causal Inference', *Security Studies*, 24: 239–50. https://doi.org/10.1080/09636412.2015.1036624

Welch, C., and Piekkari, R. (2006) 'Crossing Language Boundaries in Qualitative Interviewing', *Management International Review*, 46: 417–37. https://doi.org/10.1007/s11575-006-0099-1

Wingrove, P. et al. (2025a) 'University Autonomy is a Predictor of English Medium Instruction in European Higher Education', *Higher Education*, 90: 497–520. https://doi.org/10.1007/s10734-024-01333-8

Wingrove, P. et al. (2025b) 'English-Medium Instruction in European Higher Education: Measurement Validity and the State of Play in 2023/2024', *Applied Linguistics*, XX: 1–23. https://doi.org/10.1093/applin/amaf020

Yuksel, D. et al. (2024a) 'A Critical Approach to the Rise of EMI: Why, how, and by Whom are Decisions Made?', in S. A. Mirhosseini, P. de Costa (eds) *Critical EMI*, pp. 87–104. Cambridge: CUP.

Yuksel, D. et al. (2024b) 'Macro Level Language Policy and Planning to Promote and Maintain English-Taught Programmes in Turkish Higher Education: A Process-Tracing Perspective', *Current Issues in Language Planning*, 1–23. https://doi.org/10.1080/14664208.2024.2400836

Zhang, L. E., and Guttormsen, D. S. A. (2016) '"Multiculturality" as a Key Methodological Challenge During In-Depth Interviewing in International Business Research', *Cross Cultural and Strategic Management*, 23: 232–56. https://doi.org/10.1108/CCSM-07-2014-0084

Zuaro, B. et al. (2024) 'The (In)Justice of EMI: A Critical Discourse Analysis of Two Key Stakeholders' Views on the Polytechnic University of Milan Court Case', *Journal of English as a Lingua Franca*, 13: 29–49. https://doi.org/10.1515/jelf-2024-2002

Zuaro, B., Soler, J., and Björkman Nylén, B. (2022) 'Language Policy in Italian Higher Education: Exploring Ideas Around Multilingualism and Internationalization in Policy Documents', *Language Problems and Language Planning*, 46: 231–55. https://doi.org/10.1075/lplp.21029.zua