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Interpretive Interactions among Legal Systems and Argumentation Schemes

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INTERPRETIVE INTERACTIONS AMONG LEGAL SYSTEMS AND ARGUMENTATION SCHEMES

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Abstract This thesis is about argumentation schemes that help to deal with interactions between national and foreign canons of interpretation in private international law cases. In fact, many legal orders, like Italy, require that, in conflict of laws disputes, courts apply the relevant foreign law using canons of interpretation and rules of application of the original foreign system. Our research hypothesis is that, in interpreting the foreign rule, domestic courts incur interpretive divergences of many kinds among the involved legal systems. Foreign law interpretation may result in linguistic and/or conceptual misalignments, in normative and/or interpretive gaps, and in specific incompatibilities between inner and foreign canons of interpretation. By focusing on interpretive conflicts within one legal system, legal theorists and AI and Law scholars have not yet paid sufficient attention to the issue, even if pluralist logics and argumentation have been generally applied to legal pluralism and conflict of laws. The present study fills this gap in the literature: it explores the feasibility of a theory for arguing and interpreting in private international law contexts, providing an argument-based conceptual framework that encompasses plausible interpretive interactions. To this end, and after addressing the epistemic concerns foreign law raises for domestic judges, the thesis gives a definition of cross-border interpretive incompatibilities and proposes argumentation schemes to reason with interpretive canons coming from different legal systems. An illustrative list of critical questions is used to evaluate the correctness of such interpretive reasoning. Lastly, the thesis presents the first formal developments of the study, based on the concept of meta-argumentation. It is possible to detect two main contributions to knowledge. First, this work identifies the components of foreign law interpretation, an interpretation activity with significant practical implications for legal systems today. In so doing, it also indirectly contributes to better understand interpretation at large. Secondly, its argument-based analysis paves the way for further formal applications in the domain of AI and Law.

Keywords Argumentation Schemes, Meta-Argumentation, Legal Interpretation, Foreign Law, Private International Law

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Chapter 1: Introduction

1. Legal Reasoning: the Rear Window on Law

Legal reasoning has fascinated scholars in legal theory, logic, and Artificial Intelligence (AI) and Law. Exploring how judges and lawyers address a case, identify the applicable law, and apply and interpret it has long been a stimulating endeavour. Such interest has been particularly motivated by some peculiarities of legal reasoning: it can be seen as a form of practical reasoning, it often means reasoning with uncertainty, and it is sometimes led by general principles and goals.

Practical reasoning embodies the human ability to determine, through reflection, what action has to be taken on a particular occasion (Wallace 2014): agents act after deliberately and thoroughly considering the existing situation in sight of their ends. Correspondingly, legal reasoning has been described as "the process of devising, reflecting on, or giving reasons for legal acts and decisions or justifications for speculative opinions about the meaning of law and its relevance to action" (MacCormick 1998). According to MacCormick, legal reasoning is linked with action in that both by regulating what to do or not to do in practice and by issuing legal opinions, legal institutions (e.g., lawmakers, courts, and administrative authorities) give reasons to justify their activity. Moreover, a pragmatic approach to legal reasoning recognises the role of agents in applying the law to a concrete case (Hage 2015). This outlook on legal reasoning, first of all, echoes ideas about the law nowadays: in our interconnected world, the law would be more and more a matter of "relations between agents or persons at a variety of levels, not just relations within a single nation state or society" (Twining 2000, p. 139). Then, it also shows how legal reasoning could be seen as the foremost frontier of the conception of law as a system in all its articulations (Luhmann 2004, Lierman 2014). Complex adaptive systems (CAS) are systems the components of which are connected and interact with each other; their main feature, as their name suggests, is that they are highly capable of adapting to changes and disorders. Some examples of CAS are the economic and financial world today, the biosphere, the Internet, and the cyberspace. CAS have then recently been also used to explain legal pluralism, where mutual respect, cooperation, and convergence have been acquiring utmost importance (Lierman 2014). Other interesting comparisons can be drawn with research trends in AI committed to planning and decision-making and focused on Multi-Agent Systems (MAS). Despite the lack of a unique definition of MAS, there is agreement on the fact that a MAS provides for a model of the world: an environment where many entities act, i.e., the existing agents have the

ability to transform the environment. Knowledge, goals, beliefs, intentions, execution ability, decision-making skills, and also rules need to be embedded in MAS. As a simplification of the real world, MAS contribute to study collective phenomena that involve rational entities acting in a stable and shared environment (Noriega et al. 2013): this simple social world requires institutions and rules, formalization of time, interactions, epistemic components, as well as *a priori* definition of behavioural patterns to define compliance with the rules governing the system. Distances between AI and legal reasoning reduce, if it is possible to conceive of such similarities, and thus take advantage of their respective point of view.

Even though legal certainty is a pillar of the rule of law and the wall against which judicial discretion clashes for the sake of the division of powers and of the protection of those subject to the law, uncertainty in law is a reality, it takes various forms, and affects legal reasoning as a consequence. Firstly, as recognised by Hart (1994), legal reasoning requires to deal with open texture terms, a core trait of the law. Vagueness, ambiguity, and imprecision of legal texts are often a side effect of multiple factors: lawmakers cannot predict each and every detail of any possible situation and, even if they could do that, the costs of such an undertaking would be incredibly high; moreover, there are undeniable political incentives in maintaining vagueness. All this frequently makes law application both unclear and open to multiple, often contradictory outcomes. Widely-known, the example of the prohibition for vehicles to enter a public park, and the doubt of what should be actually considered vehicles, helps to clarify range and scope of the issue. Secondly, legal reasoning is quite frequently reasoning with conflicts. Within the same legal system, it might happen that pieces of laws contrast with one another, or that more incompatible interpretations of the same legal rule can be given. On these occasions, legal systems usually provide the interpreters with modes to handle conflicts, and these shape the way the courts reason with conflicting pieces of legislation, or conflicting interpretations. Lastly, law is often fragmented: the law to apply can be reconstructed only referring to different normative texts, even pertaining to various field of law. This phenomenon, known as 'legal rule fragmentation' in jurisprudence (Wahlgren 2000), and increasingly experienced by lawyers, judges and individuals in unexpected forms, implies that legal reasoning is also reasoning with fragmented pieces of knowledge, and is aimed at making sense of disparate sources and texts into a unitary vision.

General principles and goals have been recognised to play a fundamental role in the application and interpretation of law. Be it in strict connection with morality and moral truth (Dworkin 1978, 1986), be it in connection with the rule of recognitions are connected to the connection of the connection with the rule of recognitions.

¹ Fragmentation is today mainly fragmentation of international law: in fact, international law has lately developed into many specialised fields, and its branches do not miss to interact, overlap, and conflict. A significant scholarly debate has ensued from the 2006 report of the International Law Commission on the matter (see ILC, Fragmentation of International Law: Difficulties arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, 13 Apr. 2006, A/ CN.4/L.682, and, among others, Smits 2010, Michaels and Pauwelyn 2012, Deplano 2013).

nition in a positivist view of the law (Hart 1994, MacCormick 1994), the reference to superior principles of the legal system as a whole, or to the goals and intentions of the legislator is no doubt a tool available to judges when they have to exert their decision-making power. Nevertheless, following an ongoing, and never-ending, scholarly debate, it has to be said that turning to principles and goals, historical or objective, when it comes to applying and interpreting the law is not an uncontroversial venture for lawyers and courts, for it is not clear whose will and intention they are after (Liebwald 2013): is it the will of the author of the text? Or has the rule an autonomous, objective purpose?

However, also reasoning by analogy frequently implies reasoning with general legal principles (Verheij and Hage 1994): if the legal rule cannot be applied because one or more of its conditions are not satisfied, or if the legal rule is not clearly applicable to the concrete case, it might be useful to retrieve the underlying goal of the norm, i.e., what it is meant to achieve within society. The debate on analogical reasoning in law is far from new.² Rather, its very conceivability, its rationality and persuasive force as a justification, and the content of the related concept of similarity have been object of extensive study worldwide (Lamond 2016). In common law countries, such reasoning basically allows the doctrine of precedent to function in concrete (e.g., Sunstein 1993), as it is better explained in chapter 2. In civil law systems, the promulgation and enforcement of Constitutions, in the twentieth century, meant to put principles and standards in writing for the first time and, as a consequence, to allow judges to reason with them in the decisionmaking. Legal theorists have also been interested in discussing the impossibility to resort to analogy in criminal matters³ and the distinction between analogy and extensive interpretation (Canale and Tuzet 2014).

Also AI and Law scholars have explored ways of reasoning with purposes and goals. After Berman and Hafner's pioneering work, which in 1993 offered a teleological analysis of the now famous wild animals cases, many perspectives on the same problem have been taken and developed over the years: reason-based logic (Hage and Verheij 1994), value preferences (Bench-Capon 2003), proportionality (Sartor 2010), value judgments and intermediate legal concepts to compare cases (Grabmair and Ashley 2011), just to mention a few. Berman and Hafner contributed to define "a powerful and important strand of modelling legal argument, the use of purpose and value in justifying legal decisions" (Bench-Capon 2011, p. 241), and also to recognise that the law does not consist of mere rules, but also of principles, even if often elusive and ambiguous.

Although legal reasoning has awakened a transverse academic curiosity, there exists no uniform theory of legal reasoning, and the approaches to its study have

² See Nerhot (1991) and Hage (1997, 2005) for thorough investigations into this topic.

³ Article 25, par. 2, of the Italian Constitution impedes a criminal law to be retroactively valid with references to facts that occurred, or actions that were committed, before its enactment. The constitutional provision expresses the principle of legal certainty in criminal matters and is read as also preventing analogy, which implies to add new and similar facts or behaviours to laws.

been various and diversified. From rule-based approaches typical of civil law countries, to case-based ones more closed to common law tradition, up to combinations of the two, each approach has been backed up by an underlying conception of what the law is, the question of questions of legal theory and jurisprudence, and how it develops in our changing society.

2. Reasoning with Conflicts in Law

Legal reasoning is often reasoning with conflicts. As interestingly remarked by Glenn (2014), law has always been pluralist in kind, and this pluralism fuels conflict: within the same 'major' legal tradition (e.g., civil law, common law, hindu law), different 'minor' sub-traditions flourish, feeding themselves on religion, history, multiculturalism, and emerging needs. One should only think of internet law as a form of autoregulation of online commercial interactions, or of the *lex mercatoria*, arriving at our times as a tool to deal with globalised commercial relations. Besides, Glenn argues that exactly the capacity of legal traditions to encompass and reconcile diverse trends within themselves is suggestive of their solidity, enduring power, and projection into the future: a legal tradition that is able to maintain diversity is meant to keep on developing.

These opening observations introduce two important situations that legal traditions and legal systems witness on a daily basis, and that end up deeply challenging legal reasoning:

- 1. Internal conflicts;
- 2. Relations with other legal systems and potential conflicts.

Within the same legal system (1.), legal rules conflict with each other even if they are the product of the same legislative power. Three different situations can occur: a) conflicts among pieces of legislation: two legal rules apply to the same case, with incompatible legal outcomes; a₁) conflicts among different interpretations of the same legal provision; b) apparent conflicts among provisions or norms.⁴ From a logical standpoint, this contributes to make the system inconsistent (Hage 2015), not to mention the negative effect for individuals and companies subject to contradictory legal consequences. In line with what Glenn (2014) claims, legal systems usually provide for modes to handle these idiosyncrasies within the system. The next section shows that various perspectives have been proposed to look at legal reasoning in action in such situations, stressing the role played by interpretive reasoning.

⁴ In the whole thesis, it is considered the distinction between provision or rule, i.e., the linguistic/textual statement of the law, and norm, i.e., the meaning attributed to the rule, its interpretation, what has to be applied ultimately to the concrete case (Ross 1959, 1968, Crisafulli 1964, Guastini 1998).

As for the relations that legal systems establish with each other (2.), conflicts may take many forms, also in consequence of overlapping normative levels (international, supranational, national, regional, etc.), of the international rule fragmentation, and of always new practices of legal interaction (e.g., transnational law, soft law, etc.). Complex scenario, it has not been paid much attention to from the position of legal reasoning and interpretation, despite its relevance in every day affairs and its virtual capacity to subvert traditional conceptual frameworks.

2.1. Normative and Interpretive Conflicts within One Legal System

Interpretive reasoning is the chief way through which the law is applied to the concrete case, and helps legal professionals deal with inconsistencies in the legal system. Even if theoretically possible, finding laws that do not require to be interpreted (so called direct understanding, talking of which the Romans would say *in claris non fit interpretatio*) is like looking for a needle in a haystack. Laws are currently featured by several inner and outer cross-references, unclear linguistic exposure, excessive use of technicalities: identifying and then applying the appropriate law cannot help but be a proper interpretive adventure. Indirect understanding of a legal text is thus much more common.

This introductory chapter is not the place to go in depth into all that relates legal interpretation: the literature is huge, and the topic only partially pertains to the present research aims. Still, the lively interdisciplinary scholarly debate on the link between interpretation and understanding (what comes first?), on what it really signifies 'meaning' when it comes to interpreting a legal text (sense vs reference, connotation vs denotation, internalism vs externalism), and on what conditions are necessary and sufficient to interpret a (legal) text, is the unavoidable background for what it is going to be said about legal interpretation.

Following Alf Ross's famous distinction (1959), legal interpretation is seen as a double-sided exercise. So, legal interpretation is both an activity and a result: on the one hand, it is the activity through which the legal operator ascribes a meaning to a legal provision; on the other hand it is its exact meaning, i.e., the result of the interpretive activity. Typically, this distinction mirrors a semantic theory of interpretation. Though, according to the advancements in linguistics and philosophy of language, the semantic perspective is not the only one, and other theories of interpretation have been developed over the years, stressing other semiotic layers of texts. Considering the syntax, for example, induces the interpreter, approaching a text, to focus on the peculiarities of the linguistic expressions, highly language-sensitive (e.g., use of connectives, punctuation, and negation). In AI and Law, systematic mechanisms to spot and solve those issues within the legal texts have been elaborated, following the seminal work by Allen and Saxon (1986), but such tools are still rarely used in the legal practice. Rather, pragmatics looks at how context contributes to the attribution of meaning. Many aspects fall under this category:

intent of the author of the text, underlying common knowledge, expectations concerning the addressee, societal conditions, etc. Accordingly, meaning is conveyed not just by expressions and grammar, but also by contextual elements. All in all, the three layers help give a thorough vision on interpretation.

What allows lawyers and judges to derive the norm from the legal textual unit, be it a statutory provision or a contractual clause, is interpretation as activity. Beyond the positivist view according to which there would always be a perfect correspondence between provision and norm in one-to-one ratio, reality shows how, sometimes, the norm is the result of interpreting several provisions jointly considered, a phenomenon above called legal rule fragmentation. In other cases, different norms can be extracted from the same legal provision: as legal practitioners well know and experience in everyday practice of law, there might exist multiple admissible interpretations of the same provision (Pino 2013). Unwritten law, such as customs, would even prove the existence of norms without dispositions.

However, in practice, different norms often turn out to be compatible or incompatible with one another. As mentioned above, three situations frequently occur: a) genuine conflicts among pieces of legislation; a₁) conflicts among different interpretations of the same legal provision; b) apparent conflicts among provisions or norms.

A typical case of (a) occurs when two different laws, i.e., r_1 and r_2 , apply to the same behaviour a, qualify it differently, and give incompatible legal outcomes: for example, while r_1 says that a is prohibited, r_2 states that a is admitted. Such genuine rule conflicts are solved by investigating if one rule prevails over the other one for some reasons, established by the legal system: it is more recent ($lex\ posterior$), it is higher in the hierarchy of the legal sources ($lex\ superior$), it is more specific ($lex\ specialis$), it is acknowledged precise competence in the matter (competence criterion).

It can also occur that multiple meanings can be ascribed to the wording of the text of a provision and collide (a_1) , because they express incompatible meanings, qualify the same behaviour in different ways, or their applicative scopes overlap. They represent a subset of genuine normative conflicts (a), so they are also proper antinomies. Rotolo et al. (2015) consider article 575, Italian Penal Code, regulating homicide: "Whoever causes the death of a man is punishable by no less than 21 years in prison." The sentence is not clear about how to interpret the word 'man.' In the Italian language, 'man,' *uomo*, has an ordinary, plain meaning (I_1) , corresponding to an adult male human being. But this reading excludes many individuals from the application field of the norm: not only adult female human beings, but also children. A literal interpretation as such gives rise to doubts of constitutionality of the provision itself. Another interpretation (I_2) , more faithful to the general principles of the Italian legal system, thus, reads it as person, irrespective of gender and age.

The example encourages some comments. Article 575 allows both I_1 and I_2 and also from a logical perspective, there is no conflict, since I_1 is included in I_2 ($I_1 \subset I_2$): a man is a human being. Yet, a legal system that punishes just killers of men is

an inherently defective system since what is not explicitly prohibited ends up being permitted: murders of women and children are implicitly admitted. I_1 and I_2 no doubt mirror precise historical legal frameworks. The statutory disposition was conceived of, and formulated, in a society essentially male-oriented: the year was 1930, Italy and other European countries were under dictatorships, and, worldwide, women's and children's rights were still mostly unknown. Therefore, I_1 would be expression of such a historical moment. However, emerging constitutional values and a generally changed societal perception showed its narrowness and the necessity to adopt the other reading I_2 . Article 575 has to be read along with other provisions of the legal system, among which article 3 of Italian Constitution: "All persons have equal social status and are equal before the law, without regard to their sex, race, language, religion, political opinions, and personal or social conditions." This operation has been called constitutional oriented interpretation, and regarded many legal provisions promulgated before the enactment of the Italian Constitutional Chart in 1948.

Apparent conflicts (b) take place when the field of application of any derivable norm is not overlapping with the others: the resulting norms are definitely compatible. As way of example, Pino (2013) proposes article 2043, Italian Civil Code, regulating tort liability. The provision states that "any fact, committed with malice or without intention, that causes others an undue damage forces he/she who committed the fact to refund the damage." Since malice and unintentionality exclude each other by definition, two distinct and not conflicting norms are actually derived from the wording of the text: one regards the case of malice, the other regards unintentionality. The "or" used in the natural language text is logically exclusive: there cannot be malice and unintentionality at the same time.

Let us now consider the Dutch Penal Code: articles 310 and 311 provide for a difference of punishment depending on the moment of the day in which theft was perpetrated (Hage 2015). Theft is generally punished with at most four year imprisonment, whereas theft committed at night is punished with at most six year imprisonment. Apparently, the legal system punishes the same factual conduct, i.e., theft, in two different ways, so that it seems to instantiate a proper normative conflict. Still, the conflict is only apparent: the two rules need to be read jointly, and this is mostly accomplished through interpretation.

So, within the same legal system, (a), two legal rules can apply to the same case and give different legal consequences, and this is mainly because their applicative scopes (temporal, territorial, or personal) overlap (Hage 2015), and, (a₁), two or more incompatible norms can be derived from a single disposition since there is no univocal interpretive canon. Though, these situations do not exempt judges from their task: they are required to dissolve the impasse and choose the norm to apply to the case in front of them. Normally, the legal system itself, also with the contribution of Superior Courts safeguarding the uniform application and

⁵ Our translation.

⁶ Our translation.

interpretation of the law,⁷ provides for ways to deal with the conflict: there exist domestic laws establishing hierarchies among the norms, presumptions of statutory interpretation, principles for balancing the interests at stake, the possibility to resort to systematic coherence, in a list that does not claim to be complete.

2.1.1. Various Approaches to Systemic Rule Conflicts

Two main formal approaches to systemic normative conflicts have been explored. Belief-revision, first theorised by Carlos Alchourrón and David Makinson (1981) and then developed into proper theories of knowledge dynamics, directly addresses the change occurred in a system. A system based on a set of information (e.g., a set of legal provisions) can actually change in consequence of the progressive addition of information, and, therefore, turn out inconsistent because of the incompatibilities between existing and new information. Various operations can be performed on the set (e.g., contraction, expansion, consolidation, and merging), but revision is specifically meant to restore consistency within the set, while minimising change: the original set is revised so that it remains consistent even though new pieces of information are included.

But legal reasoning and argumentation have provided for the preferred observation deck on normative conflicts. In particular, defeasible reasoning has been considered the most appropriate form of reasoning to study law and normative conflicts since it allows to withdraw a (just provisional) conclusion in presence of new information (such as new piece of evidence in a trial). Beginning from the mid-Nineties, the AI and Law community has been highly concerned with questions regarding what kind of reasoning the legal operator uses when facing rule or interpretive conflicts, and how this reasoning could be formalised.

Defeasible reasoning conceives of the legal system as a knowledge base, in which conflicting rules can coexist since they are distinct from each other for their relative importance and scope of application. Abstract argumentation, pioneered by Dung (1995), has been used to model this type of defeasible reasoning with conflicting norms: each norm is seen as an argument that can be attacked by other arguments. The attacks can be stronger or weaker, and so defeat or simply weaken the first argument. A conclusion can be validly inferred only if its supporting arguments get through all the possible attacks. Sartor (1992) and Prakken and Sartor (1995) have developed the idea of deriving arguments from the conflicting norms and of making one argument prevail over the other one through the use of competing principles normally included in legal systems. These are legal principles borrowed from the Roman interpretive tradition, presented in the previous section:

- Lex specialis, i.e., the specific law derogates the general law;
- Lex superior, i.e., the higher law derogates the lower law;

⁷ In Italy, for example, the Supreme Court of Cassation (*Corte di Cassazione*) protects the uniform interpretation of the law (*funzione nomofilattica*).

• Lex posterior, i.e., the recent law derogates the older law.

Also combination of rules can avoid rules conflicts. Any lawyer would resolve the inconsistency given by the said different treatment of theft by jointly considering the two rules: theft is punished with at most four year imprisonment, unless it is committed at night time, in which case the thief can be punished with at most six year imprisonment. Such constructed rule is different from the original two since it has no specific source in the legal system; though, it results crucial to the consistency of the system itself. According to Hage (2003, 2005), each legal system is composed of an exhaustive set of such constructed rules, called "case-legal consequence pair" (CLCP). The set is exhaustive in that every possible concrete case can be subsumed under one and only one CLCP: sticking to the theft example, the system should thus include a description for "theft during daytime" and for "theft during night time", but no general rule on theft that replicates inconsistency of results. These CLCP are modelled from the original legal rules, taking into account interpretive canons, priority rules, and the principles of the legal system. The CLCP-set is built by the agents, like judges and lawyers, who operate in the system and have at their disposal common legal materials, so that, ultimately, legal systems prove to be agent-relative.

The analysis of conflicts among different interpretations of statutory provisions (in the previous sub-section, case a₁) takes advantage of the argumentative approach. Argumentation in such cases focuses on the proper use of interpretive canons in order to solve the conflict. Interpretive canons, or canons of construction, are seen as defeasible rules that compete with each other and submit to superiority relations established among them (Rotolo et al. 2015). Multiple interpretive possibilities with regard to the same provision, or to a term in it, arise in legal contexts that are homogeneous and unique, where precise rules of engagement govern the play. For instance, it is not rare that the legal system establishes a hierarchy among canons of construction, so that priority relations among canons are derived from such hierarchy. The preliminary dispositions to the Italian Civil Code include the following article 12:⁸

- 1. In applying the law, it is not possible to ascribe to it a meaning other than that resulting from the proper meaning of the words according to the connection existing among them, and to the intention of the legislator.
- 2. If a controversy cannot be decided with a precise provision, it should be referred to provisions regulating similar cases or analogous matters; if the case still remains undecided, it is ruled according to the general principles of the legal system of the state.

It basically states that, usually, the canon for literal interpretation prevails over other interpretive rules. Only if the literal interpretation fails, it is possible to refer to analogy (with the exclusion of criminal matters, *ex* art. 25, Constitution), and, in case the doubt endures, to the general principles of the normative system.

⁹ See previous footnote no. 3.

⁸ Our translation.

Much work in AI and Law has been recently done to model reasoning mechanisms deployed in statutory interpretation. In Sartor et al. (2014), defeasible argumentation schemes have been used to represent the logical structure of the arguments used in statutory interpretation. Framework for their analysis is given by doctrine and legal theory, in particular the vast comparative study on interpretive arguments edited by MacCormick and Summers (1991), Tarello's (1980) categorization of canons of interpretation, and Alexy and Dreier's (1991) list of criteria to solve conflicts between interpretive arguments. So, Sartor et al. have identified the general structure of interpretive arguments, and provided for a logical model that uses meta-canons to reason with preferences among canons themselves. Developing this approach, Rotolo et al. (2015) have conceived of a logical machinery for reasoning about interpretive canons based on deontic defeasible logics.

Also Araszkiewicz (2015) has incorporated doctrinal theories in a model of interpretation. Part of a broader study on statutory interpretation (Araszkiewicz 2013, 2014), this paper aims to investigate how doctrinal theories about the concept of causation in attribution of legal responsibility should be taken into account in models of legal reasoning. The project is designed with an eye to future practical implementation and automation. Notably, among the methodological choices, doctrines and theories of causation coming from different jurisdictions are explicitly excluded: the research focus is on a single jurisdiction, given that theories developed elsewhere could be inconsistent with each other.

2.2. Inter-Systemic (Potential) Conflicts

If systemic normative and interpretive conflicts have been largely studied and are still receiving attention by the academic community, what happens when different legal systems interact with each other still remains mostly underinvestigated from the perspective of legal reasoning. Even if relations and various forms of exchange among nation states, international institutions, supranational organizations, judicial authorities, and individuals as well, have hugely increased over the last few years, and have highly diversified as regards modalities and effects, detailed studies on how legal reasoning is affected by such dialogues and interdependencies are not very common.

Although they are still largely isolated, these efforts are critical to understand scope and range of phenomena that are strongly affecting not only the practice of the law, but also how we conceive of the law.

2.2.1. Logic and Argumentation for Inter-Systemic Conflicts

Over the last few years, and alongside with the emergent need to advance the theoretical and logical understanding of complicated legal relations, the possibility that conflicts among distinct normative systems occur more easily than ever before, has not failed to draw the attention of the AI and Law community. Among many possible examples of inter-systemic interactions, this research has mainly focused on private international law (or conflict of laws), the field of law that identifies jurisdiction and competent substantial law in cases in which more than one legal system is potentially competent to decide them.

In 2011, revising a precedent version of their work dating 2010, Dung and Sartor acknowledged that we live and act in an interconnected and interdependent world, where multiple normative systems overlap, interact, and compete in many ways. In such a scenario, they found it interesting as well as relevant to investigate how lawyers and judges take into account those legal systems, especially in international contracts, tort, or family law cases involving multiple countries at once. In particular, they proposed a logical analysis of private international law based on modular argumentation. They intended to give a logical model of a legal technique that coordinates normative systems without the imposition of a hierarchy among them. In their opinion, conflict of laws is a unique branch of law in that it provides lawyers and judges with tools to understand "the ways in which each system takes into account the existence, the content and implications of other systems" (Dung and Sartor 2011, p. 234). These interactions are actually inter-systemic in kind since they occur between different legal systems, and private international law approach practically guarantees their coexistence: it does not impose any overarching regulation nor does it establish any priority relation between the systems involved in the cross-border relation. Two mechanisms make certain that the case is allocated to a precise court and that the legal system according to which the case must be ruled is determined: jurisdiction, establishing what court is competent to hear and rule the case, and choice of law rules, identifying which law, domestic or foreign, the court or other deciding authority should apply.

But talking about inter-systemic 'conflicts' among legal rules may be misleading: jurisdiction and choice of law mechanisms address conflicts that are different from those regularly occurring within one legal system, examined above. On the one hand, these are conflicts between legal systems: each of them is in some way linked to the case and supposedly competent to decide it according to its own body of law. Private international law aims to regulate those potentially conflictual situations (for this reason, it is also called conflict of laws) and its techniques mostly prevent such conflicts from happening in practice and make them just virtual. On the other hand, it is reductive and not compliant with reality to hold that private international law techniques avoid any kind of conflicts among different legal rules and systems. The legal orders involved in a cross-border case often provide dissimilar or even contradictory answers to the same problem, regulate institutions unknown to other legal orders, or ascribe different meanings to apparently similar legal concepts. Thus, as clarified in the next pages, conflicts among legal systems may unpredictably appear, by reason of different rules of interpretation, when the relevant foreign law is concretely applied.

From a logical standpoint, no contradiction nor inconsistency exists if two legal systems regulate the same situation in a different way (Hage 2015): the fact that the same case has different legal consequences, merely depending on where it is eventually ruled, is logical-indifferent, for legal systems are separated by definition. Besides, legal systems are founded on a concept of authority that cannot be detached from territorial sovereignty, ¹⁰ excluding that foreign rules may be validly applied where such sovereign power is exerted. Nevertheless, Hage argues that, from the point of view of individuals and companies, subject to two legal outcomes in their cross-border relations, a dilemma subsists for they need to decide according to which of the laws they should act. In fact, both legal systems offer reasons for action. As anticipated, legal reasoning is first and foremost a form of practical reasoning and conflict of laws is but an instantiation of what it means to reason with the law in practice.

Additionally, as in systemic normative conflicts, scope conditions of rules play a fundamental role also in inter-systemic potential conflicts: private international law is mainly constituted of conflict rules that limit the applicative scope of legal rules, identifying not only which court of which state is competent to rule the cross-border case, but also according to the law of which state, be it national or foreign, the ruling will take place. Conflict rules are scope-defining rules in that they determine when national rules should be applied, i.e., when no foreign legal rule is applicable to the case. In Hage's view, this logical reasoning is not easy to catch, since conflict of laws operates with a type of procedural rules that regulate how legal systems interact, without expressing judgements on values and contents.

On a theoretical level, then, private international law arises a big question as for the status of the foreign law once it has accessed national legal systems. Hage holds that legal systems tackle the issue either by merely *referring* to the law of the other state, i.e., the foreign law remains a fact and as such is treated, also in trial, or by *incorporating* it in the domestic legal system, thus recognising it as law.

So, despite its preliminary state, Hage's analysis is helpful in that it isolates some interesting issues pertaining conflictual relations among legal systems: a) there is no contradiction nor inconsistency from a strictly logical perspective since legal systems are ideally separated; b) conflict rules are rules that regulate scope conditions of national rules; c) it is important what status the domestic system eventually assigns to the foreign law. All in all, and following what has already been stated with regard to systemic normative and interpretive conflicts, logics cannot solve conflicts, but it could outline "a conceptual framework that clearly defines when a rule conflict occurs and which tools are available to avoid these conflicts or to deal with them." The working paper does not yet provide for a logi-

¹⁰ The concepts of sovereignty and authority have lately undergone momentous transformation in consequence of globalisation. Consider the huge literature on the subject: e.g., Roughan (2013) addresses the change in the conceptualisation of authorities.

¹¹ For the definition of conflict rules, see chapter 3, sect. 2.1.

cal model of the legal reasoning in such situations or in private international law applications to concrete cases. Still, referring to Glenn's work (2014) on the sustainability of diversity in law, Hage seems to conceive of a pluralist logic, mirroring that "multivalence thought" that would be the only one able to encompass all the complex interactions among legal traditions, levels of laws beyond the borders of nation states, cross-references among courts belonging to different legal systems, and so on.

The semi-formal approaches, here presented, consider private international law mainly as a technique to avoid conflicts among normative systems: legal systems, although interacting, remain distinct and independent. But, this vision does not seem to mirror the legal reality accurately. If conflict rules no doubt prevent conflicts from occurring, they also formally authorise exogenous pieces of legislations to enter domestic legal systems. Moreover, national courts need to interpret the foreign law when they apply it to decide cases, and interpretation should be accomplished using the interpretive rules and traditions of the foreign legal system, as for example article 15, Italian law no. 281/1995 requires. This is far from just avoiding superficial virtual conflicts of jurisdiction and choice of law: it is a full interpretive enterprise, where domestic judges use rules of interpretation and application coming from abroad, and it often implies that unknown legal institutions or concepts access the legal system of destination and clash with inner laws. Such a perspective on private international law, focused on foreign law interpretation in cross-border proceedings before national courts, has so far remained unexplored. Consequently, linked research questions are yet to be answered.

3. Problem Statement: Foreign Law Application by Domestic Courts

The debate on the possibility of a fruitful dialogue among different legal systems is not new. In recent years, though, it has significantly intensified in consequence of legal globalisation, of technological and scientific progresses, identifying new frontiers for international and transnational legal cooperation (e.g., robotics), and of the information revolution, allowing for data exchange irrespective of temporal and spatial location (e.g., Floridi 2014). The three phenomena are all increasing the complexity of our times, and this growing complexity has largely impacted on the reality we live in, on the personal and commercial relations we normally establish, and, thus, on the law as a mirror of societal changes.

Unquestioned reality, complexity is flourishing at many levels and in many areas of life, and so is the change affecting the law, with no exception for any field, and with no special consideration for traditional boundaries among legal systems, external and internal hierarchies, powers, or subjects. National judiciaries play a prominent role in this framework: almost regularly, they handle pronouncements

of foreign courts, ¹² or legislations and legal institutions that are exogenous to their national legal system, coming from other normative systems. These elements front onto the courtyard of domestic legal systems and legal proceedings in ways more or less formalised, and intensified by globalisation and the other phenomena previously outlined.

Private international law represents one of such formalised ways, and, traditionally, probably the most practised and studied. Legal relations featuring crossborder elements have largely increased, and, as a consequence, people and companies frequently get involved in private and commercial agreements that present links with many countries at once. Just consider the high number of marriages in which the spouses are of different nationalities and maybe live in a third state, or how many contracts see their parties coming from different countries and identify the law of a third country as the applicable law to their relation, or even cases of death of a person, who lived in a state, was citizen of another, and held some real estate in a further country. Private international law is exactly that field of law committed to coordinating these different normative systems in order to guarantee that, eventually, just one of them will be competent to rule the case, according to the substantive law of one legal order. The mechanisms of jurisdiction and choice of law together prevent the normative systems from conflicting with each other, as explained in the preceding section. However, even if the conflict is avoided in terms of competence and applicable law, the fact that the conflict rule identifies a foreign law as the law to be applied discloses further thorny scenarios for the court ruling the case and the recipient legal system, as clarified in the next sections and extensively argued across the whole thesis.

A peculiar, and exceptional, ¹³ case of explicit authorisation for national courts to refer to foreign law to interpret constitutional provisions is included in article 39, 1996 South African Bill of Rights: "(1) When interpreting the Bill of Rights, a court, tribunal or forum [...] (c) may consider foreign law." South Africa was recovering from the wounds inflicted, and left open, by the apartheid regime, and democratisation of the society as a whole was perceived as an impelling priority. Therefore, openness to foreign solutions was probably promoted by two complementary needs (Lollini 2012): the regaining of international legitimacy after the racist distortions of the apartheid system, and the taking of the international constitutional framework as an interpretative point of reference. After all, not only the Bill of Rights was a pristine constitutional text, with no history nor traditions, but also judicial review was a novelty: overcoming the borders of South African legal

¹² In what follows, the focus is kept on how foreign law accesses domestic legal systems. Still, the practice of cross-reference among courts of different states is also quite common, e.g., when it comes to applying and interpreting an international treaty. On such occasions, the domestic court often quotes the opinion already issued on the same matter by the court of another state that is part to the treaty. This happens so often with double taxation treaties that scholars have supposed the existence of a principle of uniform interpretation of tax treaty provisions (Ward 2007).

¹³ To the best of our knowledge, the Bill of Rights of South Africa is still the only Constitution in the world including such a provision.

system probably appeared an advantageous solution. South African judges, thus, when interpreting the Constitution, may refer to foreign law, and, "during the argumentation (legal reasoning), transform this information in a proper *legal inference* able to provide a conceptual basis for the adjudication" (Lollini 2012, p. 61, italics in the original).

However, even if South Africa is no doubt a sort of legal unicorn in that it is the only one providing for the option to refer to foreign law when interpreting the Bill of Rights, it is far from an *unicum* from a merely practical point of view. Indeed, cross-border legal borrowings are on the agenda of almost any court in our interconnected world, and have been examined in many respects (Slaughter 2003, Waldron 2005, Markesinis and Fedtke 2005, 2009). So, it frequently happens that national courts use the foreign law without any express normative provision in this sense, i.e., they informally refer to foreign law while interpreting domestic provisions to decide the case before them. Such borrowings mainly occur in constitutional law since constitutional provisions often need to adapt to changed societies and to new perceptions of the legal reality: transcending known boundaries not rarely reveal unforeseen solutions to problems.

A famous example is represented by the US Supreme Court decision in Roper v. Simmons¹⁴ in 2005. On that occasion, the Supreme Court overruled Stanford v. Kentucky¹⁵ (1989) and decided that juvenile death penalty is not permissible under the Eight and Fourteenth Amendments to the US Constitution. The opinion has had dramatic resonance and impact not only for its content, but also because it supported its argumentation referring to exogenous sources of law. The idea that capital punishment is a disproportionate form of punishment for minor offenders has been maintained by observing the isolated position on the matter of the USA in the international landscape, by citing an international law provision (article 37, United Nations Conventions on the Rights of the Child, which by the way had not even been signed by the USA), and by comparing the USA with the experience of a foreign country (specifically, the UK, which is the legal system of origin of the Eight Amendment). Commenting upon the decision, Waldron (2005) stresses how it basically lacks a "general theory of the citation and authority of foreign law:" in the majority opinion, the Justices have missed an occasion to theoretically explain why national judges should refer to external sources of law to apply and interpret their own body of law, including the Constitution, and, thus, what kind of authoritative power the foreign law should be acknowledged within national proceedings. Paradoxically, one of its major opponents, Justice Antonin Scalia, was also the one who got the closest to articulate such a theory, even if just to reject it. In his concurring opinion in Sosa v. Alvarez-Machain (2004), 16 he actually proposed that this theory should be based on the idea of global legal consensus. Following this line of reasoning, Waldron (2005) holds that national courts cite foreign law be-

¹⁴ Roper v. Simmons, 543 U.S. 551 (2005).

¹⁵ Stanford v. Kentucky, 492 U.S. 361 (1989).

¹⁶ Sosa v. Alvarez-Machain, 542 U.S. 692 (2004).

cause this is part of a large legal consensus on how to solve legal problems which different jurisdictions share, thus seeing law mainly as a problem-solving activity. This consensus would ground the so called law of nations.

However, after the discussed *Roper v. Simmons* case, many opinions have been, and still are, ruled with more or less open references to foreign law. In a recent book, Justice Stephen Breyer has bluntly recognised that the US Supreme Court cannot avoid to deal with cases involving some foreign elements: "even in ordinary matters, judicial awareness cannot stop at the border" (Breyer 2015, from the Introduction). This situation directly derives from enhanced communications and commerce, and from the fact that many problems, pertaining, e.g., to environmental, health-, or security issues, are growingly shared by the international community. An interdependent world cannot but talk also from a legal standpoint and also Supreme Court's references to the legal world beyond the US borders have shifted from exceptional to routine (id.). In addition, such references more and more express the idea that a tighter judicial coordination and cooperation will be necessary in future to the efficient functioning of economy and institutions.

Nevertheless, originalists, and Justice Scalia as one of their most famous representatives, have been severely contrasting any foreign influence on US law and legal practice: the US Constitution would be a private affair, and its interpretation a matter of mere historical reconstruction of the intention of the Founding Fathers. This is not the place to deeply investigate the originalists' ideas, but their position sheds some light on the main doubts the use of foreign law raises within domestic legal systems: where does the foreign law acquire authority, so that it can have effects within the national legal order? Which foreign law should the domestic court opt for? Is there no risk of a guided choice, in the sense that the national court picks the foreign legal system that is most convenient to the achievement of its own predefined, practical targets? Anyway, both positions were debated in a famous discussion at the American University Washington College of Law (Dorsen 2005), where Justices Breyer and Scalia confronted with the question if it is desirable for US justices to rely on foreign judicial decisions or other materials in deciding US constitutional issues. It was particularly stressed whether the reference should be acknowledged authoritative (like any other precedent), persuasive, or rhetorical force.

Cross-border constitutional borrowings lead to what comparatists have called "legal transplants" (Watson 1974). They are generally considered the major source of development for domestic legal systems: when legal rules are transferred from one system to another, the transplantation itself would boost developments and advances in the receiving system. What is borrowed, according to Watson, would not be the legal rule itself, but the idea underlying it, somehow (re)defined by the transfer. As a result, transferred legal rules would not have a meaning strictly linked to the community of origin, in historical, sociological, geographical, and linguistic terms, and the courts of other jurisdictions, even if lacking specific knowledge of the initial context, could effectively use them. Strongly criticised, e.g. by Legrand (1997), this theory has regardless grounded research projects set

out to demonstrate its validity: the European Legal Development project, conducted by John Bell and David Ibbetson, has aimed to prove that private law has historically been a rich soil for such cross-fertilizations between legal systems (Bell and Ibbetson 2014). By way of illustration, Bell (2011) has described how the concept and regulation of product liability have developed in Italy and Germany following the US model.

Believing that foreign law can exert such a pervasive and meaningful impact on domestic laws presupposes a functionalist conception of the law: comparative reasoning, that is, reasoning with foreign law or foreign legal solutions in comparison to national law, stresses how other countries could have already faced the same problems, and, thus, be useful repository of efficacious legal solutions (Bell 2011). All the legal systems would mainly aim to solve common practical issues, and so a dialogue among them would be not only possible, but also indispensable. Functionalism and contrary comparative law theories are analysed in chapter 3.

In the past, also in line with the US tendency to disregard foreign law, scholars did not fail to formulate theories on the imminent end of comparative law (Siems 2007). Over the years, however, the practice of law has gone exactly the other way round, showing how that premonition seems to have missed the target. Nowadays, under the thrust of many forces, foreign law plays a momentous part in domestic legal systems, and national judges daily engage with it, by applying and interpreting it in various ways.

3.1. The Case for Private International Law

This broad framework depicts a world in which previously closed and isolated legal systems have progressively become open to multilevel legal interactions that take place in unpredicted ways. The process seems to be pointing to even greater forms of integration, uniformity, and harmonisation, both of political relations and of legal solutions: the European Union (EU) is probably the most illustrative example of such trends. As legal experts and citizens, we have witnessed the development of a network of variously integrated and communicating systems, ¹⁷ to which foreign law, infiltrating domestic law and proceedings, has been contributing over the years.

In the light of what it has been outlined in the previous subsection, the application and interpretation of foreign law within domestic legal systems generally cast some far from trivial theoretical and practical doubts. Even though these are mostly evident when the foreign law is referred to and applied in informal ways, such

¹⁷ System theory is not new to the field of law. Biological theories (e.g., that of general systems) have for example been used to give a description of international law and of its development (D'Amato 2014). Also the idea of legal systems as complex adaptive systems has been proposed (Lierman 2014).

doubts prove to be critical also in private international law. They take the following forms:

- To what extent should a domestic court recognise and give effect to foreign legal rules? To put it differently, what justifies the importation and application of the foreign law within the borders of the state?
- What is foreign law?
 - A) What does it fall under those very general terms? According to what criteria does the domestic court choose what is the foreign law to refer to?
 - B) What status does the foreign law acquire in the domestic system?
- How can national courts know the foreign law however understood?
- How should the foreign law be concretely interpreted and applied?
- How do the foreign legal rule and the concepts, or institutions, it conveys, impact on the recipient legal system, most of all if the national and foreign systems do not even belong to the same legal tradition?

These questions unveil a potentially contentious scenario that hides beneath the mere coordination of different legal systems, all somehow involved in the cross-border legal relation: at the superficial level, the conflict is usually avoided thanks to conflict rules that identify the applicable law. Still, at a deeper level, when the identified foreign law is imported within the domestic system and applied by national courts, its impact may turn out troublesome: canons of interpretation, legal concepts, and legal institutions coming from the foreign legal system, as well as various interactions of principles, goals, and values end up challenging the interpreters and the recipient system. Besides, once accepted within the borders of the domestic system, they cannot help but influence it, triggering the discussion on the adoption of legal solutions that were previously unknown.

It is common knowledge that private international law is the branch of law that, first, has made it "possible the application, within the territory of the State, of the law of foreign States," as summarised by Hersch Lauterpacht, justice of the International Court of Justice (ICJ), in the *Boll* case. But, as any other field of law, private international law has been observing that same shift from a world of disjointed nation states, which were essentially legally isolated and interacted with one another only occasionally, to a world of interconnected and interdependent legal systems. In the last few years, private international law has been shaken in its backbone and has assisted to modifications in its sources, the overlapping of levels of governance and law, a major openness to non-traditional forms of law (e.g., soft law, religious law), pushes towards harmonisation and uniformity, and a renewed public law dimension.

Therefore, private international law can provide a unique perspective on the legal phenomenon of application and interpretation of the foreign law within domestic systems. First, even though it regulates a use of the foreign law that is author-

¹⁸ Netherlands v. Sweden, Judgments [1958] ICJ 8; ICJ Reports 1958 p. 55. The passage is taken from p. 94 and is also quoted by Bogdan (2012), at p. 65.

ised by domestic legal systems, and as such it originated as far back as in the Ancient Rome, it has also been profoundly transformed, and its nature of mere nation state law has changed as well, at least partially. Actually, conflict of laws has long been primarily and fundamentally inner law: not only choice of law rules were promulgated just by national lawmakers, but also the foreign law they referred to was mainly the law of other sovereign states. Both assumptions have been going through significant changes. Likewise, Savigny's vision of a strictly private and apolitical private international law has undergone deep revision, and new theories of a public facet of private international law have been proposed. Secondly, conflicts of law theorists have been fascinated by the question about what status foreign law acquires in the legal system of destination: is it fact, law, or a tertium genus? How each legal system replies to this question gives hint to which kind of relation exists between systemic and inter-systemic elements, mostly in case of clashes, when foreign rules are applied. Thirdly, applying the foreign law in private international law cases is time-consuming, also because the access to its content is a difficult enterprise for judges trained in a different legal context (Bogdan 2012). In particular, how foreign law is applied in concrete leaves doubts about the very feasibility of such application and the scope of discretionary powers left to the judges: what interpretive criteria, principles, and goals do they actually apply, conform to, and pursue?

Private international law, being focused on cross-border legal relations, unavoidably builds bridges among legal systems. It shows not just how distinct normative systems interact, but also how different levels of governance (i.e., international, federal, regional, and national) overlap, network, and interrelate (Mills 2013). Further, it assigns a significant role to domestic judges, those who substantially determine how the dialogue between legal systems and levels of law occurs in practice, whether and how this dialogue is not only conceivable, but also concretely possible, and with what strategies of reasoning it can be achieved.

3.1.1. Connecting the Dots: What Reasoning when Interpreting the Foreign Law

Progenitor of all the new forms of interactions among legal systems, private international law ends up representing a privileged ground to test whether theory of argumentation may explain how domestic legal systems deal with foreign law and, conversely, how foreign law impacts on them, mainly at the interpretive level.

Legal reasoning and argumentation theory provide thoughtful insights on:

- How systemic and extra-systemic canons of interpretation should coexist in the judicial opinion;
- How national judges should reason before many possible interpretations of the same foreign rule and, so, choose among many legal solutions;
- How the recipient legal system should receive the foreign elements.

As it is explained in detail in Chapter 5, our model assumes that multiple legal systems exist: each has its own laws and these laws are different from each other. Italy is the legal system considered domestic and its courts are always competent to decide the cross-border case, on the basis of its choice of law rules. In turn, choice of law rules identify the substantive law, be it national or foreign, applicable to the case. The court is then required to apply it complying to art. 15, of law no. 218/1995, reforming the Italian system of private international law: "The foreign law is applied and interpreted according to its own canons of interpretation and application over time." 19 This rule implies that the relevant foreign law is transferred into the domestic system with all its apparatus of interpretive canons. Canons of interpretation (or construction) are interpretive rules which indicate to the courts which interpretive principle leads to the attribution of meaning to the law. Usually, such canons emerge from judicial practice and legal doctrine, but are sometimes codified in legislative texts (Tarello 1980, MacCormick and Summers 1991), as in the case of the cited article 12 of the preliminary dispositions to the Italian civil code.

Imagine that choice of law rules of the Italian legal system refers to the Spanish normative system: the Spanish substantive law should regulate the case before the Italian court. At this point, the Italian court needs to search not only for the Spanish law concretely applicable, but also for the canons of construction that are usually applied by Spanish courts to interpret that piece of legislation. Troubles may for example arise in front of vague concepts, difficult linguistic translations, or normative gaps. Theoretically, the next interpretive case scenarios can occur, originated by the necessity to transfer not only the law, but also its mode of interpretation:

- The application of the same interpretive canon gives different results in the foreign and domestic legal system;
- The foreign interpretive canon gives an interpretive result the effects of which
 are contrary to the public policy of the domestic legal system; in such case,
 there might exist a domestic interpretive canon that gives a non-conflicting interpretation of the foreign law;
- A legal institution, provided for by the applicable foreign law and as interpreted
 according to foreign interpretive canons, has no correspondence in the domestic
 legal system, even if it does not explicitly conflict with its public policy or with
 any other fundamental principle;
- A foreign legal institution, as interpreted according to foreign interpretive canons, corresponds to a domestic institution only partially;
- The foreign interpretive canons do not resolve the vagueness of a concept or of a term provided for by the applicable foreign provision; it may happens that such vagueness can be avoided applying a national interpretive canon.

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¹⁹ Our translation.

Although not exhaustive, the bulleted list shows where the problem, so far under investigated, lies: the conflict between distinct normative systems, avoided thanks to jurisdiction and choice of law rules, emerges when interpretation of foreign law is performed and national and foreign interpretive arguments eventually meet.

Some further observations ensue. First, such conflict, interpretive in kind, gives an interesting outlook on how legal systems concretely interact: the dialogue is between basic interpretive units, and it takes different shapes depending on how the judges reason with those units. Secondly, how judges should reason with those units can be examined through the lenses of argumentation: in the end, how the conflict is avoided in concrete is but a matter of managing those same interpretive units, wherever they come from. Considering argumentation the favoured perspective also implies that application and interpretation of the (foreign) law is understood in terms of dialogue among agents. Courts are agents in such endeavour, as are the parties in a transnational contract opting for a specific foreign law to regulate their relation. It could be objected that such perspective is biased since it does not account for the epistemic concerns foreign law raises in practice: in the thesis, the issue is discussed in many respects and we maintain that, despite the undeniable difficulties, domestic courts can acquire an acceptable knowledge of foreign law and, thus, apply it.

Conflict of laws ends up being, at the same time, characterised and distressed by its intrinsic, back-and-forth tension: on the one hand, it opens to foreign legal systems, promoting international dialogue and legal cooperation, on the other, it puts the domestic system necessarily in contact with exogenous legal traditions, concepts, and institutions, all sifted through an interpretative activity that challenges its inner coherence.

4. Purpose of the Study

Purpose of the present study is to define a conceptual framework that encompasses the various interpretative interactions occurring between legal systems in the context of private international law. When national courts apply foreign rules to handle cross-border disputes or relations, interactions cannot help but result from the legal reasoning that unfolds. In particular, applying a foreign piece of law within the domestic legal system requires that national courts, despite the difficulties they face to get acquainted with both foreign law content and its interpretation, apply it using its own canons of interpretation and application over time.

This conceptual framework, in turn, aims to achieve two additional theoretical purposes:

- To increase understanding of a form of interpretive legal reasoning that has not been fully explored yet, i.e., application and interpretation of foreign law in domestic systems; and
- 2. To provide for a standard of correctness of such reasoning.

The two central themes of the thesis are therefore legal reasoning and legal interpretation as one of its fundamental components. As section 6 on methodology argues, both will be read through the lenses of argumentation theory and argumentation schemes. A mainly informal approach to the research problem is maintained in order to keep track of the reasons that guide domestic judges when engaging in foreign law application. Besides, argumentation schemes have been used to study practical reasoning in a logically sound way (Walton et al. 2008), and have proven powerful tools to reconstruct the possible strategies of argumentation in defeasible contexts. A first formalisation is however introduced to support the utility of the present theoretical model for AI and Law research.

Of course, as any other theoretical endeavour, this research runs the risk to be a modern Janus, fighting with its own two-faced nature: on the one hand, its idealistic drive to abstract from reality in order to find the ultimate answer; on the other hand, its eternal recurrence to reality and its unpredictable developments. But as the wording says: not all evil comes to harm. Indeed, its intrinsic contradictions is also its force: being mainly aimed at increasing understanding, it cannot but search for reconciling different facets of reality.

5. Research Objectives and Questions

Considering private international law from the perspective of foreign law application in domestic proceedings implies the focusing on how foreign canons of interpretation are applied and how they interact with inner interpretive rules. As such, it has remained underinvestigated in legal reasoning and argumentation (see previous section 2.2.). On the contrary, over the last few years, scholars have shown interest in reasoning with and about inner canons of interpretation when domestic laws are applied (Sartor et. 2014; Rotolo et al. 2015; Walton et al. 2016). In particular, they have identified specific interpretive arguments, exploring how they can be used to successfully perform legal interpretation. The research objective and questions we present below are thus grounded in that literature: those interpretive arguments, duly modified, can help to study interpretation in private international law, which entails not only the use of foreign canons of interpretation, but also various interactions with inner interpretive rules. In this light, our research intervenes both to analyse a so far ignored problem and to enrich understanding of interpretation as generally performed by courts, given that foreign law application is by now "routine business."

With these premises in mind, the main research objective is to explore the feasibility and utility of developing a theory for arguing with canons of interpretation coming from different legal systems, once that canons of interpretation are seen as basic inference rules in interpretative arguments.

With this goal in mind, the following research question is addressed:

 How can theory of argumentation and, specifically, argumentation schemes be used to explain the way domestic courts should reason when they apply and interpret a specific foreign law in order to decide the cross-border case in front of them?

Such research question will be satisfactorily answered if the next sub-questions are analysed and provided with constructive replies. In fact, each of them focuses on a key component of our theory for arguing with and about different canons of interpretation in private international law cases: patterns of reasoning; strategies to face interpretive incompatibilities; means to guarantee the concurrent examination of foreign and inner interpretive rules in the reasoning.

- 1. Which argumentation schemes can help in dealing with interpretive canons coming from foreign legal systems?
- 2. How do the identified argumentation schemes help to deal with interpretive incompatibilities occurring in foreign law application?
- 3. How can the identified argumentation schemes give an explanatory view on what should happen when foreign canons of interpretation enter the national legal system, i.e., on the interactions between intra- and inter-systemic interpretative elements in the judicial reasoning?

These sub-questions concern rules, methods, and techniques that the domestic court should follow when required to apply and interpret the foreign law.

It is worth repeating that the underlying research hypothesis is that conflicts between normative systems, which have been avoided by private international law and, in particular, its conflict rules, can occur at the level of interpretation. In fact, applying a foreign law within the domestic system often means to tackle conceptual misalignments, to fill normative and interpretive gaps, and to solve clashes between canons of interpretation. Establishing a standard of correct reasoning for foreign law interpretation helps to better handle such interpretive conflicts.

6. Methodology

Legal reasoning is a method to manage disagreement and uncertainty in law, as illustrated above. As such, it is suitable to study conflicts occurring between norms and interpretations, first within and then beyond the borders of a legal system. In attempting to build a theory for arguing with foreign canons of interpretation in domestic systems and proceedings, some preliminary assumptions about what le-

gal reasoning is need to be presented as starting point of the thesis. In the subsequent list, they are linked to one another, in sequential order:

- 1. Legal reasoning is a multi-layered process, and interpretation is a milestone of it.
- 2. Legal reasoning is mainly argumentative in kind;
- 3. Legal reasoning is primarily reasoning with rules;
- 4. Legal reasoning is essentially defeasible.

As regards point 1., legal reasoning can be seen as constituted by progressive steps, all meant to reach the final decision, be it a judicial opinion, or legal advice: identification of the legal issue starting from the examination of the facts of the case, search for the law to be applied, application and interpretation of the identified piece of law, evaluation of its legal outcomes, formulation of the decision (Wahlgren 2000). In this picture, legal interpretation ascribes meaning to the law, narrowing or broadening its scope: it plays a critical role in resolving uncertainty, considering that "reasonable uncertainty and disagreement are usually taken as occasions for interpreting the law–for figuring out meaning that it may have" (Lyons 1999, p. 305). At the same time, it represents one of the trickiest moments in legal reasoning, since, frequently, the activity of meaning attribution is hindered by abstract or vague textual formulations (Prakken 2005).

Legal reasoning is then argumentative in kind (point 2.), since each legal conclusion needs to be supported by a proper argumentative backbone. Different parties in the lawsuit express different positions and interests: judicial decisions intend to solve this inner conflict. Concretely, it means to see whether and why the legal conflict exists and, then, to attribute, justifying them, strengths and values to the positions at stake, which are often the results of divergent interpretations of the law. Legal reasoning is understood as a dialogue involving different players, the parties and the judge, whose differently supported positions confront with each other, until the stronger one defeats the weaker, according to the rules governing the procedure (MacCormick 1994).

This brings to point 3., for any argumentative strategy developed by the parties can be seen as composed by arguments shaped on the if-then structure of rules, where the term 'rule' is free from any legal connotations. Reasoning with arguments is thus reasoning with rules, each of them expressing reasons for acting in a certain way instead of another. Legal reasoning is a form of practical reasoning and argumentation mirrors exactly this (MacCormick 1998), showing that the prevailing argument is the one that allows the most reasonable course of action, however this may be defined.

Finally, point 4. refers to the defeasible nature of legal reasoning (Sartor 2012): any conclusion of this game played by the parties, using legal and interpretive rules, can be reassessed in light of new or additional facts. The potential openness and circularity of such defeasibility is interrupted by the achievement of the end of the game that is usually established by civil procedure law (e.g., for civil lawsuits), or by the realization of the target (e.g., in case of signature of the contract

the parties were negotiating). Defeasibility is therefore connected with argumentation: both allow to study how legal arguments relate to one another, to assign different values to each position, and to see which one eventually wins.

For these reasons, theory of argumentation is a good perspective of inquiry also to better explain reasoning performed by domestic courts when applying and interpreting the foreign law in private international law contexts, provided that due regard is paid to non-argumentative facets of the problem (e.g., acquisition of foreign law knowledge). If each legal system can be seen as composed by basic interpretive rules, then dialogues with other legal systems are established on the basis of those same rules, which are triggered whenever the foreign law somehow challenges the recipient legal system. Exploring how and in compliance with what general rules, values and goals those interpretive rules are used is but an attempt to reply to the question concerning the feasibility of such inter-systemic dialogues.

In addition, the argumentative perspective overcomes the view of judicial syllogism that restricts law and legal reasoning to a logical theory, where conclusions are deduced as its direct consequences. A "naive deductivist view on legal reasoning" (Prakken 1997, p. 19), judicial syllogism, although it is still the main structure of judicial reasoning (Sartor 2009), cannot fully explain and include those legal relations, and the reasoning they bring about, that exceed the borders of nation states. If normative systems are interdependent, interconnected, and included in a network of multiple normative levels, inter-systemic dialogues cannot be boxed in monotonic logical theories that do not admit absence of a proper hierarchy among norms, exceptions, gaps of various nature, vagueness of legal concepts complicated by linguistic translations, and so on. Conversely, argumentation as a theory of legal reasoning is more flexible, takes account of the variables given by intrinsic conflicts of law arising on many levels and in many forms, giving space to the agents in action, investigating what forces (e.g., superior principles, political relations, individual interests) try to prevail in the conflict.

A theory of argumentation and argumentation schemes that has interpretation as its main object of investigation can thus provide a model of post-rationalization of legal reasoning in private international law cases, determining its standards of correctness while considering the challenges it unavoidably confronts.

7. Thesis Contributions

The narrative in the previous pages should have by now shed light on the interdisciplinary character of this work, which finds itself at the intersection between applied law, legal theory, and AI and Law. Trying to abridge the distances among these knowledge fields, it enriches the comprehension of emergent and pervasive legal phenomena while identifying new applicative paths for AI and Law formal tools. In this larger perspective, two contributions make the present work probably relevant.

First, from a legal theoretical standpoint, the study investigates new outlooks on conflict of laws. Up to now, private international law has been mostly seen as a domestic law tool used both to coordinate interactions and to avoid virtual conflicts among normative systems. Legal theory has long debated around a central issue of conflict of laws, that is, why states should even apply foreign law, lacking a moral or legal obligation in this sense, and to what extent they are supposed to do so. In other words, legal theorists across the globe have substantially tried to justify the very essence of this field of law and the status of foreign law rules, once crossed the domestic borders. This point of view lacks to stress what impact the foreign law may concretely have on the domestic system, mainly when courts need to interpret it: virtual conflicts among jurisdictions and normative systems, avoided by choice of law rules, may result in interpretive conflicts. As already mentioned, in Italy, when private international law rules recognise that the law applicable to the particular case is the foreign law, courts are required to apply it using rules of interpretation and application over time coming from the foreign legal system. At this level, interpretive incompatibilities of many kinds may arise, and unknown legal concepts or institutions may be introduced into the domestic sys-

Secondly, to the best of our knowledge, this form of interpretive reasoning in law has not been explored from formal or semi-formal perspectives, even though attempts to formalise pluralist legal reasoning (Sartor 2005), and to logically approach conflict of laws (Dung and Sartor 2011, Hage 2015) have been made over the last ten years. As much work in the AI and Law community shows (Verheij 2003, Walton et al. 2008, Bench-Capon et al. 2013, Sartor et al. 2014, Prakken and Sartor 2015), then, theory of argumentation and argumentation schemes, even though still at an informal stage, are a precondition to conceive of a formal model of legal reasoning. Argumentation schemes, in particular, can transmit the explicit reasons that support a conclusion, allowing the reasoner/interpreter to trace back to the specific legal information that has inspired the reasoning process.

Besides, our theoretical study has been partially formalised in a defeasible logic framework, as introduced in chapter 5, and, thus, lays the groundwork for future further AI and Law applications, specifically exploring foreign law interpretation.

8. Thesis Structure: a Roadmap of the Work

Stories have the power to offer keys to access reality in new ways,²⁰ and this doctoral thesis has the opportunity to tell one of such stories.

²⁰ This idea is borrowed from an Italian novelist, Gianni Rodari: "La fiaba è il luogo di tutte le ipotesi: essa ci può dare delle chiavi per entrare nella realtà per strade nuove, può aiutare il bambino a conoscere il mondo." (1964, La freccia azzurra. Editori Riuniti, Roma).

It is composed of seven chapters, organised in the following way. Chapter 1 has introduced the reader to the work as a whole. As such, it has described the research background and identified the research problem and hypothesis, defining both the research perspective and the methodological choices that have been taken. The successive Chapter 2 is a basic chapter dedicated to theory of argumentation and argumentation schemes, which are the theoretical backbone of the thesis. In particular, the chapter illustrates how informal and formal argumentation tools have been increasingly implemented over the years to analyse and reproduce legal reasoning. It ends with a focus on legal interpretation, considered one of the most significant phases of legal reasoning as well as a form of reasoning itself. It shows that also legal interpretation has been extensively studied through the lenses of argumentation; though, starting from Tarello's legal theoretical work in 1980, the study has exclusively concerned interpretation within one legal order, even when acquiring a comparative perspective, as in the comparative survey edited by MacCormick and Summers (1991).

Chapter 3 switches to the law and introduces private international law, seen as a benchmark for application and interpretation of foreign law within domestic systems. From a legal theoretical standpoint, the chapter provides an overview on its theoretical foundations, emerging theories, and open questions. It also addresses a topic that is critical to the very implementation of private international law, i.e., how national courts acquire knowledge of the relevant foreign law. Given its importance, the issue is discussed again: chapter 4 studies what solutions the Italian lawmaker has adopted to put its courts in an adequate position to know foreign law; chapter 5 acknowledges the epistemic concerns such step undeniably raises, providing for ways to face them in a reasonable way. Then, Chapter 3 does not disregard the deep transformations private international law has been witnessing in its sources, content, and general understanding. Also, in line with Chapter 2 and the leading threads of the thesis, it describes AI and Law attempts to formalise how courts reason in pluralist contexts, demonstrating that legal reasoning in such situations can be logically correct.

Chapter 4 focuses on the Italian legal scenario: it takes a picture of private international law as resulting from the reform promoted, in 1995, by law no. 218, and from the growing EU legislative production in conflict of laws, starting from the Amsterdam Treaty. General concepts, e.g., public policy and overriding mandatory rules, are described in some detail by reason of the crucial role they will play within the model we propose in the following chapter.

Chapter 5, the height of the thesis, proposes an argument-based framework for analysing the interpretative reasoning triggered by private international law, after showing that such reasoning often materialises in proper incompatibilities among the foreign and national legal systems. In so doing, it not only advances argumentation schemes and critical questions to reason with foreign canons of interpretation in domestic systems in a sensible and justified fashion, but also suggests to formalise the whole theoretical framework by using meta-argumentation. Consider

that a co-authored paper, developing such first formalisations, is included as Appendix to the thesis.

Chapter 6 explores how the proposed theory works in practice. To this end, it deconstructs two working examples, drawn from real legal cases: it reduces them to the basic interpretive and argumentative moves, which both the different canons of interpretation and the various interests at stake could theoretically justify.

Last but not least, Chapter 7 discusses whether and how the research questions have been replied to in the thesis, what main contributions to knowledge can be identified, how the present research work is connected to what has been already done in the field, and, finally, whether the research outcomes have revealed new research questions, worthy of investigation in future.

Hopefully, by the end of the book, the reader will have the impression to have run into one of those stories mentioned at the beginning, and so to have gained unexpected keys to access an increasingly complex (legal) reality.

Chapter 2: Argumentation Theory, Argumentation Schemes, and Legal Interpretation

1. Introductory Remarks

Argumentation theory is an interdisciplinary research area where philosophers, psychologists, logicians, linguists, legal theorists, and AI scholars have met and shared insights, knowledge, and methods over the years. Arguments, seen as the basic unit of reasoning, have been object of a vibrant research work exploring the possibility to understand and reproduce how human beings reason.

Many facets of argumentation have attracted researchers from so different perspectives. Firstly, argumentation is one of the core modes of expression of human intelligence and communication. From their first societal gatherings, 21 human beings have probably expressed themselves, shaped their perception and comprehension of the surrounding world, and interacted with each other through argumentative processes. We commonly argue to support our ideas, to communicate how we see and evaluate facts and events, to persuade others of the soundness of our opinions, and to (counter-)attack others' positions. All in all, even this doctoral thesis is nothing but argumentation.

Secondly, argumentation is relevant because it lends itself to the needs of practical reasoning and ordinary discourse, in that:

- It is context-dependant (Walton et al. 2008, Verheij 2003);
- It is usually constrained by procedural rules (van Eemeren et al. 2014);
- It allows for reasoning in presence of new information, exceptions, and special cases (Prakken 2005, 2011, Prakken and Sartor 2015): this means that it is not limited to deductive reasoning, where the truth of the premises guarantees the truth of the conclusion, but permits to perform reasoning that is valid only provisionally, i.e., where conclusions can be withdrawn if additional pieces of information become available to the reasoner.

Thirdly, it offers an informal understanding of what can be defined correct reasoning, studying how reasons support conclusions, what rules regulate the inferen-

²¹ Herein, other ways of human expression, such as non-verbal ones, are not considered for they are not strictly relevant to our purposes. Still, we acknowledge that non-verbal communication, behavioural traits, and emotions play a significant role in argumentation and in legal argumentation in particular: consider, for example, their importance during judicial trials, or in settling disputes outside the courtrooms.

tial process, how to distinguish a good argument from a bad one in a chain of reasoning, what are the purposes of the reasoning itself (Walton 2005).

Each knowledge field has originally contributed to develop our idea on reasoning and on how it develops in concrete, which is also the basic question of argumentation theory. In AI, studies on argumentation have mainly intended to build and programme computer systems capable of reproducing practical reasoning and argumentative interactions. In doing so, AI researchers have been integrating diverse viewpoints: those of theoretical systems, artificial systems, and natural systems, respectively focusing on formal models of argumentation, on computer systems and software, and on argumentation as a real life phenomenon (van Eemeren et al. 2014).

Moreover, great attention has been paid to find applicative areas for AI prototypes. One of these testbeds has soon become the legal domain. The parties in a lawsuit *argue* in front of the court to support their claims; in turn, the court decides the case *justifying* its opinion, so that the argumentative path it followed can be traced back to. In law, argumentation mainly meets constitutional needs. On the one hand, legal justification is a public warrant for the review of judgements by society as a whole. On the other hand, it guarantees that the losing party knows the motivations of the court and, if need be, can file an appeal against the decision, in accordance to right to defence and fair legal procedures. So, the law can also be seen as an argumentative process taking place among the parties and the court.

Logic is the *trait d'union* between AI, law, and the informal study of reasoning conducted in argumentation theory. Many logical models have been proposed to formalise legal reasoning as a form of practical reasoning and have shown the limits of classical logic when applied to legal argumentation. Overcoming the pitfalls of deductive reasoning in law has thus toughly challenged logicians and AI scholars interested in that field; but, it has also pushed to generally reconsider logic, its objectives, and its methodological role, revealing ways to model reasoning that are closer to reasoning in real contexts.

As a result of this redefinition of boundaries, many AI and Law approaches to legal reasoning have been grounded on non-monotonic logic and the defeasible scheme, both more adherent to how legal operators reason in practice. Defeasible reasoning allows for rejecting a conclusion even though its premises not only have been accepted, but also still hold. Non-monotonic logic seems to be the most appropriate way to convey such form of reasoning (Brożek 2014). So, computer systems based on defeasible reasoning models do not limit themselves to identify one univocal solution to a question or problem. Rather, they provide users with plausible arguments to justify controversial positions, to assess the state of arguments in the frame of the overall argumentation structure, and to choose the best argumentative strategy. Famous example of such an approach is the case-based reasoning system HYPO (Ashley 1991), in trade-secrets law. This computer program, supplied with a set of facts, can generate the skeleton of a legal memorandum that includes legal conclusions, cited opinions, hypotheticals, and counterexamples. The expert system does not simply give the right answer as output; it also sheds light

on possible alternative paths, allowing to take into account hypothetical cases and alternative reconstructions of the facts of the case.

Much has been done since then and the relation between logic, law, and argumentation has kept on thriving (Prakken and Sartor 2015): a mutual exchange has been possible because, in the end, both logic and law are all about arguments. The present chapter, structured around three main sections, exactly aims to take an accurate picture of this scenario. Section 2 reconstructs the relation existing between argumentation theory, defeasibility, and legal reasoning, from historical, legaltheoretical, and AI and Law perspectives. The number of applications and extensions of Dung's abstract argumentation framework (Dung 1995) in the legal domain confirms that formal argumentation can be fruitfully used to study legal arguments, which are usually defeasible in kind. AI and Law has, then, also studied and implemented argument schemes, considering them the missing link between formal methods and practical reasoning, such as legal reasoning. Section 3 explains what argument schemes are, if they can be efficaciously formalised, and how they have been applied in the legal field. Lastly, section 4 expands on legal interpretation as a characteristic stage and form of legal reasoning, showing how argument-based approaches have so far been applied to this research problem. Note that legal interpretation represents the activity, through which legal operators derive the applicable norm from textual provisions. In accomplishing this crucial task, interpreters are often challenged by vague or open-textured terms, as well as the need to promote or demote certain goals, values, and principles when applying the law. Also, by interpreting the law, public policies, the rule of law, and the private interests of the parties emerge and confront in order to gain the upper hand on each other.

2. Argumentation Theory, Defeasible Reasoning, and Law

At the heart of argumentation lies the notion of argument. But argument is also what logic is about, as any basic logic textbook maintains (Tomassi 1999, Hardegree 2011). Science of reasoning *par excellence*, logic considers arguments the building blocks of reasoning and aims to distinguish correct reasoning from incorrect reasoning.

An argument is a set of statements: statements are declarative sentences that can represent data, information, and facts, and can be true or false, even if the reasoner can be unaware of their truth value. Depending on the role played within the argument, some statements are premises and one is the conclusion: the premises are reasons for drawing the conclusion. The conclusion is inferred starting from the premises, and reasoning is exactly making such inferences (Hardegree 2011).

For an argument to be a correct form of reasoning, classical logic requires it to be valid: the truth of the premises must guarantee the truth of the conclusion. In other words, if the premises are true, so is the conclusion, with no exceptions. Va-

lidity is thus a property of (some forms of) arguments, and consists of their truthpreserving nature. Logically valid arguments are also called deductive arguments. Syllogism, dating back to the Greek philosopher Aristotle, is a type of deductive argument. Let us see it:

Major Premise: All men are mortal
Minor Premise (instantiation): Socrates is a man
Conclusion: Therefore, Socrates is mortal

Another typical deductive argument is *modus ponens*. Consider the following example:

If you have the password, you can log in. You have the password. Therefore, you can log in.

By looking closely at it, we realise that any argument having this form, i.e., in the language of propositional logic,

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p \rightarrow q
p
\therefore a
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is a logically valid argument, whatever content it may refer to: its conclusion is true whenever its premises are also true. Validity in classical logic thus focuses on the form of arguments, disregarding their specific content: reasoning is correct if it complies with specific formal standards. Being deductive in kind, *modus ponens* warrants that reasoning is valid reasoning since, according to classical logic, deductive arguments are the only form of valid inference, and, in turn, valid inference is the only form of correct reasoning.

But is this last claim actually true? Are logically valid inferences the only way to reason in a logically correct way? In our daily life, we normally employ forms of reasoning that are not strictly deductive, and this does not automatically mean that we are talking nonsense, even if it does not even exclude it, actually. However, this observation already hints at a negative reply to the prior questions.

Apart from deductive arguments, several kinds of arguments exist: inductive, abductive, presumptive, a list that is not exhaustive. Each of them pursues different objectives in the reasoning process, which could be making generalisations, identifying causal links among facts, or finding similarities among events. In an inductive argument, for example, the premises provide the conclusion with stronger or weaker evidence, and make it simply probable, likely, or plausible, and not certain as in a deductive inference. The following example clarifies the concept (Vickers 2016):

All observed emeralds have been green. Therefore, the next emerald to be observed will be green.

Inductive arguments typically occur in scientific reasoning. While allowing for drawing predictions from the observation of reality, they also do not prevent the

reasoner from drawing contrary conclusions in case new pieces of evidence contradict those expectancies (e.g., the discovery of an emerald that is not green).

Conversely, abductive reasoning, also called inference to the best explanation, allows to infer that a is an explanation for b. Even if, at first glance, inductive and abductive arguments may appear similar, explanatory considerations take on a specific role in the abductive argument, whereas inductive arguments simply base their conclusions on probabilistic or statistical data (Douven 2011). Here is an example of abductive reasoning:

There has been a robbery at Tim's place. Bob has been seen fleeing from Tim's place. No other satisfactory explanation is available. Therefore, it is a plausible explanation that Bob is the robber.

A series of hypothesis leads the reasoner to the conclusion that at best explains the facts of the case: on the crime scene, the detective usually formulates plausible hypothesis to explain what happened and to find out who is responsible.

These forms of arguments are typical of everyday thinking, practical reasoning, scientific reasoning, and legal argumentation (Walton 2001). They have in common that conclusions are reached in a provisional way: they can be retracted or abandoned in a later moment, when further information, such as new empirical data in science or new pieces of evidence in law, is collected. For this reason, they are normally jointly considered as defeasible arguments: their conclusions can be defeated by other arguments. Pollock (1987) has shown that perceptual reasoning, which is a basic way for humans to shape their knowledge about the world, is intrinsically defeasible. Consider his example of an object that looks red.

The object looks red. Therefore, the object is red.

But the object may look red because some red light illuminates it. This red light objection is enough to weaken the previously stated conclusion about the colour of the object. It may be red, as it may be not. Perceptions are therefore only "prima facie reasons," in Pollock's terms, to build certain beliefs about the world.

Defeasible arguments are logically invalid inasmuch as their conclusions can be falsified by further information, even if their premises hold true. However, they are still reasonable: they allow us to argue in favour of an opinion, and to reach conclusions for acting in a certain way, for adopting a scientific theory, for preferring a specific legal solution, even though we cannot have knowledge of every element impacting on the situation. Of course, in such a scenario, there might be other, even stronger, or otherwise better reasons for holding contrary opinions, so called counterarguments: unsurprisingly, refutation by counterexample is actually a way to show that an argument is logically invalid. But, as Prakken (2011) wittily observes, "as long as such counterarguments are not available, we are happy to live with the conclusions of our fallible arguments." Therefore, also those arguments that classical logic has always depicted as fallacious for they are logically invalid, contribute to make our reasoning logical, that is, rational.

In order to formalise such defeasible reasoning, further types of logic have been developed alongside with classical, monotonic logic. A form of non-monotonic logic, argumentation logic, for example, accounts for the dialectic nature of practical reasoning and can deal with new pieces of information that lead the reasoner to retract the conclusion even if the premises still hold true (Prakken 2011). The next subsections intend to explore the way informal studies on argumentation, logic, AI developments, and law have met in the end, and have found common ground to examine how legal argumentation develops in concrete, what constitutes good arguments, how such arguments can be constructed.

2.1. Argumentation Theory and Law: a Long-Term Relationship

Many scholars have paved the way towards argumentation theory as a separated area of knowledge, have contributed to ensure its enduring success, and have actually kept on exerting great influence on research in AI and, in particular, in AI and Law.

In 1958, the British philosopher Stephen Toulmin published *The Uses of Argument*. He criticised classical logic since it just focused on mathematical reasoning, substantially neglecting any other form of reasoning, such as common-sense or legal reasoning (Prakken 2011). Walking away from the traditional paradigm of the conclusive, deductive argument, he proposed an argument scheme that admits the possibility to be rejected and supposed that an argument is good if it is capable of defending itself against other arguments. He recognised that arguments consist of several parts, each playing a different role during the argumentation process. These basic components are:

- Claim: it is the conclusion, which the reasoner is trying to establish;
- Data: it represents the facts that form the foundations for the claim;
- Warrant: it is the general rule that allows to pass from the data to the claim;
- *Modal qualifier*: it is a word or phrase that expresses the degree of certainty the reasoner has with reference to the claim ('possibly,' 'necessarily,' etc.);
- *Backing*: it supports the warrant and all the elements that certify or justify the statement expressed in the warrant;
- Rebuttal: it refers to circumstances rejecting the claim, or restricting its scope.

A successful argument is thus an argument that has a solid justification and that resists to contrary reasons in dialectical battle fields. Together with this idea, many factors have made Toulmin's argument scheme extremely attractive for legal theorists and AI and Law scholars. First of all, it lends itself to the dialectic of law that instantiates in the cut and thrust occurring between the plaintiff and the defendant during the trial. In addition, it is simple, it is centred on rules, and it leaves room for handling exceptions and special cases, which are so frequent in the legal domain. The following example (Toulmin 1958) clarifies the point. If we want to

prove that George is a British citizen (claim), and if he was born in Bermuda (data), we need a statement (warrant), such as "A person born in Bermuda is legally a British citizen," that authorises us to bridge data and claim. In order to make the warrant stronger, we add that there is a UK statute that provides that any person born within the territory of Bermuda holds the British citizenship (backing 1) and that, since we are barristers trained in the UK (backing 2), we are aware of the existence of such a piece of legislation. Someone could challenge our claim, holding that George is a spy and so he has betrayed the UK: this is a reason for losing the British citizenship in accordance with UK law (rebuttal).

Warrants and backings can thus be legal rules, the application of which allows for asserting the claim. Likewise, rebuttal acknowledges that non-monotonic aspects govern the law: new information can always be added, or exceptions raised, in this way preventing the warrant from operating, even if the premises still hold true.

In the same year, the philosopher of law Chaim Perelman published together with the linguist Lucy Olbrechts-Tyteca *Traité de l'argumentation*, a treatise on argumentation. As Toulmin attacked the focus of logic on deductive reasoning, so Perelman censured how formal logic assesses the validity of arguments on the mere basis of their syntactic form. Rather, in ordinary discourse, arguments aim to persuade a specific audience with their rhetorical force. Therefore, according to the authors, rational is not just what is logically valid, but also what seems to support the claim (more) reasonably: again, an extended concept of rationality. Argumentation is exactly the field of what is reasonable, plausible, and even retractable.

Their theory builds on some ideas that would be analysed and expanded by AI and Law scholars at a later time. First, arguments are always addressed to an audience and develop depending on it. Secondly, any type of argumentation is essentially rhetoric in kind: its aim is to persuade its audience of the reasonableness of the claim it asserts. Thirdly, in argumentation, the participants agree on facts and values, even if they are arguing in favour of opposing claims and need to settle a dispute. Participants select which element to stress in their argumentative strategy, depending on the goal they want to achieve.

Perelman's work on argumentation influenced his thought on legal reasoning and legal logic (Perelman 1978). Assuming an antiformalist perspective, he held that formal logic is not suitable:

- To reproduce the dialectics of judicial application and interpretation of the law as well as of the parties confronting during the trial;
- To account for the societal context, in which any legal reasoning develops;
- To adapt to the different values identified in each phase of the argumentation.

Pragmatic point of view, it highlights how the role of the court is not limited to delivering an opinion on the case that defines winners and losers, but it extends to justification of that decision in people's eyes: it should be not only logical, but also just. Judges search for the legal solution that is acceptable to the society, conse-

quently trying to conform to what is generally considered fair and reasonable. As is argumentation meant to persuade its audience, so is legal argumentation specifically aimed to persuade its peculiar audience of its own correctness, fairness, and reasonableness.

The legal theorist Robert Alexy has also been highly influential in argumentation theory, developing a discourse theory of legal argumentation (Alexy 1989). According to Alexy, practical reasoning is essentially conversational and linked to relations between individuals (Rotolo 1998): lastly, practical reasoning is practical discourse. Moreover, argumentation intends to achieve understanding and agreement, and is itself the very criterion for any form of justification to be rational: it is the way argumentation develops, i.e., complying with precise procedural rules, what warrants the rationality of the process as a whole. As a form of practical reasoning, legal reasoning is practical discourse as well, and legal argumentation and justification are, thus, rational if they abide by procedure understood as prerequisite of correctness.

This procedural approach to legal argumentation has exerted strong influence on subsequent research in AI and Law (van Eemeren et al. 2014). For example, in his Pleadings Game (Gordon 1993, 1995), Thomas Gordon has formalised a set of procedural norms for civil pleading, by combining a formal dialogue game for argumentation with non-monotonic logic. Basically, the game is a dialogical model of legal argumentation, which results tightly regulated by procedural rules in order to limit legal discretion: each party has only one reaction move to play in response to each statement the opponent adduces. The reasoner can also argue about the validity of rules and model exceptions. So, Gordon's work has mainly theoretical aims and tries to manage and formalise arguments in compliance with a fixed procedural regulation.

Deeply-rooted in the twentieth century, these reflections have not failed to dramatically contribute not only to the birth and development of argumentation as an independent and interdisciplinary research field, but also to reform the outlook on law and legal reasoning. Through the dispersive prism of argumentation, law can be decomposed in its building blocks: rules, agents, principles, goals, and context. Cornerstone idea is that law is basically a work in progress, where every contribution is valuable in order to give the best and as shared as possible solution to a problem. Underlying this vision, is, once again, law seen as a problem solving activity.

2.2. Formal Methods for Legal Argumentation

Expression of momentous critiques²² against classical logic and its constraints (Prakken 2011), the work by Toulmin, Perelman, and Alexy has outlined a clear picture of legal argumentation as mainly defeasible, procedural, and value-driven.

Research and advancements in argumentation theory have thus tried to redefine what use of logic is possible with reference to legal reasoning. If logic studies not only reasoning that is logically valid, but also reasoning that is simply reasonable, i.e., correct in that it is plausible, probable, or justifiable, logic turns out to be useful again to theoretically reconstruct legal reasoning and argumentation. The logic that is referred to is a logic that conveys justification, not truth (Hage 1997).

2.2.1. Defeasibility in Law

In legal theory, defeasibility is a property that does not relate to a univocal aspect of law. From time to time, it concerns legal reasoning, legal norms, legal systems, legal validity, legal interpretation (Brożek 2014). Though, if a common trait has to be detected, the property of being defeasible has to do with the fact that, from certain true premises, you can derive a conclusion that holds only provisionally: it can be later retracted because of new, or previously unknown, information, even if there was no mistake in supporting it beforehand (Sartor 2005, Grossi and Rotolo 2011). Defeasible inference is exactly "that kind of inference in which reasoners draw conclusions tentatively, reserving the right to retract them in the light of further information" (Strasser and Antonelli 2014). Defeasibility allows the cognitive agents to infer conclusions about the world even if they do not have complete knowledge of the conditions affecting their situation (Sartor 2012).

In more detail, Prakken and Sartor (2004) distinguish three faces of defeasibility in the law:²³

- Inference-based defeasibility: legal conclusions, although, at first, correctly deduced and supported, cannot be derived when further pieces of information are included into the knowledge base;
- Process-based defeasibility: it captures the dynamics of legal reasoning regulated by procedural norms, e.g., by stating how the burden of proof needs to be allocated between the parties;

²² Critiques against the use of logic in law were however not new. In a renowned article of 1897, "The Path of the Law," the US Justice O.W. Holmes observed the limits of considering the law as governed merely by logic. The major risk was (and is) to disregard other major forces that contribute to its development: context, background knowledge, beliefs, goals, and values.

²³ In what follows, the focus is mainly on the first two types of legal defeasibility, i.e., the inference-based and the process-based.

 Theory-based defeasibility: legal information can be explained by different theories that can be later abandoned for theories showing major explanatory force

Defeasibility in law often results in normative conflicts, but also, more generally, mirrors the fact that legal rules are used in the context of disputes and of argumentative settings, where arguments and counterarguments interact in a dialectical fashion (Grossi and Rotolo 2011). It has already been mentioned the relevance of Pollock's work in developing the idea of defeasible reasoning in even more general terms (Pollock 1995). He has not just provided examples of defeasible inferences (perception, memory, induction, statistical syllogism, and temporal persistence), where "prima facie reasons" may turn out not to support adequately the conclusion, he has also introduced the notion of defeater (van Eemeren et al. 2014). If reasons are the premises that defeasibly imply the conclusion, the defeater is the reason that somehow prevents the reasoner from drawing that conclusion: rebutting defeater, if it is a reason for the contrary conclusion; undercutting defeater, if it attacks the link between reasons and conclusion. The concept of undercutting defeater has followed closely behind Toulmin's key insight on the possibility of rebuttal in everyday reasoning (Prakken 2005). Prakken (2011) has then built on these concepts adding the notion of undermining defeater, which is meant to attack the premises or assumptions of an argument. This model has been largely explored and applied by the AI and Law community for it suits the dynamics of legal reasoning and argumentation.

2.2.2. Different Layers in Legal Argumentation

Observing legal reasoning through the lenses of argumentation means to recognise at least three layers of legal arguments: the logical layer, the dialectical layer, and the procedural layer (Prakken and Sartor 2002, Grossi and Rotolo 2011).

The logical layer looks at what logical language L underlies legal arguments: legal arguments can thus be seen as proofs in L. Grossi and Rotolo (2011) hold that legal arguments can be arguably conceived of in two ways:

- As based on a monotonic consequence relation, so that non-monotonicity would result from the interactions among arguments: the exchange between arguments and counterarguments is what makes the system non-monotonic;
- As based on a non-monotonic logic: the argumentation system is but an alternative way to derive conclusions in that logic.

In fact, non-monotonic logic, mainly developed by AI scholars, formally captures defeasible inferences. Such logic allows for expressing lack of monotonicity: a conclusion following from certain premises does not necessarily follow when other premises are added. Reiter's default logic is a type of non-monotonic logic (Reiter 1980), where conclusions are inferred on the basis of *default rules*. He

provides for a default theory that is a pair [W, D] where W is the background theory and formalises the facts about reality that are known for sure, in this way taking into account domain-specific information (Prakken 2011), and D is the set of default rules. A well-known example of default rule concerns the possibility, whenever x is a bird, to assume that x can fly, because birds typically fly (D). Though, there exist birds that do not fly, e.g., penguins or ostriches, or that are temporarily impeded from flying, e.g., because they have a broken wing (W). The occurrence of one of such cases, included in the background theory, prevents the reasoner from deriving the conclusion by default. So, in case x is a bird, we conclude by default that it flies. However, once we have evidence that x is a penguin, we cannot assume the truth of the default conclusion. In other words, there are justifications that make the conclusion inconsistent with current beliefs included in W: penguins do not fly. To formalise the same situation, classical logic would require defining all the possible exceptions in the rule: something that is not only almost impossible in reality, but that also hugely increases the computational complexity of such a formalisation. In the end, it is but a matter of choice about how to better represent legal knowledge (Brożek 2014), and defeasible reasoning seems to be better formalised by non-monotonic logic.

AI and Law scholars have applied non-monotonic techniques to address normative conflicts as conflicts among arguments (Prakken and Sartor 2002). Following Pollock's formulation, legal arguments are thus rebutted, undercut, or undermined, respectively depending on whether contrary conclusions are presented, the (defeasible) inference rule does not adequately support the conclusion, or its assumptions are attacked. Moreover, conflict resolution in law involves domain-specific criteria: these are usually general principles (e.g., lex specialis, lex posterior, and lex superior), or case- or context-specific principles that aim at promoting, or demoting, certain goals involved in legal rules application. AI and Law systems need to embed such principles if their target is to reproduce how legal experts reason in front of normative conflicts. Legal experts not only normally deal with those criteria, but are also trained to weigh them depending on many concurrent factors: private interests, constitutional and fundamental rights, general purposes of the legal system.

Wondering whether or not non-monotonic logic and techniques are enough to represent such a complex reasoning scenario leads to the dialectical layer of legal arguments. The dialectical layer exactly focuses on when legal arguments conflict, how they can be compared, and what legal conclusions are better supported and, eventually, justified (Grossi and Rotolo 2011).

AI research has greatly contributed to a deeper understanding of the functioning of argumentation and of the way arguments attack one another. Dung's abstract argumentation framework constitutes a fundamental step in this direction (Dung 1995): not only has it given rise to *abstract argumentation* (van Eemeren et al. 2014), but also it has shown that non-monotonic logics can be converted into argument-based systems (Prakken and Sartor 2002). Essentially mathematical, Dung's work has laid the groundwork also for many developments in AI and Law

research on legal argumentation, in particular by providing for both a conceptual framework where to study the reciprocal interactions among legal arguments, and a model useful for reasoning *about* the law (Prakken and Sartor 2015).

The attack relation among arguments is central to his analysis: Dung overlooks the inner structure of arguments, i.e., their premises and conclusion, for considering just in which way arguments attack each other. The attack relation is seen as a formal, mathematical relation, and its graphical representation coincides with directed graphs: arguments are the nodes, and edges indicate that an argument attacks the other.

The notion of abstract argumentation framework (AF) grounds the whole formal model: an AF is a pair (A, D), where A is a set of arguments, and $D \subseteq A \times A$ is a binary relation of defeat. D(A, B) means that A defeats B. Additionally, A strictly defeats B if A defeats B while B does not defeats A.

In his famous paper, Dung describes some further notions. In particular, a set of arguments is admissible, if the following two properties hold at the same time:

- the set is conflict-free: the arguments belonging to the set do not attack each other:
- each argument is acceptable with respect to the set: the set contains at least one
 argument that defends the first argument from the attack by another argument
 external to the set.

Different semantics (complete, preferred, stable, grounded) have also been proposed to compute the sets of arguments, called extensions, that can be accepted or not in a given AF. Different semantics bring about different ways to interpret the AF (van Eemeren et al. 2014), which can be condensed in the skeptical/credulous dichotomy. In this sense, Pollock's notion of defeat has helped to clarify the relative strength of two conflicting arguments, but it has left us blind to the whole picture: how legal arguments interact in the broader framework of a complex argumentation process, which argument wins in the end, whether there may even exist a winning strategy for its participants, in the language of game theory. Dung's AF and semantics have filled the gap and have been used to study how a legal argument relates to all possible arguments, and whether it is justified (i.e., it survives all attacks), defensible (i.e., it leaves the dispute undecided), or overruled (i.e., it is defeated by a justified argument) within the argumentative framework. Also, such extensions of Dung's AF benefit from capturing the complex reasoning patterns (Grossi and Rotolo 2011) that are relevant for reasoning with evidence in law. Consider, for instance, reinstatement: an argument A_1 is attacked and defeated by an argument A_2 , but it may be reinstated if another argument A_3 attacks and defeats A_2 . Imagine that Tom was killed and Dick was charged with the murder. Chris argues that Dick is innocent (A_1) , whereas Harry testifies that he actually saw Dick killing Tom (A_2) . Another witness then comes into play and testifies that Harry has some issues against Dick so that Harry's testimony is not credible (A_3) . This reinstates the original argument about Dick's innocence (A_1) . Such argumentation logics based on Dungs's AF and semantics have proved useful for modelling legal reasoning. They recognise that legal reasoning hinges on arguments and consists of building them, of linking them through inference rules, of attacking them appealing to counterarguments, and of settling their conflicts (Prakken 2010).

Last but not least, the procedural layer emphasises the dynamic aspects of law, that is, how conclusions are reached in the context of legal disputes. Both civil and criminal disputes are governed by rules of procedure, stating what moves, and when, the parties can make during the unfolding of the proceedings. This central feature of law and legal reasoning was firstly highlighted by Robert Alexy, as explained before. His work has strongly inspired that AI and Law line of research committed to reproducing legal reasoning into dialogue games: in those games, rules identify what moves (e.g., claiming, challenging, or conceding) participants have at their disposal, when those moves are legitimate and with what effects for the parties, and, lastly, when the dispute ends. Moreover, the procedural layer calls attention to the allocation of the burden of proof. Not only the concept itself of burden of proof is a challenge to logicians (Prakken and Sartor 2009), but also the fact that its allocation concerns both the dialectical and the procedural layer makes its modelling a complex endeavour (Prakken and Sartor 2004). Proponent/plaintiff and opponent/defendant have usually different burdens of proof, and this dynamics is well represented in basic dialogue protocols with two players (Grossi and Rotolo 2011): the first is required to support the claim with at least one justified argument for winning the dispute, the later suffices to propose a defensible argument capable of weakening that claim.

Non-monotonic logics, abstract argumentation, and dialogue games have encouraged logic, law, and legal reasoning to meet halfway, trying to overcome critiques and doubts of the past. However, such formalisations still run the risk of oversimplifying legal reality because of the abstractness of their logical assumptions and concepts. Facing the big challenge of being adherent to law as a real-life phenomenon, the AI and Law community has gradually resorted to argumentation (or argument) schemes. Originally investigated in argumentation theory, argument schemes have been more and more regarded as the possible missing link between the formal realm of logic and AI, and the real world of common-sense knowledge and practical reasoning, of which legal reasoning is a form (Prakken 2005, Walton et al. 2008).

3. Argumentation Schemes

Argumentation schemes are patterns of reasoning (Walton et al. 2008). If Dung's argumentation framework (1995) abstracts from the content of arguments, argument schemes, conversely, specify the meaningful reasons that lead to the conclusion: such feature is considered crucial to a complete formalisation of argumentation (van Eemeren et al. 2014). Therefore, the argument schemes approach, where

validity is no more a matter of form, connectives, and quantifiers, but rather of content, offers invaluable help to logic, still charged with excessive formalism and disconnection from reality when it comes to modelling practical reasoning, such as legal reasoning.

Argument schemes owe their good fortune *in primis* to argumentation theory. In particular, Toulmin (1958), acknowledged for distinguishing among claim, data, warrant, backing, and rebuttal in his argument scheme, is also credited a broader remark: by appreciating that, within any argument, different parts play different roles, he contributed to realise that each argument has its own specific standards of evaluation (Prakken 2005). In other words, depending on the type of assertions the argument conveys, it is possible to attack it in different ways. Critical questions (CQ) are the tools for accomplishing the task of attacking the argument and each argument scheme has its own critical questions. The nature of critical questions is debated (Walton et al. 2008), but replying negatively to them often corresponds to identifying counterarguments and exceptions and makes argument schemes defeasible. Besides, argument schemes are defeasible also because competing applications of the same or another scheme may contradict them.

Hinging mostly on non-deductive reasoning, argument schemes have contributed to the analysis of informal fallacies, recently an area of vibrant philosophical and mathematical research (Hansen 2015). Further, the argument schemes method looks promising to tackle some problems AI faces when modelling how artificial agents reason in a real world setting and are supposed to successfully deal with uncertainty and incompleteness of information (Walton et al. 2008). In this respect, argumentation and argument schemes could turn out helpful for they are focused on defeasible reasoning, they are dialogue-based, and, interestingly, they offer implementable techniques.

3.1. Features, Insights, and Applications

Argument schemes are usually framed by and develop within dialectical/dialogical contexts: conceptually, there are a proponent and an opponent, the first asserting a claim, the second variously challenging it through critical questions. Establishing a claim, weakening its supporting reasons through counterarguments and exceptions, and defending and reaffirming the opening claim, all require for balancing several elements.

Consider the simple version of the argument from expert opinion scheme (Walton et al. 2008, p. 14):

Major Premise: Source E is an expert in subject domain S containing proposition A. Minor Premise: E asserts that proposition A (in domain S) is true (false). Conclusion: A may plausibly be taken to be true (false).

Compared with other versions of the same scheme, this form has the merit of showing "how argument from expert opinion works as a fast and frugal heuristic in everyday thinking" (Walton 2010a, p. 164): in ordinary situations, we often jump to a certain conclusion through shortcuts of many kinds, such as the idea that if it is an expert opinion, it is necessarily correct and we can safely base our decisions or actions on it. The reasoner, who is putting forward the argument from expert opinion, needs to pay attention not to incur the fallacy of the argumentum ad verecundiam, or appeal to authority, in the form of inappropriate argument from expert opinion. For instance, this may occur when the argument is proposed in such a way that the opponent feels threatened and does not advance the needed critical questions, consequently treating the argument as a deductively valid argument (Walton and Koszowy 2016), or when the cited authority is not an expert or his/her expertise pertains to another field.

The presented version of argument from expert opinion hides an implicit conditional premise (Walton and Reed 2002, p. 2):

Conditional Premise: If source E is an expert in subject domain S containing proposition A and E says that A is true then A may plausibly be taken to be true (false).

It is thus possible to see the "structural resemblance" (Verheij 2003, p. 170) between this argument scheme and the deductive scheme of *modus ponens* presented above: as *modus ponens* is expressed in the form of premises and conclusion, so is the argument from expert opinion. Argument schemes are generally seen as rules and correspond to rules of inference in logics. However, argumentation schemes are often defeasible, context-dependant, and only pragmatically valid. For example, in the argument from expert opinion, experts are fallible and may be wrong regarding the concrete case, or their opinion may be falsified by new information: its conclusion is always just tentatively drawn. So, the argument from expert opinion, as many other argument schemes, follows the pattern of defeasible *modus ponens* (Walton 2010a, p. 165):

```
If A then (defeasibly) B
A
Therefore (defeasibly) B
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Besides, pragmatic validity implies that the argument schemes that do not reproduce deductive forms of reasoning are acceptable depending on the context and on the specific, even contingent (Verheij 2003) circumstances of their application. This property meets the needs of modelling concrete argumentative situations that are very common in human reasoning but that "have proved troublesome to view deductively" (Walton 2010a, p. 160). Many lists of argument schemes have been presented over the years, ²⁴ but none of them can claim to be exhaustive. In this regard, it does not even exist a standard criterion for establishing if a pattern of reasoning is acceptable as argumentation scheme. As a result, an infinite range of argument schemes could be enumerated, at least theoretically, and their acceptability

²⁴ See, for example, Walton et al. (2008).

verified from time to time on the basis of their contextual relevance (Verheij 2003). As open tools of analysis, argument schemes are thus potentially applicable to whatever knowledge domain. Additionally, they can either be used as patterns for reconstructing arguments (e.g., they can detect implicit premises, as the next subsection shows) or as generators for constructing new arguments (Gordon and Walton 2009).

3.1.1. Critical Questions

Argument schemes are combined with a set of critical questions, which are usually included in the definition of argument scheme.

Consider what critical questions Walton et al. have identified for the cited argument from expert opinion (2008, p. 15):

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CQ1–Expertise Question: how credible is E as an expert source?
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CQ2–Field Question: is E an expert in the field that A is in?

CQ3-Opinion Question: what did E assert that implies A?

CQ4–*Trustworthiness Question*: is *E* personally reliable as a source?

CQ5-Consistency Question: is A consistent with what other experts assert?

CQ6-Backup Evidence Question: is E's assertion based on evidence?

Critical questions depend on the content and type of the sentences that compose the reasoning pattern, in turn defined by the context in which the parties are arguing. In our example, the argument is reasonable if certain "contextual factors" (Wagemans 2011, p. 333) concerning the expert, the delivered opinion, and the relation existing between the expert opinion and the claimed field of expertise are actually present. In particular, the expert should be a credible source (CQ1) in the specific field of expertise of A (CQ2) and personally trustworthy (CQ4), his or her assertions should imply A (CQ3), he or she should deliver an opinion that is both consistent with what other experts maintain (CQ5) and based on evidence (CQ6). CQ1, CQ2, CQ3, CQ6 could be modelled as implicit premises, or assumptions, of the argument (Walton and Gordon 2009), and are considered sufficient to refute the claim if not adequately replied to, shifting the burden of proof from the respondent to the proponent. Differently, CQ4 and CQ5 requires that the respondent, questioning both the expert's trustworthiness and the consistency of his or her assertions, backs them with proper evidence. So, he/she should present evidence that the expert is untrustworthy and indicate the different opinions other experts in the field have expressed (Walton 2010a).

Notably, these critical questions only refers to the argument from expert opinion. In this respect, consider also the different argument from analogy together with its critical questions (Walton et al. 2008, p. 56, version I, and p. 315):

Major Premise (or Similarity Premise): Generally, case C_1 is similar to case C_2 . *Minor Premise (or Base Premise)*: Proposition A is true (false) in case C_1 . *Conclusion*: Proposition A is true (false) in case C_2 .

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CQ1: Is A true (false) in C_1?
CQ2: Are C_1 and C_2 similar, in the respects cited?
CQ3: Are there important differences (dissimilarities) between C_1 and C_2?
CQ4: Is there some other case C_3 that is also similar to C_1 except that A is false (true) in C_2?
```

Critical questioning arguments from analogy means to investigate whether similarity and differences exist among the cited cases and whether it is possible to establish comparisons with other, ignored cases: the abovementioned questions on experts and their opinions are absolutely irrelevant. Identifying the types of sentences that characterise an argument scheme is therefore a necessary step for analysing argument schemes in general (Verheij 2003).

Three further observations naturally follow.

Firstly, the field-dependency of critical questions grounds the concept of validity of argumentation schemes (Prakken 2005): validity is not understood in a strictly logical sense, but, broadly, in terms of reasonableness and persuasive strength of the argument. That is why different arguments require different standards of evaluation. Critical questions, thus, play a key role in evaluating arguments. If evaluation generally intends to establish whether an argument, fitting a precise argument scheme, is strong or weak, how to better accomplish this task is object of a lively debate in the AI and Law community. A feasible solution is represented by the reformulation of argument schemes in an argumentation framework, so that a computational model is then available to evaluate the argument-scheme approach. As for informal logic, the usual approach to argument evaluation consists of investigating three main aspects (Walton et al. 2008): a) whether the premises are acceptable; b) whether the premises are relevant in sight of the conclusion; c) whether the premises provide for sufficient support for accepting the conclusion;

Second observation is that, even if field-dependency boosts difference between critical questions pertaining to different argument schemes, some degree of similarity can be nevertheless distinguished. Each argument scheme is challenged in its premises and conclusions: the former always need to be true, well supported, and justified, whereas the latter always need to resist to contrary reasons or different conclusions (Verheij 2003). Thus, there exist questions that are common to every argument scheme as for the function they accomplish within the scheme, and this is linked to the fact that critical questions fulfil many tasks with reference to argument schemes: some represent premises of the scheme otherwise left implicit, some identify exceptions that could prevent the scheme from operating, some indicate other possible reasons or arguments against the conclusion of the argument.

Thirdly, critical questions determine whether an argument scheme is appropriate in a concrete case by investigating whether its conditions are relevant to its use and ends. Relevance is a sort of transverse issue: argumentation theory wonders

about its definition,²⁵ AI studies if and how it is possible to express this property formally and treat it computationally, law also has extreme interest in better defining what can be labelled as relevant for the purposes of well-supported judicial opinions and lawyer's argumentative strategies. So, even if analysing the concept of relevance is not the object of the present thesis, relevance is not exempt from our discourse, for its implicit role in identifying conditions of argument schemes.

3.1.2. AI and Law Perspective on Argument Schemes Formalisation

Argument schemes are, technically, rules of inference of a logical system (Verheij 2003, Prakken 2005, Walton et al. 2008, van Eemeren et al. 2014): informal arguments can be instantiated into logical inference rules by seeing the relation between premises and conclusions in terms of conditional rules. It is worth noting that the obtained rules are generally defeasible since deductive arguments are one of the several possible types of arguments, and not even the most recurring in ordinary argumentation. Prakken (2005) refers to Horty's attempt to formalise some argument schemes as instances of the defeasible *modus ponens* (Horty 2001):

P If P then usually Q Therefore (presumably), Q

However, the defeasible *modus ponens* is still excessively abstract with its logical language and it does not preserve the vocation of argument schemes of maintaining nuances of meaning while reproducing the reasoning process (Prakken 2005). Moreover, when approaching an informal argument scheme, there are parts that are general, and basically function as ordinary rules of logical inference, but there are also parts that are strictly context-specific and, as such, determined by the content of the sentences they consist of: it is on this blurred line that abstract logic and contextual logic would distinguish from each other (Verheij 2003).

Argumentation schemes hence show an inner contradiction. On the one hand, their underlying logical form allows for expressing them in logical language, on the other hand, that same formalisation puts in danger their most significant feature, i.e., the capacity to transmit meaningful reasons. Formalisations run the risk of losing those details that field-dependency of argument schemes offers, for example in the form of distinct critical questions. Once more, logic has the opportunity to rethink itself, its methods, and its purposes, for encompassing the enriching specificity of argumentation schemes, and not stumbling upon the shortages of formalism.

In line with this vision, argumentation logic makes use of non-monotonic techniques that allow to express exceptions, disagreement, and uncertainty. Argument schemes can thus be embedded in such argumentation framework (Prakken 2005),

²⁵ See for example Walton (2004).

where, defined as trees including both deductive and defeasible inferences, arguments can be attacked also on the defeasible inference step. Rebuttals, undercutters, and undermining defeaters are adequate tools for the formalisation: according to Prakken, who has further improved this AF in ASPIC+ (Prakken 2010, Prakken et al. 2015) by formalising argument schemes for factor-based reasoning, a) argument schemes can be modelled as the "prima facie reasons" dear to Pollock; b) whenever the application of a scheme results in contrary conclusions is nothing but an instantiation of rebuttal; c) negative replies to critical questions corresponds to undercutters, which actually highlight exceptional conditions.

Feasible path, argumentation logic clearly expands upon the issue of distinguishing what relations form and content have within argument schemes. Additionally, such an abstract AF is capable of dealing with conflicts among arguments, first establishing criteria to assess which argument is strong enough to prevail in the dialectical relation (e.g., by modelling preference rules), then defining the defeasible validity of arguments, often understood in game-theoretic terms: an arguer has a defeasibly valid argument, whenever he or she has a winning strategy. "Tree of trees" in Prakken's words, argument-based logic gives a useful representation of ordinary argumentation.

3.2. Argument Schemes for Legal Reasoning

The law has been a natural landing place for such efforts in argument-based modelling of practical reasoning: its unique connection with argumentation theory and its regular reliance on common-sense knowledge and defeasible patterns of reasoning have made it a favoured area of investigation, with both theoretical and applicative aims. Moreover, legal reasoning is a cognitive activity that develops in compliance with recurring argument schemata, where reasons and conclusions express the mental states of a rational reasoner (Sartor 2005, 2012). Such schemata can be examined individually, like building blocks of legal argumentation as a form of correct ratiocination, and collectively, in their relation with one another.

Legal argument schemes can for instance be identified referring to the stage of reasoning they pertain to (Prakken 2005). Legal reasoning would actually consist of four main stages.²⁶ Consider that the following order is not strictly consecutive:

- Evidence: this stage aims to verify the occurrence of the alleged facts. It focuses on two main questions and identifies where the burden of proof lies: is there evidence supporting the factual allegation? Is the collected evidence sufficient to draw a well-supported conclusion?
- Classification/interpretation: legal rules are usually expressed in general terms, for both practical and political reasons.²⁷ But under those general rules, facts

²⁶ In legal theory, there are other subdivisions: e.g., see that proposed by Wahlgren (2000) and presented in chapter 1.

need to be ascribed and interpretation is exactly the activity that allows for attributing meaning to the rule's conditions and for deciding whether the rule includes the facts.

- Rule validity: the rule is legally valid in that it comes from a legally recognised source of law.
- Rule application: at this stage, legal experts verify whether the rule must be applied to the concrete case, or whether there exist circumstances preventing its application (e.g., an exception occurs, another piece of law prevails in the normative conflict, or a superior principle states that the rule is unfair or unjust).

In what follows, two argument schemes are specifically considered: argument from precedent and argument from rule application, which mirror the traditional, but more and more imprecise, distinction between common law and civil law systems. Interestingly, both schemes show that the stages of legal reasoning are not strictly sequential, as already noted; rather, they mostly overlap and intertwine in the reasoning flow, and this is particularly evident in the analysis of the argument from precedent, where issues of validity and evidence mix with the goal of rule application. Additionally, the interpretive stage functions as an umbrella, covering and sustaining all other stages; for this reason, its in-depth analysis is postponed to the next section.

3.2.1. Argument from Precedent

The argument from precedent in law is based on the more general argument from analogy, one of the fundamental forms of ordinary reasoning, and implies to reason with similarities between legal cases. Arguing with cases is typical of common law countries, where the doctrine of *stare decisis*²⁸ is in force. This doctrine states that judicial precedents have binding authority: lower courts should abide by the rule drawn from a case that is similar to the new case and that has already been decided by a higher court.

The *stare decisis* principle is one of the possible answers to the problem of legal certainty, the protection of which is a pillar of the rule of law. For their part, civil law countries have pursued legal certainty by undertaking the huge effort of codifying, ideally, all that could be codified. In fact, codifications guarantee not only that for every problem there exists a correspondent legal solution in the form of a piece of legislation, but also that judicial discretion is limited: in Montesquieu's words, judges are mere *bouche de la loi*, the mouthpiece of the law. Both

²⁷ From a merely practical perspective, conceiving of laws that include every hypothetically possible circumstance not only goes far beyond imagination, but also would not be an economical solution in terms of legal efficiency. Politically, a consensus on every factual hypothesis could be difficult to achieve, and general rules allow for future informal expansion of the law.

²⁸ The whole Latin maxim is "stare decisis et quieta non movere." Its translation into English usually sounds as follows: "to stand by decisions and not disturb the undisturbed."

targets have been only partially accomplished: normative gaps remain unavoidable, and interpretation often ends up expanding the role of judiciary. In common law systems, legal certainty is rather protected by following rules extracted from legal cases superior courts had previously ruled on. In particular, courts build their motivations around two components, i.e., ratio decidendi and obiter dictum. The ratio decidendi, "court holding" in the USA, provides lower courts with the binding rule, namely, the legal principle that determined the judgment. What falls outside the ratio decidendi is obiter dictum and consists of incidental and/or collateral statements that do not have any binding authority. Obiter dicta may exert persuasive force on following opinions, mainly depending on how prestigious the court deciding the case is. Lower courts firstly identify the ratio decidendi of a case and abstract the legal rule from its own decisional context, a far from trivial task. Secondly, they have to establish if the selected rule has binding authority since not all rationes decidendi become binding precedents for future similar cases. In some way, prediction is how the stare decisis doctrine conceives of the law: previous decisions are of utmost significance as they allow for performing reliable predictions on the law content in future legal cases. But precedents' binding authority is not absolute: if the court shows, through the distinguishing technique, that the new case is dissimilar from the previous one in significant respects, it can disregard the precedent.

In AI and Law, case-based reasoning systems, such as HYPO (Ashley 1991), CATO (Aleven 1997), and all the research triggered by those first works (e.g., Bench-Capon et al. 2013, Prakken et al. 2015), have modelled this reasoning pattern, which is complex for two main reasons. First, those computational models should be able to compare cases in terms of similarity between them. Similarity has to be also relevant, and relevance is an extremely elusive concept, as we have stressed above. Secondly, the systems should measure in what respect and how much two cases are similar. To put it differently, similarity among cases shifts the burden of proof between the parties, and each is required to prove how much similar two cases are, or whether and how the new case distinguishes itself.

HYPO addresses the issues with dimensions and factors. A dimension is a legally relevant aspect of the case; it can be pro-plaintiff or pro-defendant (factor), depending on the value that it takes on a scale. Case-based reasoners have usually a dialectical structure: opposite arguments confront and require to be balanced. Logical argument game (Prakken 2005), HYPO consists of a three-ply argumentation: three moves are possible (plaintiff-defendant-plaintiff) and, at the end, a winner is identified. HYPO allows for using the distinguishing technique and for finding counterexamples to arguments.

Applying an argument-scheme approach to reasoning and arguing with cases, an argument scheme suitable for reasoning with precedents is formulated by building on the basic version of the argument from analogy:

ARGUMENT FROM ANALOGY (Walton et al. 2008, p. 315) *Similarity Premise*: Generally, case C_1 is similar to case C_2 . *Base Premise*: Proposition A is true (false) in case C_1 .

Conclusion: Proposition A is true (false) in case C_2 .

ARGUMENT FROM PRECEDENT (Walton 2010b):

Previous Case Premise: C_1 is a previously decided case.

Previous Ruling Premise: In case C_1 , rule R was applied and produced finding F.

New Case Premise: C2 is a new case that has not yet been decided.

Similarity Premise: C_2 is similar to C_1 in relevant respects.

Conclusion: Rule R should be applied to C_2 and produce finding F.

Critical questions challenge rule applicability, similarity between cases, and its relevance for the comparison. They also explore the possibility of finding stronger similarities with other cases ruled differently, or, simply, of distinguishing the present case so to prevent the application of the rule.

Apart from the specificity of comparing cases in terms of relevant similarities, it seems possible to connect argument from precedent to another key argument scheme for law, i.e., argument from rule application. Indeed, applying the argument from precedent scheme results, in the end, in applying a rule, even if rules are identified not among a written body of law, but are extracted from a previous case that is relevantly similar to the case yet to be decided. This remark could allow for inferring that legal reasoning, however it is performed, is generally meant to solve legal problems through the application of rules to facts, and that, for this reason, it is essentially rule-based.

3.2.2. Argument from Rule Application

Applying a legal rule to the facts is central to the law as a problem solving activity (Prakken 2005), both in common law and civil law countries. Much about the nature of rules, their application, and interaction has been told in AI and Law community (Gordon and Walton 2009):

- rules have properties, mainly regarding their validity (e.g., date of enactment), which are better expressed by terms than by logical formulas, and which imply, whenever a rule is applied, to reason about them;
- rules are defeasible, are subject to exceptions, and can conflict with each other;
- normative conflicts can be effectively addressed by reasoning about them with priority rules (e.g., lex superior, lex specialis, lex posterior);
- rules are exclusionary²⁹ for they undercuts other, theoretically applicable rules;
- sometimes, it is necessary to reason with invalid rules: if admissible, ³⁰ retroactive reasoning exactly requires to apply rules that are not valid anymore (they may have been, explicitly or implicitly, suppressed by a subsequent rule).

²⁹ In Reason-Based Logic (Verheij 1996, Hage 1997), rules are exclusionary as well, in that they include not only reasons to support their conclusions, but also reasons against the application of the principle underlying the rules. In other words, principles are replaced by rules. The meaning of 'exclusionary' is thus quite different.

Argument-based logic has modelled this kind of reasoning and has dealt with norm conflicts (Prakken and Sartor 1996, 1997), with reasons and principles (Verheij 1996, Hage 1997), with purpose (Berman and Hafner 1993), with values (Bench-Capon et al. 2013).

A possible argument scheme for reasoning with rules looks as follows:

ARGUMENT FROM ESTABLISHED RULE (Walton et al. 2008, p. 343)

Major Premise: If carrying out types of actions including the state of affairs A is the established rule for x, then (unless the case is an exception), x must carry out A.

Minor Premise: Carrying out types of actions including state of affairs A is the established rule for a.

Conclusion: Therefore, a must carry out A.

This scheme seems to resemble the basic functioning of schemes for practical reasoning, where an action is tied to specific consequences, bad or good, and agents reflect on their actions in sight of those future consequences. Such resemblance does not surprise since legal reasoning is normally considered as a form of practical reasoning. Moreover, this link to practical reasoning further implies that reasoning with rules often means reasoning with the different goals they could be achieving, and with the principles that ground them. So, critical questions need to assess which exact content the rule has, whether the rule conflicts with other rules and is maybe overridden by one of them, and, finally, whether the concrete case instantiates an exceptional circumstance allowing for not complying with the rule.

4. Argumentation-Based Approach to Legal Interpretation

Interpretation is one of the stages of legal reasoning as well as a form of reasoning itself. In AI and Law, Prakken (2005, p. 314) has defined it "a very hard research problem," and not by chance. Always bearing in mind Alf Ross' distinction between interpretation as activity and interpretation as outcome (1959), applying the law to concrete cases calls for a multifaceted interpretive activity:

- The piece of legislation is interpreted to derive the applicable norm: this first interpretation leads to the definition of the conditions of applicability of the rule, that is, its 'scope,' borrowing Hage's words;
- Subsuming the facts of a case under the rule is the interpretative act that practically verifies whether the scope of the rule includes specific factual situations and allows for its correct application: the interpreter's task is difficult due to the large gap between the facts of a case and the abstract nature of legal concepts (Prakken 2005, p. 314);

³⁰ Retroactive reasoning is usually not admitted in criminal law, unless the new law is favourable to the defendant (*favor rei*). In Italy, both principles are derived from article 25 of the Constitution (see footnote no. 3).

 Choosing among different possible interpretations is an interpretive act as well, even if it is a special one, defined 'second-order' (MacCormick and Summers 1991), or meta-interpretation, for it does not aim to attribute some kind of meaning to the words of the rule, but to reason about how and why to select one meaning instead of another.

It is worth noting that, in sight of the interpretive activity, the text of the law, i.e., the provision, distinguishes itself from the meaning that the interpretation attributes to it, i.e., the norm. Such (not merely) terminological distinction is maintained throughout the whole thesis, as specified in the introductory chapter.

Much AI and Law research has been committed to modelling arguments for interpreting legal concepts and the fact that normative conflicts often result from conflicts among different interpretations has further promoted this research trend. In particular, argument-based approaches to legal interpretation have been extensively explored. They actually account for the connection existing between interpretation and justification: not only courts' interpretation of a statute justifies the way they apply it in a case, but also the very choice of a specific interpretation needs a justification. In other words, arguments justify both the application of the rule and the interpretation itself, expressing what gives justificatory power to that interpretation. Starting from such remarks, in 1991, Neil MacCormick and Robert Summers collected several country-specific studies on statutory interpretation, and conducted a significant comparative investigation on the topic. They aimed at promoting a general theory of interpretive arguments, believing that interpretive arguments are the "elements of rational justification within practical reasoning about issues of law" (MacCormick and Summers 1991, p. 511).

According to them, each interpretive argument can be formulated in terms of a mode of interpretation that should be adopted in case certain circumstances hold: "If interpretive conditions c exist, then statutory provision p ought to be interpreted in manner m" (id., p. 515). Canons of interpretation are thus expressed in a conditional form, as an 'if-then' rule.

As also listed by Sartor et al. (2014), eleven types of interpretive arguments resulted common to all the countries reviewed, and they are:

- Argument from ordinary meaning: if a statutory provision can be interpreted according to the meaning a native speaker of a given language would ascribe to it, it should be interpreted in this way, unless there is a reason for a different interpretation;
- Argument from technical meaning: if a statutory provision concerns a special
 activity that has a technical language, it should be interpreted in the appropriate
 technical sense, as opposed to ordinary meaning;
- Argument from contextual harmonization: if the statutory provision belongs to a larger scheme in a statute or set of statutes, it should be interpreted in light of those;

- Argument from precedent: if a statutory provision has a previous judicial interpretation, it should be interpreted in conformity with it; if courts are organised hierarchically, lower courts must conform to the judgements of higher ones;
- Argument from analogy: if a statutory provision is similar to provisions of other statutes, it should be interpreted in order to preserve the similarity of meaning, although it provokes a departure from the ordinary meaning;
- Argument from a legal concept: if the general legal concept has been formerly identified and elaborated by the doctrine, it should be interpreted in such a way as to maintain a consistent use of the concept through the system as a whole;
- Argument from general principles: whenever general principles are applicable
 to the statutory provision, one should favour the interpretation that most complies with these general legal principles;
- Argument from history: if the statute has been interpreted for a period of time following the historically changed understanding of a peculiar point, its application to a case should be interpreted pursuant to this historically evolved understanding;
- Argument from purpose: if a purpose can be ascribed to a statutory provision, the provision should be interpreted in a way compatible with the purpose;
- Argument from substantive reasons: if there exists some goal that can be considered as fundamentally important to the legal system, and if the goal can be promoted by one rather than another interpretation of the statutory provision, the provision should be interpreted in line with the goal;
- Argument from intention: if a legislative intention concerning a statutory provision can be identified, the provision should be interpreted in line with that intention.

They were then grouped into four categories: 1. *linguistic* arguments (argument from ordinary meaning; argument from technical meaning); 2. *systemic* arguments (argument from contextual-harmonization; argument from precedent; argument from analogy; logical-conceptual argument; argument from general principles of law; argument from history); 3. *teleological/evaluative* arguments (argument from purpose; argument from substantive reasons); 4. '*transcategorical*' argument (argument from intention).

Before them, Giovanni Tarello (1980), an Italian jurist, had proposed another list of interpretive arguments, which, after influencing Perelman's work, has been also considered by Sartor et al. (2014):

- Argument a contrario: if a legal statement says "If A then B," then the interpretation "If A or C then B," where C is not entailed by A, should be excluded;
- Analogical argument: if there are entities that are not literally included in the scope of a legal statement but are relevantly similar with other entities literally included, the legal statement should be interpreted as including the first;
- Argument a fortiori: if a term in the statement, which apparently identifies a single class of subjects or acts, can be extended to other subjects or acts be-

cause these deserve to a larger extent that normative qualification, it should be interpreted in the extended version;

- Argument from completeness of the legal regulation: if an interpretation creates a gap, it should be excluded;
- Argument from the coherence of the legal regulation: if interpretations of different legal statements make them conflict with one another, those interpretations should be neglected;
- *Psychological argument*: if the actual intent of the lawmaker can be identified, the legal statement should be interpreted accordingly;
- *Historical argument*: if the legal statement can be given a meaning already used in other statutes regulating the same topic, that meaning should be maintained:
- Apagogical argument: if an interpretation generates an absurdity, it should be disregarded;
- *Teleological argument*: if it is possible to identify a rational purpose from the goals and interests supposedly promoted by the law, the legal statement should be interpreted in such a way as to promote that purpose;
- Parsimony argument: if an interpretation is redundant, this should be excluded, on the assumption that the lawmaker does not make useless normative statements;
- Authoritative argument: if an authoritative judicial or scholarly subject has already promoted an interpretation, this should be supported;
- *Naturalistic argument*: if the legal statement can be interpreted in such a way as to align it with human nature, that interpretation should be supported;
- Argument from equity: If an interpretation is unfair or unjust, it should be excluded (and vice versa);
- Argument from general principles: if suggested interpretations are compliant with (incompatible with) general principles of the legal system, they should be supported (excluded).

Sartor et al. (2014) note that the two categorisations complement each other: Tarello mainly focused on the reasoning steps constituting the interpretive arguments, whereas MacCormick and Summers stressed what inputs bring about interpretive arguments. In fact, the latter wished to identify where each interpretive argument draws its justificatory force from and, ultimately, what important values permeate our legal systems. They claimed that "values form the ultimate level of justification and of interpretative arguments and of other underlying directives of interpretation" (MacCormick and Summers 1991, p. 532): the more interpretive arguments are based on values of legal and constitutional order,³¹ the more they can exert justificatory force. Consider, for example, the strong "prima facie" justificatory force that linguistic arguments show in all the systems covered by the

³¹ In their study, it has been shown that a consensus across systems about general values of legal order can be identified (Summers and Taruffo 1991).

comparative study: this would be rooted in the idea that legislation comes from an authority that lawfully promulgates and enacts the law on behalf of the (majority of the) people. Applying and abiding by the literal text of legislations thus mean respecting democracy, separation of powers, and the rule of law.

Additionally, they noticed that a model for arguing with interpretive arguments should take into account that:

- Occasionally, just one interpretive argument is used in the interpretation: that single interpretive argument is capable of exerting sufficient justificatory force to promote the application of the rule;
- More frequently, to achieve the goal of supporting a specific interpretation of the law, interpretive arguments are considered jointly (e.g., systemic arguments often concur to support a particular interpretation that is expression of values or principles);
- When various interpretations are possible and each of them is theoretically appropriate, conflicts may arise.

The last bullet item refers to the necessity of modelling argumentation in presence of interpretive conflicts, which is a form of second-order, or meta-, argumentation. Multiple argument forms are involved in arguing with such conflicts: not only the different interpretive canons that can all be hypothetically applied, but also rules of preference, which will eventually solve the conflict, establishing priorities among the various possible interpretive outcomes. A possible ordering among canons of interpretation looks as follows: 1) linguistic arguments, 2) systemic arguments, 3) teleological arguments; each next step is reached only if there are reasons to abandon the previous level (MacCormick and Summers 1991, p. 531). Intentions may then intervene at any level to identify those values the legislator has supposedly held as fundamental: the argument from intentions, 'transcategorical' for this reason, may confirm a first ordering of the involved interpretations or, contrarily, show reasons to leave it.

4.1. Arguing with Interpretive Canons

Interpretive canons are those rules that have to be applied for interpreting statutes. Usually, legal systems not only provide for lists, more or less complete, of such canons of construction,³² but also establish priorities among them.³³ Besides, Superior Courts are often charged with deciding on the interpretation of controversial

³² For instance, articles 1362–1371, Italian Civil Code list the interpretive criteria to be applied for interpreting contracts: such list represent a guideline not only for the parties, but also for the judge on the occasion of dispute resolution.

³³ As mentioned in chapter 1, in Italy, article 12 of the preliminary dispositions to the Civil Code establishes a hierarchy between canons of interpretation.

pieces of legislation, and with fostering an as uniform as possible interpretation of the law,³⁴ which is one of the pillars of legal certainty.

To appreciate how interpretive canons function, consider the argument form ordinary meaning, as presented by MacCormick and Summers (1991, p. 513): a statutory provision can be interpreted according to the meaning an ordinary speaker of the language would ascribe to it as its obvious meaning, unless there is adequate reason for a different interpretation. Interpretive arguments seem to show recurring structural elements (Sartor et al. 2014):

- There is an expression E, the meaning of which is doubtful;
- This expression occurs in a document D (e.g., a statute, or a contract);
- E has a setting S that is relevant for interpreting it (e.g., ordinary language, technical meaning, precedent);
- E in D would fit this setting S by having interpretation I;
- E ought to be interpreted as I if all the previous elements are satisfied.

Sartor et al. (2014) recognise the following pattern of interpretive argument:

If expression *E* occurs in document *D*, *E* has a setting of *S* and *E* would fit this setting of *S* by having interpretation *I*, then, *E* ought to be interpreted as *I*.

Each interpretive argument is a pattern of reasoning in the form of 'if-then' rule, licensing a deontic interpretive claim ('ought/ought not'). In so doing, it aims at supporting certain interpretations, and relates to other interpretive arguments either supporting their interpretive conclusion (aggregation of arguments), or attacking it. In an abstract argumentation framework such as ASPIC+ (Prakken 2010), canons of interpretation are seen as defeasible rules, so that their conclusion, i.e., E ought to be interpreted as I, can be abandoned in presence of better-supported interpretations. The AF includes both strict and defeasible rules expressed in an underlying logical language L, and preferences between those rules are expressed by formulas like $r_1 > r_2$, establishing which interpretive argument prevails in the attack. Attacks occur in the standard three ways: by producing a counterargument, i.e., rebutting it; by denying that the interpretive argument holds in the present case, i.e., undercutting it; by claiming that one of the antecedents of the argument does not hold, i.e., undermining it.

Rotolo et al. (2015) have refined such argument-based model of legal interpretation, by presenting a logical machinery, based on deontic defeasible logic, for modelling interpretive arguments. They build on the next basic intuitions:

- Interpretive canons are represented as defeasible rules: their antecedent conditions can be of any type (assertions, obligations, etc.), and their conclusion is an interpretive act that leads to interpret a provision *n* in a certain way as a result.
- Interpretation is both the activity that ascribes the meaning to a provision *n* (A-interpretation), and its outcome, corresponding to the meaning obtained by applying that interpretive canon (O-interpretation).

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³⁴ For Italy, see footnote no 7.

- It can be established a standard priority relation over interpretation rules, so that it is possible to handle and solve conflicts occurring among interpretive canons (e.g., Rule 1 > Rule 2); it is worth noting that a ranking between interpretive rules can be useful also in absence of a proper conflict, so that the interpreter is aware of what canons should be preferably applied in general (for instance, if both the ordinary meaning canon and the systemic canon give the same interpretive result, the first should be normally used to justify the interpretation).
- Both A- and O-interpretation can be admissible, if it can be proved by a defeasible interpretive rule, or obligatory, if it is the only admissible interpretation of *n*; note that this intuition develops the claim that an expression *E* in a document *D* (e.g., a statute) ought, ought not, may or may not be interpreted in a specific way (Sartor et al. 2014).
- A provision n can be abstract, if its logical structure is not analysed, or structured, if it corresponds to a linguistic sentence having the structure of a rule a₁,..., a_n ⇒ b; along with this distinction, the authors propose two options for modelling interpretive arguments.

Following the same line of research, Walton et al. (2016) have further considered some contested cases of statutory interpretation. Not only have they proposed the distinction among positive and negative interpretive arguments, but have also identified some critical questions:

CQ1: What alternative interpretations of E in D should be considered?

CQ2: What reasons are there for rejecting alternative explanations?

CQ3: What reasons are there for accepting alternative explanations as better than (or equally good as) the one selected?

Arguing with different interpretations has also been viewed through the lenses of practical reasoning: interpretations promote certain applications of the law that are seen as actions with possibly good or bad consequences. Thus, a value-based approach (Bench-Capon 2003), already used to address the issue of interpreting statutes with purposes, can turn out useful (Atkinson and Bench-Capon 2007, Atkinson et al. 2005): Dung's abstract AF is extended by providing each argument with a value that it promotes and by ordering all the values. The system resolves the attack relation among the conflicting arguments by comparing the value preference they support. An argument scheme for practical reasoning that can reasonably be applied to legal interpretation is also identified:

In the current circumstances R Action A should be performed To bring about new circumstances S Which will release goal G And promote value V

Critical questions challenge the truth of the circumstances, explore the credibility of the imagined consequences, look for alternative ways to promote the same

value, investigate potential disadvantages linked to the action (e.g., demotion of other important values), and, finally, put to the test the legitimacy of the value.

Also factor-based reasoning, as developed in CATO (Aleven 1997), has been combined with an argument-based approach (Prakken et al. 2015). The ASPIC+ framework is the formal setting for the comparison between two famous cases of US trade secret law, *Mason v. Jack Daniels Distillery*³⁵ and *M. Bryce & Associates, Inc. v. Gladstone*. The comparison is accomplished through the identification and use of factors (expressed, e.g., in the following form: *F6 Security-measure (p)*, where p stands for 'pro-plaintiff factor') drawn from the cases. Arguments are then constructed with those factors, and comparisons are modelled in terms of similarity or distinguishing. As a result, a directed graph in Dung-style AF is obtained.

5. Conclusions

The chapter has presented the theoretical background of the thesis, and has intended to show that:

- Legal reasoning is mainly defeasible in kind and grounded on arguments: so, argumentation theory methods can be suitably tested on it, in turn acquiring beneficial viewpoints on how arguments work in practical settings;
- Logics, if understood broadly as the study of reasoning that is correct in that it
 is rationally justified, can also be conveniently used to study legal reasoning,
 despite the usual critiques against formal methods applied to law: argumentation logics supports such statement;
- In particular, argumentation schemes prove useful in order to examine legal argumentation, even if from an informal perspective, for they allow to keep track of the reasons underlying the reached legal conclusion.

The second section has illustrated what an argument is and what kinds of arguments exist, emphasising the close connection between argumentation and defeasible reasoning. Besides, argumentation theory has independently and informally studied arguments and argumentation, but it has been enriched by contributions from philosophy, AI, and also law. Taking into account the essential theoretical influences exerted by the works of Toulmin, Perelman, and Alexy, the AI and Law community has mostly focused on formalising the many instantiations of legal defeasibility. It is worth recalling Dung's abstract argumentation framework, which has fundamentally contributed to the study of the attack relations between arguments and continues to ground several AI and Law works.

³⁵ Mason v. Jack Daniel Distillery, 518 So. 2d 130 (Ala. Civ. App. 1987).

³⁶ M. Bryce & Associates, Inc. v. Gladstone, 107 Wis. 2d 241 (1982).

After considering formal studies of legal argumentation, the attention has been then brought on the content of arguments, examining argumentation schemes and taking the argument from expert opinion as main example. Acting as missing link between formal methods and practical reasoning, argument schemes allow the reasoner to express and maintain the specific-domain reasons behind the achieved legal conclusions. Such field-dependency is particularly evident in critical questions, which constitute the method for evaluating the correctness of the reasoning unfolded through them: depending on the scheme, critical questions indicate how the parties may weaken their counterparty's reasoning. Some cross-similarities are identifiable in all critical questions: there are always questions that generally undermine the conclusion, or the inference between premises and conclusion, or the starting assumptions. Clearly, they resemble the role played by counterarguments and attack relations also in abstract argumentation frameworks. Section 3 ends with two argumentation schemes that are central to the law, i.e., argument from precedent and argument from rule application.

Finally, the chapter introduces the topic of legal interpretation, one of the trickiest research problems linked to legal reasoning as well as leitmotiv of the thesis. The concept of canon of interpretation is explained, and a correspondence is established between its if-then form and the usual form of arguments and argumentation schemes. The legal theoretical works conducted by Tarello and MacCormick and Summers on interpretation help to situate the basic functioning of canons of interpretation within legal argumentation, judicial justification, and law application. On these premises, the chapter analyses the argumentation scheme for statutory interpretation and its implementation, and presents other formal approaches to legal interpretation.

In closing, it should be said that the picture taken of argumentation theory, argumentation schemes, and legal interpretation has ended up showing a gap in the literature with reference to argument-based approaches to legal interpretation. If MacCormick and Summers (1991) have edited a wide-ranging comparative analysis of modes of interpretation, identifying common traits among different system when interpreting legal rules, an area has so far remained under investigated, both from a merely legal theoretical and formal/informal perspective, that is, how national courts should apply foreign interpretative canons. We know from the introductory chapter that domestic courts are more and more engaged in such interpretive endeavour in private international law cases, when the law to be applied may be a foreign rule. The present report on the state of the art has revealed that if legal interpretation has been quite extensively studied through the use of formal and informal argumentation methods, providing tools also to address normative conflicts, legal interpretation of foreign law by domestic courts has been disregarded, remaining an unexplored field in spite of its growing practical relevance. So, major efforts should be put not only into bridging the gap between facts and legal concepts in domestic legal interpretation (Prakken and Sartor 2015), in order to guarantee its realistic formal representation, but also into examining how different legal systems interact on the level of interpretation.

Chapter 3: Introducing Private International Law

1. Going Back to the Law

Legal systems may appear as isolated structures that work quite smoothly within their own borders, offering suitable legal solutions to problems, and avoiding disharmonies as much as possible. Though, separation between normative systems is just a fiction: always more often, private relations are featured by transnational elements and legal experts end up dealing with legislations, concepts, and principles extraneous to their professional education and experience.³⁷ Coordinating legal systems and avoiding conflicts among them is an overriding aim for lawmakers: private international law (or conflict of laws) is exactly the branch of law that identifies the court competent to hear and rule the case, and makes it possible to apply, within the territory of the state, the law of a foreign state.

However, even if jurisdiction and choice of law mechanisms avoid such first conflict among states in private international law contexts, foreign law application by domestic judges raises thorny questions, ranging from the theory to the practice (Basedow 2014): from to what extent national courts should import and apply foreign legal rules, to the status of foreign law once it accesses the domestic system, to the concrete possibility for national courts to be acquainted with and interpret it properly, up to the impact foreign law has on the recipient system.

In particular, how domestic courts manage, firstly, to know and, then, to interpret the relevant foreign law is at the core of any possible cross-border legal reasoning as well as the trickiest challenge such reasoning poses to domestic systems. Lacking awareness of, and insights into, the natural context of foreign rules, courts run the risk of misunderstanding their original meaning and misinterpreting them (Bogdan 2012): the examination of some private international law decisions has actually shown that foreign rules have often been applied incorrectly by national judges (Jänterä-Jareborg 2003). An as faithful as possible application of foreign law not only serves the interests of the forum country in seeing cross-border contractual and family relations function smoothly (Bogdan 2012), but also those of the parties in obtaining certain and predictable legal outcomes (Kiestra 2014).

³⁷ Even if it is not the focus of the present thesis, consider also the growing impact of international law on domestic law (see, e.g., Björgvinsson 2015), speaking of which it has been said that "[...] we should no longer think of domestic law as particularly self-contained" (Bermann et al. 2011, p. 950 – Schippele).

In the overall picture of the thesis, this chapter follows the introduction of argumentation theory and argument schemes as valuable tools to address the theoretical and practical challenges posed by legal reasoning and interpretation to any reasoner. Also the present chapter has an introductory character with respect to the legal field we are considering, i.e., private international law, mainly as experienced in continental Europe. As such, it presents its main questions, features, and critical issues, without disregarding the many changes it has been going through lately. Still, no in-depth examination of EU or of any of its Member States conflict of laws is carried out: aim of the following analysis is rather to make the reader both acquainted with the fundamentals of private international law, and aware of its actual challenges, while offering some theoretical guidelines and perspectives. Thus, the chapter logically precedes the next one on the Italian reformed system of private international law, as outlined by law no. 218/1995, in the broader framework of EU regulations and international treaties. Note that some basic concepts, e.g., public policy exception and overriding mandatory rules, are left to be examined in that chapter. The next pages maintain a mainly theoretical approach and focus on legal reasoning and interpretation, central themes of the thesis.

Keeping in mind these reading guidelines, we explore the topic with three main sections. Section 2 is about the basics of private international law and introduces its fundamental components (i.e., conflict rules, connecting factors), central questions, and objectives. We pay special attention to the issue of ascertainment of foreign law, given its nature of prerequisite to any foreign law application. Section 3 examines the present sources of conflict of laws: EU regulations and international treaties play by now a growing role in regulating private international law matters, and have been correspondingly reducing the applicative scope of inner provisions. Finally, section 4 reviews possible theoretical perspectives on private international law. Firstly, it presents the deep changes occurred both in US and in EU conflict of laws. Secondly, it comments upon some AI and Law approaches to the analysis of conflict of laws and, in general, of legal pluralism: in fact, the theoretical analysis of both topics has profited from logic and argumentation.

Before continuing, we should consider a terminological observation: the term 'forum' always refers to the domestic legal system, be it its court system or its substantive law, which, in Latin conflict of laws terminology, is also called *lex fori*. Other terminological clarifications are in the text.

2. The Concept of Private International Law

Private international law, or conflict of laws, is defined as the branch of law that is meant to assist domestic courts in deciding cases which present one or more foreign elements (Rogerson 2013). It deals with private-law relations and civil proceedings that have international connotations (Bogdan 2016), and is composed of

the principles, customs, or agreements that regulate the juridical relations between individuals and companies governed by the law of different states.³⁸

The use of the adjective 'international' should not be confused with its use in 'public international law,' casting doubts on the very nature of private international law. Private international law is private law for it concerns private relations among citizens or companies; but, those relations have an international character since they present some link with more than one country. Originally, each state equipped itself with a body of private international law and decided to what extent it would acknowledge the law of other states, allowing it to access the domestic legal system and to substantially regulate the particular case in front of the national court. Gradually, it has become terrain of international and supranational legislative production; still, international is not the source of the law, rather, the nature of the private legal relation conflict of laws rules refer to. On the contrary, public international law is the law of the international "community of states" (Conforti 2014) and consists of customary law, common to all nations around the world (jus gentium), peremptory norms (jus cogens), and rules included in international treaties (jus inter gentes), entered into by sovereign states for regulating their conduct and the relations among them, or, exceptionally, with natural or juridical persons. In short, private and public international law are rules of different legal systems.

Consider a request of dissolution of marriage between partners of different citizenships, or the regulation of a supply contract stipulated by companies seated in different countries, or of a tort committed in a country other than that where the parties habitually reside: these are the kind of international situations private international law rules. In fact, in each of them, more than one legal system could be competent to hear and decide the case and also to provide for the applicable law: in front of many substantive private laws, which one should indeed regulate the relation and possible dispute from a substantial standpoint may thus be unclear. So, a system for allocating disputes in front of the proper jurisdiction, for identifying the relevant law, and for establishing at what conditions a foreign judgment may be recognised, is required. Such system, i.e., private international law and its connecting factors,³⁹ is often grounded on the prominent idea that cross-border private cases should be governed by the legal system, with which they present major connections.

Conflict of laws is then usually composed of:

• Rules of jurisdiction that determine the competence of the national court to hear and decide a case: note that, when the court decides that it is competent to rule the case, it usually follows the procedural rules of the forum (Bogdan 2016);

³⁸ Confront legal dictionaries: e.g., Braudo S, Droit International Privé, *Dictionnaire du droit privé*, http://www.dictionnaire-juridique.com (accessed on 19/08/2016).

³⁹ Connecting factors are introduced in the next subsection 2.1.

- Choice of law rules, or conflict rules, selecting the appropriate rules of a system
 of law, domestic or foreign, which the competent court should apply in hearing
 and deciding the case;
- Rules for the recognition and enforcement of judgments issued by foreign courts or of awards of foreign arbitrations.

Judicial cooperation raises other procedural questions, such as the cross-border service of legal documents or the acquisition of evidence, which may be considered a residual part of conflict of laws, but with extreme practical importance, mostly within the EU (Kramer 2014).

2.1. Conflict Rules and Connecting Factors

Conflict rules are those rules of private international law that identify the legal system the substantive law of which governs the case in front of the national court: they can ultimately allow courts to apply foreign law in the national proceedings. Also called choice of law rules, they are often considered procedural rules, or formal rules, for they do not directly establish the substantive result of the dispute; but, they simply refer to other substantive rules, which, in turn, will determine that result. Note that the identified substantive law can be inner or foreign, depending on what facts feature the case and on how the court categorises them.

An example of conflict rule is article 20 of the Italian law no. 218/1995, on the legal capacity of physical persons: "The legal capacity of physical persons is governed by their own national law." This is a typical case of bilateral conflict rule: von Savigny's legacy, bilateral conflict rules treat the law of the forum and the foreign law equally, at least in principle. Conflict rules may also be unilateral, just defining the applicative scope of the national law: lawmakers normally introduce both bilateral and unilateral rules. But, noticeably, the savignian approach continues to prevail in codifications of private international law, e.g., within the frame of EU integration (Bogdan 2012).

Starting from the conflict rule, the identification of the applicable law is an interpretative act performed by domestic courts. It consists of two successive steps, through which judges identify where the particular case has its "centre of gravity:"

- Qualification;
- Identification of the connecting factor.

The qualification step aims to include the facts of the case under a precise, abstract legal category. The court usually qualifies the legal categories through the

 $^{^{\}rm 40}$ Our translation.

⁴¹ Chapter 4 illustrates that the Italian legislator was influenced by both von Savigny and the jurist Pasquale Stanislao Mancini to mainly opt for bilateral conflict rules.

lenses of the law of the forum. Other theories require that qualification occurs according to the *lex causae*, i.e., the law of the foreign legal system, or to some form of comparative analysis (Bogdan 2012). Still, the fact that conflict rules are, firstly, inner law makes legal experts prefer to interpret them according to national interpretive criteria. However, also classifying a cross-border legal case according to purely national categories is troublesome: apparently similar categories can prove distinct from one another in meaning and application, depending on the legal order of reference; then, qualification could result even impossible in case of unknown legal institutions. Consider for example the problem of qualifying a same-sex civil partnership in a state that neither admits civil marriages of same-sex couples nor provides for a regulation of civil partnerships broadly understood.

Rogerson (2013) lists two other possible situations:

- the national law and the foreign law stress the relevance of different connecting factors with reference to the same particular case: such problem is better known as *renvoi*, in French language, and refers to the question whether the law of the foreign legal system, which the domestic private international law identifies, is to be understood as the substantive law or the choice of law rule of the foreign country; *renvoi* is preferably excluded nowadays, for example in the EU regulations, as it is explained in the next chapter;
- the legal issues at stake may contextually belong to different categories, regulated by different conflict rules: for instance, this frequently occurs in successions, where, besides the issue of transmission of property of real estate (the connecting factor is usually the place of seat of the real estate), there may be the need to verify the degree of kinship of the supposed heir.

For better qualifying facts and categories in light of the inner law, some correctives have been proposed: firstly, the identified legal category should not resemble the corresponding category of national law, but should refer to larger categories that are common to all legal systems; secondly, after identifying the legal category and, thus, the relevant foreign law, the applicable provisions should be specifically drawn from it (double qualification): accordingly, conflict rules recall the foreign law as a legal order. It is worth mentioning that national judges perform qualification also when the relevant rules of private international law are included in EU regulations or international treaties: in such cases, the legal categories will refer to those different levels of law.

Conflict rules, besides abstractly describing the facts included in their applicative scope, stress which element of the case, extraneous to the national system, is relevant to identify the foreign legal system: that element connects the events not only with the national legal system, but also with one or more other systems. For instance, according to the UK conflict of laws, one example of choice of law rule and related connecting factor is the following: "the formal validity of a marriage is governed by the law of the place of celebration" (Rogerson 2013, p. 265). Once the concrete legal relation has been qualified as 'marriage,' the court should investigate where the marriage was celebrated for finally identifying the applicable law.

Another example is given by the regulation of filiation by Italian law no. 218/95 (article 33): the connecting factor is the citizenship of the supposed son or daughter

Main connecting factors thus refer to the citizenship, domicile, or nationality of the parties, to the place where the obligation was stipulated or the event took place (as in case of marriage), to the place of the damage (as in tort law, e.g., where the car accident happened), to the place where the real estate is located, to the will of the parties. The last factor, expressing the freedom of choice of the parties as for the law to be applied to them, is generally favoured in commercial relations and contractual obligations not only by national but also EU conflict rules, as article 3 Regulation no. 593/2008 on the law applicable to contractual obligations (Rome I) shows.

So, conflict rules allocate the particular case to a specific legal system on the basis of the spatial location of some element held decisive by the lawmaker of private international law.

2.2. Ascertaining the Content of the Foreign Law

By coordinating legal systems that are involved in a cross-border relation or transaction, private international law is primarily meant to avoid conflicts among their courts and laws, all supposedly competent to decide the case: the identification of the applicable law should dissolve further problems. Though, after legally qualifying the dispute, choosing the most suitable connecting factor, and localising the relevant foreign law, domestic courts face the need to ascertain the content of that foreign law, and to understand and correctly apply it. A sufficient ascertainment of its content is actually an undisputed requisite for the application of the foreign law in cross-border cases (Esplugues et al. 2011) as well as the ultimate test bed for the very existence of private international law (Lalani 2016, Verhellen 2016).

So, the task of ascertaining the content of the relevant foreign law continues to strongly challenge national courts. In every jurisdiction, the system of justice has an integrated, complex structure, consisting of procedural and substantive laws, legal methodology, a court system, a specific organization of legal professions, a legal education system, and a linguistic community of reference (Basedow 2014). Faced by the necessity to apply and interpret foreign law, domestic courts are unlikely to have adequate information, language skills, and time, for conceiving of a comprehensive outlook on the foreign legal system and safely ascertaining its content on their own. Also, indirectly acquiring such knowledge is expensive, both in terms of time and cognitive resources deployed by the courts, and does not guarantee reliable and up-to-date information on the "living" foreign law. Private international law, thus, risks to be frustrated in its implementation and *raison d'être* and the inability to access the foreign law opens the door to escape mechanisms to

resort to the law of the forum (Verhellen 2016), for example through as an unjustified use of the public policy clause.

Effective and efficient systems of private international law should ideally guarantee the least burden for domestic courts in accomplishing this heavy task. In this respect, legal systems put at the courts' disposal different mechanisms for ascertaining the content of the foreign law and provide alternatives in case of unascertainable foreign law, depending on whether they apply conflict rules and, as a consequence, the relevant foreign law ex officio, or only if the parties require it. Such central distinction between ex officio application and application in consequence of the parties' pleading resembles civil law and common law diverse approach to private international law. The former, like Italy after the promulgation of law no. 218/1995, normally opt for the ex officio application. Foreign law is seen as law and is governed by the principle iura novit curia: courts are obliged to know its content and need to take it into account without express request from the parties. In order to fill the knowledge gap and increase the possibilities to access the content of the foreign law, they can resort to any source, even informal ones, foreign law experts included, even if this is a typical tool to ascertain facts in trials, as it is better clarified in chapter 4 with reference to the Italian legal system. Additionally, the decision on questions of law taken by the lower court may be overruled on appeal (Hausmann 2008).

Differently, in common law countries, like the UK (Crawford and Carruthers 2011) or Australia (McComish 2007), courts apply the foreign law only if the parties plead and prove it. As any other question of fact, failure to prove its content results in dismissal of the claim based on it (Rotem 2014). Besides, statements of fact made by lower courts are usually binding on the court of appeal: potential errors in its application or interpretation are errors of facts. Referring to the Australian conflict of laws, McComish (2007, p. 401) notes that conflict rules are no doubt justified by international comity and the need to avoid extreme forum shopping practices; still, they do not allow an automatic application of the foreign law, which remains a choice of the parties in their particular case.

Beyond the classic dichotomy between foreign law as a question of fact or as a question of law, many states in practice swing between the two, e.g., Scandinavian countries, considering foreign law a sort of *tertium genus*. Such different attitudes have emerged also in the comparative work supervised by Esplugues et al. (2011), whose study has not failed to reveal that courts often merge the three approaches in the legal practice. So, the application of the foreign law in private international law cases often proves inconsistent with the underlying theoretical approach. Consider, for instance, the situation in the USA. Even if in 1966 the Federal Rule of Civil Procedure 44.1 established that "the court's determination must be treated as a ruling on a question of law," in practice foreign law has been treated as a hybrid ever since, not only at the federal level (Cheng 2010): the parties are usually required to prove its content and if no sufficient evidence is provided, this may be a cause for dismissal; also, foreign law is commonly proved thanks to the interven-

tion of experts in trials (Wilson 2011). Proposing to treat scientific facts as foreign law in US trials, Cheng succinctly compares them as follows:

Approaching them as factual questions neglects their status as generalized inquiries subject to external verification. Approaching them as legal questions ignores judges' profound lack of expertise and experience in the substantive areas (2010, p. 110).

Still, it is worth mentioning that US judges are sometimes not keen on appointing foreign law experts, instead favouring a personal but disputable ascertainment of the relevant foreign law. Paradigmatic in this sense is the *Bodum* case (2010):⁴² on that occasion, two out of three judges opted not to resort to the expert testimony to acquire knowledge of the applicable French law and preferred to base their decision on documents concerning the relevant foreign law, available in English in the USA. Note that the French law had been chosen by the parties: when the parties choose the law governing their cross-border relation, they supposedly expect that the law is applied and interpreted as it is in its country of origin (Basedow 2014). By sharply criticising such judicial refusal and the consequent misapplication of French law, Legrand (2013) maintains that, even if national courts are doomed not to bridge the distance between them and their foreign colleagues when applying foreign provisions, their cognitive deficit can no doubt profit from the experts' job. 43 Foreign law should be interpreted as it is lived and experienced in the foreign country, not as it is understood in the domestic country, 44 often relying on accessible, but dubious translations of legislative documents, not officially validated by the competent foreign authorities and filtered through naïve national perspectives. According to Legrand, reading the foreign law through domestic parameters (e.g., terms, categories, or concepts) does not account for the inescapable relation between the law and the place where it was promulgate and, in so doing, it also deceives into thinking that the local law is equal to the foreign law in so many respects, that the expert opinion is not necessary.

Yet, also taking advantage of experts in trial is not so neutral a play. First, experts are not immune to mistakes and misunderstandings. Besides, they are often selected among comparatists. Still, comparative law and private international law have distinct perspectives: the former draws comparisons between legal systems, by highlighting similarities and differences, and studies possible mutual influences from a mainly theoretical standpoint; the latter concretely requires judges to apply foreign law instead of inner law to decide the case and, in so doing, to use foreign rules of interpretation and application. If anything, comparison is a by-product of

⁴² Bodum USA Inc. v La Cafetière Inc., 621 F 3d 624 (2010).

⁴³ Referring to the *Bodum* case and paraphrasing Samuel Beckett, Legrand states: "[...]while the judges were destined to fail to bridge the epistemological gap between Chicago and Paris, they had at their disposal intellectual resources allowing them to '[f]ail better'." (2013, p. 350)

⁴⁴ In this respect, the author talks about "French-law-as-it-is-lived-in-France," that is, the law the parties were presumably expecting to be applied to their relation, opposed to "French-law-as-it-is-apprehended-in-the-United-States," i.e., a misrepresentation of that law through local criteria (2013, p. 349).

foreign law application. However, comparative law, by proposing distinct scholarly approaches to the possibility of knowing and understanding foreign law, contributes to stress what main pitfalls judges may incur when applying foreign law.

Firstly, even if knowledge of the relevant foreign law is a prerequisite for any comparison between legal systems as well as for foreign law application, it is uncertain if the comparatist can effectively acquire such knowledge. In this respect, Legrand (2012) talks more comfortably about shaping one's own belief on the foreign law: indeed, comparatists operate a selection of foreign legal materials, arbitrarily considered relevant and authoritative, and construct their opinion ("narration," "imagination") on what they believe foreign law is, instead of a faithful replication of what foreign law actually is.

Secondly, provided that foreign law is adequately accessed and identified, it is unsure if comparatists can understand it and, if so, what guarantees such understanding. According to functionalism (Michaels 2008a), all societies would basically face equivalent problems, so that laws would functionally aim to react to and solve those problems. In such a view, understanding foreign law is possible: differences in solutions between laws and legal systems are seen in the (functionalist) perspective of identical (or similar) goals to reach. It is easy to see that any idea of legal transplants (Watson 1974), of borrowings between systems, up to that of uniform law(s) are grounded in the functionalist method.

Contrarily, Legrand (2006) maintains that attention should be paid to the singularity of law. If every law is situated in place and time and has a specific historical and socio-political context, manifest in real world circumstances, disregarding such contextual factors implies an "erasure of significance" (p. 524) of the legal text itself in the name of functional commonalities. Accordingly, foreign law could not be understood in universal term. Besides, legal systems do not speak a common language, so that a proper dialogue between them is not conceivable either (Legrand 2012). Rather, their interrelations resemble a negotiation. Not by chance, Legrand defines the comparatist's tasks in terms of temporary achievements, reached by changeable mappings built over the systems of reference, trying to account for both commonalities and singularity, within a "third space," as the ensuing citation makes it clear.

In the third space, there takes place an articulation projecting meaning beyond any signification obtaining in the situated laws themselves. The third space can properly be regarded as effectuating an othering of those laws beyond any simple logic of exclusion or inclusion of them. In effect, the third space introduces another other to the comparison-at-law (when it comes to comparison, one plus one makes three). (2012, p. 39)

As a result, foreign law knowledge would indeed imply production of meaning, in the "trialectical dialectic" starting from the laws and their comparison, and arriving to a third (both conceptual and epistemic) space.⁴⁵

⁴⁵ It is worth noting that Legrand's opinion resembles Troper's idea on meta-concepts (2012) as the only way to compare constitutional systems.

From whatever angle we look at its ascertainment, foreign law seems to build walls around courts. Also, whether we consider foreign law proper law or fact, it is a peculiar specimen of its kind: as law, it cannot be known by judges, it needs to be ascertained resorting to typical fact finding tools, and it leaves room for disregarding it in favour of the law of the forum; as fact, once proved by the interested party, it is used by the court to decide the case. Additionally, it is doubtful whether foreign law, once acquired by the court, becomes integral part of the domestic legal system, or, rather, it remains foreign law within the recipient system, a sort of detachment of the foreign normative system. The answer differently impacts on the way how national courts interpret it, i.e., according to national or foreign interpretive canons, provided that the latter can be likewise acquired. The first solution presumes a substantial identity between national and foreign law: in compliance with this presumption, in common law systems, when the foreign law cannot be proved, the local law replaces it without particular concerns about their differences. The second solution is more typical of question-of-law models. For example, Italian private international law no. 218/1995 expressly provides for the interpretation of the relevant foreign law using foreign interpretive canons.

2.2.1. Tools to Access the Foreign Law

Concretely accessing the content of foreign law is a tangible barrier for the full operation of private international law. When searching for the foreign law, national courts end up confronting the structural and substantial distance between systems of justice and laws. Despite the growing number of cases requiring the application of foreign law, uncertainty about it, also due to limited resources, continues to afflict domestic judges, as also revealed by Verhellen (2016) in a recent survey conducted among Belgian courts in cross-border parentage cases, and it sometimes actualises in "reason based on foreign law inadequately proved" (Lalani 2016). It is worth mentioning that, in the face of any contrary expectation, judges often assess on a case-by-case basis whether they have satisfactory knowledge of both foreign law's content and its interpretation in the country of origin: if they find this is not the case, courts usually resort to national law.

Acknowledging the difficulties parties and courts encounter in cross-border litigation also within the borders of the European Community, in 2001, the Council established the European Judicial Network in civil and commercial matters (EJN-civil), 46 in operation since 1st December 2002, to "improve, simplify and expedite effective judicial cooperation between the Member States" (with the exception of Denmark, not adopting the Decision). The EJN-civil mainly functions through

⁴⁶ Council of the European Union Council Decision of 28 May 2001, establishing a European Judicial Network in civil and commercial matters. OJ L 174, 27/06/2001, pp 25–31.

Contact Points, one for each Member State,⁴⁷ and an information system accessible to the public.⁴⁸ At present, it is possible to contact EJN-civil Contact Points by filling a form that is available from the EJN-civil portal.⁴⁹

Establishing the EJN-civil, the Council intended to meet scholarly expectations of adequate communication between Member States: Remien (2001, p. 79) had for example proposed to install a "preliminary reference procedure," through which domestic courts, facing cases involving the application of another Member State's law, could consult an equivalent court from that state for ascertaining the foreign law's content; such opinion would have not been legally binding, but could have exercised a persuasive authority on the deciding court. However, Bogdan (2016) notes that the EJN-civil has simplified the exchange of information among courts and the access to the foreign law and its ascertainment, whereas Verhellen (2016) shows concerns regarding the ability to keep the ambitious promise of guaranteeing update and reliable legal information to its users at any moment in time.

Over the years, also the international community has looked for viable solutions to this thorny problem. In 1968, the European Convention on Information on Foreign Law (so called London Convention) was signed within the scope of the Council of Europe. ⁵⁰ Its contracting parties specifically undertook "to supply one another with information on their law and procedure in civil and commercial fields as well as on their judicial organization" (art. 1). The Convention has tried to regulate many aspects of the judicial inter-state communication: from the role of receiving and transmitting agencies, which are the state bodies respectively appointed to receive and act on questions from abroad on the forum law, and to accept and transmit requests of information on foreign law (often, the two agencies coincide), up to the content of such requests and replies, and the management of costs. Despite its potentially global coverage, the London Convention has remained limited in its resources (Jänterä-Jareborg 2003) and mostly unknown by judges (Verhellen 2016).

Not surprisingly, the Hague Conference on Private International Law (HCCH), the world organization for cross-border cooperation in civil and commercial matters, has promoted the international cooperation in finding a global answer to this common problem, organising studies and experts' meetings on the topic, in strict collaboration with the European Commission.⁵¹ In March 2009, its Permanent Bu-

⁴⁷ Art. 2, par. 2, provides for the possibility to designate more contact points in special cases of, e.g., existence of separate legal systems, or peculiar distribution of jurisdiction.

⁴⁸ The EJN-civil portal (http://ec.europa.eu/civiljustice/index_en.htm) will converge into the EU e-Justice portal (https://e-justice.europa.eu/content_ejn_in_civil_and_commercial_matters-21-en.do) (both website last accessed on 24/11/2016).

⁴⁹ https://e-justice.europa.eu/contactPoint.do (last accessed on 11/11/2016).

⁵⁰ Council of Europe, ETS no.062, London, 07/06/1968.

⁵¹ See the Joint Conference of the European Commission and Hague Conference on Private International Law, held in Brussels, from 15 to 17 February 2012 (https://www.hcch.net/en/news-archive/details/?varevent=248, last accessed on 24/11/2016).

reau released a series of preliminary documents⁵² addressing the issue. By recognising that the procedures of the London Convention were time-consuming, that online sources were more and more preferred by legal operators when acquiring the foreign law and that, in general, legal information was increasingly digitised, cross-border administrative and legal cooperation was considered an essential step towards a facilitated access to foreign law content. Ultimately, such strengthened cooperation should even prevail over the laborious and complex attempts to harmonise the different existing systems of private international law.

Predictably, the computerisation of legal information has indeed greatly advanced, so that legal materials are by now more easily available to the public, mainly free of charge, through a simple Internet access. It can be expected that, in a near future, most legal information will be accessible online in digital format. In a scenario as such, the Hague Conference could be the ideal candidate both for coordinating all the governments and legal information institutes' efforts towards the digitalisation of laws and for providing for standards and guiding principles to develop a common instrument to collect and share information. In this line, in February 2012, the HCCH meeting⁵³ concluded that:

- Globalisation, migration, and cross-border trade were consistently intensifying the need to access foreign law;
- An effortless access to foreign law was an element of access to justice in general as well as a pillar of the rule of law, both fundamental components of the EU system of justice;
- Only global cooperative mechanisms could offer adequate common solutions;
- Information and Communication Technology (ICT) proposed powerful tools to make foreign law available in private international law disputes and relations.

In 2014, the HCCH issued another preliminary document⁵⁴ and provided a summary of EU legal information solutions, i.e., ELI⁵⁵ and ECLI,⁵⁶ on the development of which the EU hoped for greater collaboration with the HCCH itself.

⁵² Prel. Doc. no. 11A, "Accessing the content of foreign law and the need for the development of a global instrument in this area – A possible way ahead"; Prel. Doc. no. 11B, "Report of the meeting of experts on global co-operation on the provision of online legal information on national laws (The Hague, 19-21 October 2008)"; Prel. Doc. no. 11C, "Compilation of responses to the questionnaire of October 2008 for the meeting of experts on global co-operation on the provision of online legal information on national laws (The Hague, 19-21 October 2008)."

⁵³ See footnote no. 51.

⁵⁴ Prel. Doc. no. 14 (April 2014).

⁵⁵ ELI stands for European Legislation Identifier and is a "semantic web solution enabling direct access to specific national legislation through a structured, flexible identifier" (Prel. Doc. no. 14, 3). More at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3Aj10068 (last accessed on 25/11/16).

⁵⁶ ECLI stands for European Case Law Identifier and is a "system for improving case law accessibility on the internet" (Prel. Doc. no. 14, 13). Its website (accessed on 25/11/16) is https://e-justice.europa.eu/content european case law identifier ecli-175-en.do.

Yet, contrarily to its own past trend and to an unchanged need for tighter cooperation on the topic (Verhellen 2016), in 2015, the HCCH decided to remove from its agenda "the topic of accessing the content of foreign law, with the understanding that this issue may be revisited at a later stage."⁵⁷

Counterintuitive move, it even contrasts ongoing advancements in digitisation of legislations and case law, fostered by the Semantic Web revolution. In fact, law is currently seen as a promising field for applying Natural Language Processing techniques, modelling ontologies, and formalising rules and special reasoning patterns. Taking into account Semantic Web standards,⁵⁸ such methods exactly aim to automate the access to legal content. Conceivably, thus, artificial systems in future could assist legal professionals also with the retrieval of relevant foreign legal materials, referring to the metadata featuring that content.

2.3. Objectives

It is a fact that movements of people have increased, and so has the degree of economic integration among different countries. Thus, if foreign elements in legal relations were once exceptional occurrences, today lawyers and judges face them on a daily basis. Along with such reality-driven necessity, other complementary reasons force states to adopt rules of private international law (Kiestra 2014).

Firstly, private international law rules guarantee legal certainty in cross-border legal relations. Legal certainty is one of the fundamental components of the national rule of law, in that it protects the individuals from discretionary decisions of judicial or administrative authorities. In the context of private international law cases, legal certainty takes on the form of meeting as much as possible the reasonable expectations of the parties as regards the law that will regulate their relation. In other words, when engaging in a legal relationship however featured by a foreign connection, the parties should know in advance the court of which state will decide any eventual dispute arising between them, and which substantive law will apply to their case. Neglecting such reasonable expectations would bring about injustice as well as a distrust of states.

Secondly, private international law should assure the international harmony of decisions: its fundamental objective, in von Savigny's view. Accordingly, given a private law case, presenting links with two or more states, it should be decided in the same way in all the different states (Mayer 2013).

Thirdly, the openness towards the law and the decisions of other states favours the interests of the domestic legal system: international legal cooperation and legal

⁵⁷ Proc. Doc. no. 1 (Dec. 2015), Conclusions and recommendations of the Council on General Affairs and Policy of the conference (24-26 March 2015), 11.

⁵⁸ See for example the OASIS Legal Rule ML project (website last accessed on 25/11/16): https://www.oasis-open.org/committees/legalruleml/charter.php.

stability increase the chances that international commercial contracts are concluded, with advantageous economic repercussions for the state that accepts to apply foreign laws, or to recognise foreign decisions within its territory. Bogdan (2016) observes that this is mostly evident within the European Union: the principle of mutual recognition pursues the objective of legally and economically integrating its Member States, preventing that the two freedoms of establishment and of movements of people, goods, services, and capitals are pre-empted.

3. Legal Sources: a Changing Scenario

Originated as far back as in the Ancient Rome, private international law traditionally forms part of national law, authorising and regulating the (possible) use of the foreign law by and within domestic legal systems in private law cases with a foreign or cross-border element.

Yet, in a more and more globalised legal world, states haves soon perceived as impelling the need for harmoniously handling the same relationship in all the different legal systems involved, for recognising judgments of other states on the basis of precise standards, and for guaranteeing beneficial legal conditions to companies engaged in transnational transactions. A tight international cooperation in conflict of laws matters could also avoid the practice of forum shopping, occurring when the parties present their cross-border case in front of the court that will most likely provide for a positive judgment (Mosconi and Campiglio 2015). Thus, in the last years, conflict of laws has been the result not only of the usual domestic law-making process, but also of international and European law-making procedures: many bilateral and multilateral agreements have been concluded, and now international treaties represent a distinct and pervasive legal source of private international law.⁵⁹

In particular, EU Member States and citizens have been witnessing the gradual, but persistent Europeanisation of private international law. The EU legislative action in the field is contributing to the legal integration among Member States within the Area of Freedom, Security and Justice (AFSJ) of the EU, provided for by article 67 of the Treaty on the Functioning of the European Union (TFEU).

Therefore, a complete framework of the sources of private international law for EU Member States includes:

- Domestic sources of law: e.g., law no. 218/1995 in Italy;
- International sources, even if the expanded EU competence in negotiating treaties with third countries for and on behalf of its Member States is correspondingly reducing their relative power (Mosconi and Campiglio 2015);

⁵⁹ From a constitutional law perspective, international law and EU law rules access the Italian legal system, either by virtue of constitutional reference (art. 10, par. 1; art. 11; art. 117, par.1), or of ratification orders, which usually attribute the status of laws to treaties.

• EU sources.60

External sources have not failed to impact on the provisions of private international law promulgated by national lawmakers: inner laws have been not only influenced in their content, but have also seen their role reduced in scope and marginalised in relevance. Although growingly compressed, national legislations have survived: international and EU private international law provisions are still mainly sectorial and leave normative gaps that are often filled by domestic provisions.

3.1. International Treaties and EU Private International Law

Over time, states have signed many international treaties concerning private international law, realising that an as much uniform as possible legal treatment of cross-border disputes is necessary for promoting legal certainty, predictability of judicial decisions, as well as national economic interests. Some international organisations support the states in preparing, negotiating, and drafting such treaties (Mosconi and Campiglio 2015), such as the Hague Conference on Private International Law (HCCH), the International Commission on Civil Status (ICCS), and the International Institute for the Unification of Private Law (UNIDROIT).

The Hague Conference on Private International Law was established as the first world organization for cross-border cooperation in civil and commercial matters in 1893. Today, 80 states plus the EU (defined as "Regional Economic Integration Organisation") are part of the Hague Conference⁶¹ and several conventions have been developed, covering many areas of law: from international family law and children rights,⁶² to international commercial law,⁶³ up to general legal cooperation and litigation (Kiestra 2014). Besides, it is worth reminding that the HCCH is also playing a precious role in improving the access to the content of foreign law,⁶⁴ one of the trickiest aspects for properly implementing private international law, along with the domestic interpretation of the applicable foreign provisions.

However, international treaties have an important limit: whenever a new Party accesses the agreement, the other Contracting Parties have to sign it again, further

⁶⁰ Consider that EU law takes various forms (directives, regulations, recommendations and opinions, as provided for by article 288 TFEU) and engages with national laws in different ways: for a thorough analysis of the issue, see for example Craig and de Búrca (2015).

⁶¹ More at: https://www.hcch.net/.

⁶² For example, the Convention of 25 October 1980 on the Civil Aspects of International Child Abduction; or the Convention of 19 October 1996 on Jurisdiction, Applicable Law, Recognition, Enforcement and Co-operation in Respect of Parental Responsibility and Measures for the Protection of Children.

 $^{^{63}}$ See the Convention of 22 December 1986 on the Law Applicable to Contracts for the International Sale of Goods.

⁶⁴ See sect. 2.2.1. in this chapter.

slowing down an already compound procedure. Such limits have been faced also when the European Community (after the Lisbon Treaty, European Union) took its first steps towards a common regulation of private international law. After the negotiation and signature of international tools (as the 1968 Brussels convention, on the judicial competence and enforcement of judgements in civil and commercial matters, and the 1980 Rome convention, on the applicable law in contractual obligations), which officially inaugurated the judicial cooperation in civil matters within the Community, it was only with the entry into force of the Amsterdam Treaty, on 1 May 1999, that the Communitarian lawmaker acquired competence in private international law, and, with supranational actions, began to overcome the international law mechanisms.

Since then, and especially after the Lisbon Treaty in 2009, the EU legislative competence has been supported by many policy and legislative actions, and EU private international law has widely developed. The TFEU includes Article 81 (former Article 65, Treaty establishing the European Community–TEC): at the first paragraph, it states that EU judicial cooperation in civil matters having cross-border implications should conform to the principle of mutual recognition of judgments and may entail the adoption of measures for the approximation of the laws of the Member States.

Even if this is not the place to list all the EU regulations⁶⁵ in force, let us recall at least four of them, given their importance:

- Regulation (EC) no. 44/2001, the Brussels I Regulation: 66 it replaced the 1968 Brussels Convention, concerning jurisdiction, recognition and enforcement of judgments in civil and commercial matters. It establishes the so called Brussels Regime, according to which the domicile of the defendant generally determines which court has jurisdiction in a given case (article 2, par. 1, Brussels I, and article 4, par. 1, Regulation no. 1215/2012, the Brussels I bis, a recast adopted in 2012).
- Regulation (EC) no. 2201/2003, the Brussels II Regulation,⁶⁷ regarding matrimonial and parental responsibility matters.
- Regulation (EC) no. 864/2007, the Rome II Regulation:⁶⁸ it regulates choice of law in non-contractual obligations, and includes special rules for product liabil-

 $^{^{65}}$ Regulations have general application, are binding in their entirety, and directly applicable in all Member States (article 288 TFEU).

⁶⁶ Council Regulation (EC) No. 44/2001 of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters. OJ L 12, 16/1/2001, pp 1-23.

⁶⁷ Council Regulation (EC) No. 2201/2003 of 27 November 2003 concerning jurisdiction and the recognition and enforcement of judgments in matrimonial matters and the matters of parental responsibility, repealing Regulation (EC) No 1347/2000. OJ L 338, 23/12/2003, pp 1-29.

⁶⁸ EC Regulation No. 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations (Rome II). OJ L 199, 31/07/2007, pp 40-49.

- ity, damage caused by unfair competition, environmental damage, infringement of intellectual property rights, and damage caused by industrial action.
- Regulation (EC) no. 593/2008, the Rome I Regulation:⁶⁹ it absorbs the above-mentioned 1980 Rome convention, and deals with choice of law in contracts. It also presents special rules for choice of law in consumer contracts, employment contracts, and insurance contracts.

Both Rome I and Rome II consider the habitual residence as the main connecting factor for identifying the applicable law, even if Rome II uses also many factors of objective nature depending on the type of obligation concerned (e.g., the law of the place where the damage has occurred, ex article 4, par. 1). Besides, they both provide for some flexibility, whenever the case presents stricter connections with another state. This element of flexibility has been object of interpretive discussions, as it will be clarified under section 4.2.2. of this chapter.

Notably, the EU legal experience is unique in the world. In fact, the progressive Europeanisation of the law (among which, private international law) is not simply meant to reach the aforementioned general objective of international legal cooperation, but is part of a wider political project: the full European integration. Legal harmonisation and uniformity thus show not just a mere quantitative dimension, expanding on many levels and areas of the law, but also a dominant qualitative aspect (Franzina 2010): European legal pluralism, embodied in the legal traditions of each Member State, is being ordered while protecting a common heritage of values and pursuing precise larger goals.

4. Outlining Theoretical Perspectives

Fundamental area of the law for states, international and supranational organisations, individuals, and companies moving and acting in the global arena, private international law raises important theoretical questions.

At first sight, it is arguable that the very idea underpinning conflict of laws is counterintuitive. In fact, given that no moral or international obligation exists that forces domestic legal systems to apply foreign law, and considering that each legal order is a complete legal universe in itself, the basic question is whether national courts actually need private international law at all (Bogdan 2012): would it not be easier for judges to apply their own law in every case? In this respect, McComish claims as follows:

When foreign law is applicable, one must always bear in mind that it is applicable only because, and only to the extent that, the law of the forum permits it to be so. (2007, p. 401)

⁶⁹ EC Regulation No. 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I). OJ L 177, 4/07/2008, pp 6-16.

Any theoretical approach to conflict of laws starts from here, and tries to untie the knot of sub-questions such first remark inevitably brings about:

- What is the identity of private international law, its raison d'être (Mills 2013)?
- To what extent domestic courts should acknowledge and apply the foreign law? It is worth noting that the receptive attitude of the domestic legal system is not really towards the other state, the law of which has to be applied, rather towards the parties, who have precise expectations as for the law applicable to their relation (Basedow 2014).
- How should alternative interpretations of private international law rules (Dung and Sartor 2011) and of foreign law be considered?

The section is divided into two parts: the first presents some major theories that have developed in this field over the years and how legal theorists have been acknowledging the deep changes in private international law; the second accounts for how logics and argumentation have so far helped to investigate legal pluralism and conflict of laws.

4.1. Theories, Revolutions, and Prospective Developments

Theories of private international law have differently explained why legal systems should acknowledge, and then apply, laws of other legal systems, and to what extent they should do so.

European private international law owes to the thinking of Friederich Carl von Savigny (1869), who intended it mainly as a way to order the international power of states, variously allocating their regulatory authority in case of private-law relations involving more legal systems. In his opinion, since any legal system is equally entitled to be applied, domestic courts should indifferently apply foreign law or national law, just depending on where the particular case has its centre of gravity. This open attitude will eventually promote not only legitimate international relations between states, but also harmonious judicial decisions.

Historically, such understanding of conflict of laws has contrasted with the theory of vested rights, according to which domestic courts would not apply the foreign law, but simply recognise the consequences of foreign provisions within the domestic system (Mills 2013). Basically, this theory accepts that each state has the power to impose its rules of conduct, whenever transactions or other events occur in its own territory: once the last event of the occurrence takes place on the territory of that state, its parties acquire vested right under the law of that jurisdiction (Wasserstein Fassberg 2015). Main purpose of the theory is reconciling the principle of territoriality of law with the need for private international law.

The vested rights approach has long characterised the US conflict of laws. In particular, the 1934 First Restatement of Conflict of Laws, influenced by the work of Joseph Beale (1935), codified that approach into the classical scheme of choice

of law rule, composed by the abstract identification of the legal category and the connecting factor, as presented in previous section 2.1.

American legal realists, with their anti-formalist attitude and attention to judicial practices, sharply criticised the First Restatement, ending up substantially destroying it and favouring the so called American conflicts revolution. Legal realism reacted against any formalistic approach to the law, believing that applying the law is an indeterminate activity, that the law is an empirical phenomenon that cannot be completely studied with logical tools, that judicial practice involves balancing policies and facts, and, finally, that the law is essentially a prediction starting from judicial cases (Holmes 1897). Choice of law rules exerted a formidable attraction on this school of thought and vested rights theory soon became the preferred object of its critiques: rights in cross-border relationships are relative, and so the applicable rules, despite the abstractedness of conflict rules. Besides, judges in private international law cases are often guided by considerations of facts and policies that go beyond the mere application of legal rules.

The American conflict revolution has had the major merit of putting conflict of laws theoretically closer to the real practice of law as daily performed by judges. Local law theory, backed by Cook (1942), originated exactly from observing that national judges, when deciding private international law cases, usually apply their own law. Opposing the vested rights theory, a right exists only if the court decides to enforce it, also considering facts and policy, so that the foreign law has no normative force of its own within the domestic system. On the same line of stressing the importance of policy analysis in deciding private international law case, other approaches focused on the need to weigh the competing interests at stake, on a case-by-case basis: the "opposed governmental interests" approach (Currie 1963); the substantive results theory (Cavers 1965); the comparative impairment theory (Baxter 1963), aimed at considering the negative impact that not applying the law of a state would have on its interests; "choice-influencing considerations" (Leflar 1966), which listed some factors, such as predictability of results or advancement of forum governmental interest, to consider when identifying the applicable law.

But, in the end, legal realists proved incapable of proposing a satisfactory alternative methodology (Wasserstein Fassberg 2015), leaving room for a highly discretional approach to private international law. In each case, judges should thus assess all the competing interests and objectives in order to determine the applicable law (Mills 2013). The 1971 Second Restatement partially codifies this theoretical approach: starting from the rule, according to which applicable should be the law of the state presenting the most significant relation with the case, its section 6 lists some principles and factors to consider in the identification, expanding judicial discretional powers in the matter.

In the last fifty years, also the European continent has been witnessing changes in private international law that have been defined revolutionary: a new revolution (Michaels 2008b), compared to the twentieth-century US conflict revolution. Still, the EU has never needed to contrast theories similar to the US theory of vested rights. Moreover, private international law has always been deeply different in the

USA and in Europe: US conflict of laws has mostly been inter-state conflicts within the federal system, whereas private international law in European countries has been facing the challenging interactions between distinct legal systems, each with its own history and traditions (Wasserstein Fassberg 2015), accomplishing the task in often very dissimilar ways. For example, it is worth mentioning the case of UK, which has represented the common law approach to conflict of laws in Europe. Such approach is particularly careful to guarantee justice and fairness in crossborder cases, where justice is understood in pragmatic terms, as expression of the international need for fair treatment in private transactions between individuals. Though, transposing the general concept of justice in conflict of laws context raises doubts, regarding which idea of justice should be considered, and in accordance to which set of domestic law rules, procedural and substantive (Mills 2012).

However, the real revolutionary (or, better, evolutionary, for it has never shown that character of violent disruption with the past, which is typical of revolutions) passage in Europe was represented by the progressive shift from substantial diversification of private international laws in the different European states, with a minor harmonising activity led by the HCCH, to always greater forms of legal integration, unification, and harmonisation, under the aegis of the EU (originally, the European Community).

Such transformations have not only impacted on the sources of law, but also on its functions, paving the way for a renewed "public dimension" of private international law understood as a form of public ordering of regulatory authorities (Mills 2012). In fact, the EU sees conflict of laws as crucial to achieve the broader political, economic, and legal European project: consequently, EU conflict of laws has gradually complied with those objectives. That is also why Michaels has identified three persistent features of EU private international law, making it "European, regulatory, and mediatized" (Michaels 2008b, p. 1641):

- Federalisation: it is accomplished by the promulgation of regulations oriented towards a unifying codification of the matter. This codification aims to overcome the fragmentation of choice-of-law regimes, to allocate regulatory competence from the centre, and to pursue the substantive EU policies (e.g., environmental protection in Rome II, or consumer or employee protection in Rome I); the European Court of Justice (ECJ), then, monitors that regulations are applied in a predictable and uniform manner.
- Contitutionalisation: mutual recognition, non-discrimination among EU citizenship, and human rights play a growingly significant role.
- Pluralisation of methods: on the one hand, there is a differentiation between intra-EU conflicts, where the international focus is maintained and the law of Member States is equally relevant, and conflicts with third countries, where the EU law is, on the contrary, unilaterally preferred; on the other hand, EU private international law appears more and more as a combination of two methods, the classical choice of law method, and a new method governing states' regulatory interests and private rights with regard to EU law and its four basic freedoms.

According to Mills (2009), EU private international law would thus seem to be oriented towards a public understanding of conflict of laws, embodying "a global system for the pluralist international ordering of private law" (Mills 2012, p. 25).

From an US perspective, an interesting theoretical reply to the changing legal scenario is embodied by the cosmopolitan pluralist choice-of-law approach (Schiff Berman 2012). Such approach acknowledges that, nowadays, people are often affiliated to many states and communities, and that provisions of multiple systems may apply to different parts of a cross-border dispute and may even be merged to account for the variety of normative systems involved in the legal relationship.

Therefore, the determination of the normative system(s), the substantive law of which should lawfully be applied, needs to be conducted *a priori*, but, differently from what commonly happened under the First Restatement and the vested rights theory, it should not derive from merely territorial arguments. On the other hand, Schiff Berman emphasises that also the theory of governmental interests has given a too narrow definition of state interests, neglecting that nation states may benefit from being part of the global system. As a result, states should address the choice-of-law question from this broader perspective, pursuing state interests that overcome the simple interests of its citizens and considerations of national legislative policy. In fact, a cosmopolitan pluralist approach to conflict of laws should include a larger series of governmental interests deriving from its participation to the "interlocking world system of transnational regulation and multiple community affiliation" (id., p. 257).

Schiff Berman concludes that such cosmopolitan pluralist approach allows domestic courts to consider a variety of choice of law sources, ranging from domestic legislations and international treaties to various forms of soft law (e.g., norms of behaviour promulgated by non-governmental organisations). It substantially entails that courts behave "as international and transnational actors who are engaging in an international dialogue about legal norms" (id., p. 266). It can be objected that this judicial dynamism would end up reducing predictability of legal norms as well as legal certainty in cross-border private law relations. Though, uncertainty is not a novelty in choice of law context, and is intended to gradually diminish with the growing practice of the new method, at least according to the author's opinion.

4.2. Reasoning with Multiple Normative Systems

Private international law, with its ever-growing practical importance, has interested also the AI and Law community, which has contributed to improve both theoretical and logical understanding of how different normative systems interact.

4.2.1. Pluralist Logic for Legal Pluralism

Given that legal pluralism, not only in the form of conflict of laws, but also of international and transnational laws as well as subnational laws, is by now a fact in our interconnected and interdependent world, Sartor (2005) proposes to use a pluralist logic for enabling a reasoner to handle, in a unitary reasoning process, interactions between different legal systems.

Objective of this logical approach is modelling how distinct normative systems may disregard legal qualifications provided for by other legal systems, or, on the contrary, be open to and use them as premises for further inferences. In the proposed logical language, the symbol Θ is an abbreviation for 'relatively to,' and the formula φ_{OS} means that proposition φ holds relatively to the normative system S. The running example is represented by the interaction between the Italian law and the law of Catholic Church, i.e., Canon law, regarding marriage.

Bearing in mind that, for reason of simplicity, some normative conditions have been ignored, let us consider the two following provisions, respectively of Canon and Italian law, on the intentions of the spouses to get married (id., p. 661):

```
OCatholic

FORANY (x, y)

IF [x and y declare that they intend to be married]

AND [a priest proclaims that x and y are married]

THEN<sup>n</sup> [x and y are married]

OItalian

FORANY (x, y)

IF [x and y declare that they intend to be married]

AND [the city major proclaims that x and y are married]

THEN<sup>n</sup> [x and y are married]
```

In addition, Italian law states that, if two people are married according to Canon law, they are married also according to the Italian legal system:

```
Oltalian

FORANY (x, y)

IF [x \text{ and } y \text{ are married}]_{OCatholic}

THEN<sup>n</sup> [x \text{ and } y \text{ are married}]
```

With regard to the previous rule, it is worth noting that a proposition of a legal system can include propositional constituents that hold relatively to a different normative system, e.g., relatively to S_I , and the fact that antecedent A holds relatively to S_I determines consequent B relatively to S_2 :

```
(IF A_{OSI} THEN B)_{OS2}
```

In the marriage example, if John and Mary are married according to the Canon law, they are also automatically married for the Italian law.

Italian law provides also for a provision that allows a married couple to divorce and terminate their marriage:

```
Oltalian

FORANY (x, y)

IF [x \text{ and } y \text{ are married}]
```

THENⁿ[x and y can divorce]

Then, absolute and relative endorsements of a proposition are defined:

• when reasoners are *absolutely* endorsing a proposition, they are not considering any specific point of view, and can use that proposition in any inference, unless there are reasons not to use it (in this sense, they are *defeasibly universal*);

[John and Mary declare that they intend to be married] Oabsolute

• on the contrary, *relative* propositions refer to those propositions endorsed in respect to a particular point of view, e.g., system S_I; this is normally the case for normative propositions:

```
OItalian

FORANY (x, y)

IF [x \text{ and } y \text{ declare that they intend to be married}]

AND [\text{the city major proclaims that } x \text{ and } y \text{ are married}]

THEN<sup>n</sup> [x \text{ and } y \text{ are married}]
```

Relative and absolute propositions may be combined in the reasoning process, as shown in the example below, where it is also clear that relative conclusions can be derived from absolute conditions:

```
(1) [John and Mary declare that they intend to be married] Oabsolute
```

(2) [a priest proclaims that x and y are married] Oabsolute

```
(3) OCatholic
```

```
FORANY (x, y)

IF [x \text{ and } y \text{ declare that they intend to be married}] AND [a \text{ priest proclaims that } x \text{ and } y \text{ are married}]

THEN<sup>n</sup> [x \text{ and } y \text{ are married}]
```

(4) [John and Mary are married] OCatholic

Starting from such considerations on absolute and relative endorsements, Sartor identifies three reasoning schemata for pluralist legal reasoning, drawing a parallel with the logic of beliefs in multi-agent framework:

• *relativisation*: when a proposition is absolutely endorsed, it can be defeasibly endorsed also with reference to any specific point of view, e.g., a legal system;

```
Reasoning Schema: Relativisation
(1) believing that A_{Oabsolute}

IS A DEFEASIBLE REASON FOR
(2) believing that A_{OS}
```

• *relativised detachment*: if reasoners relatively endorse both the conditional and its antecedent, they can relatively endorse the consequent as well;

```
Reasoning Schema: Relativised detachment
(1) believing that (IF A_1 AND ... AND A_n THEN<sup>n</sup> B)_{OS}
(2) believing that (A_1)_{OS},..., (A_n)_{OS}
IS A DEFEASIBLE REASON FOR
(3) believing that (B)_{OS}
```

 relativised syllogism: such schemata obtains combining relativisation with the usual logic specification;

```
Reasoning Schema: Relativised syllogism
(1) believing that

(FORANY (x) IF A_1 AND ... AND A_n THEN<sup>n</sup> B)_{OS};
(2) believing that (A_1[x/a])_{OS},...,(A_n[x/a])_{OS}

IS A DEFEASIBLE REASON FOR
(4) believing that (B[x/a])_{OS}
```

Combining the rules of each legal system, relative and absolute propositions, and the described reasoning schemata, the reasoner is now able to perform a pluralist reasoning, as in the following example (id., p. 667):

```
1. [John and Mary declare that they intend to be married] Oabsolute
2. [John and Mary declare that they intend to be married] Ocatholic
                                                                                                                                                                               <from 1, by relativisation>
3. [a priest declares that John and Mary are married] Oabsolute
4. [a priest declares that John and Mary are married] Ocatholic
                                                                                                                                                                               <from 3, by relativisation>
5. OCatholic
                       FORANY (x, y)
                                   IF [x \text{ and } y \text{ declare that they intend to be married}] AND
                                   [a priest proclaims that x and y are married]
                                  THEN<sup>n</sup> [x and y are married]
6. [John and Mary are married] OCatholic
                                                                                                                                                               <from 2, 4, 5 by relativised detachment>
7. OItalian
                       FORANY (x, y)
                                   IF [x \text{ and } y \text{ are married}]_{OCatholic}
                                   THEN<sup>n</sup> [x and y are married] OItalian
8. [John and Mary are married] Ostalian
                                                                                                                                                                <from 6 and 7 by relativised detachment>
9. Oltalian
                       FORANY (x, y)
                                   IF [x \text{ and } y \text{ are married}]_{OItalian}
                                   THEN<sup>n</sup> [x and y can divorce] Olimins [solution of the content 
10. [John and Mary can divorce] Oltalian
                                                                                                                                                                   <from 8 and 9 by relativised detachment>
```

Sartor's work thus shows that it is possible to have a pluralist logic for reasoning with legal provisions coming from different normative systems.

Also Hage (2015) explores the chance to use a pluralist logic for addressing legal pluralism. For his purposes, conflicts among rules arise when more legal rules coming from different normative systems are all applicable to the same case, but with incompatible legal consequences: the typical situation governed by private international law rules. In particular, he considers that:

• From a strictly logical perspective, there is no contradiction, nor inconsistency, if distinct legal systems regulate the same situation in different ways: legal systems are separated by definition; so, whether or not different legal consequences apply to the same case depending on where it will be eventually ruled is log-

ical-indifferent; though, from the standpoint of individuals and companies, a dilemma exists, since they are subject to different legal outcomes and have to decide which they should be compliant with. In a practical reasoning sense, the two legal systems are no more separated: they both provide reasons for action.

- Private international law traditionally avoids inter-systemic conflicts to occur through conflict rules: conflict rules are rules that regulate and limit scope conditions of national rules, identifying not only which court of which state has jurisdiction and is competent to decide the cross-border case, but also which substantive law, national or foreign, applies to the case. Conflict rules are scopedefining rules: they determine when national legal rules have to be applied, i.e., when no foreign rule is applicable to the case.
- Once it has accessed the domestic system, the foreign law may be acknowledged different status, depending on how that legal order applies and interprets it in practice: legal systems tackle the issue either by merely referring to the law of the other state or by incorporating it in the domestic legal system. In the first case, the recipient system treats the foreign law as a matter of fact, also in trial, and conflicts are avoided because the content of the recipient system adapts to the content of the foreign one. Differently, incorporation guarantees that the foreign law becomes integral part of the domestic law, thus recognising it the character of a matter of law: this identifies one system as the only relevant to rule the particular case.

In such context, the task of logics would not be to solve conflicts, but to outline "a conceptual framework that clearly defines when a rule conflict occurs and which tools are available to avoid these conflicts or to deal with them." In particular, non-deductive logics may help to formulate theories of private international law thanks to its analytical power. In the paper, it is not presented a precise logical model of the pluralist legal reasoning in private international law. Yet, referring to Glenn's research (2014) on the concept of sustainability of diversity in law, Hage seems to suggest that a "multivalence thought" is the only one able to encompass interactions among legal traditions and levels of laws beyond the borders of nation states, up to cross-references among courts of different legal systems.

4.2.2. Modular Argumentation

Developing the idea of logic for interactions among distinct normative systems, Dung and Sartor (2011) propose a logical analysis of private international law based on modular argumentation. They take contract law cases as main examples.

Noting that conflict of laws is the legal technique deployed by legislators to coordinate different normative systems without imposing a hierarchy among them, they believe it uniquely provides lawyers and judges with tools to understand "the ways in which each system takes into account the existence, the content and implications of other systems" (id., p. 234). Besides, private international law interactions are inter-systemic in kind for they occur between different legal systems, the coexistence of which is guaranteed by jurisdiction and choice of law mechanisms. Such mechanisms make certain that the case is allocated to a precise court and that the legal system according to which the case must be ruled is determined. So, not only conflict of laws does not impose any overarching regulation, but also it does not establish priority relations between the systems involved in the cross-border case.

Starting from such premises, they assume the existence of different legal systems $L_1, L_2, ... L_n$, and model each L_i as including:

- ChJur(L_i): a set of choice of jurisdiction rules, establishing whether courts of L_i
 can hear and decide the case;
- *ChComp*(*L*_i): a set of choice of competence rules, establishing which particular court of *L*_i can decide it; and
- $ChLaw(L_i)$: a set of choice of law rules, identifying which substantive law, of L_i or of another legal system, the court has to apply.

For reason of simplicity, public policy, *renvoi*, and *forum non conveniens*, a common law principle according to which a court can discretionally neglect to hear the case in favour of another court, are explicitly not considered.

Based on Dung's formal argumentation framework (1995), modular argumentation allows for representing legal knowledge in separate modules that can be referred to, with apposite queries, whenever a specific issue requires it. Thus, the components of private international law, the different national laws that can be identified, as well as the doctrines can be adequately represented through distinct modules. Dung and Sartor' modular logic focuses on the level of the definition of jurisdiction and competence of the domestic court, and on that of the identification of the applicable law, and prefers a credulous reasoning. The latter actually enables the reasoner to consider all the outcomes that can be possibly derived from the available legal knowledge, in terms of doctrines and alternative conclusions, without prejudicially blocking any of them as it would happen in a sceptical approach.

Let us briefly show how such modules practically work, and how they can be used to convey different doctrines for the interpretation of a provision. First consider the *brusselsConventionMod*, one of the five modules identified by Dung and Sartor (2011, p. 247). It defines jurisdiction in civil and commercial matters under the Brussels Regime established by the already mentioned Regulation (EC) no. 44/2001, Brussels I, in EU Member States. Two provisions are specifically considered: article 2, according to which the defendant's domicile in a contracting state determines the jurisdiction of the courts of that state; article 5, establishing two correctives to this connecting factor, the first in favour of the different place of performance of a contract, the latter in favour of the place, where the harmful event took place in matters relating to torts.

Module brusselsConventionMod hasJurisdiction(Country) ←

```
defendantHasDomicileIn(Country),
contractingState(Country).

hasJurisdiction(Country) ←
contractDispute, placePerformance(Country).

hasJurisdiction(Country) ←
tortDispute, placeHarmfulEvent(Country).
```

The module operates, through a call, whenever the court of a contracting state *S* needs to verify whether it has jurisdiction for the case *C*:

```
call(brusselsConventionMod + Case(C), hasJurisdiction(S))
```

If the answer to the call is positive, the court of S has jurisdiction over the case C; otherwise, it rejects the case.

Let us now have a closer look at how the same method is then used for representing alternative interpretations of one provision, specifically article 4 of the Rome convention (1980).⁷⁰ According to such provision, when the parties have not chosen the applicable law, the contract is governed by the law of the country with which it is most closely connected. Par. 2 presumes that "the contract is most closely connected with the country where the party who is to effect the performance which is characteristic of the contract has, at the time of conclusion of the contract, his habitual residence." Par. 5 establishes that such presumptive connection "shall be disregarded if it appears from the circumstances as a whole that the contract is more closely connected with another country."

Dung and Sartor (2011, p. 254) identify a predicate for representing the hypothesis when the presumptive connection with the country of the performer's residence is overridden:

```
overriddenConnViaPerformerTo(Country)
```

The doctrine (Hill 2004) presents at least two alternative interpretations of the par. 2 presumption, respectively the weak presumption theory and the strong presumption theory. According to the former, the connection with the country of the performer's residence is overridden whenever other factors (e.g., the place where the contract was stipulated) show a stronger connection with a different country. This is the corresponding module:

```
\label{eq:module weakPresViaPerformerMod} Module weakPresViaPerformerMod overriddenConnViaPerformerTo(Country) \leftarrow moreConnectedToContract(Country', Country). moreConnectedToContract(Country', Country) degreeOfConnectionTo(Country', X) degreeOfConnectionTo(Country', Z) X > Z.
```

⁷⁰ The 1980 Convention on the Law Applicable to Contractual Obligations, or the Rome Convention, has been substantially replaced by Regulation (EC) no. 593/2008.

On the contrary, the strong presumption theory states that the connecting factor can be overridden only exceptionally, when it is completely insignificant in the particular case.

```
Module strongPresViaPerformerMod
overriddenConnViaPerformerTo(Country) ←
insignificantConnectionViaPerformerTo(Country).
```

Finally, the two doctrines are inserted in the module corresponding to the Rome convention application, i.e., *romeConventionMod*: the application of the doctrines will solve the predicate *overriddenConnViaPerformerTo(Country)*, depending on which one it is assumed and called.

Dung and Sartor have revealed the major role played by interpretation also in private international law as in any other rule application and form of legal reasoning. The case of alternative interpretations of the same international or supranational provision, a frequent occurrence in the application of EU regulations in the different Member States, shows that even the adoption of the same conflict of law rules does not completely avoid the possibility of applicative mismatches. Moreover, even if the issue of different interpretations of the foreign provision within the domestic system is not explicitly taken into consideration in the analysis, it is arguable that modules can be implemented to express such different interpretations of substantive laws, national or foreign.

5. Closing comments

Before moving to the analysis of the Italian system of private international law, let us summarise the key contents of the present chapter.

First, in our more and more globalised and pluralist legal world, private international law still represents the chief doorway through which foreign law accesses domestic legal systems. As such, it lends itself to examine some typical challenges judges face in foreign law application, among which the ascertainment of its content and its interpretation. But, as other fields of law, also conflict of laws has been lately going through significant changes, both in its sources and in its theoretical understanding. The US and EU "conflict revolutions" exactly illustrate that strong modifications are affecting private international law all over the world.

Secondly, those changes have been proven to promote pluralist approaches to private international law, both in the jurisprudence and among AI and Law scholars. In detail, legal theory and AI and Law have tackled conflict of laws with different goals, the former meant to theoretically justify the application of laws outside their country of origin, the latter aimed at identifying correct standards for legal reasoning in pluralist contexts. Though, they have both ended up adopting a pluralist method and, each from its own peculiar perspective, have greatly increased the interest in the normative interactions in conflict of laws settings.

The chapter has thus not only introduced private international law as an independent field of law interested by strong normative and theoretical changes, but also presented emergent logical perspectives that formalise how courts should apply rules of other legal systems and conflict rules. Sartor (2005) and Dung and Sartor (2011) have actually demonstrated that legal reasoning in pluralist contexts can be logically correct, and that it is possible to reason with alternative interpretations, formalising them with modular argumentation. Such research progresses reveal an important gap in the AI and Law analysis of legal reasoning triggered by choice of law: how domestic courts should concretely apply and interpret the relevant foreign provisions is still an open research question. In fact, interpretation of inner law has been extensively investigated from informal and formal standpoints, as illustrated in the previous chapter, whereas, corresponding efforts have not been put in studying interpretation of foreign rules by domestic judges, even if, from a practical point of view, the occurrence is far from being rare.

In the next chapter, we better describe the normative contours, within which courts accomplish their interpretative task in private international law disputes. As anticipated, the focus is on the Italian legal order, even if, with due modification, the theoretical model we propose later on in the thesis is conceptually extensible to any legal system, facing foreign law application. In addition, since foreign law knowledge and interpretation are critical to a proper implementation of conflict of laws, attention is maintained on both issues in the next chapters. Then, provided that legal pluralism and Europeanisation affect law in general and private international law in particular, courts, in case of interpretive incompatibility or doubts, should now balance mere nation state interests and parties' private interests also with EU and international objectives. This perspective is further explored in the following chapters 4 and 5, which precisely aims to provide domestic courts with an argument-based framework for foreign law interpretation and application.

Chapter 4: The Italian Legal Scenario

1. Taking a Step Forward

Private international law has turned out to have lately significantly transformed, diversifying its sources on many legal levels, orienting itself towards greater forms of international harmonisation and uniformity, and assisting to the rise of public and pluralist approaches to its theoretical understanding. In particular, the EU has steadily moved towards the full legal integration among its Member States, promoting many regulatory efforts also in conflict of laws. The present chapter takes the required step forward in order to appreciate how the Italian system of private international law has reacted to these changes and how its courts have been consequently applying foreign law within a (partially) renewed normative context.

The chapter develops around three main keystones. Firstly, it accounts for what consequences EU regulations have had in Italy. Since a regulation is a binding legislative act, directly applicable in its entirety across the EU (article 288, TFEU), Member States are obliged to comply with them, thus reducing the living space of their national systems of private international law. Thus, also Italian conflict of laws, reformed in 1995 with law no. 218, is being further reshaped in alignment with fundamental EU law principles, such as the prohibition of discrimination on grounds of nationality, and the free movement of goods, persons, services, and capitals, and is being diminished in its scope by EU private international law rules.

Secondly, the chapter introduces some of the general rules, established by law no. 218/1995, which Italian courts still follow when dealing with cross-border disputes, even if they are by now often supported by corresponding EU rules. Noticeably, they are often in contact with interpretative criteria of other normative levels: for example, EU regulations are interpreted according to EU law canons of interpretation, and their correct and uniform application is in turn controlled by the ECJ. Besides, national judges continue to struggle with the acquisition of foreign law and, mostly, with its correct application and interpretation: article 15, law no. 218, states that domestic courts, dealing with the foreign rule, should use foreign canons of interpretation to apply it. Additionally, public policy and overriding mandatory rules wield a lasting power in safeguarding the coherence of the domestic system, even though both concepts have changed over time.

Thirdly, the chapter acknowledges that, irrespective of the sources of conflict rules, foreign law application and interpretation is the fulcrum of private international law, and begins to explore how interpretive doubts and conflicts are likely to occur in practice. Conflict of laws challenges domestic judges to apply and rea-

son with many kinds of rules: choice of law rules may derive from national, international, or EU sources; the proceedings are in most cases regulated by national procedural rules; eventually, in case conflict rules refer to it as the relevant law in the concrete case, courts will apply foreign law.

The chapter is structured as follows. Section 2 outlines the characteristics of the reform of Italian private international law as accomplished by the cited law no. 218/1995, paying close attention to how EU private international law regulations have been influencing it. Section 3 breaks down the general part of the Italian private international law, especially focusing on some rules and on the mode of operation of both public policy and overriding mandatory rules. It illustrates the case of punitive damages, a foreign legal institution traditionally rejected as contrary to Italian public policy: the example shows that the contact with foreign systems may open the discussion on inner legal institutions and principles, and even influence, in future, the evolution of inner law. Section 4 delves into the central issue of foreign law application. Accordingly, it is first described art. 14 and the mechanisms it arranges to assist the court in acquiring and accessing the foreign law content, developing a topic already discussed in the previous chapter. The reader is introduced to trial consultancy and expert opinions as civil procedure tools that possibly increase the chances to acquire satisfactory knowledge of foreign law. Some issues will be then specifically addressed in the next chapter. Section 4 also discusses the content of art. 15, both as formulated by the lawmaker, and as read by the Supreme Court over the years. In the end, this general provision is the entrance door for interpretative mismatches and incompatibilities.

2. The Reform of Italian Private International Law

Only in 1995, the Italian legislator unified all the national measures of private international law under a unique statute, law no. 218.⁷¹ Before that date, several provisions concerning different aspects of private international law were scattered in just as many different laws: e.g., articles 17-31 of the preliminary dispositions to the civil code, or articles 2505 and 2509 of the civil code. Moreover, at the time, the European Community was far from being the point of normative reference that it later became, also in conflict of laws matters: the 1968 Brussels and 1980 Rome conventions, then in force, still embodied a typically international law approach.

Law no. 218 abrogated some of those dispersed rules and, with an all-inclusive perspective (Mosconi and Campiglio 2015), determined the scope of Italian jurisdiction, established the criteria to identify the relevant law, and regulated the efficacy of foreign judgements and deeds (art. 1). The law was revised in 2013, with another statutory law, no. 154, modifying articles 33, 35, and 36, and introducing art. 36 *bis*, all rules regarding children rights, filiation and parental relationship.

⁷¹ Law no. 218, 31 May 1995.

The reform tried to organise a chaotic legal scenario, building on the thought of Pasquale Stanislao Mancini, as both the codification in 1865 and that under fascist period in 1939-42 had previously done. In his renowned lecture held in 1851 at the University of Turin, ⁷² the Italian jurist theorised that, in private international law disputes and relations, individuals should be subject to the law of their nationality. In fact, if the state is an artificial entity, created by politicians and statesmen, the Nation, in contrast, is the only real and permanent entity, naturally yielded by historical events and, as such, logically preceding the state (Nuzzo 2012). Mancini also proposed that the parties should be free to choose the applicable law that regulates their contracts and obligations. Finally, he acknowledged the usefulness of international treaties in conflict of laws matters (Mosconi and Campiglio 2015).

The 1995 reform recognised the law of the state, the citizenship of which the individual holds, as main connecting factor. Citizenship was considered the closest legal concept to the idea of nationality supported by Mancini: that was a necessary deviation for implementing his theory. Besides, the connecting factor of citizenship allowed Italy, initially a country of massive emigration flows, to maintain a link with its citizens around the world. Nowadays, the Italian socio-economic situation has profoundly changed and immigration to Italy has strongly increased. Thus, citizenship has ended up requiring courts to frequently apply foreign laws: these are often religious laws⁷³ and their application ultimately prevents Italy from integrating immigrants through the application of domestic law (Mosconi and Campiglio 2015). Although in the Mid-Nineties society was already oriented in this direction and other criteria, e.g., the domicile, could have proven more beneficial in the long term, the lawmaker decided to comply with the old view.

As for the general theoretical perspectives on private international law, and foreign law application in particular, the Italian legislator has opted for a universalist approach that handles the law of all the legal systems involved equally, at least in principle, in line with Mancini's and von Savigny's visions. Accordingly, domestic courts are obliged to know, or get acquainted with, the content of the foreign provisions, applying them by referring to the canons of interpretation of the foreign legal system, a theoretical imperative that is not easily complied with, from a practical standpoint. Such open attitude is embodied by bilateral and neutral conflict rules, through which the law of the forum and the law of the foreign country are indifferently applied, depending on the concrete facts of the case.

The reference to the spatial location of (some elements of) the case has thus been usually preferred over alternative methods. Still, the legislator has also, on the one hand, empowered the court to assess, in certain situations, with which state the case presents significant or prevalent connections (e.g., the prevalent location of the matrimonial life provided for by article 29, par. 2, law no. 218/1995, in case the spouses either have different citizenships or multiple citizenships in common),

⁷² Title of the lecture was *Della nazionalità come fondamento del diritto delle genti*.

⁷³ Most immigrants come from Muslim countries, where it is possible that religious laws like Sharia are in force.

and, on the other hand, it has enabled the parties to freely opt for the preferred law in contractual matters (now, covered almost entirely by EU regulation provisions, which however mainly provide the parties with the same freedom of choice).

2.1. Impact of EU Conflict of Laws

Role and importance of the law no. 218/1995 have dramatically decreased in consequence of the advent of EU private international law. Especially after the 1997 Amsterdam Treaty and the 2009 Lisbon Treaty, the EU has been attributed a standard competence in the matter, only limited by the general principles of subsidiarity and proportionality, as any other EU legislative power (van Calster 2013). The present section aims to account for the impact EU conflict of laws exerts on Italian private international law, referring to the previous chapter as for the historical path that led to the actual legal scenario. The ambitious goal of a unified applicable law in the EU territory is being pursued by harmonising not only Member States' substantive laws (as happened, for instance, for consumer protection law), but also, and probably even more successfully, conflict rules, so promoting, in cross-border legal disputes, major predictability of the competent court and applicable law. Van Calster (2013) reports that EU private international law regulations prevent Member States from referring to their national law also when it comes to solving preliminary issues, which, mainly considered as procedural questions, were usually subject to domestic provisions. For example, article 10, par. 1, Rome I regulation states that the existence and validity of a contract is determined by the law which would govern it under the Regulation if the contract were valid. A similar move aims to further restrict the applicative scope of national laws.

Promulgated just before the normative explosion triggered by the Amsterdam Treaty, law no. 218/95 does not mention EU private international law regulations. Yet, it includes article 2, saying that the statute does not undermine the applicative operation of the international agreements Italy is part of. Observe that such provision is merely descriptive in kind (Mosconi and Campiglio 2015): the obligations, which the Italian government takes on internationally, are imperative for the state, including its courts, immediately after the order of execution, that is, a special act, normally included in the law ratifying the treaty, which makes it valid and effective over the Italian territory (Conforti 2014). Moreover, after the constitutional law no. 3/2001, modifying art. 117 of the Italian Constitution, the domestic legislative power has to be exerted in compliance with the obligations deriving from international treaties. International rules, once accessed the domestic legal order through the order of execution, should thus prevail over national rules. In addition, consider that they are mostly special for the matters governed, or the categories they refer to: in particular, international conflict rules are considered special and, as such, override merely national provisions in the same matter. Confronted with a cross-border case, Italian courts should thus firstly ascertain whether there exists an international treaty governing the specific matter, and, if so, whether it is still valid or it has ceased to exist.

EU law is worth a separate discourse. Alongside international obligations, article 117 recognises also the role of the Communitarian legal system (after the Lisbon Treaty, the EU): its rules as well usually prevail over national law. Such prevalence is due to the significant transfer of sovereignty from the Member States to the EU, defined as a supranational organisation: in Italy, the sovereignty transfer is constitutionally sanctioned by article 11. In particular, the ECJ has developed the principle of primacy of EU law in case of conflict with inner laws, interpreting it in the sense that EU law always takes precedence over domestic rules. But Member States condition EU law supremacy to the compliance with national constitutional law. So, considering together articles 11 and 117, par. 1, of Italian Constitution as well as article 288 TFEU on the direct applicability of regulations in their entirety, it can be easily deduced that EU private international law, mainly embedded in regulations, prevails over Italian provisions of conflict of laws, as expressed by law no. 218/1995, provided it is compliant with the fundamental principles established in the Italian Constitution.

Furthermore, Italian law needs to be generally interpreted according to the principles of EU law: so, even rules of domestic private international law that still operate are not spared (Bogdan 2016). Two important principles that the interpreter needs to consider are the prohibition of discrimination on grounds of nationality and the freedoms of movement. According to art. 18 TFEU, any discrimination on grounds of nationality is actually prohibited within the scope of application of the EU Treaties. So, EU citizens in similar situations cannot be treated differently only by reason of their nationalities (so, citizenships). Following the interpretation of the principle by ECJ,74 any different treatment between EU citizens, even though formally operated on account of a criterion other than citizenship, is prohibited if it has the practical result to discriminate among citizens of different nationalities. Such understanding of the principle of equality is common also in national law (Bin and Pitruzzella 2014): similar situations have to be treated similarly, while different situations differently, unless there exist objective reasons that justify a diversified approach. Still, reading domestic private international law through this lens could raise doubts about citizenship as main connecting factor: in succession and family law matters, it is the preferred link, and its application could be seen as an automatic violation of the prohibition (Bogdan 2016). As long as succession and family law were excluded from the Communitarian competences, no problem occurred; though, they are now a fully-fledged part of it, so that the ECJ should soon cast light on the issue. Bogdan (2016) argues that, until then, citizenship should probably not be automatically rejected since even the Brussels II regulation grounds jurisdiction on the basis of the nationality of the spouses (article 3).

The other general principle necessarily affecting the remainder of national conflict of laws is the respect for the freedom of movement that, within the EU territo-

⁷⁴ Mund & Fester v. Hatrex, Case C-398/92, [1994] ECR I-467.

ry, concerns goods, persons, services, and capitals, and mainly meets the needs of internal market and fair competition. Accordingly, Member States should not implement any restrictions capable of hampering this freedom. In EU private international law, such principle has been translated into the country-of-origin principle, or mutual recognition, which could be seen as the European version of the vested rights theory (Mosconi and Campiglio 2015). The principle states that the legal status or relation validly recognised in the country of origin should be recognised also in the country of destination, mostly in the areas of administrative licences and personal status: the European Union's Area of Freedom, Security, and Justice should promote trust in other Member States' laws that results in recognising as lawful and admissible what other states legally define as such, and in avoiding to act in such a way to impede the law of the country of origin (Bogdan 2016), unless there are important reasons to make the law of the country of destination prevail (e.g., public policy considerations).

So, not only EU legislative production in conflict of laws has ended up gradually consuming the applicative scope of domestic provisions, requiring that national judges ascertain, before referring to their own law, if EU conflict of laws rules exist and govern the particular case, but also its leading principles are shaping and modifying their interpretation and application, imposing to read all national legislation as respectful of EU principles and policies.

Let us now briefly consider one further topic, regarding the interpretation of international and EU private international law rules by domestic courts. It is an absolutely relevant issue for it impacts on how courts qualify legal categories and concepts, essential interpretative act for private international law application. As provided for by article 2, par. 2, law no. 218, international treaty provisions should be interpreted according to their own interpretive criteria. Practically, national judges have to verify whether the treaty possibly includes any explicit direction for its interpretation. Otherwise, articles 31-33, Vienna Convention on the Law of Treaties (1969), establish both general and special rules of interpretation as well as specific recommendations for the common case of treaties authenticated in two or more languages. Lastly, it is not infrequent that domestic courts refer to the case law of courts of other contracting parties to check how the same treaty provision, clause, or term has been interpreted, and tend to conform to that interpretation (Ward 2007). Similar cross-references are no doubt favoured if the courts share the same language.

Differently, EU private international law is interpreted through EU law principles. Additionally, ECJ plays a vital role: the Luxembourg court has the last word in all the interpretive issues that arise from the application of EU Treaties and EU law. Article 19, par. 3, Treaty on European Union (TEU), states that the Court gives "preliminary rulings, at the request of courts or tribunals of the Member States, on the interpretation of Union law or the validity of acts adopted by the institutions." So, domestic courts refer to the ECJ also whenever facing interpretive doubts regarding EU conflict of laws regulations, a mechanism that fosters uniformity in interpretation across all Europe.

3. General Provisions of Law no. 218/1995

The third part of law no. 218/95 includes some dispositions that could be applied to any conflict rule, whatever its source (national, international, or European), by reason of the typical issues they face. In fact, they address the following questions, which challenge any system of private international law:

- Does the conflict rule refer to foreign substantive law or foreign private international law? (art. 13);
- How does the court know foreign law? What if the court is incapable of ascertaining its content? (art. 14);
- How should the relevant foreign law be applied by domestic courts? (art. 15);
- What happens if foreign law contrasts with public policy? (art. 16);
- Are there inner laws that prevail over application of conflict rules? (art. 17).

Previous sections have described that, over the years, international and EU conflict of laws rules have more and more marginalised domestic private international law. It has been further highlighted that international treaties and EU regulations should be applied as uniformly as possible: hence, regarding the mentioned general matters, national courts should preferably refer to the relative dispositions included in the international instrument they are applying. Still, it is arguable that, if the specific international treaty, or EU regulation, has not expressly provided for such issues in its text, the court can resort to the general provisions of law no. 218 (Mosconi and Campiglio 2015). This frequently happens, for example, in case the public policy exception is raised, because international or EU tools usually do not regulate what consequences such exception has.

In what follows, we compare the concepts of *renvoi* (art. 13), public policy (art. 16), and overriding mandatory rules (art. 17), replying to three of the listed questions, with the corresponding formulations in EU regulations. Such double analysis accounts for the prevalence and pervasiveness of EU private international law, while appreciating how the concurrence between national and EU law impacts on the content of common notions. The remaining questions, respectively addressed in articles 14 and 15, are discussed separately in the next section 4 since they crucially pertain to the core of the present thesis.

3.1. Renvoi

Renvoi is a French term that alludes to a peculiar question underlying private international law: do conflict rules refer to substantive law of the foreign legal system or, rather, to the foreign legal system as a whole and also to its own conflict rules? In the second case, choice of law rules of the foreign legal system could in turn refer to the law of the nation state (remission), or of a third state (transmis-

sion), as the law applicable to the particular cross-border relation or dispute (van Calster 2013).

Courts wonder about considering *renvoi* mostly when the foreign conflict rule remits the case back to the law of the forum: facing a similar circumstance, the national judge could apply his/her own law, without struggling with the application of foreign legal rules (Bogdan 2012). But *renvoi* is theoretically and practically troublesome in that, potentially, it is never-ending exactly when it refers back to the law of the forum because, if it is applied consistently, the reference back is but, again, a reference to the conflict rule of the forum (Mosconi and Campiglio 2015), in a vicious circle.

The problem of *renvoi* originates from a famous case, *Forgo v. Administration des domain*, decided by the French Court of Cassation in 1882, and concerning the inheritance of a Bavarian citizen, who died in France without holding the French citizenship nor having his domicile there, but owning many assets in the French territory. Abiding by the Bavarian substantive law, some maternal relatives would have inherited his estate. Differently, the French law did not consider them successors, so the French state could inherit his assets. The normative contrast became evident as the French conflict rule identified the Bavarian as the applicable substantive law, whereas the Bavarian conflict rule rejected the particular case in favour of the French law. On that occasion, the Cassation Court accepted the remission, and decided that the French state should appropriate the inheritance.

The attitude towards *renvoi* varies from country to country. Italy has opted for its conditioned acceptance. Firstly, article 13 states that the conflict rule reference to the foreign law is to be understood as a reference to the foreign private international law only in two cases, both aiming to avoid the vicious circle of unceasing back and forth references: when the foreign conflict rule refers to a third state that in turn accepts the *renvoi*, or when it remits the case to the law of the forum. Secondly, some exceptions are articulated: *renvoi* does not work when the parties have freely chosen the applicable law to their contractual relation, when it is a matter of formal validity of acts, and in non-contractual obligations. Additionally, in filiation matters, courts should consider *renvoi* only in case it points to legislations that favour the establishment of parental relations (so called principle of *favor filiationis*) and guarantee a stronger protection of the rights of the children. Finally, whenever an international convention applies, judges should abide by the relative disposition concerning the topic.

Notably, in respect to *renvoi*, EU regulations have generally opted for rejecting it. For instance, article 20 of Rome I regulation excludes it, stating that "the application of the law of any country specified by this Regulation means the application of the rules of law in force in that country other than its rules of private international law, unless provided otherwise in this Regulation." Article 24 of Rome II regulation almost mirrors this sentence.

The decision to exclude *renvoi* is probably a "sound approach" (Bogdan 2012, p. 210) for it is more consonant with the general idea underpinning conflict rules: private international law primarily expresses the interests of the legal system that

has promulgated it. Thus, if the legislator, both domestic and EU, has considered relevant a precise connecting factor for identifying the legal system more connected to a case, it is highly probable that such reference is meant to identify the substantive law of that legal system, i.e., the valid foreign law that, in the interested area, defines and regulates rights, duties, and behaviours.

3.2. The Public Policy Exception

Public policy (*ordre public* in French) aims to protect the inner coherence and the core values of the law of the forum. As such, it is emblematic of the tension, typical of conflict of laws, between openness towards other legal orders and need to defend basic principles of domestic systems. In particular, public policy is called into question whenever the foreign law to be applied, or the foreign judgement to be recognised, can produce effects that are unacceptable in many respects from the viewpoint of the legal system of destination. Legal systems can provide for the public policy reservation explicitly or implicitly, and the relative exception could even be raised without any expressed statutory provision, as a sort of general principle of law acknowledged by all nations (Bogdan 2012).

In Italy, article 16, par. 1, law no. 218, states that the foreign law is not applied if its effects are contrary to the public policy (*ordine pubblico*). The legal doctrine has long debated about the difference existing between "inner" public policy, which would include all the mandatory rules of the legal system, and "international" public policy, 75 instead referring to a broader set of fundamental principles and values, characterising the ethical, legal, political, and economic order of the national system in a given historical moment (Mosconi and Campiglio 2015).

In earlier days, courts read public policy as corresponding to the "inner" public policy: every time the applicable foreign rule was merely different from an imperative inner provision, it was considered contrary to public policy and, thus, rejected. For instance, according to foreign law, the legal age is achieved at the age of 17, whereas, according to a mandatory Italian rule (art. 2, civil code), it is lawfully achieved only at 18.76 In this way, public policy was mostly used to apply inner law also in situations where foreign provisions were not really threatening the domestic system. Public policy has thus advanced towards a gradual restriction of its applicative scope, and has included only general, societal values that are protected by the legal system as a whole in a precise historical moment (so called 'international' public policy). By systematically overviewing legislations and constitu-

⁷⁵ 'Inner' and 'international' public policy translate the Italian expressions *ordine pubblico interno* and *ordine pubblico internazionale*. In the end, the second, larger concept prevailed in private international law matters, as also recognised by Cass. 6/12/2002 no. 17349.

⁷⁶ We will resort to this example, drawn from Mosconi and Campiglio (2015), also in chapter 5.

tional provisions, it is possible to identify those values that are actually challenged by the contact with other legal systems in cross-border relations.

Finally, the concept has ended up referring also to fundamental values, principles, and goals that pertain to other legal systems, such as the EU or the international community. So, public policy includes also the multilevel protection of fundamental rights, as developed in Europe (Zuffi 2014).⁷⁷ Some judgements issued by the European Court of Human Rights in family matters78 have contributed to the idea that public policy should refer to those values that are shared by the majority of European countries, so to possibly conceive of a communitarian public policy. Yet, this opinion is not unanimously accepted: Bogdan (2012) illustrates that no such thing as international, 79 or European, public policy actually exists for even EU regulations refer to the "public policy of the forum," as states for example article 21 Rome I Regulation on the law applicable to contractual obligations, reminding to the public policy of the state. Also Mosconi and Campiglio (2015) believe that public policy does not have a merely international connotation totally disregarding national features. But, however understood, a conceptual expansion has indeed concerned public policy, progressively making it more difficult for domestic courts to raise the relative exception and reject the foreign law.

Courts play an important role in safeguarding the public policy: since no complete list of potentially dangerous cases exists, judges enjoy a large margin of discretion in assessing if public policy is in danger in the concrete case. In practice, they fill the normative void, ascribing a meaning to public policy firstly by reason of the time of adjudication: in fact, public policy is not only spatially, but also temporally located. Then, in order to avoid a disproportionate use of the exception, they need to focus on those effects that are "manifestly incompatible:" the mere difference of legal solutions between the two systems does not instantiate incompatibility, if core values of the system are not undermined. Otherwise, the essence of private international law would be frustrated. In other words, public policy should be considered the last remedy, useful when no other legal solutions are available. Also, its excessive use would amplify unpredictability and lack of uniformity, as highlighted by Bogdan (2012).

National courts usually apply the public policy exception *ex officio*. Exceptionally, Brussels I and Brussels I *bis* regulations require that it is raised by the party obtaining the processual benefits from its use: such provisions meet the need of creating an integrated legal framework, where judgements are automatically recognised in all the Member States.

Public policy functions in a negative way: once the exception has been raised, it prevents the court from applying the foreign law supposedly contrary to it, so

⁷⁷ See Cass. 26/11/2004 no. 22332, Cass. 19/07/2007 no. 16017, Cass. 26/04/2013 no. 10070.

⁷⁸ See for example *Wagner and J.M.W.L v. Luxembourg*, no. 76240/01, 28/06/2007, ECHR-I.

⁷⁹ 'International' here refers to a concept of public policy pertaining to the international community, whereas 'international' in the distinction under footnote no. 75 refers to an enlarged concept of the public policy of the state in private international law context.

inevitably challenging the legal system about how the left normative gap should be filled. Since EU regulations do not provide for such situation, Member States are free to differently address the issue. Potentially, there is room for a different application of the EU instrument: each Member State has its own public policy, even if it is more and more composed of shared values, and regulates the consequence of its functioning in different manners. The Italian legislator has opted for a step-by-step procedure (article 16, par. 2): in case the foreign law cannot be applied, the court applies the law identified through alternative connecting factors eventually provided for by the conflict rule. Lacking other connecting factors, the law of the forum is finally applied.

The question about what consequences public policy has is particularly relevant because it could leave the door open for immediately resorting to the safe law of the forum, or, on the contrary, invite to investigate if the foreign law can be possibly interpreted in a way that respects the core values of the legal system. Following this line of reasoning, there have been attempts to apply the foreign law in a selective way, thus leaving space for those parts of the foreign provisions that are neutral towards public policy' considerations (Mosconi and Campiglio 2015).

3.2.1. The Case of Punitive Damages

In Italy, the public policy exception has been typically raised when it came to recognise and enforce foreign judgements that inflicted punitive or exemplary damages in the area of civil liability. So far, courts' prevailing attitude has always been to reject them. Though, the legal system has been lately opening to forms of damages that overcome the compensatory function commonly and uniquely attributed to damages and civil liability, and a recent opinion of the Supreme Court of Cassation⁸⁰ goes exactly in this direction. The same Court has also lately asked to remit to its unified sections the question about the possibility to recognise judgements inflicting outright punitive damages.⁸¹ If a legal issue is considered particularly relevant, it can be remitted to the First President of the Court, who, in turn, evaluates the chance to assign it to the unified sections for settling it definitely (article 374, civil procedure code – c.p.c.). Such request signals that the judicial attitude towards punitive damages is perhaps undergoing a change.

Let us now briefly consider what punitive damages are, if and in which way EU private international law has addressed them, why the Italian judiciary have consistently rejected their recognition, and, lastly, if it is conceivable that a modification may occur in the near future in the Italian legal scenario, caused by the recurrent contacts with other concepts of civil liability.

By imposing considerable pecuniary sanctions, punitive damages tend to deter the defendant from repeating the same conduct in future. They are frequent in US

⁸⁰ Cass., civ. sect. I, 15/04/2015 no. 7613.

⁸¹ Cass. decree 16/05/2016 no. 9978.

tort law cases, particularly when it is difficult to calculate the amount of the real damages suffered by the plaintiff. Even if plaintiffs are then practically awarded sizeable monetary sums, punitive damages are not confined to compensating damages effectively suffered, but have retributive and dissuasive purposes with regard to the person causing the damage, purposes that, in continental Europe, are normally pursued by public law (specifically, criminal law).

For these reasons, the original project of Rome II regulation on the law applicable to non-contractual obligations included a provision, then not inserted in the final text, totally excluding the application of a foreign rule that provides for punitive or exemplary damages for it would be contrary to the communitarian public policy. Such rule was in the end replaced by article 26, simply stating that the application of a foreign provision, specified by the regulation, may be refused only if it is "manifestly incompatible with the public policy of the forum." By dismissing the original idea, the EU lawmaker has firstly acknowledged that it is not yet possible to talk about an independent communitarian public policy, even if, certainly, communitarian and EU principles have been increasingly absorbed by Member States' inner public policies. Further, it has concluded that Member States should enjoy a certain discretionary power in assessing whether punitive or exemplary damages are disrespectful of their public policy. In the preamble, Recital 32 refers to punitive damages as one of the possible "exceptional circumstances" that justify Member States to consider their public interest and raise the public policy exception. In this way, room is left for diversified treatments of the same situation, depending on the Member State where the case is decided (Bogdan 2016).

Until recently, in line with the European attitude, the Italian legal and judicial system has looked at punitive damages suspiciously: the idea of a system of civil liability aiming at punishing the defendant has been considered not only generally extraneous to its historical legal tradition, but also completely contrary to the inner public policy, which assigns the punitive function to other branches of law, such as criminal law. In case of patrimonial damages, civil liability is attributed a merely compensatory function: plaintiffs are awarded monetary sums corresponding to the suffered damages and, after the relative payment, they should not result enriched since a similar enrichment would be unjustified.⁸²

Notably, requests of application of foreign law providing for punitive damages, such as the US tort law, have yet to be put forward an Italian court. On many occasions, though, domestic judges have been required to recognise and enforce foreign judgements including similar measures (Mosconi and Campiglio 2015). The Court of Cassation has long maintained the same negative approach: in 2007 and 2012,⁸³ both cases of liability for defective products, it refused to recognise and enforce the relative US opinions, mainly motivating that punitive damages irrec-

⁸² These are also the main arguments of the Supreme Court against the recognition of punitive damages (e.g., Cass. no. 1183/2007).

⁸³ Cass. 19/1/2007 no. 1183 and Cass. 8/02/2012 no. 1781, both caused by defective motorcycle helmets in the USA.

oncilably conflict with the domestic system of civil liability, compensatory in kind, and, consequently, with its inner public policy. The plaintiffs had tried to argue that punitive damages could be assimilated to the institutions of *clausola penale* (penalty clause) or *danno morale* (non-material harm), both deemed as not merely compensatory (Sciarratta 2015). The Court rejected the argument, explaining that the first is simply meant to stimulate the fulfilment of contractual obligations and to facilitate evidence in trial, whereas the latter always aims to compensate a suffered damage, even if of a diverse kind with respect to patrimonial ones.

If this has for long been the prevailing position, something is now changing. In 2015,84 the Italian Court of Cassation recognised and enforced a Belgian judgment sanctioning the defaulting party with a monetary measure called *astreinte*. It justified such reception stating that *astreinte* has a coercive function, threatening consequences to the detriment of the defaulting parties, whereas punitive damages function as proper civil punishments, often enriching the damaged party far beyond the economic damage actually suffered, thus remaining unacceptable in Italy.

The recognition of astreinte has probably paved the way toward an extended understanding of civil liability. In fact, if its functions are both compensatory and coercive, we cannot rule out the possibility that, in future, punitive functions could be ascribed as well, also because astreinte is not so clearly distinguished from punitive damages in the Court's opinion (Sciarratta 2015). As anticipated, the Supreme Court has recently required the remission to its unified sections of the issue of recognising foreign judgements providing for punitive damages.85 Firstly, the absolute rejection could be no longer justified by asserting that punitive and coercive functions are excluded altogether from Italian regulation of civil liability. Consider for instance article 96, par. 3, c.p.c.: it allows to sanction the losing party in the court proceedings with a sum, so discouraging future abuses of the tool of civil trial. If the compensatory function of damages had been expression of a constitutional principle, the Italian legislator could not have ignored it, and so article 96 could not have been promulgated. Secondly, automatically denying recognition of foreign judgements including punitive damages would represent a too severe judicial approach: rather, the mere recognition of foreign judgments should be distinguished not only from direct application of foreign law, requiring greater forms of control, but also from the way courts ordinarily decide inner cases, applying merely national concepts and categories.

Waiting for the relative pronouncement of the unified sections, it is legitimate to wonder whether the continuous contact with foreign legal systems and, especially, with different legal solutions to the same problems, does not inevitably lead first the courts, then even the lawmaker to consider the plausibility of new normative scenarios: the cited opinion no. 7613/2015 might open to forms of civil liability including deterrent and punitive functions.

⁸⁴ Cass. 15/4/2015 no. 7613.

⁸⁵ Decree no. 16/05/2016 no. 9978.

3.3. Overriding Mandatory Rules

The public policy reservation is just one of the tools that are at the courts' disposal for protecting the inner coherence of the domestic system. In fact, within most legal systems, there exist rules that are considered of primary importance for the matter they regulate or for the rights and principles they defend, and are capable of prevailing over any other rule, choice of law rules included.

Known also as peremptory norms, immediately applicable rules, *lois de police* in French, they are often called overriding mandatory rules, after the ECJ's decision in the *Arblade* case⁸⁶ that substantially identified them as a restricted sub-set of all the mandatory rules of the forum (van Calster 2013, p. 145). Contrarily to public policy, which is a negative corrective exception (Bogdan 2012, p. 239) to foreign law application and works after verifying the undesirable effects on the internal harmony of the domestic system, overriding mandatory rules function beforehand, preventing the very application of conflict rules. They need to be always applied, irrespective of the internal or international character of the case.

Also EU private international law regulations have aligned with the ECJ's pronouncement, recognising the role of overriding mandatory rules. Consider for instance article 9, Rome I Regulation: it firstly defines them as "provisions the respect for which is regarded as crucial by a country for safeguarding its public interests, such as its political, social or economic organisation, to such an extent that they are applicable to any situation falling within their scope," thus admitting their operation to the detriment of the conflict rules established by the regulation. Besides, it states that the application of the overriding mandatory rules of the forum cannot be limited by any regulatory provision. The third paragraph concerns instead the tricky issue of applying mandatory rules belonging to a third state, somehow connected to the case at stake: in the context governed by the regulation, this third state is often the place of the contractual performance. The court may give effects to those provisions only if they make the contractual performance illegitimate. Noticeably, this rule is a modified version of the one included in the 1980 Rome Convention: its article 7 was much more open to the possibility of applying the mandatory rules of "another country with which the situation has a close connection." Opposed by UK, Germany and Luxembourg, afraid of the uncertainty it would bring about in contractual matters, the final solution was thus a compromise (van Calster 2013).

As for the Italian law no. 218/1995, article 17 regulates *Norme di applicazione necessaria*, establishing their prevalence over conflict rules because of the object they regulate and the purposes they pursue. Generally, mandatory rules intend to guarantee that certain situations, connected to the Italian system, are regulated uniformly, even if this frustrates the private international law objective of international harmony of legal solutions. Also, unilateral conflict rules, i.e., a sub-set of self-

⁸⁶ Joined cases C-369/96 and C-376/96 Arblade and Leloup, [1999] ECR I-8453.

limited norms that directly restrict their applicative scope (Mosconi and Campiglio 2015), exist: they allocate certain cross-border relations in commonly sensitive areas, such as family law, directly to the law of the forum. Rules of this kind are, for example, articles 115 and 116 c.c., regulating the marriage respectively of Italian citizens abroad and of foreign citizens in the Italian territory.

Domestic legal systems continue to have the last word as regards the protection of their inner coherence and fundamental values. Still, the traditional instruments of public policy and overriding mandatory rules require to be used more cautiously than in the past: not only their use should not frustrate classic private international law purposes, but also new general principles and policies, derived from international treaties and EU law.

4. Application and Interpretation of the Foreign Law

Previous sections have aimed at framing Italian private international law in the recent and pervading internationalisation and, mostly, Europeanisation of this area of law. In particular, it has been shown that, by now, general issues of conflict of laws, such as public policy and overriding mandatory rules, are regulated by both national and EU provisions, and that the intent to protect the inner coherence and values of national systems is mixed with larger objectives, shared with the international community and EU Member States.

However, irrespective of what conflict rules the court is applying, the actual application of the foreign law, identified through the suitable connecting factor, raises many practical difficulties. Since it is not conceivable that, normally, judges are familiar with a legal system other than their own, they regularly need to face and, if possible, overcome the obstacle of becoming acquainted with the content of that law.

In the previous chapter, we have stressed that, in the end, the possibility to practically acquire such knowledge is highly critical to the feasibility and implementation of private international law. In the present section, we intend to account for what concrete steps domestic courts usually take when required to know and apply foreign provisions. The first part analyses article 14, law no. 218/1995: interestingly, even if the foreign law is formally seen as law, domestic courts are supposed to adopt tools that are normally used in judicial fact finding, evidence, and proof in order to get informed about its content. Inevitably, how the court acquires knowledge of the foreign provision ends up affecting the way the court interprets and reasons about it, with consequences for the parties in the lawsuit.

The second subsection examines the phase of proper application of the foreign rule, once not only has the court identified the foreign law, following the connecting factor, but also it has supposedly become acquainted with its positive content. Further complications actually arise (Mosconi and Campiglio 2015): courts have to attribute the correct meaning to the foreign law, obtained through "canons of in-

terpretation and rules of application over time of the foreign legal system" (art. 15). It should reflect the meaning it is normally attributed to its words and concepts in the linguistic and legal community of origin: reading art. 14 and 15 jointly, courts should pay attention not to assign a meaning different from its original one (Carbone 2009). Over time, the Supreme Court (*Corte di Cassazione*) has intervened to specify what principles Italian courts should follow in interpreting foreign provisions.

4.1. Knowledge of the Foreign Law and the Role of Experts

In 1995, on the occasion of the reform of the Italian system of private international law with the statute no. 218, the legislator opted for considering the determination of the applicable foreign provision a question of law, reversing the previous normative choice to treat it as a question of fact.

Article 14 requires that the courts ascertain the foreign law ex officio, the only way to guarantee a certain degree of normative effectiveness to foreign law within national borders (Carbone 2009). Thus, the interested parties do not need to plead for it or present it as evidence, because domestic courts have both the power and the duty to determine and apply the foreign provisions in compliance with the principle of (aliena) iura novit curia, i.e., "the court knows the (foreign) law." Theoretically, foreign law is equated with national law. It follows that article 113, civil procedure code (c.p.c.), stating that Italian judges are supposed to settle cases applying only legal rules,87 indistinctly refers to both national and foreign laws. Besides, a judicial opinion based on a violation or false application of the foreign law could be appealed in front of the Court of Cassation, according to article 360 no. 3 c.p.c., as it would happen in case of violation or false application of a domestic provision. Moreover, in case of appeal ex art. 360 no. 3 c.p.c., since the application of the foreign law is decisive for the settlement of the case, the Supreme Court should not only pronounce the principle of law, but also, being a matter that is lodged ex officio, submit it to the examination of the parties, in compliance with the adversarial principle (article 384 c.p.c.).

Still, the assimilation between national and foreign law is just "tendential," as stated by doctrinal comments to article 113 c.p.c. (Comoglio et al. 2014). The principle of equality, which informs the Italian system of private international law and forces national judges to apply the foreign law not differently from Italian law, is basically jeopardised by the fact that the law of the forum is mostly privileged by the courts. Firstly, exactly in light of *lex fori*, judges assess if both international harmony and inner coherence are at balance in private international law

⁸⁷ Article 113 c.p.c. states that the judiciary generally applies legal rules to settle the case, except if the law allows it to decide according to equity: e.g., *ex* art. 1226 c.c., when the precise monetary amount of a damage cannot be proved, it can be assessed equitably by the judge.

cases. Secondly, whenever both laws are applicable and all other things being equal, courts end up mostly applying inner laws. Moreover, in case it is not possible to ascertain the content of foreign law and no other connecting factor works, the national law is residually applied, according to a corrective mechanism provided by article 14, par. 2.

In addition, it is factitious to think that the court could really know the foreign law as it knows the Italian law. Domestic judges are trained and normally spend their whole professional career in a specific legal order and they cannot be reasonably required to know and be familiar with all the remainder legal systems, often profoundly dissimilar in linguistic and conceptual terms. As matter stands, foreign law application would prove difficult, if not impossible, for the domestic court, all the more so if it has to be applied "according to its own canons of interpretation and application over time" (art. 15).

Aiming at minimising their cognitive disadvantage, art. 14 supplies a series of informative tools, which favour the acquisition of foreign law, to national courts.

Firstly, courts can profit from those informative measures, which international treaties and supra-national organisations put at their disposal. In this respect, the preceding chapter⁸⁸ has accounted for the role respectively played by the 1968 European Convention on Information on Foreign Law (or London Convention), the 2001 European Judicial Network in civil and commercial matters (EJN-civil), and the Hague Conference on Private International Law (HCCH), ideal candidate to coordinate the efforts of institutions and legal information centres towards an assisted access to foreign law.

Besides international treaties and networks, art. 14 authorises courts to consult the Ministry of Justice (*Ministero della Giustizia*) for obtaining appropriate information through governmental channels. Moreover, judges can resort to experts or specialised institutions, like university professors or research centres, and, last but not least, the parties assist the court in identifying the foreign law and its content. In most cases, courts either use governmental informative channels, or nominate foreign law experts. Comparing those two tools, expert opinions appear to be more conveniently acquired, both in terms of time and of substantial help they offer: as shown later on, experts reply to precise queries of the judge during the proceedings, whereas the Ministry of Justice provides just concise written notes, which take longer to be delivered.

In Italian civil trials, opinion of experts are generally acquired through the institution of trial consultancy. In its original function, the expert assists the court in ascertaining facts that require to analyse particular technical or scientific issues, going beyond the average culture and of which judges have no specific knowledge (Comoglio et al. 2011). Its regulation is included in Book II, Title I, Chapter II of the civil procedure code (articles 191-201), precisely governing the ascertainment of facts and taking of evidence. But, trial consultancy is not a piece of evidence itself: rather, it allows the judge to acquire a technical opinion to evaluate evidence

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⁸⁸ See chapter 3, sect. 2.2.1.

already gathered by the parties, or to solve questions involving technical or scientific competences, as repeatedly affirmed by the Supreme Court.⁸⁹ It follows that the expert's actions cannot fall outside of the scope of the facts of the case, both as presented by the parties and as supposedly proved by them according to the burden of proof: as the court is subject to the limit of what has been expressly asked by the parties when presenting the case (art. 115 c.p.c.), so is the expert.

By exercising its discretionary power, the court decides whether it is opportune to appoint an expert; in case, it proceeds with an order (art. 191). The appointed experts take part in the judicial hearing arranged during the first appearance of the parties in front of the court (art. 183, par. 7). They conduct the proper investigations, by their own or accompanied by the judge, and can be assisted by the parties or by experts the parties have nominated (art. 194); they finally reply to the specific queries posed by the judge, usually in the form of a written report (art. 195). The expert opinion is not binding in character, but instructive for the court, which remains *peritus peritorum* (literally, expert among experts) and has the last word on the evaluation of its outcomes: the court determines if and how to use them to settle the facts of the case. In this regard, it is notable the contradiction of considering judges at the same time not competent to personally evaluate the facts, but competent enough to assess the expert's technical report (Comoglio et al. 2011).

Logical errors, omissions in the investigations, and inexact application of technical rules, which may affect the expert's opinion, do not constitute an autonomous reason to appeal the decision that acknowledges them, unless they fundamentally vitiate the motivation of that decision (Comoglio et al. 2014). According to the main trend in case law, 90 if the court endorses the expert's conclusions and no specific criticism has been raised by the parties, the decision can merely refer to the report, without any express refutations of the parties' contrary positions, particularly if the report has already sufficiently examined them. On the contrary, in case the court disagrees with the expert, it should adequately motivate why the report is considered untrustworthy and what other elements ground the decision (e.g., Cass. no. 23969/2004).

Trial consultancy has a main objective limit: it cannot concern legal evaluations of facts and the identification and interpretation of the law to be applied to the concrete case, being in force the principle *iura novit curia*. At a first sight, this should lead to reject the possibility to resort to experts to access the content of the foreign law. Nevertheless, interpreting art. 14, the Supreme Court⁹¹ has observed that national courts has the faculty to resort to experts in order to get familiar with the foreign law content in private international law cases, and the legal doctrine generally sees trial consultancy as the most appropriate solution to acquire such knowledge (Boschiero 1996). Also, the discussion between the appointed expert and the experts nominated by the parties can allow the court to evaluate which of

⁸⁹ Cass. no. 9461/2010; Cass. no. 3130/2011.

⁹⁰ Among many, Cass. no. 8355/2007.

⁹¹ Cass. civ. sect. I, 09/01/2004, no. 115.

many possible interpretations is preferable (Carbone 2009). The underlying principle is to increase the chances that the relevant foreign law is correctly applied: accordingly, judges can "resort to any means, also informal" (e.g., Cass., civ. Un. Sect., 07/06/2012, no. 9189), including their private knowledge (Carbone 2009), in order to guarantee effectiveness to the foreign law.

At the same time, resorting to experts to apply the foreign law contributes to blur the line that article 14 draws between foreign law as a question of law or as a question of fact, a troublesome issue both in common law and civil law systems. Besides, the court acquires the content of the foreign law indirectly, as it is reported by the expert. On the one hand, the court interprets the foreign law and motivates its application; on the other hand, at least normally, it is probably ignorant of the original context of that law, the language in which that law is expressed, and its possible consequences for the domestic system. Canale (2015) addresses a similar situation, occurring when the court does not know the content of a legal provision, because it is expressed in a technical or scientific language it does not master, and anyway applies such content, as identified by experts, to decide the case. This happens more and more frequently, e.g., when the applicable law governs the sale of chemical products, such as pharmaceuticals, or regulates technical activities. In such cases, it is not rare that administrative bodies intervene to set standards that end up identifying the applicative conditions of laws and that cannot be evaluated by judges, who lack the required competences. Canale names the situation "opacity of norms:" these norms would be opaque both for the judge, substantially unaware of what is applying also after the expert's intervention, and for the experts, unable to assess the legal consequences of their opinions. Besides, the author affirms that the experts' job impacts also on interpretation and decision making, preventing judges from interpreting the law when necessary. For instance, the court would not be able to detect ambiguities or vague terms in the text for it is not able to understand the text itself completely.

In some way, the foreign norm as well is and remains "opaque" to the domestic court in many respects: the court needs to be assisted in acquiring knowledge of foreign law content, and has a limited vision on the foreign legal system, also after obtaining the expert's opinion. But, is this enough to maintain that expert opinions nullify the interpretive and argumentative power/duty of courts? If so, we should presume that, whenever the court is helped in accomplishing its task, it is *de facto* delegating its decisional power to others. Thus, when it resorts to ordinary trial consultancy, the court would basically abdicate responsibility for the case, instead of simply benefiting from a supplementary tool, provided for by the lawmaker, to better fulfill its obligations, in compliance with the interests of the parties.

Similarly, we cannot deduce that the indirect (acquisition of) knowledge of the foreign law, even if existing and, at present, unavoidable, implies that the court does not interpret it. Rather, from this, it follows that its interpretive choices may be practically influenced by what the experts propose as foreign law. Therefore, the evaluation of experts assisting the judiciary in foreign law application should not be limited to the usual parameters, testing their personal and professional cred-

ibility, trustworthiness, expertise and the general consistency of delivered opinions. But it should also measure the coherence of the provided legal information in the framework of the foreign legal order (e.g., with reference to case law, or legal doctrine), the consistency of more possible interpretations of the foreign rule, and the authority and legitimacy of the sources supporting their opinions.

4.2. Interpreting the Foreign Rule

Art. 15 of law no. 218/1995 establishes that foreign provisions are applied according to their own criteria of interpretation and application over time. Such rule directly ensues from choosing a private international law system that accepts the foreign law as proper law, demanding the judiciary to search for the interpretation methods and canons followed by their foreign colleagues. So, not only it proves hard for the court to get familiar with the content of the foreign law and its usual interpretation in the foreign country for all the reasons we have mentioned above, but also it opens scenarios of conflicts among interpretative traditions once, in the ideal situation, those canons have accessed the Italian system. In fact, if the gap existing between facts and legal concepts challenges the application and interpretation of the law within one legal system (Prakken 2005), all the more, it challenges the application of foreign law in the system of destination, requiring for comparisons with domestic legal concepts, categorisations, and institutions. Conflicts between normative systems may thus eventually emerge at the level of interpretation, as the next chapter shows in detail.

Since doubts have soon arisen about the concrete application of article 15, the Supreme Court has often intervened to clarify and specify its content and functioning. First, it is worth noting that the interpretation guidelines there included are considered generally applicable: they work not only when the foreign law is identified by national conflict rules, but also when it is referred to by international treaties or EU regulations, the most recurrent situation nowadays.⁹²

The Court has also established the following directives for a correct application of art. 15:93

- The foreign legal system is referred to as a whole and in as much as it is practically experienced and applied by the foreign legal experts;
- Reference to foreign criteria of interpretation and application over time should not be understood as implying a strict obligation for the domestic court to acquire all the possible documentation relating the way the foreign rule is always applied in concrete cases;

⁹² Cass., civ. sect. I, 26/10/2015 no. 21712.

⁹³ Cass. 26/02/2002 no. 2791; Cass. no. 21712/2015 (already cited).

- In particular, although domestic courts have to take action to acquire the foreign law content as well as its prevailing mode of interpretation, this does not mean that they should obtain and examine all the related case law; rather, they should investigate if there is a prevailing trend in foreign case law with reference to the application of that piece of law;
- It should be read as referring to the rules that, in the foreign legal system, regulate entry into force of laws, their temporal validity, hierarchy among sources of law, interpretation of criminal and special provisions;
- It should also be taken into account that interpretation of the foreign law cannot disregard public policy considerations, which now convey both internal and international or supranational interests, purposes, and values.

Additionally, the interpreter's task in cross-border cases is better understood if the following private international law mechanisms are kept in mind. Examined, in a scattered way, in the preceding pages, they end up subtly, but pervasively impacting on the concrete possibility of interpretive conflicts among different legal systems.

First, distinct legal systems may protect the same rights as well as pursue the same goals differently. Not only is this phenomenon absolutely normal, for such differences are expression of different lawmakers, legal traditions, and linguistic communities, but also it cannot be removed altogether. National courts facing the variety between legal solutions are tempted to make use of the public policy reservation, or to easily resort to overriding mandatory rules, and consequently to reject the foreign law. Still, different regulations do not necessarily mean them to be wrong or substantially incompatible with the domestic legal order, as recently reaffirmed by the Supreme Court.94 On similar occasions, domestic courts should rather assess whether the foreign legal solution is capable of protecting the rights and of reaching the normative goals involved, even if in alternative ways. Systematically disregarding the applicable foreign law in front of regulatory discrepancies ultimately deprives private international law of its own purpose and raison d'être. Also, from the perspective of globalisation of legal orders, private international law should favour the transnational circulation of legal rules, and not contribute to their further fragmentation.95

Secondly, private international law has been touched, and transformed, by the dynamics of supranational and international law: today, a broad legal framework, variously overcoming national borders, encompasses the majority of national legal systems. As a result, not only conflict rules are always more often derived from sources other than national ones, as it has been often remarked above, but also the principles and peculiar purposes of other legal levels and systems influence the interpretation of both foreign and national law: consider the pervasive effects of the EU consumer protection law, or of the European Convention on Human Rights

⁹⁴ Cass. 15/4/2015 no. 7613.

⁹⁵ As expressed by the cited decree no. 9978/2016 of the Court of Cassation.

(Kiestra 2014), which has established a proper multilevel protection of fundamental rights in Europe.

Domestic courts should enlarge their interpretive horizon, rising above merely national perspectives and walking previously unexplored interpretative paths as for legal solutions and concepts. In particular, if law application is assumed to be an argumentative activity that is firstly and essentially interpretative in kind, then, legal systems ultimately interact through interpretive arguments. Even concretely avoiding conflicts between different normative systems depends on how national judges reason in such situations: what interpretive arguments they build, how they decide upon potential normative gaps, clashes between principles, and vague concepts, how superior principles are referred to in the cross-border decision-making. Apparently, both the law seen as a problem-solving activity, and the renewed pluralist approaches to conflict of laws could provide for useful conceptualisations, putting the interpretative challenge in the perspective of what the finest legal solutions are in an interdependent and globalised legal world.

Lastly, it could be questioned whether the foreign law should be compliant with the constitution of the source legal system, and domestic courts should check its original constitutionality as a consequence. In fact, the reply depends on the type of judicial review existing in the foreign legal system. For example, Italian courts, in case of uncertain constitutionality of a piece of inner legislation that applies to a particular case, can interrupt the proceedings before them, and remit the relative question to the Constitutional Court, empowered to evaluate the constitutional compliance of legislative acts (art. 134, Constitution). If the Constitutional Court deems the rule unconstitutional, it pronounces on it with a constitutive opinion that has retroactive effects. In fact, unless it specifies that the pronouncement impacts only on future cases starting from the one that originated the judicial review, the unconstitutional law is removed from the legal order as if it was never validly promulgated: tamquam non esset, claims the Latin brocard.

Italy has clearly opted for a form of concentrated judicial review, which can be activated by courts incidentally, i.e., in trials underway, and cannot elude the role of the Constitutional Court, the only judicial authority allowed for ruling on matters of constitutionality. Contrarily to the concentrated one, the diffuse judicial review entails that all the judiciary are authorised to invalidate laws and opinions held incompatible with constitutional provisions, without the need to resort to a superior court for solving doubts of constitutionality. The constitutional review is thus carried out by any court of the system, which will eventually set aside the unconstitutional piece of law, but just in respect to the particular case.

As a result of the distinction between concentrated and diffuse forms of judicial review, it is argued that Italian courts can proceed to examine the original constitutionality of the identified foreign law, if the foreign legal system admits some type of diffuse judicial review (Mosconi and Campiglio 2015). Only afterwards, the court shall assess if the interpreted foreign law is compatible also with the system of destination: public policy is partially constituted exactly by the fundamental constitutional principles of the domestic system.

5. Closing Remarks

The chapter has first clarified what changes Italy has experienced in legal sources and in general understanding of private international law, as a result of its participation to the international community and of its membership to the EU. Domestic-based conflict rules and connecting factors have witnessed a progressive reduction of their role in consequence of the EU regulatory action in this field, exercised with the intent of favouring the internal market and a common space of justice and freedom. In particular, the Europeanisation of private international law has impacted on the system, resulting from the reform of the statutory law no. 218/1995. Despite being still in force, the conflict rules there provided for are applied just in case no other EU private international law rule exists.

Acknowledging this reality, the chapter has mainly focused on how statute no. 218 faces basic questions of private international law, and so do corresponding EU rules. Such questions stem from the tension that intrinsically features private international law: on the one hand, by recognising that the relevant law can be a foreign law, it opens to other legal systems, of which it acknowledges the existence; on the other hand, such openness allows extra-systemic elements to access the domestic system, raising reasonable doubts about their compatibility with the system itself. In this scenario, both public policy and overriding mandatory rules, even if partly changed in content and scope, continue to protect the fundamentals of the domestic system. In sight of the next chapter, it is useful to recall that the public policy clause functions as an exception to foreign law application, whenever foreign law is deemed to have negative effects on the domestic system. By contrast, overriding mandatory rules even prevent conflict rules from being applied: the legislator has already decided that a certain topic is regulated exclusively by inner law. In very similar terms, both institutions are provided for by the EU legislator.

The case of punitive damages has then been presented as an example of the use of public policy so to reject a foreign legal institution. In fact, punitive damages have been typically considered irreconcilably conflicting with Italian legal approaches to civil liability, so that courts have generally opposed their recognition with the public policy exception. But, the Supreme Court has recently challenged the traditional, merely compensatory function that the Italian legal order assigns to damages, noting that, in some cases, the lawmaker has already attributed coercive or sanctioning functions to damages. Even if the unified sections of the Court have not yet pronounced on it, ⁹⁶ the fact that a question as such has been posed seems to signal an ongoing or future change in attitudes.

The last section has first provided for details of how Italian judges effectively acquire knowledge of foreign law, examining the tools that art. 14 puts at their disposal. Special attention has been paid to the role experts may possibly play in

⁹⁶ Update on 19/04/2017.

private international law cases, upon judicial request. Then, the chapter arrives at the analysis of art. 15: if other general provisions of statute no. 218 have been replaced by corresponding international or EU rules (e.g., those providing for public policy), this provision is still generally applicable when it comes to applying foreign law in private international law cases, whatever the source of conflict rule. It provides for a challenging imperative: the foreign law has to be applied according to its own canons of interpretation and application over time. After exploring how it is usually read and applied in the Supreme Court' case law, it has been argued that foreign law interpretation is the trickiest moment for the domestic court dealing with cross-border cases. In fact, not only it requires the court to engage in a difficult search for those interpretation canons and methods, but also it often brings about interpretive uncertainties or even incompatibilities. Enlarging the interpretive horizon of domestic courts would be beneficial in such situations, if only for favouring the parties' reasonable expectations as the applicable law to their relation, and for honouring the participation to the international community and to the European Union with all its principles and goals.

In line with the last remark, the following chapter is totally committed to analysing interpretative case scenarios in the event of foreign law application and to introducing an argument-based approach for facing the theoretical and practical problems they present. After overviewing what has already been done in the field of pluralist reasoning and, particularly, reasoning in conflict of laws contexts, the previous chapter has highlighted the lack of analysis of the interpretative reasoning required in such pluralist settings. In the overall framework of the thesis, thus, the present chapter has provided for the pillars within which the domestic court plays, considering that private international law is no more a merely national affair.

Chapter 5: Arguing across Legal Systems in Private International Law

1. Applying Foreign Law: an Uncertain, Stepwise Endeavour

At this point of the thesis, it is arguable that, when it comes to dealing with cross-border disputes in the European Union, national judges, lawyers, and private subjects (both individuals, and companies) experience it first-hand that the normative framework more and more consists of interactions that apparently elude any form of logical thinking. Still, legal reasoning in pluralist contexts has been shown to be not as illogical as it may appear at first glance. ⁹⁷ Through the use of pluralist logic and argumentation, it has been demonstrated that not only standards of correct reasoning exist with reference to interactions between distinct normative systems (Sartor 2005), but also that modular argumentation can properly formalise all the different fragments of legal knowledge involved in such reasoning (Dung and Sartor 2011).

Though, these AI and Law works have mainly addressed how different jurisdictions and normative systems interact and work jointly for avoiding that, when a cross-border dispute occurs, more legal systems are all concurrently competent. So far, it has been disregarded how the identified piece of foreign law should be applied and interpreted by domestic courts. In that respect, private international law provides an ideal test-bed to assess whether there exists some rationality while reasoning with, applying, and interpreting foreign provisions. In fact, through the described mechanisms of jurisdiction and choice of law, private international law may allow domestic courts to apply foreign law to the concrete case, or to recognise and enforce foreign judicial measures within the territory of their legal system.

As a general premise, consider that the analysis developed in this chapter, even if based on the Italian legal scenario, is conceptually expandable to any country facing the challenge of applying foreign law. At its core, it intends to offer a fresh theoretical framework for cross-border interpretative mismatches and misunderstandings, triggered by private international law. Article 15, law no. 218/95, applied irrespective of the legal source of the conflict rule, requires that courts apply foreign law "according to its own canons of interpretation and application over time:" thus, foreign canons of interpretation may not correspond to domestic ones, and conflicts of many kinds may plausibly arise. Also, it is undeniable that nation-

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⁹⁷ See chapter 3.

al judges apply foreign law only after having ascertained, with an acceptable degree of certainty, its content and, possibly, its probable interpretations. The imperative of applying foreign law ex officio, 98 essential to the Italian system of private international law, 99 confronts the precondition of being aware of that law: typically, this is not the case as domestic courts are hardly familiar with foreign legal systems. Facing the issue of correctly interpreting and applying foreign law in private international law, it cannot be ignored that foreign law knowledge is (mostly) indirectly acquired: it often implies resorting to sources, external to the proceedings, whose authority guarantees a fair transmission of knowledge and, then, application of foreign law. Different ways to account for this knowledge problem are, for example, the appointment of foreign law experts, or the recourse to governmental informative channels. Besides merely epistemic concerns, questions arise about the legitimacy and authority of the foreign legal content acquired, also in light of the constitutional provisions Italian judges have to comply with in civil trials (Comoglio et al. 2011). In other words, the fact that domestic courts are applying foreign law does not exempt them from respecting their duties and the right of the parties to have their case fairly and legitimately decided.

Our theoretical analysis takes advantage of argumentation theory' tools. Generally, argumentation theory proves useful for addressing legal reasoning as a form of practical reasoning, as shown in chapter 2. Specifically, as regards private international law, it can give valuable insights on the coexistence of systemic and extra-systemic elements in legal proceedings and judicial opinions, on the one hand, and on the practical acceptance of foreign elements by the recipient legal system, on the other, by clarifying in what ways, for what reasons, and with what purposes acceptance is eventually achieved and potential conflicts are faced and possibly solved. Also, with reference to the role played by external sources in accessing foreign law content, e.g., foreign law experts, argumentation helps identify what elements contribute to form the court's belief about the law concretely applicable, by setting the standards for assessing both external source's credibility and its justified opinion, however expressed. 100

Before proceeding with the analysis, the following are assumed:

• In our world, different laws and legal systems exist:¹⁰¹ states (often with more sub-legal systems), supranational systems (e.g., the EU), international treaties signed by states establishing the international community;¹⁰²

⁹⁸ Ascertainment of foreign law is more generally discussed in chapter 3, sect. 3.

⁹⁹ More in chapter 4, sect. 4.

¹⁰⁰ Here, we refer to any external source of knowledge and their different modes of expression: e.g., governmental channels usually express their opinion through written notes, often very concise, whereas experts are appointed by courts and take active part to the proceedings, delivering a more extensive report on the relevant foreign law.

¹⁰¹ From a comparatist perspective, Legrand (2012, p. 34) talks about "differential co-presence," in Leibniz's terms: not only more laws exist but also they are different from each other. Supporting law's pluralist nature, see the already cited Glenn (2014).

- We consider Italian courts competent to decide the case and consequently ignore any complication arising in this respect: the cross-border dispute has always been correctly allocated to the competent jurisdiction and court. Hereby, we just examine what happens when the conflict rule, whatever its legal source, identify the foreign legal system, the provisions of which should be applied and interpreted.
- As a result, the Italian system of private international law, consisting in conflict rules included in law no. 218/95, in EU regulations, and in international treaties, is conveniently applied.
- Conflict rules are interpreted according to the level of law they stem from: for
 instance, EU conflict of laws regulations need to be interpreted according to the
 canons of interpretation of EU law. Yet, such level of interpretation is not examined, unless it directly influences the following interpretation of foreign law.

The chapter develops into four main sections. Section 2 explores how domestic courts acquire the needed knowledge of the relevant foreign law, provided that national judges hardly know its content on their own. Consider that not only judicial lack of familiarity with foreign law but also a potential personal knowledge of it, if combined with a simplistic view on foreign law and legal inter-systemic interactions, risk to result in misinterpretation and misapplication of foreign provisions to the detriment of the parties. 103 A sensible reliance on experts' opinions is often the only viable solution, taking into account the larger scheme of (comparatist) dialogue between legal systems. An argument scheme is thus identified for evaluating expert's contribution to knowledge of foreign law. Section 3 pictures some interpretive case scenarios, introducing the issue of cross-border interpretive incompatibility to the reader. Section 4 defines: a) the semi-formal language with its caveats; b) a scheme for arguing with and about foreign canons of interpretation; c) the notion of cross-border interpretive incompatibilities, then analysed in various instantiations; d) the relevant critical questions. Lastly, section 5 illustrates the first attempt to formalise the argument-based framework proposed in the preceding section.

¹⁰² It is wort noting that, although it outreaches the scope of our work, the debate about which relationship exists between those many levels of law is still lively, and many theories, in turn referring to monism, dualism, or pluralism, have tried to understand and explain it. See, for example, the recent theory of the law creators' circle by Kirchmair (2016).

¹⁰³ For example, chapter 3 has presented the *Bodum* case (USA), in which the misapplication of French law provoked experts' indignant reactions (e.g., Legrand 2013).

2. Foreign Law Knowledge

Traditionally, knowledge is defined as justified true belief¹⁰⁴ (Steup 2016): subject S knows that proposition p if and only if p is true and S is justified in believing that p. Truth, belief, and justification are thus "individually necessary and jointly sufficient" for knowledge (Ichikawa and Steup 2016). Applying this paradigm to the issue of foreign law knowledge, what is supposedly required for domestic judges to know the foreign law could thus be a well-supported belief that the relevant foreign law has a certain content and, also, certain rules of interpretation and application.

The first question is whether Italian courts are in such an epistemic position, so that their beliefs about foreign law' content are true for justified reasons. Assuming that a court is in the appropriate position to know the relevant law primarily because of its proximity 105 to that law itself, 106 consider the following epistemic positions (S is the national court, p the relevant foreign law):

- Scenario 1–*S* is in the epistemic position to know *p*. The national judiciary has been educated and trained in more than one legal system and, with reference to those systems, it is in the position to know the law.
- Scenario 2–S may be in the epistemic position to know p. For no "institutional" reasons, the court has personal knowledge of (some parts of) the applicable foreign law, masters the language in which that law is expressed, or is aware of the general context featuring that foreign legal system.
- Scenario 3–S is not in the epistemic position to know p. Not only the court does not directly know the foreign law, but also it has neither the linguistic competences nor some knowledge of its characterising contextual factors.

¹⁰⁴ Even though widely-accepted, such definition of knowledge has been ascribed two different meanings. In its strong conception, dating back to Descartes, knowers have knowledge of something only if they have conclusive reasons to believe it to be true (BonJour 2010). Differently, according to its weak conception (also called fallibilist account for knowledge), one may know something also just in presence of a probable justification for it (Pritchard and Turri 2014). If the first conception is usually rejected for its requirements are hard to meet in practice, the second is open to a basic criticism: if "justification comes in degree" (BonJour 2010, p. 58), a threshold, beyond which the subject can be said to have knowledge of something, must be fixed (exactly, the threshold problem) and it risks to be a matter of arbitrary choices (for an overview of replies to such critique, mostly known as impurism, please see Hannon 2017).

¹⁰⁵ Proximity is here understood in terms of physical and cultural closeness of the knower, i.e., the court, to its object of knowledge, i.e., the relevant law.

¹⁰⁶ Speaking of law, the epistemic plausibility, i.e., the fact that something can be known, is strictly linked to the legitimacy of that knowledge, i.e., the fact that the knower has the authority to legitimately acquire knowledge of (then applicable) law. In what follows, emphasis is put on "knowability" of foreign law as an epistemic problem, even if it cannot be disregarded that the authoritativeness of the knowledge source and the judicial ability to understand it strongly influence its concrete application.

If national courts share education and training with foreign courts, as in scenario 1, they also are in the same epistemic position as foreign judges are to know foreign law. Also provided that it is not just a theoretical situation, ¹⁰⁷ it would concern, in the best case, only some foreign legal systems, probably belonging to similar legal traditions or the same linguistic community, in the worst case, just two legal systems, the national and one of choice of the legal professional: epistemic issues would be left open for all the remainder legal systems.

Also scenario 2 is infrequent and merely accidental, but not negligible *a priori*: we cannot deny that, for some unspecified reasons, the court has had some experience of the relevant foreign law or is able to acquire some knowledge of it in autonomous ways. If this is the case, according to sceptical standpoints, whatever personal knowledge of foreign law the court has, its roots in another legal system could impede a full correspondence between foreign law as applied in the domestic system and foreign law as lived in the foreign country. ¹⁰⁸ In detail, it should be explored whether courts' beliefs about foreign law satisfy the epistemic standards that guarantee its (at least) probable truth, ¹⁰⁹ as it will be clearer later on, not to say that such personal, informal knowledge has no authority nor legitimacy and should be sifted through adversarial mechanisms in order to have normative force in the case.

Lastly, scenario 3 is no doubt the most recurrent, for the many reasons we have mentioned in this and previous chapters. As a matter of fact, it is not conceivable that national courts normally know foreign law, or have personal tools to get such knowledge on their own: mostly, they do not find themselves in adequate epistemic position to accomplish the task, lacking linguistic skills as well as conceptual, cultural, and other contextual information featuring the relevant foreign law and legal system.

Such uncertain and, generally, inconclusive epistemic positions seem to compromise any chance of correct foreign law application by Italian courts: national judges risk to run after their foreign colleagues, except for realising, at the last sprint, that they have been running two different races, and no common finish line even exists. At present, the epistemic gap represents one of the main "expenditure items" for the finances of private international law: expensive for both the court, with regard to cognitive and temporal resources, and the parties, in terms of (frustrated) interest to see foreign law properly applied. Therefore, it is worth investigating what may put domestic judges in a more favourable epistemic position, so

¹⁰⁷ As things stand now in Italian professional education, but also elsewhere in the EU (see, e.g., Verhellen's (2016) report on similar circumstances in Belgium), this is exactly a theoretical example. Still, it cannot be dismissed the idea that in future we could have different scenarios, e.g., due to common training activities or exchanges, in which the European Judicial Training Network (www.ejtn.eu, accessed on 12/12/2016) is already engaging the judiciary of EU countries.

¹⁰⁸ See Legrand (2006, 2013).

¹⁰⁹ Even if a further analysis is not the focus of this thesis, it is worth noting that, theoretically, questions about what is domestic and foreign and the plausibility of legal knowledge could be posed also with reference to inner law.

that they could be satisfactorily closer to the object of knowledge with reasonable warranties of reliability, within the limits of (in)comparability between legal concepts. However, consider that private international law, though strictly connected with comparative law and its studied set of problems, has a strong pragmatic bias against foreign law: since courts are first and foremost bound to "speak the law," often "knowledge" of foreign law are those justified beliefs that practically allow courts to act on them with sufficient reasonableness, without much detailed exploration in terms of subtle nuances of meaning or conceptual misalignments.

Yet, epistemologists agree on the existence of various sources of knowledge: perception, introspection, memory, reason, and testimony (Steup 2016). Differently from the others, testimony is an indirect source, since it implies that S comes to know that p on the basis of someone's reporting that p (id.). In everyday life, we often know things through testimony, broadly understood: when we read news from the newspaper, when someone tells us what time it is, and so on. From an epistemological perspective, an expert is a kind of testimony and is acknowledged a crucial role in acquisition of knowledge¹¹¹ since, through them, we can more easily access technical and scientific notions. Also the legal domain looks to experts for validating knowledge of specific events or facts: e.g., as a result of experts' assistance, courts can evaluate technical or scientific evidence in trial.¹¹² But, even if experts generally contribute to put the judge in a position to better know and understand something, a conceptual and terminological clarification is necessary: in common law systems, experts are indeed a special type of trial testimony and undergo cross-examination as common witnesses do. Differently, in civil law systems, testimony is legally understood as the declaration uttered by a subject who had direct knowledge of the facts to be proved, whereas experts intervene, upon judicial request, to support the court in evaluating evidence: they convey a testimony just in the epistemic sense above mentioned. By drawing such fundamental distinction, however, we do not intend to deny that, ultimately, experts in both legal traditions get involved in private international law proceedings exactly to help courts become familiar with foreign law, as, e.g., provided for by Italian private international law (art. 14). In addition, a similar intervention raises further questions: why should such "testimony" provide courts with the required justified true belief on foreign law? What epistemic standards should be satisfied for the knower, i.e., the court, to have knowledge of what is "testified" on, i.e., foreign law?

¹¹⁰ This issue is typically discussed by comparatists: see chapter 3, sect. 2.2. Also, problems of legal translation are well-known: see, for example, Wróblewski (2000), distinguishing between linguistic, systemic, and functional equivalence of different legal languages.

¹¹¹ We refer to the ordinary usage of the terms "knowledge acquisition" as a form of human learning, and not to the knowledge engineering meaning, implying "teaching" to machines "by constructing a knowledge base that mimicked, or at least could be a functional equivalent of human domain knowledge" (Breuker 2013, p. 177).

¹¹² Expert opinions have been already discussed elsewhere in the thesis: for the analysis of the argument from expert opinion, see chapter 2, sect. 3; for their role in foreign law application from a purely legal point of view, see chapter 3, sect. 2.

In Italy, domestic courts acquire foreign law expert opinions through trial consultancy, even if, in civil procedure law terms, they are not proper trial consultancies, as explained in chapter 4. However, resorting to foreign law experts not only cannot be easily eluded from a practical point of view, since hardly, if ever, Italian judges are in a good epistemic position to directly and independently access and know foreign law. But, compared with other informative channels, like governmental ones, it should also be encouraged for at least two reasons. Firstly, even assuming that the epistemic gap cannot be totally bridged and misalignments cannot be entirely eliminated, relying on experts should reduce the chances that national judges fall back on "domestic-like" foreign law applications, as in the US Bodum case, or directly reject foreign law in favour of forum law: in fact, usually, experts not only present the content of foreign provisions, but also try to explain their context and plausible interpretations. Secondly, judges can profit, also in law application, from the dialectics typical of ascertainment of facts in trial. Court-appointed experts may be assisted by experts nominated by the parties:113 the closing report, written by the court-appointed expert, encompasses various positions on content and interpretation of the relevant foreign law, expressed by the experts involved. In turn, such dynamics allow the foreign law to lose its (special) factual nature and to transform itself into a proper legal argument, which could be then processed and applied in the system of destination.

In particular, concerning the probable truth of p, i.e., what the expert reports as foreign law, we maintain that, since experts are supposedly close to the epistemic community of the foreign legal system, they are aware of the specific intentions and presuppositions featuring that context. As a consequence, they are acknowledged an acceptable epistemic position with reference to p, so that they are firstly able to acquire that knowledge on their own and, secondly, to satisfactorily transmit it to those who are interested. That is the reason why, in the end, the expert's intervention is considered sufficient to settle the epistemic difficulties in practice. If the national judges are mostly denied to autonomously know foreign law, on the contrary, experts are free to access it due to their acknowledged position, and to put others in a similar epistemic position: it follows that domestic courts can be provided with relevant and usable knowledge. Relevance of knowledge is then defined with reference to the facts of the case, the legal questions presented by the parties, and the specific queries of the court; usability is rather assessed in terms of capability of prospecting a normative solution for the dispute, in line with the foreign legal order.

It is not rare that appointed experts are comparatists. Still, experts are not entrusted with the task of drafting a comparative analysis of both legal systems on the legal issue at stake; rather, they should provide judges with sufficient (i.e., rel-

¹¹³ Such dynamics are evident in common law systems, where party-appointed experts are cross-examined as witnesses in the trial. Cross-examination may even result in fully opposite opinions expressed on the facts of the case, so that the court/jury must rely on the more persuasive opinion (so called battle of experts).

evant and usable) knowledge of foreign law' content. So, in private international law cases, comparative law is often understood in merely functionalist and instrumentalist terms, as "a means to an end, one end only, which is to resolve concrete practical problems." (Bermann et al. 2011, p. 956 – Zoller)

Judges need to trust the appointed experts for safely relying on their contribution and for constructing their knowledge of foreign law. Trust is a highly critical issue when it comes to scientific or technical experts in trial, mainly because science itself is fallible *par excellence* and, often, scientific communities admit more explanatory theories of the same problem. As for foreign law experts, the impact of the problem is softened and trust is satisfactorily built by requiring that experts are personally dependable, credible in the field of their expertise, i.e., the relevant foreign law, and justify their opinions with reliable sources of information. Besides, experts' trustworthiness is confirmed, and agreed upon, by the very epistemic community they belong to: documented legal practice in the foreign legal order, scientific publications, or long-standing work in pertinent research centres may be sufficient proof of their reliability and, consequently, of the reliability of their justified opinions.

At this point, it is worth recalling the argument from expert opinion, introduced in the second chapter, for it can offer a way to assess if opinions on foreign law, expressed by experts, count as knowledge, upon which courts can rightfully act. The following should be kept in mind:

- Argument from expert opinion generally concerns acquisition of facts in trials
 and mainly aims to offer a professional point of view on technical or scientific
 evidence. It has been shown that, in private international law, foreign law is a
 sort of fact for national courts, which do not normally know it, requiring a reliable and legitimate¹¹⁴ source of knowledge. From these remarks, some modifications to the argument scheme follow, but they are not extreme.
- In conflict of laws cases, expert opinions concern special facts, having a legal/normative content, i.e., foreign provisions, and, thus, do not aim to evaluate evidence or to shift the burden of proof. On the one hand, they help to solve the epistemic issue, providing national courts with knowledge of foreign law. On the other hand, they contribute to transform such knowledge item, otherwise merely factual in kind, into a proper legal argument, which can be subsequently interpreted and applied by the national court.
- As it is probably by now clear to the reader, a weak conception of knowledge is preferred. If meeting certain conditions of credibility, trustworthiness, reliability, experts do provide national courts with highly probable beliefs about the content of foreign law, which in turn are considered sufficient knowledge for applying and interpreting foreign law. Differently, the strong conception would pose a too high epistemic standard, requiring national courts to have conclusive

¹¹⁴ Keep in mind footnote no. 106.

- reasons, i.e., reasons that cannot be uncertain or just probable, regarding their beliefs about foreign law.
- With reference to what epistemic standards should be satisfied to overcome the
 threshold problem regarding knowledge of foreign law, private international
 law context requires that the normative solution prospected by the courtappointed expert should either provide evidence of the existence of a unique
 legal answer to the problem, thus rejecting other contrary positions, or present,
 in a consistent way, different modes of interpretation of foreign law.

Thus, the argument from foreign law expert opinion, shaped on the argument from expert opinion (Walton et al. 2008), should account for all these remarks, especially in its critical questions:

ARGUMENT FROM FOREIGN LAW EXPERT OPINION

Major Premise: Source E is an expert in legal system F containing provision n. *Minor Premise*: E asserts that provision n (in legal system F) is true (false). *Conclusion*: n may plausibly be taken to be true (false).

CQ1–Expertise Question: how credible is E as an expert source?

CQ2–Foreign Legal System Question: is E an expert in the legal system that n is in?

CQ3–Trustworthiness Question: is E personally reliable as a source?

CQ4-Consistency Question: is n consistent with what case law and/or legal doctrine asserts?

CQ5–Interpretation(s) Question: are various $n_1, ..., n_n$ presented plausible interpretations of n?

CQ6–Reliable Source Question: is E's assertion based on reliable source(s)?

CQ1–2–3 are meant to assess both personal and professional reliability of the expert in the foreign legal system, preventing that bias or acknowledged dishonesty prejudice his/her work and checking his/her belonging (or proximity) to the epistemic community of reference. CQ4 adapts the consistency question to the context of foreign law: accordingly, the expert's opinion should be consistent with the case law and legal doctrine that influence the interpretation and application of the relevant foreign law in the system of origin. CQ5 aims to reveal the existence of more plausible interpretations of foreign law $n_1, ..., n_n$, presented as alternative interpretive solutions by the experts. Lastly, in CQ6, the Backup Evidence Question is replaced by the Reliable Source Question: experts need to refer to reliable sources of information (e.g., official gazette) as supporting evidence for their assertion on the foreign law content. CQ6 also faces the issue of authoritativeness and lawful force of n, i.e., foreign law as conveyed by the expert. Consider that the more reliable the expert's sources prove to be, the easier will be for the national court to evaluate and choose among the range of interpretations $n_1, ..., n_n$.

Undeniably, foreign law raises strong epistemic concerns for domestic courts. Still, the fact that judges hardly find themselves in a satisfying epistemic position with regard to foreign law should stimulate lawmakers to find profitable ways to put them in such position. As also art. 14 law no. 218/95 shows, foreign law experts are exactly one of those legislative tools prepared for simplifying the judges' task. So, knowing foreign law remains an epistemic enterprise, implying difficul-

ties and limits of many sorts, but judges are not prevented from applying foreign provisions, even though unfortunate outcomes may occur. 115 Besides, by critically questioning the expert opinion, the court preserves its position of first expert in trial, *iudex peritus peritorum*, a basic principle, all the more so when application of legal provisions is at stake. If such knowledge entails a good understanding of transmitted provisions and concepts and how judges may use it to interpret the foreign law, is analysed in the following sections.

3. Interpreting across Borders: a Theoretical Picture

Domestic courts mostly construct their knowledge about foreign law indirectly, by analysing and assessing either the expressed expert opinions on foreign law content, ¹¹⁶ or legal information acquired through other external sources, like governmental institutions, or through the parties themselves.

In cognitive science terms, generally, when we address new information, we need to first mentally represent that information as concepts, propositions, rules, and analogies (Thagard 2000, Friedenberg and Silverman 2006). Only when we have at our disposal a mental representation of our world, we can process and manipulate information for our purposes. If "the structure of the mental representation places a cognitive constraint on our knowledge processes" (Grimm 2014, p. 263), then, we will have different possibilities of reasoning with, or about, a piece of information and of drawing conclusions or comparisons from it, depending on what features of that information we decide to identify and represent in our mind. In other words, there is a strong link between mental representation of knowledge and its following processing and manipulation.

Let us adapt such general knowledge pattern to foreign law application by domestic courts. Whenever national courts are confronted with unfamiliar concepts, sentences, or rules, they should first have a mental representation of them, starting from the information at their disposal. In so doing, they can either search for similar notions they have in their cognitive store (memory) to confirm them, in case double-checking whether apparent similarities may hide discrepancies of meaning, thus, basically resorting to analogical reasoning, or discover how those new concepts (e.g., legal institutions) work (Main 2013). Knowledge itself is not enough, if you do not have tools to adequately use that knowledge. 117 In fact, the cognitive science metaphor further implies that, to satisfactorily apply foreign law, national

¹¹⁵ In the worst case, i.e., when foreign law cannot be ascertained, not even with the parties' cooperation, and no other connecting factor is identified by the conflict rule, judges apply inner law (art. 14, par. 2).

¹¹⁶ Opinions are normally expressed in a final written report; though, if required, experts appear in court to reply to the queries in the presence of the judge and the parties.

¹¹⁷ How to best represent and use knowledge is a real concern for AI (Kowalski 2011).

judges need to be able to process and manipulate it: to use their foreign law knowledge, they need to become familiar with the apparatus of foreign interpretive canons and rules of application. In the end, through interpretation, the court faces the cognitive gap, administering justice in the concrete legal case and allowing foreign law and canons to enter the domestic system.

In what follows, we consider cases of foreign law application, each falling under one of the next categories:

- When choice of law rules (whatever their source, international, EU, or national)
 identify the law of another state as the law regulating the case: the court needs
 to interpret the foreign rule before it can be applied to the concrete case;
- When the parties in a transnational contract have autonomously opted for a foreign law as the law governing their agreement: contractual clauses require to be classified and interpreted in light of the chosen foreign law; it can also happen that a legal institution, unknown to the domestic system, is established between Italian parties and has to be interpreted according to foreign law (e.g., trusts);
- When the court is required to recognise and enforce a foreign judgement: in so doing, it needs to evaluate if foreign judgements, and the legal institutions they convey, are compatible with the domestic legal system. Usually, the recognition of foreign judgements is not strictly considered a matter of foreign law application (Kiestra 2014); but such position overlooks that recognising an unknown institution means to build an interpretive bridge between the two systems, often by searching for similar domestic law institutions, under which to classify the foreign institution, so to have proper legal effects.

In all these cases, incompatibilities between legal systems¹¹⁸ may indeed occur because of different modes of interpretation: the rule as interpreted by the foreign legal system may prove incompatible with the public policy of the recipient system; there may exist more, conflicting interpretations of the same provision; etc. The next subsection intends to provide for a seemingly exhaustive list of interpretive case scenarios. Together with the mentioned major assumptions of our model, the case scenarios also assume the following rules, derived from Italian law no. 218/1995:

- Each case should present some link with one or more foreign countries: this is the factual premise for any application of private international law;
- Private international law rules can be eluded only in case an overriding mandatory rule exists (art. 17);
- Applicable is the substantive¹¹⁹ law of the relevant foreign legal system; *renvoi* (art. 13) is not considered as a viable solution, not only for reasons of simplici-

¹¹⁸ It is worth repeating that two legal systems that regulate identical situations in different ways do not represent *per se* a logical contradiction or inconsistency, for the two systems are and remain separated (Hage 2015).

¹¹⁹ Substantive law is distinct from the private international law of the foreign legal system.

- ty (Dung and Sartor 2011), but also because always more often conflict of laws systems tend to avoid it whenever it is possible, as shown in chapter 4;
- Public policy works as an *ex post* exception for preventing foreign law application: if the relevant foreign law is not compatible with it, the foreign provision cannot be applied (art. 16);
- The foreign substantive law must be applied according to its own canons of interpretation and application over time (art. 15).

3.1. Interpretive Case Scenarios

The six interpretive case scenarios are structured as follows: 1) description of the hypothetical factual situation and normative framework; 2) focus on the incompatibility that can presumably occur; 3) (eventual) reference to real legal cases, falling under the specific scenario.

The symbols used are:

- LS_I for the Italian legal system, i.e., the domestic system considered; 120
- LS_F for the foreign legal system, the substantive law n of which the competent Italian court k is required to apply; it has already been assumed that multiple legal systems LS_b ..., LS_z exist in our world, and no jurisdiction nor competence issue is at stake;
- s is the cross-border legal dispute or relation;
- c is the canon of interpretation that ascribes a meaning to the identified substantive law n.

3.1.1. Case (A): Existence of Overriding Mandatory Rules

Imagine that there exists an inner provision that is considered a mandatory rule for the goal (g_1) it pursues within the legal system. Then, suppose that s is not only governed by a foreign provision n, autonomously chosen by the parties, but also falls under the applicative scope of that mandatory provision. According to art. 17, mandatory rules override any other rule, private international law included, thus preventing its application. As a result, in case an overriding mandatory rule applies, foreign law is seen as ex ante incompatible with the domestic legal system.

But suppose that the relevant foreign law n, originally applicable, can be interpreted, in LS_F , both as n_1 , pursuing a goal g_2 contrary to g_1 , and as n_2 , pursuing g_1 exactly as the inner provision does. If one of the possible interpretations of n is not conflicting with the important goal pursued by the inner mandatory rule and is, ra-

¹²⁰ It is worth repeating that the theoretical analysis, adequately changing the legislative framework, lends itself to be extended to any legal system applying foreign law.

ther, capable of adequately satisfying its pursuit, can n be applied to the case? In fact, the Italian legal system pursues not only g_1 , but also others goals $g_3,...,g_n$, among which, for instance, legal certainty. In private international law, legal certainty is assured trying to meet the parties' reasonable expectations as regards the law applicable to their relation, all the more so if that law was chosen by them.

An example drawn by a real legal case, ¹²¹ concerning classification and interpretation of a clause of a transnational contract, can help to frame the interpretive issue. The particular clause, by stating that "in event of termination of this agreement by the Licensor pursuant to this agreement [...] the Licensee shall pay to the Licensor the balance of all outstanding sums payable to the Licensor under this Agreement," substantially predetermines the amount to be paid in case of nonfulfilment of contractual obligation by the licensee. Its regulation and consequent impact on the defaulting party depend on its classification and interpretation: interpretive conflicts may arise because each legal system ascribes different meaning and legal consequences to the same clause.

According to the autonomous choice of the parties, the contract is regulated by the UK law, so that the Italian court should apply it to settle the dispute arisen around the classification of the clause. Under UK law, the clause could be classified in two ways, with opposite legal effects: 1) penalty clause, null and void, or 2) liquidated-damage-clause, legitimate. In Italy, the Civil Code classifies it as *clausola penale* and art. 1384 provides for the equitable reduction of penalty clauses by courts in case of partial execution of the main obligation or of manifestly excessive amount of the penalty itself. This provision is a mandatory rule 122 and its main goal is to protect the defaulting party by unfair economic repercussions.

The question is, thus, if the UK regulation allows to satisfactorily achieve the goal. Indeed, UK case law favours a systematic interpretation of such contractual clauses, so that the distinction between penalty and liquidated-damage clauses is assessed considering many concrete elements existing when the clause was negotiated in the contract. Penalty clauses just subsist in clearly excessive amounts of money, so called *in terrorem* clauses, whereas, mostly, the disputed clauses are read as liquidated-damage-clauses: being the result of predictable and reasonable quantifications of damages in case of non-fulfilment of a party, on which the parties have agreed when stipulating the contract, they are seen as adequately protecting both parties without discrimination. Such systematic interpretation thus seems to pursue the same goal protected by the mandatory code provision.

3.1.2. Case (B): Public Policy Exception

¹²¹ The example is shaped on a case decided in 2007 by the Tribunal of Rovereto in Italy (*Universal Pictures International no 2 BV v. Curatela del fallimento Academy Pictures s.r.l.*), already cited by Dung and Sartor (2011).

¹²² On its mandatory character, please see Cass., Un. Sect., no. 18128/2005.

A general conflict of laws rule states that if the relevant foreign law is not compatible with the domestic public policy, the foreign provision cannot be applied (art. 16). Such compatibility assessment is accomplished after the identification of foreign law and of its probable interpretation.

Imagine that, applying a foreign canon of interpretation, the court derives an interpretive result the effects of which, at first, definitely contrast with public policy: e.g., they violate a general principle of inner law. But suppose that inner law can be interpreted as being shaped on more general principles: according to this new interpretation, also foreign provision *n* does no longer conflict with public policy.

Once again, a real example may be helpful. Civil liability regards both legal obligations deriving from private wrongs (torts) and breaches of contract that are not criminally relevant, as non-fulfilment of contractual obligations. Also, historically, civil liability is the area of law that has witnessed the worst and most frequent interpretive conflicts between foreign laws and Italian law. In fact, cross-border civil liability disputes are scene of famous interpretive misalignments challenging goals and principles, which both foreign legal systems and the domestic one pursue with their own civil liability regulation. Frequently, normative systems and lawmakers adopt different legal solutions to attain the same objective. In civil liability, it is well-known that legal systems generally provides for the compensation of damages suffered by the damaged party (g_1) . Still, while the Italian legislator prefers to inflict on the defaulting party the obligation to economically restore only damages effectively suffered by the other party (g_2) , foreign law may provide for monetary measures aimed also to sanction the defaulting party (g_3) . Moreover, within those monetary measures, sanctioning the defaulting party, further nuances are distinguished: there are systems that provide for so called astreinte that pursue the goal of threatening bad consequences to the detriment of the defaulting party (coercive function, g_{3a}), whereas other systems (such as the USA) provide for so called punitive damages: they function as proper civil punishments, enriching the damaged party far beyond the economic damage actually suffered (g_{3b}) . 123

What happens if Italian courts are required to enforce US punitive damages in Italy? Courts usually reject them, since g_{3b} is essentially conflicting with g_2 , even if both laws are pursuing g_1 . Consider also that, in Italy, g_{3b} is usually pursued by other branches of law, *in primis* criminal law, that are controlled by constitutional guarantees. Still, it may happens that domestic judges end up recognising foreign legal institutions that pursue g_{3a} , acknowledging that there are inner legal tools that likewise pursue g_3 in civil liability matters (e.g., art. 96, par. 3, civil procedure code). Does this change the perception of civil liability as understood and governed by inner law and, as a consequence, of punitive damages? Do constitutional provisions really prevent from pursuing g_{3b} in civil law? One of the possible interpretations of both inner law and foreign law is capable of eliminating any conflict with the public policy.

¹²³ See more on punitive damages in chapter 4, sect. 3.2.1.

3.1.3. Case (C): Same Interpretive Canons Conflict

A term, included in the relevant foreign provision n, could be interpreted in different ways, depending on the fact that the same canon of interpretation is applied in LS_F or in LS_I . As a result, n has two possible interpretive outcomes: two norms, n_1 and n_2 , exist.

Theoretically, an interpretive canon cannot give different and incompatible interpretations within one legal system: for example, the canon for literal interpretation should give identical interpretive outcomes whenever it is applied within the same legal system. Such utterance assumes that it is not possible to have different literal meanings of the same provision in the same historical moment, in the same context, and within the same linguistic and legal community. In other words, if this happens in practice regarding inner law (frequently, the parties in a lawsuit contest the literal meaning of the law and propose opposite literal solutions), such conflict is always solved by the judge, who applies only one norm, i.e., one interpretive outcome, among the many possible. The application of the same interpretive canon can instead reasonably result in different meanings of the same foreign provision n, depending on the legal system and linguistic community of reference.

Imagine that the interpreter is applying the canon for literal interpretation in order to interpret n. Having regard to LS_F and its mode of interpretation, as provided for by art. 15, n is interpreted as n_1 . Considering LS_I , the literal interpretation is n_2 . In fact, there exist provisions n' and n'', respectively in LS_F and LS_I , and each of them gives n_1 ' and n_2 ''. Interpreting by coherence, ¹²⁴ in LS_I , n should be interpreted as n_2 , in contrast with the foreign law application of the same canon. But, according to art. 15, the domestic court is supposed to apply n in light of the foreign canon of interpretation, i.e., as n_1 . In turn, n_1 does not comply with the internal coherence of the recipient legal system. Some questions arise: if n_1 and n_2 coexist in LS_{I} , is its inner coherence at risk, since two literal meanings of the same term exist in one legal system? Or is it possible to accept norm n_1 , in light of a different balancing of interests? For instance, the national court, ascertaining that n_1 does not conflict with public policy, could opt for the foreign interpretation since it promotes the application of foreign law according to its own canons of interpretation. Additionally, interpreting, and applying, n as n₁ contributes to foster legal certainty in cross-border relations: the expectations of the parties, as for the law to be applied to their cross-border case, is towards an application of foreign law as faithful as possible to its foreign interpretation.

Consider the following example of classification of facts under a foreign piece of law. 125 The applicable foreign law states that real estates, which are used as

¹²⁴ This fictional case shows that the application of interpretive canons is seldom a single-canon affair: mostly, it is a matter of combination of various interpretive rules, as also noted by Mac-Cormick and Summers (1991).

¹²⁵ The example is inspired by Cass., civ. sect. I, no. 5708/2014: on that occasion, the different meaning, ascribed to family home by one party, referred to an old case ruled by the foreign court.

family home and in community of property, cannot be sold to third parties without the consensus of both spouses. Differently, the sale contract shall be invalid, unless the buyer was totally unaware of the spouse/seller's incapacity to perform the sale.

The interpretive doubt concerns the possibility to consider family home and, so, to have the legal protection of the inefficacy of the contract, a house of family property, located in another state, the courts of which have jurisdiction on the case, and mainly used as summer residence. Imagine that:

- In *LS_I*, 'family home,' is read as concerning, also for tax concessions, just the first house of the family, where the family primarily lives and has its major centre of interests; second houses are totally excluded;
- In LS_F, 'family home' is instead read as including the second house as well, provided that it is regularly used by the family and that it meets essential family needs.

Theoretically, court k should expand the textual meaning of 'family home' in LS_I applying the interpretation of it as provided for by LS_F , challenging with this interpretation the inner coherence of the former.

3.1.4. Case (D): Multiple Interpretive Canons and Outcomes

It may occur that, in the foreign legal system, various canons of interpretation can be applied to the relevant foreign provision n. From such simultaneous application of different rules of interpretation, it may follow that:

- They result in the same interpretive outcome: n_1 ;
- They give different and conflicting interpretive outcomes: $n_1 \neq n_2 \neq n_3$.

Both situations can occur, but just the second one, i.e., several norms with reference to the same provision n, instantiates an interpretive incompatibility. Incompatibility is the effect of different interpretive outcomes that appear all theoretically possible, not only within the foreign legal system, but also in the system of destination, where the foreign rule needs to be applied. Facing interpretative conflicts that, initially occurring in the foreign system, end up replicating in the domestic system, national courts have difficulty in detecting their solution:

- There may be a conflict between stricter or broader canons of interpretation: for example, the technical meaning may conflict with canons looking for the intention of the lawmaker;
- An interpretive evolution may have occurred in consequence of historical constitutional changes;
- An important case may subvert a previous foreign case law.

Rather, the fact that multiple canons of interpretation lead to the same interpretive outcome represents a common circumstance: in such cases, often all canons

are used to support that interpretation. Applying the norm n_1 , courts are just required to specify which canon they opt for in the end as the most supporting one. So, it is not a matter of proper conflicts between interpretations.

Consider a legal case, ¹²⁶ originated by gambling debts. Jack incurred gambling debts when gambling in a Casino in France. The French Casino obtains, from the Italian judicial authority, an order (technically, a warrant of execution, *decreto ingiuntivo*) that forces Jack to pay back his gambling debt (plus a penalty). Jack judicially resists the order, claiming that, according to art. 1965 of the French civil code (c.c.), creditors of gambling debt are prevented from acting against the debt-or.

The relevant law, on the basis of the 1980 Rome Convention, is indeed the French law and, thus, art. 1965. But, even if art. 1965 is the applicable foreign law, the competent Italian court has to ascertain if the facts of the case fall under its applicative scope. In fact, the next three different readings of the code provision are identifiable:

- Literally, *n* states that "La loi n'accorde pa aucune action pour une dette du jeu ou pour le paiement d'un pari," and, thus, seems not to allow that a gambling debt is protected in front of a judicial court;
- An old opinion of the Supreme Court (*Cour de Cassation*, 4/03/1980) has then added that if gambling debts are incurred in authorised and regulated casinos, creditors can obtain judicial protection: in other words, the subjective qualification of the creditor would make a difference in concrete, and no distinction is made with reference to what can be classified as 'dette du jeu.'
- Other opinions of the Supreme Court (e.g., 31/01/1984 no. 82-15904, more recently, 10/09/2014 no. 13-22001), though, have better qualified also the object: i.e., even if the creditor is a subject authorised by the law, like a regulated casino, if the debt concerns a sum of money that the Casino loaned to the gambler for continuing to gamble, such situation is not included in those that can be protected by judicial intervention. So, irrespective of the subjective qualification of the creditor, a fundamental distinction is made with reference to what should be interpreted as 'dette du jeu.'

The Italian interpreter should consider all possible interpretations and properly qualify the specific facts of the case.

3.1.5. Case (E): Vague Concepts Resulting in Normative Gaps

It may be the case that a concept a in the applicable foreign law n is vague. Let us suppose that the court cannot discover what interpretations of a exist in the foreign system and it is uncertain if the facts of the case (f) can be subsumed under n.

 $^{^{126}}$ The example is loosely based on Cass., civ. sect. 1., no. 21712/2015. Real proceedings are simplified in order to focus on the proper interpretive issue.

Facing the absence of foreign suggestions, the court identifies at least two possible, conflicting interpretations:

- Interpretation a_1 restricts the scope of n and makes f fall outside it: this, for example, happens if a is read through a strict interpretive canon as that of technical meaning;
- Interpretation a_2 enlarges the scope of n, by referring to the supposed goal of the foreign normative provision n or to superior principles that a strict application of n would frustrate, or by comparing f to similar situations that are safely subsumed under n.

In detail, both outcomes can be achieved:

- By applying a domestic interpretive canon: this could either allow for applying *n*, or prevent its application, in this way frustrating its supposed purpose; or
- By referring to the purposes, supposedly pursued by the foreign law and the foreign legal order (teleological canon of interpretation); or
- By resorting to values that pertain to superior normative levels, to which both LS_I and LS_F belongs.

Eventually, each interpretation avoids regulatory gaps, but with opposite solutions. A legal case that presents a similar interpretive issue is used as working example in chapter 6.

3.1.6. Case (F): Unknown (or Semi-Unknown) Legal Institutions

Consider that the applicable foreign law may regulate, as it often happens, a legal institution, which a) has no correspondence in the domestic legal system, or b) only partially corresponds to domestic institutions. In case a), the court should investigate if goals and effects of the unknown institution, as interpreted in the foreign system, are compatible with the domestic system and its public policy. In case b), the same assessment would be favoured by the fact that the inner law governs institutions that can be assimilated to the foreign one, at least for certain aspects: for example, they pursue the same goal within the respective legal system, even if in different ways.

Cases involving family law (divorce, patrimonial rights of the spouses, inheritance rights) and children rights (custody, international adoptions, parental responsibility in case of separation or divorce, up to dramatic cases of child abduction) are not exempt from cross-border interpretation criticalities, object of intense interest by the EU, and mainly evident when it comes to enforcing foreign judicial or extra-judicial measures. Recognising an unfamiliar legal institution is no doubt an interpretive act for the court: it implies to find domestic institutions, with which to establish a correspondence on some basis, so to legitimately derive the legal effects required by the parties. Differences are then usually due to different perceptions of family roles within distinct legal and religious traditions, and to different

purposes acknowledged to the law and its solutions. Consider for example that underage adoption is not legitimate in Islamic countries, with some exceptions, 127 because of Koranic prohibitions. 128 As a substitutive legal institution for protecting neglected minors, Muslim states have established kafala. Originally commercial institute, it is a form of guardianship, through which a Muslim family voluntarily commits to taking on responsibility of children in need, by taking care of their wellbeing and education. International treaties (the New York Convention on the Rights of the Child of 20 November 1989; the Hague Convention on Protection of Children and Cooperation in Respect of Intercountry Adoption of 29 May 1993) acknowledge kafala as protecting the child's best interests, which should be the leading principle in cross-border disputes involving children rights. Still, recognising and enforcing it within a domestic legal system as Italy raise doubts as regards its possible assimilation to either adoption or softer forms of custody: such institutes are deeply different as regards the effects they produce on children and caregivers. But failing to enforce it could also mean not only to inhibit the best interests of the child, but also to discriminate him/her for religious beliefs. 129 It is thus not just a matter of normative goals, but also of superior principles, acknowledged and valid at many levels (e.g., LS_F, LS_I, LS_{INT}, LS_{EU}).

4. Argument Schemes for Interpreting the Foreign Law

When applying and interpreting the foreign law in cross-border disputes, domestic courts are required to use foreign rules of interpretation and application and, at the same time, to protect the inner coherence of their own legal system: as we have just shown, this raises interpretive doubts of many kinds. From an argumentation perspective, for instance, applying the same canon of interpretation to the same normative provision and obtaining opposite outcomes, i.e., contradictory or different applicable norms, in different legal systems correspond to incompatible arguments and, thus, requires for effective ways to cope with them in the national system.

We intend to analyse how domestic courts should handle those conflicting interpretive arguments that are relevant to interpret the identified foreign law. Consider that Sartor et al. (2014) have provided for a general structure for interpretive arguments:

¹²⁷ Turkey, Indonesia and Tunisia (see http://www.humanrightseurope.org/2012/10/court-backsfrench-ban-on-islamic-%E2%80%98kafala%E2%80%99-adoption/, accessed on 24/05/2016).

¹²⁸ It is worth noting that the interpretation of the related passages of the Koran is not unanimous, even if mainly oriented in denying the possibility to adopt minors for Muslims.

¹²⁹ Cass., civ. sect. I, no. 1843/2015 regards the possibility to equalise *kafala* to international adoption for the purposes of family reunification under Italian law.

If expression *E* occurs in document *D*, *E* has a setting of *S* and *E* would fit this setting of *S* by having interpretation *I*, then, *E* ought to be interpreted as *I*.

Argumentation schemes are reasoning patterns, where premises are reasons for deriving the conclusion: interpretive arguments, therefore, offer reasons to attain a certain interpretation with reference to a provision. It is also assumed that canons of interpretation are applied at a particular moment in time. Additionally, using this basic scheme in private international law contexts, where interpretation of foreign law is in question, means to consider that:

- Canons of interpretation refer to at least two legal systems, the domestic and the foreign one; but both systems may also consist of normative sub-systems, e.g., religious or regional, and/or be part of larger systems, e.g., the EU (LS_{EU}). Assuming the existence of many systems LS_i ,..., LS_z , from a set-theoretical perspective, each LS_i is either included in or including other LS_i ,..., LS_z (often, both cases hold): with them, it is in various relations and their specific interpretive canons may be relevant for the concrete foreign law application.
- The foreign legal system may give priority to interpretive arguments, which are
 hardly or even not used in the domestic system: e.g., the argument from precedent, common in the USA, is not so familiar to courts of civil law countries and
 is however not used on the same terms by the latter.
- Interpretive conditions may change from one system to the other.
- An ordering among all possible interpretations has to be made: this will eventually depend on the legal system taken as main reference and on the goals and values it refers to.

The semi-formal language used to explore the interpretation of foreign law is now presented along with some clarifications that help in the following analysis of the reasoning patterns.

4.1. The Semi-Formal Language: Features and Caveats

Domestic courts construct their reasoning starting from the general scheme for cross-border interpretive incompatibilities:

Foreign provision n may have more interpretation-outcomes O_1, \ldots, O_m depending on which interpretive canon c_1, \ldots, c_n is applied, where $m \le n$.

 O_1, \ldots, O_m are incompatible.

There exists an interpretive canon c_i that can solve such incompatibility.

Canon c_i may belong to $LS_i, ..., LS_z$.

In our semi-formal language, the following holds:

• *n* is the textual provision of the foreign law that has to be applied by the Italian court *k* according to choice of law rules;

- Interpretation outcomes O_1, \ldots, O_m are the sentences expressing all the different meanings attributed to the foreign provision n, i.e., the applicable norms obtained by applying a certain canon of interpretation (or more canons, as the next bullet item specifies);
- $m \le n$ means that canons $c_1, ..., c_n$ may all have different interpretation outcomes $O_1, ..., O_m$, but may also produce the same interpretive outcome O_i ;
- The existence of more normative systems $(LS_i, ..., LS_z)$ is assumed;
- If the existence of more normative systems $(LS_b, ..., LS_z)$ is assumed, then, the foreign legal system (LS_F) and the Italian one (LS_I) may be not the only interpretive references for the case; rather, other legal orders may be involved in the process: e.g., because of the peculiar interests and rights discussed, the European legal system (LS_{EU}) , or international treaties (LS_{INT}) , 130 could provide for specific rules of interpretation.

Let us explain what interpretive incompatibility means, so to identify the cases, in which O_1, \ldots, O_m can be said to be indeed incompatible. Besides, it is worth investigating if and how the fact that O_1, \ldots, O_m refer to different legal systems, firstly, influences the definition of incompatibility, and, secondly, is perhaps the way out the interpretative doubt in the end.

Several concepts of complementary interpretations may be presented. As a first step, we endorse the basic idea of incompatible interpretations drawn from Rotolo et al. (2015), adapting it to the private international law context: interpretations O_1 and O_m of the foreign provision n are incompatible whenever O_1 is different from O_m , irrespective of any possible logical relation (entailment, semantic overlapping, etc.) between O_1 and O_m . Such definition should then be enlarged in light of the peculiarities of cross-border reasoning, so to include the following insight: whenever canons and interpretations are moved from their natural environment to another legal system, as it happens when foreign provisions are applied in the domestic system, even a plain interpretation may result incompatible with the system of destination. What follows illustrates both hypothesis of incompatibility.

Each interpretation-outcome O_i is the conclusion of an interpretive argument A_i based on a precise interpretive canon c_i , seen as rule of inference: the canon allows the interpreter to draw the result of an interpretative activity (O_i) , which is, in turn, the applicable norm derived from the foreign provision n. They are so structured:

Interpretive Argument
$$A_1$$
 $Z_1, ..., Z_l, c_1 \rightarrow O_1$
Interpretive Argument A_2 $Z_1, ..., Z_l, c_2 \rightarrow O_2$
...

Interpretive Argument A_m $Z_1, ..., Z_l, c_n \rightarrow O_m$

 $^{^{130}}$ From a strictly legal perspective, public international law, including customary law, *jus cogens*, and international treaties, is part of the Italian legal system, either by virtue of constitutional reference (art. 10, par. 1, referring to customary law), or of ratification orders, attributing the status of laws to treaties. Considering public international law a separate legal order (LS_{INT}) aims to highlight that, in the interpretive reasoning, it may provide a different outlook on the legal issue in question, to which inner law and foreign law applied in LS_I need to adapt.

Where
$$Z_1, ..., Z_l$$
 hold $m \le n$

Each interpretive argument A_m reads as follows: "If c_m applies and $Z_1, ..., Z_l$ hold, n should be interpreted as O_m ."

 $Z_1,...,Z_l$ are extra-conditions that characterise the interpretive arguments $A_1,...,A_m$. So, there will ultimately be as many interpretive arguments $A_1,...,A_m$ not only as many different interpretive canons $c_1,...,c_n$ apply to the same provision n, but also as many different extra-conditions feature that interpretation.

Extra-conditions are, firstly, the legal systems $LS_i,...,LS_z$ that are involved in the cross-border legal relation or dispute. Further extra-conditions may concern:

- The validity of the provision n: validity is here broadly understood, so to include its temporal validity in LS_F , its constitutionality with reference to LS_F , the fact that it has been promulgated by the competent authority in LS_F ; as already noted, in case the court profits from the assistance of foreign law experts, assessment on validity of n is concurrent with the evaluation of experts, whereas, when governmental channels are preferred, it is inevitably assumed that they convey legally valid information, unless evidence of the contrary subsists.
- The normative goals (g) that n supposedly pursues in LS_F : more goals $g_1, ..., g_m$ may be assigned to n (in superscript: $g_1^n, ..., g_m^n$), so to condition its interpretation outcome O_n ; such goals $g_1, ..., g_m$ may in turn have different relevance depending on the $LS_b, ..., LS_z$ of reference;
- The values characterising the legal systems $LS_i, ..., LS_z$ considered: provision n is grounded on many values $v_1, ..., v_n$ that may guide the prevalence of one interpretation O_1 against another O_2 .

Multiple interpretive arguments, so, imply that more interpretations, in the form of both multiple canons and outcomes, are possible with reference to the applicable foreign provision *n*. Still, not all of them instantiate incompatibilities in the sense we have defined beforehand.

Consider, for instance, the following case:

Example (a) Interpretive Argument A_1 $Z_1,...,Z_l,c_1 \rightarrow O_i$... $Z_1,...,Z_l,c_1 \rightarrow O_i$... $Z_2,...,Z_l,c_n \rightarrow O_i$ Where $Z_1,Z_2,...,Z_l$, hold and i=n Multiple Applicable Canons $c_1 \neq ... \neq c_n$ One Interpretive Outcome O_i

Example (a), along with case D in the previous section, shows that multiple interpretive canons do not necessarily entail different norms. If anything, when speaking the law in similar cases, judges need to justify why an interpretive canon has been preferred to other, equally applicable rules of interpretation. This is part of the grounds of the ruling: courts are generally required to provide the parties with an accurate and comprehensive motivation, regarding both questions of fact

(de facto) and questions of law (de iure). The circumstance that applicable is a foreign provision instead of a national legal rule does not exempt domestic courts from properly motivating its application and legal consequences. However, the applicable norm is just one and no interpretative uncertainty nor incompatibility confront the national judges in that respect, unless that interpretation contrasts with the domestic system.

On the other hand, a multiplicity of interpretive arguments may actually reveal such incompatibility when their interpretive outcomes O_1, \ldots, O_m are different with one another, as the next example illustrates:

```
\begin{array}{lll} \textit{Example (b)} \\ & \text{Interpretive Argument } A_1 & Z_1, \dots, Z_l, \, c_1 \rightarrow O_1 \\ \dots & \dots \\ & \text{Interpretive Argument } A_m & Z_2, \dots, Z_l, \, c_n \rightarrow O_m \\ & \text{Where} & m \leq n \text{ and } Z_1, \, Z_2, \dots, Z_l \text{ all hold} \\ & \text{Multiple Applicable Canons} & c_1 \neq \dots \neq c_n \\ & OI \neq \dots \neq O_m \end{array}
```

If the result is $O_1 \neq ... \neq O_m$, then an interpretive incompatibility exists since the applicable norm needs to be one.

Still, as already mentioned, even a plain interpretation as O_i in example (a), apparently a rather safe occurrence, may ultimately result incompatible with the domestic system as a whole: e.g., if it conflicts with its public policy. It is a second level incompatibility, following the requirement that interpretations fit the system of destination.

Such interpretive incompatibilities, though instantiated in many different ways, are all faced, and possibly solved, by national courts by opting for one interpretive canon (c_i) or outcome (O_i) and by adequately justifying their choice. In so doing, courts establish preferences among different interpretations and, correspondingly, order concurrent arguments. Of course, the context is broader than that courts usually face on occasion of domestic law application, and this weighs on the result. Besides, it is worth noting that this is a form of meta-reasoning: not only are the courts interpreting the foreign law¹³¹ to derive the norm to be applied, but they are also managing, and thus reasoning about, arguments and canons pertaining to various legal systems. The idea of meta-argumentation is used also for formally developing the theoretical model here presented, as section 5 will explain.

Lastly, before analysing the reasoning schemata, it should be noted that private international law stems from the necessity to meet the parties' reasonable expectations, as regarding the law applicable to their cross-border legal relation. Such remark encourages to think that, in case of multiple interpretive outcomes, if there exists an interpretation that promotes the application of foreign law and prevents resorting to national law discretionarily, that interpretation should be preferred, in

¹³¹ In fact, legal interpretation may be considered a form of meta-reasoning, irrespective of the specific law object of interpretation.

compliance with core values of the recipient domestic system. This rule of interpretation adapts to private international law, which, as autonomous branch of law, tries, at the same time, to adequately rule private law relations with international characters, to safeguard inner coherence of national systems, and to promote values and goals of superior normative systems, thus also fostering international legal cooperation.

4.2. Reasoning Patterns and Preferences among Interpretations

The present subsection is set out to explore what should happen in case incompatibilities effectively occur. To achieve the target, it moves forward in a step-by-step fashion, first, by analysing what kinds of incompatibility judges may face, then, by examining what reasoning steps those incompatibilities actually trigger.

The scheme for cross-border interpretive conflicts now looks as follows:

```
Foreign provision n may have more interpretation-outcomes O_1, \ldots, O_m depending on which interpretive canon c_1, \ldots, c_n is applied, where m \le n.
```

 O_1, \ldots, O_m are incompatible since:

1. $O_1 \neq ... \neq O_m$; and/or

2. O_1, \ldots, O_m conflict with the system of destination LS_I .

Facing such conflict, the court should investigate, in the first place, if there exists a canon c_n or an interpretive argument A_n that could satisfactorily solve it. In so doing, the court cannot disregard the leading principles of private international law, i.e.,:

- Interest in meeting, whenever possible, the parties' reasonable expectations regarding the relevant foreign law, as an instantiation of legal certainty;
- Need to protect the core values of the domestic legal system: foreign law application cannot translate into a violation of fundamental principles of inner law;
- Necessity to acknowledge that normative systems variously intertwine and each
 of them carries its own values.

4.2.1. Conflicts among Outcomes and Canons

Example (b) above represents an occurrence of interpretive incompatibilities:

Interpretive Argument A_1 $Z_1, ..., Z_l, c_1 \rightarrow O_1$

Interpretive Argument A_m $Z_2, ..., Z_l, c_n \rightarrow O_m$

Where $m \le n$ and $Z_1, Z_2, ..., Z_l$ all hold

Multiple Applicable Canons $c_1 \neq ... \neq c_n$ Different Interpretive Outcomes $O_1 \neq ... \neq O_m$ Bearing in mind that the context is that of application and interpretation of foreign law, at least two diverse cases A) and B) may occur.

```
CASE A) Interpretive Argument A_1 LS_F, Z_1, c_1 \rightarrow O_1 Interpretive Argument A_2 LS_F, Z_2, c_2 \rightarrow O_2 Where Z_1 and Z_2 hold and c_1 and c_2 are different canons of interpretation Interpretive Incompatibility: O_1 \neq O_2
```

Both canons of interpretation c_1 and c_2 result applicable in the foreign legal system LS_F and bring forth two interpretive outcomes $(O_1 \neq O_2)$. It has been stressed that, theoretically, it is not admissible for different interpretations to coexist with reference to the same provision n of a legal system: in the end, just one applicable norm must be available to the court. On such occasions, the domestic court should thus engage in a three-step reasoning process meant to identify which interpretive outcome eventually wins. Note that the steps follow one another.

```
Three-step reasoning process:

1. (LS_F, r_1 (c_1 > c_2) \rightarrow O_1 > O_2) \veebar (LS_F, r_2 (c_2 > c_1) \rightarrow O_2 > O_1)

2. LS_I, r (c_1 > ... > c_n) \rightarrow O_1 > ... > O_m

3. (LS_I, c_3 \rightarrow (O_1 \land \neg O_2)) \veebar (LS_I, c_3 \rightarrow (O_2 \land \neg O_1))
```

According to the first step, the court k should investigate if the foreign legal system LS_F provides for a rule r that establishes a priority among the different canons, so that $c_1 > c_2$ (or vice versa: $c_2 > c_1$). If so, the domestic court, in compliance with the obligation to apply the foreign law following its own canons of construction, applies r_1 obtaining that $O_1 > O_2$ (or, r_2 : $O_2 > O_1$). As a result, if n should be interpreted as O_1 (or O_2) in LS_F , then, n should be likewise interpreted in LS_I .

The two next steps are residual: they work if step 1. has not identified a foreign solution to the interpretive conflict. Assuming that no such rule r establishing a preference among interpretive canons (e.g., $c_1 > c_2$) obtains (or can be found)¹³² in LS_F , the court has the following options:

- Such a rule r exists in LS_I so that $c_1 > c_2$ (or vice versa: $c_2 > c_1$) and, as a consequence, $O_1 > O_2$ (or: $O_2 > O_1$); or
- In LS_I, there may be an interpretive argument A_3 , according to which canon c_3 should apply to n bringing about the interpretive outcome $O_1 \veebar O_2$ (exclusive or), so that O_1 prevails over the competing interpretation O_2 , or vice versa.

Solution 1. complies with the fundamental requirement, according to which the relevant foreign law should be applied according to its own canons of interpretation and to the rules regulating those canons in the foreign system (art. 15, law no. 218/1995). As a direct consequence, domestic courts should preferably apply rules of preference provided for by the foreign legal system, if existing and identifiable.

¹³² Chapters 3 and 4 have extensively examined the central problems of private international law, ranging from the access to foreign law content, to the very identification of the relevant foreign provision, up to the way it is concretely applied by foreign courts.

The other two steps, despite not interpreting the foreign provision n using foreign canons of interpretation, 133 have two undeniable advantages: both allow to apply the foreign law, without resorting to the *lex fori*, so conforming to the parties' expectations, and, at the same time, opt for interpretations that presumably guarantee the compatibility of n with the recipient system.

Another instantiation of $O_1 \neq ... \neq O_m$ occurs when the same canon of interpretation c_i , even if applied to the same provision n, gives different interpretation outcomes O_1 and O_2 , 134 depending on the legal system taken as reference (case B, below). For instance, this frequently happens with linguistic canons of interpretation.

```
CASE B)
Interpretive Argument A_1
Interpretive Argument A_2
LS_F, c_1 \rightarrow O_1
LS_I, c_1 \rightarrow O_2
O_1 \neq O_2
```

The question here is whether this difference between interpretations instantiates an incompatibility. Clearly, if the two systems remained separated, no incompatibility would occur: national courts of either system would apply n according to the respective outcome (O_1 or O_2). Though, in the context of private international law, LS_F and LS_I are not completely separated from the perspective of LS_I , the courts of which are required to interpret foreign law as it is interpreted in LS_F . Consistently with such provision, the court should apply O_1 , even if it differs from the usual interpretation O_2 . This solution avoids the first hypothesis of conflict, opting for one outcome instead of the other, but leaves room for further observations, regarding what should happen if O_1 proves incompatible with basic pillars of LS_I .

4.2.2. Assessing the Compatibility with Public Policy: Another Step Forward

The next level of incompatibility occurs when the interpretation O_F , to which the foreign canon of interpretation leads, does not fit with core values of the recipient legal system. Such values constitute the public policy (or *ordre public*, in French).

Public policy has long been, and partially continues to be, a vague concept. As illustrated in chapter 4, over the years, the concept has ended up including and referring to a broad sphere of fundamental values, standards, and goals featuring not only the domestic legal order in a precise historical period, but also other normative systems, which cooperate at the international or European level.

Such conceptual expansion has progressively made it more difficult for domestic courts, facing conflict of laws cases, to raise the exception of public policy and, consequently, to reject the foreign law. So, the mere difference of interpretive outcomes is not itself a reason not to apply the foreign law, provided that fundamental values and goals are safeguarded. Besides, promoting the application of the

 $^{^{133}}$ They exactly start from the assumption that it is not possible to know how the foreign judge would interpret the law.

¹³⁴ Recall case scenario (C) (sect. 3.1.3.): a term t of n had different meanings in LS_F and LS_I .

foreign law as identified by conflict rules contributes to stronger forms of international legal cooperation. In turn, similar considerations imply that, if there exists the possibility to interpret the foreign provision n in such a way to make O_i compatible with the public policy, whatever the canon of interpretation applied, O_i should prevail over the temptation to resort to and apply domestic law. Public policy should be thus considered *extrema ratio*, useful when no other legal solution is available.

Consider again case B) above:

```
B) SAME CANON, DIFFERENT INTERPRETATIONS IN LS_F AND LS_I
Interpretive Argument A_1 LS_F, c_1 \rightarrow O_1
Interpretive Argument A_2 LS_I, c_1 \rightarrow O_2
O_1 \neq O_2
```

Suppose that the two legal systems ascribe two different meanings to the same term included in the applicable foreign provision. $O_1 \neq O_2$ instantiates the first incompatibility as we have above defined it:

Interpretations O_1 and O_2 of the foreign provision n are incompatible whenever O_1 is different from O_2 , irrespective of any possible logical relation (entailment, semantic overlapping, etc.) between O_1 and O_2 .

In the previous subsection, we have concluded that domestic courts, according to private international law, should apply n using the foreign canons of interpretation: the consequent choice in favour of O_1 solves the interpretive mismatch. Differences of meaning are not *per se* a reason for disregarding the foreign provision. Still, further doubts arise: is O_1 in line with public policy? Does the interpretive incompatibility, i.e., $O_1 \neq O_2$, actually hide a subtler, but if possible deeper incompatibility with values and principles of the domestic legal system?

Another example may help in understanding the point:

```
C) DIFFERENT INTERPRETATIONS IN LS_F

1. A_1: LS_F, c_1 	o O_1

2. A_2: LS_F, c_2 	o O_2

3. O_1 \neq O_2 (1st level incompatibility)

4. LS_F, r: (c_1 > c_2) 	o O_1 > O_2 (step 1.: Rule of preference in LS_F)

5. LS_F, r: (c_1 > c_2), LS_I 	o O_1 (Application of r in LS_I)

6. O_1 (Preferred Interpretive Outcome)
```

The interpretive incompatibility $O_1 \neq O_2$ is solved thanks to a rule of preference in the foreign system. But is O_1 compliant with the public policy of LS_I ? In both cases (B and C), domestic courts should not confine themselves to solve the first-level interpretive incompatibility. Rather, they should inquiry if public policy is at risk in consequence of foreign law application in LS_I . Consider the two following examples.

The relevant foreign law states that a person is full age at 17 years old (O_1) , whereas the national threshold is maintained at 18 years old (art. 2, civil code). 135

¹³⁵ Mosconi and Campiglio (2015) present this example to explain the difference between inner and international public policy in Italy. See chapter 4 for detail.

If O_1 enters the domestic system, the same concept, i.e., full age, has two different meanings. Does such difference threaten public policy? Being the temporal distance between 17 and 18 minimal does not seem realistic to have harmful effects on the legal order as a whole. The lawmaker's intention to recognise full legal capacity to a person who is psychological and physical developed (c_i) is presumably not undermined by accepting, in the concrete case, that a seventeen-year-old boy or girl has already the full legal capacity.

Now, suppose that O_i conveys a family law institution that raises more reasonable suspicions as for its compatibility with public policy. Consider that Islamic law bans interfaith marriages, i.e., marriages between people who profess different religions. Could the domestic system accept a similar legal prohibition within its borders? Does this legal institution simply fall under the category of irrelevant different modes to reach the same goal? Compared to the previous example, it is hard to support such a position: equality and non-discrimination on the basis of gender or religion are protected as fundamental principles not only by inner law (i.e., art. 3, Constitution), but also by the international community (among many texts, the 1948 Universal Declaration of Human Rights). Incompatibility with public policy is thus assessed referring to a core of essential values, recognised by both the inner system and the international system.

Domestic interpreters will probably act as follows:

- In the first case, they explore if national canons of interpretation c_i,..., c_m (with m ≥ i), applied to n, produce an interpretive outcome that makes n compatible with the public policy (e.g., the intention of the lawmaker).
- In the second case, they disregard foreign law n: since its effects on the inner legal order are not acceptable and no other interpretation is possible, it results absolutely incompatible with public policy; lacking other connecting factors, they resort to inner law (art. 16, law no. 218/1995).

All in all, the assessment of the *n*-compatibility with public policy means also to investigate whether inner canons may provide for a compatible interpretation. In the absence of a compatible interpretation, courts reject the foreign law, apply alternative connecting factors, and, eventually, inner law. This approach favours foreign law application, while not preventing the court from resorting to national law at a later time, once verified that no adequate interpretation of *n* is conceivable. Public policy should really function as an exception, raised by domestic courts just when the foreign law, however interpreted, results contrary to it.

4.2.3. Exploring Extra-Conditions

Each interpretive argument A_i is not only featured by a specific canon of interpretation c_i , its inference rule, but also is conditioned by further extra-conditions $(Z_1, ..., Z_l)$. In the interpretation, these variables change their value, depending both on the foreign provision n and on the interpretive canon c_i that is applied.

```
Interpretive Argument A_i Z_1,...,Z_l, c_i \rightarrow O_i "If Z_1,...,Z_l hold and c_i applies, n should be interpreted as O_i."
```

Firstly, extra-conditions are the legal systems $LS_i, ..., LS_m$ involved. It may be the foreign legal system according to which n should be interpreted and applied, or the national system that provides for a different way to interpret the same term and in light of which compatibility with public policy has to be assessed, up to the EU law system providing for superior values to consider. Moreover, the foreign legal system may consist of more legal orders.

The legal system of reference (LS_i) influences other extra-conditions. For instance, the fact that the foreign provision n belongs to another legal tradition implies that it may be drawn from sources of law different from sources of law usual in the domestic system. In this sense, a relevant difference is that between statutory law, if LS_F is a civil law country, and judicial precedent, if it is a common law country. As it will be clearer afterwards, legal sources contribute to differentiate how n is eventually interpreted, conditioning subsequent choices between interpretive canons: statutory law and judicial precedents are faced by different reasoning patterns.

Some further conditions should be ascertained:

- The force and validity of n: was the authority that promulgated/issued it competent? Is n temporally valid? If not, has n retroactive effects in the present case? In what relations is n with other provisions in the system?
- Its constitutionality with reference to LS_F.

Such evaluations precede any other: only after $Z_1,..., Z_l$ have been proven to hold with reference to n in light of LS_F , the canons $c_i,...,c_n$ may be applied.

The second bullet item needs some specifications, aimed at investigating if domestic courts should check the constitutionality of the applicable foreign law with respect to the legal system of origin. Although all may theoretically agree on this as an obvious criterion for n to be applicable, a positive reply actually obtains only if the foreign legal system admits the judicial review, as explained in the previous chapter. In other words, if the judiciary of LS_F has the power¹³⁶ to invalidate laws and opinions held incompatible with constitutional provisions, then domestic courts can proceed to the same control. So, assuming that judicial review is the case, the national court should primarily evaluate which interpretation conforms to the (written or unwritten) constitution of the foreign legal system. Only afterwards, it should assess whether that interpretation is also compatible with the system of destination.

Therefore, it is evident that some $Z_1, ..., Z_l$ represent a threshold of applicability of n, directly following from the principle that foreign law is primarily law and, as such, it should comply with the conditions the law is normally subject to. This issue is not new: when the role of external sources of knowledge has been discussed, we have stressed that one basic requirement is that acquired foreign law is

¹³⁶ Such power of judicial review varies in scope and procedure depending on the legal system.

exactly the law a foreign judge would apply. In addition, this reasoning step resembles the argument from rule application presented in chapter 2. But, here, the applicable law comes from another system and the interpreter is extraneous to all its basic functioning rules, included those referring to normative goals and underlying values.

4.2.4. Resorting to Goals and Values beyond the National Borders

Interpretive incompatibilities may result when more normative goals are possibly assigned to the legal statement n: different goals may lead to attribute different meanings to concepts and to define narrower or broader applicative scopes of n.

Goals as well are extra-conditions of the interpretive argument A_i : they are ascribed to n in light of the legal system as a whole, and characterise the very structure of the argument built on them. In detail, those arguments rely on the teleological canon of interpretation: it attributes to n a rational purpose identified from the goals and interests, which the foreign law supposedly promotes (MacCormick and Summers 1991).

Teleological Argument A_i $Z_1, ..., Z_l, g_m^n, c_l \rightarrow O_m$ Where: $Z_1, ..., Z_l$, hold

 $Z_1, ..., Z_l, g_m^n, c_t \rightarrow O_m$ $Z_1, ..., Z_l$, hold g_m^n is the goal m assigned to the foreign provision n c_t is the teleological canon of interpretation

National interpreters should list all the goals that can hypothetically be assigned to n, and examine whether they respectively bring about different interpretive outcomes, instantiating interpretive incompatibilities. In the next examples, we start from acknowledging that interpretation of n is uncertain and that resorting to teleological canons of interpretation may be useful to solve that uncertainty.

Case A: More goals in LS_F .

Teleological Argument A_1 LS_F , g_1^n , $c_t \rightarrow O_1$ Teleological Argument A_2 LS_F , g_2^n , $c_t \rightarrow O_2$ Teleological Argument A_3 LS_F , g_3^n , $c_t \rightarrow O_3$ Interpretive Conflict $O_1 \neq O_2 \neq O_3$

Case B: Different goals may be identified in LS_F and LS_L .

Teleological Argument A_1 LS_F , g_1^n , $c_t \rightarrow O_1$ Teleological Argument A_2 LS_l , g_2^n , $c_t \rightarrow O_2$ Interpretive Conflict $O_1 \neq O_2$

Case C: More goals may be identified referring to LS_F , LS_I , and other LS_m .

Teleological Argument A_1 $LS_F, g_1^n, c_t \rightarrow O_1$ Teleological Argument A_2 $LS_I, g_2^n, c_t \rightarrow O_2$ Teleological Argument A_3 $LS_{INT}, g_3^n, c_t \rightarrow O_m$

```
where three mutually exclusive cases may hold: (O_m = O_1 \land O_m \neq O_2) \veebar (O_m = O_2 \land O_m \neq O_1) \veebar (O_m \neq O_2 \land O_m \neq O_1)
```

Cases A, B, and C, illustrate that assigning different goals to a legal statement n is not a neutral activity, mostly if such assignments are cross-border. The same interpretive canon, i.e., the teleological canon c_t , produces multiple interpretive outcomes $O_1, O_2,...$ that cannot coexist since one norm only should be derived from a textual legal provision.

```
Reasoning steps in case more g_1, ..., g_m may be assigned to n (in superscript).

1. Goals should be ordered so that g_1^n > ... > g_m^n.

1.1 Is there a rule r that establishes such hierarchy?

1.1.1. To what LS_F, LS_I,... does r belong?

1.2 If not, are there values v_i,..., v_m that could establish such hierarchy?

1.2.1. To what LS_F, LS_I,... do v_i,..., v_m belong?

2. After establishing a hierarchy, the preferred outcome must be compatible with public policy in LS_I.
```

In line with what stated in previous sub-sections, in case B, the conflict is preferably solved applying the foreign interpretation since the foreign law should be applied and interpreted according to its own canons of interpretation. The national interpretation O_2 should thus apply only when the foreign interpretive outcome O_1 is contrary to the public policy in LS_i : a clash between normative goals, and their underlying values, may easily occur and give rise to norms that are inadmissible in the domestic system.

Case C shows that teleological reasoning implies that the foreign and domestic legal systems are included in the frame of international and supranational systems: in such broader contexts, certain goals and values may override national purposes. In front of interpretative uncertainties, the natural temptation to reject the foreign law and take refuge in the safe harbour of national law should be contrasted with this larger outlook: the domestic system is variously involved in more normative levels, private international law has the primary purpose to meet the expectations of the parties as regards the foreign law applicable to their relation, and superior values are always more often protected beyond national borders and aspire to be shared by all civilised nations. Such viewpoint explains why the hierarchy among goals may be fruitfully established referring to further legal systems, expression of new value systems.

A special role is played by goals when investigating whether a national piece of law should prevail on the identified foreign law since the former has a mandatory character. Contrary to what happens for the public policy, functioning as an exception, overriding mandatory rules function beforehand, conditioning the application of private international law. Conflict rules and, thus, foreign law should apply only if there is no overriding mandatory rule applicable to the case: the cross-border nature of the latter would ultimately not count. The *ratio* underlying such strict requirement is that mandatory rules pursue goals and protect values regarded as fundamentals, and guarantee that certain situations, connected with the domestic legal system, are regulated uniformly. But what if foreign law interpretations pursue the

same goal and protect the same values as the inner law does? What prevents national courts from applying the foreign law? Doubts arise mostly when the parties have freely chosen the law that should govern their legal relation, mainly of contractual nature, as in case scenario A (sect. 3.1.1. above).

Let us compare different normative solutions in the specific context of mandatory rules using goals.

Factual premises:

- 1. Foreign provision *n* is the applicable law;
- 2. g_m is considered a fundamental goal in LS_I
- 3. In LS_I , rule r is an overriding mandatory rule: $\forall n \in LS_i, g_m^r : r > n$

since it pursues goal g_m^r :

Interpretive Argument A_1

 $LS_I, r, c_t, g_m^r \rightarrow O_m$

If there exists a rule r in LS_l , and the canon for teleological interpretation c_t applies, and c_t assigns r the goal $g_m(g_m^r)$, then, r should be interpreted as O_m .

$$LS_F$$
, n , c_t , $g_m^n \rightarrow O_m$

Interpretive Argument A_2 LS_F , n, c_t , $g_m^n o O_m$ '

If n is the applicable foreign law, the canon for teleological interpretation c_t applies, and c_t assigns n the goal $g_m(g_m^n)$, then, n should be applied as interpreted as O_m .

$$O_m \neq O_m$$
' (1st level of interpretive incompatibility)

Two different norms are achieved. Still, both O_m and O_m ' pursue goal g_m . The prevalence of A_1 could be challenged, considering that true purpose of mandatory rules is to protect precise normative goals and values. If n, interpreted as O_m , pursues the same goals as O_m , should the domestic court reject it in any case? If ever, this further option would promote the application of foreign law as reasonably expected by the parties, mainly when they have autonomously chosen it, at the same time without weakening, or even subverting, the national system in its core values.

4.2.5. Different Sources of Law, Special Interpretive Arguments

The teleological argument is just one of the special arguments involved in reasoning with cross-border interpretive conflicts. If the teleological argument is special because of the attention it pays to goals and values, canons of interpretation, and the arguments they build, may be special also because they apply to different legal sources or concepts of law. In short, different legal sources often require different interpretive approaches, in turn mirroring the values that underpin the whole legal system of reference.

So, the applicable foreign provision n may have various sources, depending on the foreign legal system it is drawn from. As anticipated, a fundamental distinction is that between statutory law and judicial precedents. Let us see how such distinction influences interpretation.

Linguistic canons of interpretation are the main rule in statutory interpretation. Within one legal system, they split into (MacCormick and Summers 1991):

- Ordinary meaning: if a statutory provision can be interpreted according to the
 meaning a native speaker of a natural language would ascribe to it, it should be
 interpreted in this way, unless there is a reason for a different interpretation;
- Technical meaning: if a statutory provision concerns a special activity that has
 a technical language, it ought to be interpreted in the appropriate technical
 sense, as opposed to its ordinary meaning.

From these definitions, it should follow that:

- If the statutory provision is comprehensible in the context of natural language, that ordinary meaning should be maintained in the legal interpretation;
- Other possible interpretations should be favoured only if robust reasons support them:
- If an ordinary meaning and a technical meaning are both applicable to the provision, and the provision regards a specific technical activity, the second meaning should prevail: this is somehow a specification of the second rule.

If national borders are crossed, as it happens in private international law cases, further complications arise: applying a linguistic argument beyond its original linguistic and cultural background implies to export, along with a normative provision, a series of meanings, concepts, institutions as well as contextual intentions and presuppositions that may be totally unknown to the other legal system.

Consider what may occur in such case:

$$A_1 \qquad LS_F, Z_n, c_{ling} \to O_1$$

$$A_2 \qquad LS_I, Z_n, c_{ling} \to O_2$$

Where Z_n holds and is condition of c_{ling} (linguistic interpretations are subject to the inner coherence of the system)

 Z_n holds for both LS_F and LS_I

 c_{ling} is the canon for linguistic interpretation

Interpretive conflict	$O_1 \neq O_2$
Case A)	$O_1 \subset O_2$
Case B)	$O_1 \supset O_2$

In case A), O_I , i.e., n as interpreted in the foreign legal system, has a narrower applicative scope than O_2 , i.e., n as interpreted in the domestic system, whereas in case B), the complementary situation occurs: basically, O_I covers more cases and facts than O_2 .

The question is if such transplant of linguistic meanings, by either expanding or compressing the usual meaning of a word/sentence (both in natural and technical language) in the system of destination and, so, the scope of the relative provision, threatens the inner coherence of the domestic system. In other words, interpreters should evaluate if the narrower (or broader) meaning is capable of undermining the coherence that would be in turn safeguarded by applying the national interpretation. As a general rule, foreign linguistic interpretations should be accepted, even if different: the linguistic interpretation of n is recognised if coherent primarily with the linguistic community of its system of origin (Z_n). Of course, if

public policy is put at risk by the effects of such linguistic reading, the foreign interpretation should leave room for the national one. Opting for a domestic-like interpretation of foreign law instead of a full rejection is the lesser of two evils, from private international law perspective, even if comparatists surely disagree. Still, the pragmatic bias of conflict of laws should make national interpreters tend to this solution, when available.

As for judicial precedents, it is necessary to start by making some remarks. Historically, common law and civil law countries have been mainly distinguished for the different role that judicial precedents played in each of them. The theory of stare decisis, or of formally binding precedents, is the leading theory in common law countries. Accordingly, precedent set by the highest courts is formally binding on lower courts, but such binding value is not absolute and highest courts can depart from or overrule their precedents in exceptional cases. Civil law countries do not acknowledge such systemic role to precedents, and struggle to recognise it a proper normative force: statutory law and codifications are still the main sources of law. Nevertheless, it is easily arguable that precedents do play a role in civil law countries, even if almost in disguise: legal decision making is not exempt from references to precedent cases for interpreting the applicable law. Thus, over the years, aided by the fact that common law and civil law countries have increased dialogue and exchanges, the traditional distinction has been softened, and it can also be noted a substantial, often hidden, convergence on the use of judicial precedents (MacCormick and Summers 1997).

However, some differences exist, if only because binding precedents still represent the chief source of law in common law countries: rules are drawn from judicial precedents and contextualised within precise factual occurrences and fact patterns. Legal practitioners use advanced techniques for treating judicial precedents: not only for recognising *ratio decidendi* and *obiter dicta*, ¹³⁷ but also for distinguishing the present case from the precedent. On the contrary, facts have low or no importance when civil law judges use judicial precedents. Normally, civil law courts resort to judicial precedent for supporting or confirming their statutory interpretation: in fact, a part from some fields of law, in which case law is a proper source of law (e.g., administrative law), normally the judicial precedent is but an interpretive argument supporting a certain interpretation of a statute. It has a force, this force is somehow normative, but it is primarily meant to meet the need for a harmonic interpretation of the law by national courts. Supreme Court's opinions are thus mainly cited to support one interpretive outcome instead of another.

Interestingly, some room is left for exploring what reasoning strategies domestic courts should deploy when precedents are relevant in the application of the foreign provision, either because case law is the source from where to draw n, or more interpretations of n exist, each appealing to a different judicial precedent.

According to the argument from precedent (MacCormick and Summers 1991), if a statutory provision has a previous judicial interpretation, it should be inter-

¹³⁷ See chapter 2, sect. 3.2.1.

preted in conformity with it. If courts are organised hierarchically, lower courts must conform to the judgement of higher ones.

Argument from Precedent A_1 LS_{USA} , $s, p_1, c_p \rightarrow O_1$ Argument from Precedent A_2 LS_{USA} , $s, p_2, c_p \rightarrow O_2$ Argument from Precedent A_3 LS_{USA} , $s, p_3, c_p \rightarrow O_3$ Where S is the present case

 p_1, p_2, p_3 are the judicial precedents applicable to s c_p is the canon that applies the judicial precedent

Interpretive conflict $O_1 \neq O_2 \neq O_3$

Facing three applicable judicial precedents (p_1 , p_2 , p_3), domestic courts should engage in the comparison between s and each of p, in terms of similarity and differences, as any US court would do. By performing the same analogical reasoning, national courts abide by art. 15 law no. 218, which, therefore, should not be read as requiring to conform to hypothetical, real US case law, confronting an identical situation. ¹³⁸ Time, resource, and procedural constraints would in fact prevent any Italian court from having success in such an enterprise. So, the court firstly choose the precedent more similar to the case. From that case, the norm to be applied to it is then derived. Finally, the court will explore if such norm is compatible with the public policy in LS_I . If this is the case, that norm should be applied.

4.3. Critical Questions and Evaluation

The previous sections have framed the setting, within which interpreters move, work, and argue. In detail, the informal argument-based approach has kept the focus on those "meaningful reasons" that lead national courts engaged in such interpretive process. Applying and interpreting the foreign law proves to be, first and foremost, reasoning with, and about, canons of interpretation and interpretive outcomes and, at the same time, considering some fundamental principles, either ascribable to the private international law version of legal certainty (i.e., the need to meet the parties' reasonable expectations as for the applicable law in cross-border disputes and relations), or to public policy (including values resulting from inner constitutional order of domestic systems, their international subjectivity, and possible EU membership).

Having said that, critical questions are now needed for identifying exceptions and counter-arguments to the interpretive arguments, and for establishing when the whole reasoning can be considered correct. They also show how domestic systems should face the access of exogenous legal elements within their borders. Besides, since interpreting foreign law often means to simultaneously reason with different argument schemes (e.g., the canon from ordinary meaning along with the

¹³⁸ The Supreme Court agrees on the point: more in chapter 4, sect. 4.1.

argument from precedent), critical questions may suggest how different schemata should interact.

Starting from the above defined interpretive argument scheme and interpretive incompatibility, we track our previous stepwise analysis, identifying corresponding clusters of critical questions. We have defined interpretive arguments and possible interpretive conflicts that obtain in cross-border situations. Extra-conditions $(Z_1,...,Z_l)$ specify the legal systems of reference as well as normative and interpretive conditions, which, in turn, are dependent on normative systems, interpretive canons, and concrete facts of the case.

A three-step evaluation procedure emerges: domestic courts have 1) to assess that extra-conditions, i.e., the legal grounds for applying and interpreting n, exist, 2) to solve possible interpretive incompatibilities understood as different interpretive outcomes, and 3) to evaluate the compatibility with the public policy of the achieved interpretation O_n . Each step challenges the credibility of premises and conclusions of each interpretation in light of involved legal systems and in sight of their effects within the domestic system. The critical questions proposed below retrace such three-step track and expand some arguments introduced by MacCormick and Summers (1991). The list of critical questions is illustrative and intends:

- To identify on what levels the judicial reasoning should develop;
- To explore how interpretive conditions for each canons are determined and influenced not only by the system of origin, but also by the system of destination;
- To guide the meta-reasoning of the judicial body in case of conflicts, keeping in mind the leading principles of private international law.

4.3.1. Assessing Extra-Conditions and Canons of Interpretation

Extra-conditions draw the threshold of applicability of the relevant foreign law and of the canon of interpretation c_i : thus, they need to be examined by the court with the first row of critical questions. Many remarks fall under the evaluation of foreign law expert opinions, in the event the court resorts to an expert for acquiring the foreign law.

```
n-RELATED CRITICAL QUESTIONS CQ1: Was the authority that promulgated/issued n competent in LS_F? CQ2: Is n temporally valid in LS_F? CQ2.1: If not, has n retroactive effects in the present case? CQ2.2.1: Is the retroactivity harming some superior values in LS_f? CQ3: Is n respectful of constitutional values of LS_F? CQ4: In what relations is n with other provisions in LS_F? CQ4.1: Does it determine contradictions within LS_F? CQ4.2: Can it be read so that it is coherent with LS_F as a whole? CQ4.3: Is it contrary to some important goal in LS_F? CQ4.4: Is it contrary to some general principle of LS_F?
```

Apart from CQ2.2.1, the n-related assessment is accomplished in light of the foreign legal system for two main reasons. First, Italian judges are required to apply foreign law using its own canons of construction and application over time (art. 15): this implies to attest that the foreign law complies with formal and substantial requirements of the legal system of origin. Secondly, in this way, foreign law accesses the domestic system along with its legal background, practically embodying the idea, underlying private international law, to acknowledge the existence of legal systems other than the national one.

Differently, questions concerning the specific canons of interpretation take into account also the fact that those canons are moved from a specific context to an extraneous legal environment. What will eventually cross the borders is the interpretive outcome O_n , i.e., the applicable norm derived from the textual provision n.

```
c_i-RELATED CRITICAL QUESTIONS
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CQ1: Do the interpretive conditions of the specific canon c_i subsist?

CQ1.1: Have they changed over the years in LS_F ?

CQ1.2: Have they changed in consequence of constitutional changes in LS_F ?

CQ2: Do the interpretive conditions of c_i subsist also in the domestic system LS_i ?

Each canon of interpretation that can be hypothetically applied to n has its own conditions, the satisfaction of which ultimately depends on the facts of the case (MacCormick and Summers 1991). In particular, if its interpretive conditions are not satisfied, the interpretive argument, which is grounded on them, cannot be applied, or, if applied, cannot exert its full justificatory force. In short, no interpretation can be given based on that canon, or other interpretations will be better supported.

Imagine that, as frequently happens, the preferred canon of interpretation is that of ordinary meaning, one of the two linguistic arguments. Its interpretive conditions mainly refer to the fact that, in the context of the natural language the provision is written in, its constituent sentences and words are ordinarily comprehensible by an average person: if this is the case, the interpreter will ascribe that plain meaning to the rule.

Starting from the above scheme for c_i -related critical questions, such interpretive argument and its conditions may be criticised analytically as follows:

```
(FOREIGN) CANON FROM ORDINARY MEANING
```

A) CQ CONCERNING ITS APPLICATION IN LS_F

CQ1: Is meaning m the only possible in the linguistic context?

CQ1.1: What other meanings are alternatively possible?

CQ1.2: Does it exist a meaning m in the past and a meaning m' at the present time?

CQ1.3: Has the plain meaning m been subject to constitution-oriented readings?

CQ2: Does the chosen meaning solve any ambiguity?

CQ2.1: Is the term still vague?

CQ2.2: Is the term to be interpreted evaluative in kind (e.g., 'good faith')?

CQ2.3: Are the terms too general and abstract?

B) CQ CONCERNING ITS APPLICATION IN LS1

CQ1: Does it exist a linguistic translation of the term in LS₁?

CQ2: Is meaning m' provided for by the translation faithful to the original meaning m? CQ2.1: If so, is m' normally used and applied in LS_I as it is in LS_F ?

CQ2.2: If not, does m conflicts with the system coherence of LS₁?

The same analysis can be articulated for the other canons of interpretation, having regard to the fact that interpretive conditions are canon-specific. Differences aside, the final target is always to establish that interpretive conditions are satisfied in both systems, and, thus, the interpretation is adequately justified. Note that, undeniably, the satisfaction of interpretive conditions cannot be detached from the concept of public policy, as we stress in a future subsection.

As the linguistic argument above, also the teleological argument is greatly descriptive. The interpretive conditions of this argument are linked to the possibility to identify the goals the statutory provision is meant to implement.

```
(FOREIGN) TELEOLOGICAL CANON

A) CQ CONCERNING THE APPLICATION IN LS<sub>F</sub>

CQ1: Is goal g<sub>1</sub> the only ascribable to n?

CQ1.1: What other goals g<sub>2</sub>,..., g<sub>n</sub> are alternatively possible?

CQ1.2: Does it exist a goal g' expression of the historical lawmaker's intentions (subjective) and a goal g' expression of the ideal legislator's intentions (objective)?

CQ1.3: Has the goal g<sub>1</sub> been modified by constitutional changes?

B) CQ CONCERNING THE APPLICATION IN LS<sub>I</sub>

CQ1: Is goal g<sub>1</sub> pursued also in LS<sub>I</sub>?

CQ2: Is goal g<sub>1</sub> conflicting with other goals g<sub>2</sub>,..., g<sub>n</sub> in LS<sub>I</sub>?

CQ3: Is goal g<sub>1</sub> conflicting with goals g<sub>3</sub>,..., g<sub>n</sub> in LS<sub>INT</sub> or LS<sub>EU</sub>?
```

This kind of analytic investigation may challenge any chosen canon of interpretation, be it linguistic, systemic, or teleological, and gives a picture of all the facets that need to be considered. Then, since canons of interpretation interact with each other, also such interaction and potential conflicts need to be assessed.

4.3.2. Interpretive Incompatibility: Nuances and Levels

Interpretive arguments interact variously. Besides the rare case of single-argument interpretation, occurring when just one canon of interpretation gives a satisfactory interpretative result, canons are normally applied jointly and can sometimes conflict with each other for they support competing outcomes. More interpretive outcomes $(O_1 \neq ... \neq O_m)$ correspond to derive multiple norms from one legal provision n: it represents the basic interpretive incompatibility.

At this level, critical questions highlight how the interpretive conflict should be addressed and solved. They are listed as consequential, but it should be by now clear that any interpretative endeavour develops horizontally, operating on many levels at once, often going back and forth.

CQ1: Is c_1 , the interpretive canon that provokes the conflict, inapplicable because its conditions do not exist?

This may for instance occur when linguistic arguments are applied. A term that at a first glance appeared to be unambiguous and perfectly comprehensible is then challenged on semantic or syntactic grounds within the system of origin, or, in the

domestic legal system, by the translation of the words of the provision, which replicates the ambiguity of the transferred legal concept, or unveils its vagueness.

CQ2: Is there another canon of interpretation c_2 that nullifies the interpretive conditions of c_1 ?

For example, the ordinary meaning of a term in a legal provision is replaced by its technical meaning for systemic reasons: if the legislation concerns a technical activity and, in that context, the term has a specific meaning that is different from the ordinary, the technical meaning prevails.

CQ3: Is there a rule r in LS_F establishing a priority relation among diverse interpretive canons and, consequently, outcomes?

CQ3.1: If not, can a rule r, which in LS_I establishes a priority relation among national interpretive canons, be applied to the foreign provision n?

The third row of questions is meant to find a way to establish priorities among different norms. As any other legal system, the foreign legal order may provide for its own hierarchy among canons of interpretation. A possible ordering may look as follows: 1) linguistic arguments, 2) systemic arguments, 3) teleological arguments; the following step is reached only if there are reasons to abandon the previous level (MacCormick and Summers 1991, p. 531). Intentions may then intervene at any level to identify values the legislator supposedly holds as fundamental: the argument from intentions, named 'transcategorical' for this reason (id.), may confirm a first ordering of the involved interpretations or, contrarily, show reasons to abandon it. It is conceivable that courts, if incapable to identify the priority rule as established by the foreign system, may apply the corresponding national priority rule, paying specific attention to the plausible intentions of the foreign lawmaker, if discriminating, and to their compatibility with the national system.

CQ 4: If such a rule r does not exist, is there an interpretive canon c_i in the domestic legal system LS_l so that the conflict can be solved?

Jointly with the previous case, the fourth question discloses a possible last scenario: to favour the application of foreign law n, the domestic court resorts to a canon of interpretation of its own system. Imagine that the intentions of the inner lawmaker support one of the multiple outcomes and reject the other. This solution, already presented as theoretically and practically feasible, would promote foreign law applicability and safeguard the national inner coherence, but to the detriment of a faithful "foreign-like" interpretation of n.

In particularly complex scenarios, interpreters often refer to teleological arguments: their typical focus on goals easily favours one interpretation instead of others. Some questions are thus specifically linked to this hypothesis:

```
ON GOALS
```

CQ5: Is the identified goal g_1 a legitimate goal to pursue?

CQ6: Is goal g_1 the only goal underlying the provision n?

CQ6.1: If not, in what relations are the other goals with one another?

CQ7: Are there other goals $g_2,...,g_n$ belonging to other $LS_i,...,LS_m$?

CQ7.1: Are these other goals superior to g_1 ?

ON INTERPRETIVE OUTCOMES

```
CQ8: Is the reached interpretation O_1 effectively pursuing the goal g_1?

CQ8.1: Are there other interpretations O_2, ..., O_n that achieve g_1 more effectively?

CQ9: Is O_1 blocking the achievement of other important goals g_3, ..., g_n of LS_i?
```

Besides, normative goals are usually grounded in certain values that lawmakers have considered important to promote within the legal system. Therefore, reasoning with goals means to reason also with the underlying values, mostly if they offer a way out possible interpretive conflicts.

```
ON VALUES CQ10: Is the interpretation O_1 effectively promoting value v_1 behind g_1? CQ10.1: Is O_1 demoting other important values v_2, ..., v_n ideally grounding g_1? CQ10.2: Is there an alternative interpretation O_2 that promotes any value involved? CQ11: Is value v_1 behind g_1 also pursued in LS_i? CQ11.1: Does it conflict with other values v_3, ..., v_n important in LS_i? CQ11.2: Should values v_4, ..., v_n, underlying other LS_i, ..., LS_m, prevail?
```

Values trigger a special form of legal reasoning known as outweighing (or balancing). Accordingly, contrasts between interpretive outcomes O_1 and O_2 are faced by referring to the reasons, supporting either of them, which generally outweigh any other reason. So, within one legal system, it could happen that ordinary meaning is replaced by an argument from general principles. Rather, in cross-border disputes, a basic value of the domestic system, or even of another, superior legal system (e.g., the EU), may be read as necessarily prevailing over any other value, which is also possibly recognised, but on an inferior level: ultimately, this fundamental value identifies which interpretive argument should outweigh the other.

4.3.3. Public Policy

Compatibility with the public policy is assessed whatever interpretation has been ultimately achieved, and however previous interpretive conflicts have been solved.

```
CQ1: Is interpretation O_1 compatible with the public policy in LS_1?
```

It is worth repeating that, despite the vagueness of the concept, over the years, public policy has gradually included a core of fundamental values, standards and goals characterising not only the domestic system in a precise historical period, but also other normative systems, with which the national system cooperates at the international or European level. Even if it is still not possible to talk about a proper international or communitarian public policy, domestic courts, when facing legal solutions that are strongly different from their legal traditions, need to investigate if, irrespective of the differences, the foreign solution is anyway respectful of this broader sphere of values and goals.

```
CQ1.1: If not, do other interpretations O_1 \neq ... \neq O_m exist?
CQ1.2: If other interpretations O_1 \neq ... \neq O_m exist, is one of them respectful of the public policy?
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CQ1.3: If not, is there an interpretive canon c_i in LS_I so that the interpretive outcome O_i of n is compatible with the public policy?

Such questions enlarge the interpretative horizon and prevent courts from immediately resorting to national law every time public policy exception may abstractly be advanced. Preferably, national law is applied in case no compatible foreign norm can be derived: public policy should remain an extraordinary measure in order not to frustrate the *raison d'être* of private international law.

5. First Formal Developments

The study of cross-border interpretive argumentation has so far been eminently legal-theoretical in kind and informal in its development. Though, it usefully lends itself to more formal approaches of analysis of legal argumentation, as shown in a recent paper (Malerba et al. 2016, in Appendix). Not only that paper reconnects with the branch of AI and Law research that generally aims to formalise argumentation and argumentation schemes, but it is also a step forward in the direction of the formalisation of a problem so far disregarded, i.e., cross-border legal interpretation. As such, it represents a good starting point for further practical implementations in AI and Law. In what follows, we introduce research objectives, methodologies, and contribution of that paper, recollecting some remarks already made in chapter 2. For technical details, though, the reader shall refer to the full text of the paper in Appendix.

The research issue of reasoning about interpretive canons across different legal systems is addressed by developing a logical framework based on Defeasible Logic (DL). The paper adapts the concept of meta-argumentation, presented by Rotolo et al. (2015), to the interpretive challenges of private international law. It is worth noting that the logical model by Rotolo et al. refined an existing argument-based framework of legal interpretation within one legal system (Sartor et al. 2014): the present work is but a natural extension of those contributions to explore the feasibility of formal methods for arguing with canons of interpretation, exactly considering cases in which canons come from different legal systems.

Rotolo et al.'s DL-based machinery took some basic intuitions as starting point; among them, there are the following: 139

- Interpretive canons are represented as defeasible rules: their antecedent conditions can be of any type (assertions, obligations, etc.), and their conclusion is an interpretive act that, as a result, leads to interpret a provision *n* in a certain way;
- Standard priority relations can be established over interpretation rules: conflicts occurring among interpretive canons can thus be handled and solved (e.g., Rule 1 > Rule 2);

¹³⁹ The complete list is reported in chapter 2, sect. 4.1.

 A legal provision n can be abstract, if its logical structure is not analysed, or structured, if it corresponds to a linguistic sentence having the structure of a rule a₁,..., a_n ⇒ b.

In particular, the distinction between abstract and structured rules corresponded to two variants of DL for reasoning about canons of interpretation. In our paper, the simplest one is used: legal provisions and their meanings are understood as argumentative, abstract logical units. Their basic components are then identified in:

- A set of legal provisions $n_1, n_2,...$ to be interpreted;
- As set of literals a, b,..., corresponding to any sentences, which can be used to
 offer a sentential meaning to any provision n (a literal a is the meaning of provision n);
- A set of interpretative acts or interpretations $I_1, I_2,...$ (literal interpretation, etc.) that return a sentential meaning for any legal provision;
- A set of rules encoding interpretive arguments (i.e., rules that state what interpretive act can be obtained under suitable conditions); consider that these rules express modes of reasoning within any given legal system.

The further step consists in replying to the following question: what does reasoning about foreign and inner interpretive canons specifically require to be properly performed by a reasoner/interpreter? Basically, such meta-reasoning requires:

- To specify to which legal systems legal provisions belong and in which legal system canons are applied;
- To introduce meta-rules that allow to reason about both foreign and national rules of interpretation;
- That the introduced meta-rules support the derivation of interpretation rules; in other words, the head of these meta-rules are interpretation rules, while their antecedents may include any condition.

In this light, an abstract meta-rule r may look as follows (for details on the used language L, see the Appendix):

$$r: (\mathrm{OBL}I_{\varepsilon}^{\mathrm{LS}i}(n_1^{\mathrm{LS}i}, p), \, a \Rightarrow_{\varepsilon} (s: \mathrm{OBL}I_{\varepsilon}^{\mathrm{LS}j}(n_2^{\mathrm{LS}i}, \, d) \Rightarrow^{I} I_{\varepsilon}^{\mathrm{LS}j}(n_1^{\mathrm{LS}i}, \, p)))$$

Meta-rule r states that, if (a) it is obligatory the teleological interpretation (I_i) in legal system LS_i of legal provision n_1 belonging to that system $(n_1^{LS_i})$ and returning p, and (b) a holds, then the interpretive canon to be applied in legal system LS_j for n_1 is the interpretation by coherence, which returns p as well, but which is conditioned in LS_j by the fact that n_2 in this last system $(n_2^{LS_i})$ is interpreted by substantive reasons as d. In other words, r allows for importing interpretive results from LS_i into LS_j in regard to the legal provision n_1 in LS_i which can be applied in LS_j .

Therefore, profiting from meta-rules as r above, it is feasible to formalise the peculiar legal interpretation and reasoning domestic courts carry out when apply-

ing foreign law in private international law contexts, considering the interactions between intra- and inter-systemic interpretive elements.

6. Closing Comments

The chapter has proposed an argument-based framework in order to encompass the interpretive interactions occurring in private international law disputes between different legal systems.

In so doing, it has primarily addressed the problem of acquiring knowledge of foreign law: in fact, domestic courts usually experience an epistemic distance with the knowledge object they are though supposed to interpret and apply. Thus, requirements for such knowledge to be reliable and usable are identified, having regard to consider that in most cases courts are forced to resort to external sources. In this light is read the possible intervention, upon judicial demand, of foreign law experts in the trial and, accordingly, an argument scheme from foreign law expert opinion has been defined.

Then, sect. 3 has taken a theoretical picture of the plausible case scenarios that domestic courts face in cross-border decision-making. Notably, several elements compete when applying and interpreting foreign rules: not only legal concepts and institutions coming from the identified foreign system, but also principles, values, and goals that belong to superior normative systems. Case scenarios have also revealed in practice what the previous chapter has described from a legal theoretical perspective: the public policy reservation and overriding mandatory rules still play a fundamental role in protecting the domestic system, even though their frame and contents are by now modified.

Then, the chapter has explained in detail how argumentation schemes prove useful when interpreting foreign law in conflict of laws contexts. After presenting the semi-formal language and the argumentation scheme for interpreting foreign law in domestic legal systems, the chapter presents the crucial concept of interpretive incompatibility. It is worth repeating that the latter is understood in a double sense, meeting the special features of private international law: on the one hand, interpretations O_I and O_m of the foreign provision n are incompatible whenever O_I is different from O_m , irrespective of any possible logical relation (entailment, semantic overlapping, etc.) between O_1 and O_m , as already presented by Rotolo et al. (2015) for reasoning with different interpretations within one legal system; on the other hand, an interpretative discordancy also occurs when a rather plain interpretation of the foreign rule results in conflict with the legal system of destination, which is in turn taken into account both as a whole and as part of a complex network of normative systems. The argument schemes proposed, embedding both notions of interpretative incompatibilities, allow national courts to consider multiple normative systems together as well as the various canons of interpretation possibly involved in the reasoning. Some clusters of critical questions, then, stress how the argument scheme can be challenged, proving once again that courts are always hanging in the balance of opposed interests: not only those of the parties in the proceedings, as in any civil trial, but also those of the normative systems involved, regulating legal relations and problems differently, and complying with different principles and values. Needless to say that the presented argumentative framework is strongly influenced by pluralist approaches to private international law that have lately emerged in the legal theory, both in the EU and the USA, and that have been described in the preceding chapters.

Last but not least, the first attempt of full formalisation of the proposed model has been introduced. It refers to a published paper (Malerba et al. 2016), appendix of the thesis, and aims to demonstrate that meta-argumentation may fruitfully express legal interpretation and reasoning across legal systems.

The next chapter is going to apply our informal argument-based framework to two working examples, drawn from real legal cases, thus illustrating how it functions in actual contexts and what the trickiest challenges are for the domestic interpreter.

Chapter 6: Putting the Theory to the Test

1. Introducing Working Examples

This chapter stems from the need to apply the described argument-based framework to plausible case scenarios, with the intent to measure both the efficacy and the convenience of our theoretical study for setting standards of correct reasoning in cross-border legal disputes and relations.

To this end, two real legal cases are analysed as working examples, with slight changes as regards the original judicial procedure. Each case is structured as follows:

- Description of the facts and of the legal request(s) advanced by the parties; note
 that technicalities about Italian civil procedure law are referred to (often in
 footnote) for the reader to understand the broader legal framework, but are irrelevant for the purposes of the analysis;
- Examination of the legal provisions involved; translations from French or Italian into English are ours, where no official translation exists;
- Identification of the specific cross-border interpretive incompatibility;
- Investigation of the possible argumentative strategies, which domestic courts
 could build when dealing with it, bearing in mind at the same time the objectives of private international law, the inner coherence of the national legal system, and the need to balance competing rights, interests, and values.

The cases have been chosen for the specific legal issues debated, for the interpretive challenge faced by the court, and for the supposed impact of foreign law or institution on the domestic system. The first, a family-law case of paternity recognition of a foreign minor, offers an overview of almost the whole range of possible interpretive issues discussed in the previous chapter: from the use of linguistic canons up to that of teleological interpretive arguments. The second case is interesting because the cross-border nature of the legal relation derives from the fact that the foreign institution, i.e., a trust, although generally recognised by the domestic system through the ratification of an international treaty, is not regulated by any domestic law; thus, not only the parties necessarily resort to some foreign provisions to govern their legal arrangement, but also the court needs to apply that foreign law to establish its validity and its compatibility with the system of destination.

2. Cross-Border Paternity Action

The first case is shaped on the decision of the Court of Cassation, no. 2791/2002. The facts are the following: a woman, Cameroonian citizen, put forward an Italian court a paternity action with respect to her daughter, also Cameroonian citizen, underage at the time, on the basis of article 340, Cameroonian Civil Code and article 33, law no. 218/1995. She alleged that the child was born within a relationship she had with an Italian citizen, who initially took care of the girl and financially provided for her support, then refusing to recognise the child. The judicial question is thus the recognition of the legitimate paternity in favour of the girl, and its main legal consequence would be to burden the presumed father with the duty to give her due support in the form of maintenance and education. Considering the consequences of law application is essential for distinguishing between interpretations in the context of private international law: an interpretation could be accepted if it has no negative effects on the domestic system involved.

Firstly, consider the legal provisions involved in such a typical ¹⁴⁰ cross-border case. After ascertaining that the factual premises for applying the Italian private international law no. 218/1995 hold (the case presents links with more than one legal system) and that no other private international law provisions apply (e.g., EU regulations), the appropriate rule of conflict is article 33 that identifies the national law of the child at the moment of the birth as the applicable law.

Art. 33, "Filiation."

- 1. The status of son/daughter is determined by the national law of the child at the moment of the birth.
- 2. It is legitimate the child that is considered so by the law of the state of which either parent is citizen at the moment of the birth of the child.
- 3. The national law of the child at the moment of the birth regulates requirements and effects of ascertainment and refutation of the status of son/daughter. The status of legitimate child, acquired on the basis of the national law of either parent, can be contested only on the basis of the same law.

Being the girl a Cameroonian citizen, the national law is the Cameroonian law: conditions and effects of ascertainment and refutation of the status of son/daughter have to be established according to the rules of that foreign system.

Art. 340, Civil Code of Cameroon, "Judicial declaration of paternity outside marriage."

- 1. Paternity outside marriage can be judicially declared:
- [...]

5°) when the alleged father provided for or participated in the support [entretien] and education of the child in function as father.

- 2. [...]
- 3. The suit can be actioned only by the child. If he/she is underage, only the mother, even if she is underage as well, has the legitimation to propose the suit.
- 4. The paternity suit will be presented within two years from the childbirth.

¹⁴⁰ Family law is the area of law more affected by transnational elements together with contractual matters.

5. However, in the case provided for in 5°) above, the suit can be filed within the two years that follow the cessation, either of the cohabitation, or of the participation of the alleged father in the support [entretien] and education of the child.

6. [...]

At a first glance, it appears crucial to properly interpret the term entretien for it represents a condition for lawfully advancing the judicial request of paternity. In fact, not only is the mother legitimate to go to court if such entretien subsists, but also the two-year limit for filing the lawsuit accrues from the end of the participation of the alleged father in the *entretien* and education of the child, when the two years from the childbirth are already passed, as in the present case. Different interpretations of the term *entretien* are discriminating, establishing whether or not the man's behaviour can be considered as entretien. Once again, the interpretive uncertainty mainly derives from the distance existing between the facts of the case and the legal concept that is abstractly described in the rule. Additionally, as it often happens in conflict of laws cases, the Italian court is not able to discover how the term is normally interpreted, and the law thus applied, in Cameroon. In fact, the external source of legal information, i.e., the Embassy of Cameroon, 141 did nothing but transmit the required Cameroonian legislation, certifying both its conformity to the original version and its correct translation into Italian. No reference was made to the usual mode of interpretation of that law. So, the intervention of the Embassy on the one hand allowed to verify that the foreign provision n, i.e., art. 340 of Cameroonian Civil Code, was promulgated by the competent authority in Cameroon, was there temporally and constitutionally valid, and was the only Cameroonian law applicable to the case (*n*-related critical questions). On the other hand, it left open the issue of how *n* should be interpreted and applied.

The domestic court should firstly have an Italian translation of the term. Translating is not a neutral operation in the legal context: not only are the communities and linguistic conventions different, but also different are the legal traditions that have arisen from them. Translated terms usually hide nuances of meaning that correspond to different legal consequences, concepts, or institutions. Besides, applying the foreign law using its own canons of construction and application over time means to consider at the same time the community of provenance and the recipient one since foreign law application should not contrast with the public policy of the latter. With this said, French-Italian bilingual dictionaries¹⁴² translate *entretien* as *mantenimento*, at the second or third entry, after its immediate meaning of 'interview.' But *mantenimento* may in turn be ascribed more than one meaning in *LS_I*, depending on the canon of interpretation taken into account.

¹⁴¹ The Embassy of a foreign country falls within the category of governmental channels, which domestic courts can resort to in acquiring foreign law (art. 14, law no. 218/1995), together with foreign law experts. They are considered an authoritative source of knowledge. See chapter 5, sect. 2 for detail on the epistemic concerns raised by foreign law application.

^{142 &}quot;Entretien." (2008) Dizionario Il Francese Compatto, Zanichelli, Bologna; "Entretien." (2015) Dizionario di Francese. Edizione Minore, Florence Bouvier, Hoepli, Milano.

INTERPRETIVE ARGUMENTS BASED ON LINGUISTIC CANONS

Interpretive Argument A_1 $LS_I, Z_1, c_{ord} \rightarrow O_1$ Interpretive Argument A_2 $LS_I, Z_2, c_{tech} \rightarrow O_2$

Where:

 Z_1 and Z_2 all hold and stand for: Z_1 : use of *mantenimento* in ordinary language Z_2 : use of *mantenimento* in technical fields c_{ord} : canon for ordinary meaning c_{tech} : canon for technical meaning

 $O_1 \neq O_2$

The application of the linguistic canons for ordinary meaning and for technical meaning leads to different outcomes. By applying the ordinary meaning canon, A_1 attributes a softer meaning to the term *mantenimento*, which is normally used in everyday language: ¹⁴³ any form of support offered to satisfy the ordinary needs of the beneficiaries in their daily life. Such translation seems not limited to economic support. Differently, A_2 applies the linguistic canon of technical meaning as provided for by Italian civil code: accordingly, *mantenimento* is more precisely a periodic and regular financial support, in such amount to meet the needs of the beneficiary.

Reading n through such different lenses brings about an interpretive incompatibility, as it has previously been defined: depending on the linguistic canon applied, the applicability conditions for the law are different, and in the end the facts will or will not be included within the scope of the rule. According to O_1 , the foreign rule n provides for *mantenimento* broadly understood, so covering more particular cases, whereas O_2 reduces its applicative scope, allowing to contain just forms of support compliant with precise technical requirements, i.e., financial, regularly paid, meeting the everyday needs of the beneficiary. In the end, applying the two linguistic canons, two competing norms, i.e., $O_1 \neq O_2$ (specifically, $O_1 \supset O_2$), may therefore be derived and applied, an irrational result from a legal viewpoint.

It is worth repeating that the technical meaning usually prevails over the corresponding ordinary meaning, at least within one legal system, so that, ideally, O_2 should prevail over O_1 in LS_I . Though, domestic courts should not forget that they are applying a foreign norm within their normative system: meaningful reasons for reaching one conclusion instead of the other may thus be found in either system and lean towards a different solution of the incompatibility. For instance, national judges could derive the intentions of the foreign lawmaker from the overall formulation of the statute; such intentions could in turn provide for precise interpretive recommendations. In fact, the interpretative discordancy does not fail to have consequences: depending on the concrete facts of the case and specifically on the man's behaviour, the two-year time limit to put forward the paternity action will or will not be already expired. Note also that the two years accruing from the ces-

^{143 &}quot;mantenimento": www.treccani.it/vocabolario/mantenimento/ (accessed on 19/08/2016).

sation of the support is a time limit more favourable to the child than the regular two-year period accruing from the childbirth. From such remark, it could be thus deduced that the Cameroonian lawmaker has meant to provide for laws and provisions that could meet the needs of the child: in this particular case, favouring the recognition of the parental relation.

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INTENTIONS OF THE FOREIGN LAWMAKER
Interpretive Argument A_{int}   LS_{CAM}, Z_m, c_{int}, g_1 \rightarrow O_2
Where:
Z_m holds
Z_m: the lawmaker has intended to favour the establishment of the parental relation c_{int}: canon from intention
g_1: favouring children rights
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 A_{int} ends up supporting O_2 since, in comparison to O_1 , such interpretive outcomes favours the intention of the lawmaker to favour the children right, intention that can be derived by the formulation of the whole civil code rule.

Then consider that interpretive arguments are not isolated: they not only compete with each other, as in the case just described, but are also supported by other arguments and, consequently, reasons. Therefore, if O_2 would almost certainly prevail within the sole LS_I , O_1 may though be the best legal solution in light of LS_{CAM} , of the other interested party, and of further legal considerations. Let us examine the systemic impact¹⁴⁴ of respectively O_1 and O_2 . Suppose that the canon for contextual harmonization is used to back O_2 : the technical interpretation is probably coordinated with the usual reading of the word *mantenimento* in other provisions in LS_I , belonging to that broader set of statutes concerning the management of patrimonial family relations in case of separation, divorce, filiation (e.g., articles 155 and 156 of the Italian Civil Code¹⁴⁵): a technical area of the law that requires for a uniform treatment of certain words and concepts, among which exactly *mantenimento*. This looks as follows:

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SYSTEMIC INTERPRETIVE ARGUMENTS
Interpretive Argument A_3 LS_I, Z_3, c_{contHarm} \rightarrow O_2
Where:
Z_3 holds
Z_3: in LS_I, other rules use the term in the same way
c_{contHarm}: canon for contextual harmonization
A_3 supports A_2
```

At this point, a useful critical question queries if there exist further linked normative provisions in LS_I , or in other LS_i , which both LS_I and LS_{CAM} are part of, that provides for a different use of the term.

¹⁴⁴ Keep in mind that, according to the ordering among canons drawn from the comparative study edited by MacCormick and Summers (1991), the plausible interpretative steps are 1) linguistic arguments, 2) systemic arguments, 3) teleological arguments; the next level is reached only if there are reasons to leave the previous one.

¹⁴⁵ Both code provisions have been modified by law no. 54/2006, but hereby the old formulation is taken into account since the case was ruled in the previous normative framework.

COUNTERARGUMENT FROM CONTEXTUAL HARMONIZATION

Interpretive Argument A_4

 $LS_I, Z_4, c_{contHarm} \rightarrow O_1$

Where:

Z₄ holds

Z₄: in LS_I, other rules establish that rules concerning children rights are read in favour of children

 $c_{contHarm}$: canon for contextual harmonization

 A_4 supports A_1

As the example shows, O_1 may be supported by systemic arguments as well. In particular, the identified foreign provision cannot be read as isolated from article 35, law no. 218/1995, establishing the favor filiationis as a general principle in paternity recognition issues. This means that Italian private international law sees as fundamental the application of laws that favour the recognition of the parental relation. Which interpretation of the foreign provision is more suitable to this end?

Other counterarguments may also appeal to general principles shared by the international community or included in international treaties.

COUNTERARGUMENT FROM GENERAL PRINCIPLES

Interpretive Argument A₅

 LS_I , LS_{CAM} , LS_{INT} , Z_5 , $c_{genPrinc} \rightarrow O_1$

Where:

Z₅ holds

 Z_5 : in LS_L , LS_{CAM} , LS_{INT} , children protection is a general principle

 $c_{genPrinc}$: canon for general principles

 A_5 supports A_1

Some observations may thus offer valuable help to accomplish a solid comparison among interpretative arguments, counterarguments, and outcomes, in line with the critical questions:

- Which meaning could the foreign court opt for, having in mind the facts of the case, the opposite consequences of the two interpretations, the probable intentions of the lawmaker as well as the purpose(s) of each norm?
- What purposes and intentions underlie the different systemic arguments?

Identifying what goals are supposedly pursued by the involved legislators, the Cameroonian and the Italian, may be a further step.

INTERPRETING WITH GOALS

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g<sub>1</sub>: legal certainty – use of the same technical meaning in similar cases
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g2: legal certainty - meeting the parties' expectations concerning the applicable law

g₃: favouring the child in establishing parental relations (favor filiationis)

g₄: best interest of the child

Interpretive Argument A₆

 $LS_I, LS_{INT}, Z_6, g_1, c_t \rightarrow O_2$

Where:

Z₆ holds

 Z_6 : interpreting n as O_2 pursues g_1

 c_t : teleological canon

 A_6 supports A_2

Legal certainty is an essential component of the rule of law. Reasonably, thus, in the absence of the specific mode of interpretation of the foreign court, the Italian court should interpret as it usually does in totally internal cases.

Still, further goals may actually be pursued by the foreign provision in object, mostly in the light of the foreign legal system as a whole, or of the Italian system itself, or even of the international legal system.

Interpretive Argument A_7 $LS_I, LS_{CAM}, Z_7, g_2, c_t \rightarrow O_1$

Where:

 Z_7 holds

 Z_7 : belonging to the international community, LS_I pursue g_2 with conflict of laws and is open to LS_{CAM}

 c_t is the teleological canon

 A_7 supports A_1

Interpretive Argument A₈

 LS_I , LS_{CAM} , Z_4 , Z_m , g_3 , g_4 , $c_t \rightarrow O_1$

Where:

 Z_4 and Z_m hold

 Z_4 : in LS_l , other rules establish that rules concerning children rights are read in favour of children

 Z_m : the LS_{CAM} lawmaker intended to favour the child

 c_t is the teleological canon

 A_8 supports A_1

Interpretive Argument A9

 LS_{I} , LS_{CAM} , LS_{INT} , Z_4 , Z_m , Z_l , g_3 , g_4 , $c_t \rightarrow O_1$

Where:

 Z_4, Z_m, Z_5 hold

Z₄: in LS_I, other rules establish that rules concerning children rights are read in favour of children

 Z_m : the LS_{CAM} lawmaker intended to favour the child

Z₅: in LS_L, LS_{CAM}, LS_{INT}, children protection is a general principle

 c_t is the teleological canon

 A_9 supports A_1

Note that the three interpretive arguments A_7 , A_8 , A_9 could be unified.

These last interpretive arguments A_7 , A_8 , A_9 take a step forward in the reasoning: they identify the plausible goals pursued by the foreign provision n considering that both LS_I and LS_{CAM} are part of the international community LS_{INT} . In fact, various international treaties (e.g., the New York Convention on the Rights of the Child of 20 November 1989, or the Hague Convention on Protection of Children and Co-operation in Respect of Intercountry Adoption of 29 May 1993) have established the best interest of the child as a primary goal of legislations concerning children rights around the globe. Moreover, A_7 , A_8 , A_9 gather considerations, already found in other interpretive arguments, concerning intentions of the Cameroonian legislator, or general principles of the involved legal systems.

Closing the first example, it seems that national courts should also take into account the intrinsic goals of private international law, and thus interpret the foreign rule overcoming the double threshold of the compliance with the intentions of the involved lawmakers (national, foreign, international and EU) and of the public policy: a complex, but worthy interpretative endeavour.

3. Validity of Trusts

Trusts establish legal relationships, through which one party (trustee) holds, manages, employs, and disposes of assets for the benefit of another (beneficiary) or for a specified purpose, in compliance with the terms of the trust. Trusts are usually created by a person (settlor), *inter vivos* or on death.

The trust is a legal institution typical of common law jurisdictions. When required to recognise and enforce trusts, civil law countries, lacking a specific regulation and, often, comparable institutions, discussed primarily about their overall compatibility with systems of reception. Especially controversial was that, typically, the property of trust assets is entitled to trustees, who however need to keep them separate from their other property; thus, trust assets constitute a separate fund that cannot be attached by creditors, whose financial guarantee in front of debtor' insolvency results correspondingly diminished. The Italian legal order was no exception and did not provide for a specific regulation of trust; though, ratifying the Hague Convention on the law applicable to trusts and on their recognition (1/07/1985), with statute no. 364/1989, 146 the Italian legislator ended up considering it a legitimate scheme of legal arrangement. The ratification meant to judge trusts as generally compatible with inner public policy: its effects are not abstractly conflicting with inner constitutional principles or laws. But, on the one hand, law no. 364 has generally 147 recognised as lawful a foreign legal institution previously unknown to the domestic system; on the other hand, it forces, whenever an Italian citizen wishes to conclude a trust, to necessarily resort to foreign law to regulate it. In fact, it is not infrequent the negotiation of so called "inner" trusts, where parties are Italian citizens and controlled assets are located in Italy, but which are governed by a foreign law of autonomous choice of the parties. 148 Interestingly indeed, thus, when it comes to settling a trust in Italy, the parties' autonomous choice of the applicable law is not justified only by the generally acknowledged broad autonomy in negotiation matters, but also by the absolute shortage of Italian regulations on the subject.

¹⁴⁶ The Convention was ratified with no qualification.

¹⁴⁷ Save the case-by-case judicial evaluation of its compatibility with the public policy.

¹⁴⁸ Lacking the expressed choice of the parties, the 1985 Hague Convention states that the trust is governed by the law with which it is most closely connected (art. 7).

Inner trusts are exactly the topic of a recent legal case, decided by the Court of Appeal in Milan on 1/12/2016. The lawsuit¹⁴⁹ originated from a disciplinary procedure against a notary who had drawn up four deeds of inner trust considered totally void for lack of purpose by the Notary Archive. In detail, settlor, trustee and beneficiary were coinciding in all four trusts. After being sanctioned with a financial penalty by the local administrative commission (*Commissione Regionale Amministrativa – Lombardia*) on demand of the Notary Archive for violation of the Notarial Law, the notary requested the Court to verify that he had not committed violation of his notarial duties since the trust instruments were compliant with the legal requirements. As a result, any disciplinary procedure against him should be rejected.

Underlying the disciplinary issue, legal questions concern, firstly, the conditions of validity of trusts, where settlor and trustee coincide (i.e., self-declared trusts, or declaration of trust), on the basis of foreign law and, secondly, their compatibility in light with the domestic legal system. The Trusts Jersey Law 1984 is the foreign law autonomously chosen by the parties as the law governing their trusts and the Italian court needs to primarily evaluate both existence and validity of those trust instruments in light of that law. It is worth observing that, when foreign law is designated by the parties, its content is more easily identified than in case of application of choice of law rules: the parties themselves usually provide the court with the interested legal provisions, putting the court in a satisfying epistemic position with reference to foreign law. Also, the fact that the Trusts Jersey Law is often opted for as the applicable law in inner trusts makes it even more reachable. Besides, the Jersey Legal Information Board website allows to download the official statute. 150 Consider some of its provisions.

TRUSTS JERSEY LAW (1984 plus amendments)

Art. 2: Existence of a trust

A trust exists where a person (known as a trustee) holds or has vested in the person or is deemed to hold or have vested in the person property (of which the person is not the owner in the person's own right) —

- (a) for the benefit of any person (known as a beneficiary) whether or not yet ascertained or in existence;
- (b) for any purpose which is not for the benefit only of the trustee; or
- (c) for such benefit as is mentioned in sub-paragraph (a) and also for any such purpose as is mentioned in sub-paragraph (b).

Art. 9: Extent of application of law of Jersey to creation, etc. of a trust

PAR. 5: The rule "donner et retenir ne vaut" shall not apply to any question concerning the validity, effect or administration of a trust, or a transfer or other disposition of property to a trust.

¹⁴⁹ This lawsuit was initiated in the form of urgent procedure (art. 702-*bis* and ff., c.p.c.). In broad terms, urgent procedures are featured by a summary judgment on the facts of the case and are decided with an order, which can be appealed within 30 days.

¹⁵⁰ The .pdf version is available at https://www.jerseylaw.je/laws/revised/Pages/13.875.aspx (last accessed: 17/01/2017).

The 1985 Hague Convention defines trusts and their main features at art. 2. The Convention is now integral part of the Italian legal system, through the ratification law no. 364/1989.

HAGUE CONVENTION ON THE LAW APPICABLE TO TRUSTS AND ON THEIR RECOGNITION (1985)

Article 2:

PAR.1: For the purposes of this Convention, the term "trust" refers to the legal relationships created – *inter vivos* or on death – by a person, the settlor, when assets have been placed under the control of a trustee for the benefit of a beneficiary or for a specified purpose.

PAR. 2: A trust has the following characteristics –

- a) the assets constitute a separate fund and are not a part of the trustee's own estate;
- b) title to the trust assets stands in the name of the trustee or in the name of another person on behalf of the trustee;
- c) the trustee has the power and the duty, in respect of which he is accountable, to manage, employ or dispose of the assets in accordance with the terms of the trust and the special duties imposed upon him by law.
- PAR. 3: The reservation by the settlor of certain rights and powers, and the fact that the trustee may himself have rights as a beneficiary, are not necessarily inconsistent with the existence of a trust.

The legal case is studied in the two-step procedure modelled in the preceding chapter: section 3.1. sheds light on interpretive incompatibilities possibly arising from a combined reading of Trusts Jersey Law and the 1985 Hague Convention; section 3.2. analyses if trusts as interpreted by the foreign law can be judged compatible with inner policy and, generally, inner system.

3.1. Validity of Self-Declared Trusts in light of the Foreign Law

The essential interpretive issue regards whether the establishment of self-declared trusts, i.e., trusts where the settlor coincides with the trustee, is valid according to the governing foreign law, the Trusts Jersey Law (TJL). The legal consequences on the case are clear: if the four trusts result validly established according to TJL, they were not unlawfully certified by the notary, who, in turn, could not be sanctioned for violating his notarial duties.

n₁: art. 2, let. B, TJL ["for any purpose which is not for the benefit only of the trustee"]

1) INTERPRETIVE INCOMPATIBILITY AROUND n_1

INTERPRETIVE *A FORTIORI* ARGUMENT $A_{aFortiori}$: LS_{Jer} , n_1 , Z_1 , $c_{aFortiori} \rightarrow O_1$ Where:

 Z_1 holds and stands for: "If generally trusts are not valid when they pursue a purpose only for the benefit of the trustee, a trust where the settlor coincides with trustee and beneficiary is *a fortiori* a trust that benefits only the trustee and, thus, is not valid" n_1 : art. 2, let. B, TJL, "for any purpose which is not for the benefit only of the trustee" $c_{aFortiori}$: canon for *a fortiori* interpretation

 O_1 : n_1 should exclude self-declared trusts from trusts that are validly arranged according to LS_{Jer}

INTERPRETIVE ARGUMENT A_{lit} LS_{ler} , n_1 , Z_2 , Z_3 , $c_{lit} \rightarrow O_2$

Where:

 Z_2 and Z_3 hold

 Z_2 : "if a trust is not established for a purpose which is not for the benefit only of the trustee, then it is a valid trust"

 Z_3 : no reference to the coincidence between settlor/trustee(/beneficiary) can be found in n_1 : art. 2, let. B, TJL

 c_{lit} : canon for literal interpretation

 O_2 : n_1 should include self-declared trusts among trusts that are validly arranged according to LS_{Jer}

 $O_1 \neq O_2$

The opposite interpretive outcomes O_1 and O_2 are reached using different canons of interpretation. In $A_{aFortiori}$, the canon for a fortiori interpretation (Tarello 1980) gives an extensive reading of the sentence literals. The situation of the settlor/trustee(/beneficiary) is considered quintessential of trusts established for the only benefit of trustees: if a settlor coincides with both trustee and beneficiary, the trust has been inevitably established for his/her own only advantage. Though, no such reference appears in the wording and A_{lit} reads the lack of it as symptomatic exactly of the contrary opinion: the provision does not specifically refer to the settlor/trustee in particular, so the coincidence of settlor and trustee (and beneficiary) and the fact that the trust is established for the benefit only of the trustee are not necessarily correlated. If anything, a similar correlation should be assessed case by case to verify that, in concrete, a self-declared trust aims to practically achieve the benefit only of the settlor/trustee/beneficiary.

Furthermore, if the Jersey lawmaker had intended to forbid self-declared trusts, it would have explicitly mentioned it. Let us, thus, consider the argument applying the canon from intentions of the foreign legislator. Intentions are expressed as different goals to pursue by law.

2) INTERPRETIVE INCOMPATIBILITY AROUND THE INTENTIONS OF THE $\mathit{LS_{Jer}}$ LAWMAKER

INTERPRETIVE ARGUMENT A_{int_1} $LS_{Jer}, Z_4, Z_i^{g_1}, c_{int}, g_1 \rightarrow O_2$

Where:

 Z_4 and Z_i^{g1} hold

Z₄: LS_{Jer} fails to expressly prohibit or admit the coincidence of 'settlor' and 'trustee' in TJL

 Z_i^{g1} : Z_4 reveals the intention to pursue g_1

g₁: regulating both trusts and self-declaration of trusts

 c_{int} : canon from intentions

TJL should be interpreted as O_2 , i.e., as including self-declared trusts among trusts that are validly arranged according to LS_{Jer} . But an opposite argument from intentions $A_{int\ 2}$ could be built on similar basis.

INTERPRETIVE ARGUMENT Aint 2

 $LS_{Jer}, Z_4, Z_i^{g2}, c_{int}, g_2 \rightarrow O_1$

Where:

 Z_4 and $Z_i^{g^2}$ hold

 Z_4 : LS_{Jer} fails to expressly prohibit or admit the coincidence of 'settlor' and 'trustee' in TJL

 Z_i^{g2} : Z_4 reveals the intention to pursue g_2

 c_{int} : canon from intentions

g₂: excluding self-declaration of trusts from the general regulation of trusts

TJL should be interpreted as O_1 , i.e., as excluding self-declared trusts from trusts that are validly arranged according to LS_{Jer} .

Still, A_{int_2} conflicts with the usual, technical interpretation of another important disposition of the relevant foreign law.

 n_2 : art. 9, par. 5, TJL ["transfer or other disposition of property"]

INTERPRETIVE ARGUMENT A_{tech_1} :

 LS_{Jer} , n_2 , Z_5^{TJL} , $c_{tech} \rightarrow O_2$

Where:

Z₅ holds

 $Z_5^{T,II.}$: 'transfer' and 'other disposition of property' are technical terms in trust law, the first implying disjointed settlor and trustee, the second including the possibility for the settlor to declare him or herself the trustee

 c_{tech} : linguistic canon for technical meaning

Also, A_{tech_1} and, thus, O_2 are further supported by the goals that the foreign legal system LS_{Jer} supposedly pursues with trusts in general. One of those goals is to lawfully provide for the possibility to constitute a separate fund with the assets entitled to the trustee, as derived from the following art. 21, par. 6, TJL.

Art. 21, TJL: Duties of the Trustee

Par. 6: A trustee shall keep trust property separate from his or her personal property and separately identifiable from any other property of which he or she is a trustee.

g₃: constituting a separate fund

TELEOLOGICAL INTERPRETIVE ARGUMENT A_{teleo} : LS_{Jer} , g_3^{TJL} , Z_6 , Z_7 , $c_t \rightarrow O_2$

Where:

 Z_6 and Z_7 hold

 g_3^{TJL} : TJL pursues g_3

 $\overline{Z_6}$: n_2 should be interpreted in the sense that favours the pursuit of g_3

 Z_7 : self-declared trusts pursue g_3 for they earmark trust assets within the settlor's property

 c_t : teleological canon

If the foreign law pursues the goal of authorising the constitution of separate funds, self-declared trusts do not impede it since they realise the fund separation within the settlor's assets. A_{teleo} ends up further backing both A_{int_1} and A_{tech_1} : a subjective distinction between settlor and trustee seems not to be a foreign law requisite for trust validity. We recall the earmarking effect in the next sect. 3.2., when addressing the issue of compatibility with the domestic system: such effect significantly impacts on the financial liability of the subjects involved, for trust assets cannot be generally attached by creditors.

However, the interpreter who wishes to prove that foreign law does not admit self-declared trusts could resort to the 1985 Hague Convention (HC): its ratification allows for the recognition of trusts within the Italian legal order. In fact, one of its provisions in particular lends itself to opposite interpretations, as already stressed by legal doctrine (Bartoli 2005): art. 2, par. 1 defines trusts as "legal relationships created [...] by a person, the settlor, when assets have been placed under the control of a trustee," a vague definition for many aspects.

 n_3 : art. 2, par. 1, HC ["[...]by a person, the settlor, when assets have been placed under the control of a trustee"]

3) INTERPRETIVE INCOMPATIBILITIES AROUND n_3 INTERPRETIVE ARGUMENT A_{ord} $LS_1, n_3, Z_7, Z_8, c_{ord} \rightarrow O_3$

Where:

 Z_7 and Z_8 hold

 Z_7 : using two words, 'settlor' and 'trustee,' in ordinary language is commonly regarded as implying two different subjects

 Z_8 : LS_I fails to expressly authorise or prohibit coincidence of 'settlor' and 'trustee' c_{ord} : linguistic canon for ordinary meaning

 O_3 : n_3 should exclude self-declared trusts from its applicative scope

 A_{ord} implies that only interpreting TJL as O_1 , (i.e., excluding self-declared trusts from trusts that are validly arranged according to LS_{Jer}) makes TJL compatible with the public policy of LS_I : $O_3 \rightarrow O_1(LS_I)$

 A_{ord} triggers the following reasoning: regardless of their validity in LS_{Jers} , ¹⁵¹ the fact that self-declared trusts do not fall under the scope of n_3 according to the ordinary meaning its wording has in LS_I , should lead to reject self-declared trusts in LS_I . In other words, a preference should be in any case accorded to the interpretation more close to ordinary meaning of the system of destination. However, this theoretical model accepts the rule of preference, according to which if both an ordinary and technical meaning of a word or sentence exist, the technical meaning should prevail, at least generally. Here, the application of the canon for trust-law technical meaning provides for reasons to derive O_2 , also considering that the Convention cannot be read disjoint from the relevant foreign law: according to foreign law only, the validity of the trusts has to be assessed.

INTERPRETIVE ARGUMENT A_{tech_2} : $LS_{Jer}, LS_I, n_3, Z_8, Z_9^{TJL}, c_{tech} \rightarrow O_4$

Where:

 Z_8 and Z_9^{TJL} hold

 Z_8 : LS_I fails to expressly authorise or prohibit the coincidence of 'settlor' and 'trustee' Z_2^{TJL} : 'settlor' and 'trustee' are words of technical language, referring to corresponding legal roles within a trust arrangement, commonly provided for by trust law in LS_{Jer} , i.e.,

TJL

 c_{tech} : linguistic canon for technical meaning

 O_4 : n_3 should include self-declared trusts among trusts that are validly recognised in LS_I

¹⁵¹ But, a fortiori, the same interpretive outcome is reached, if A_{int_2} above is the starting point.

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In turn, A_{tech,2} supports the compatibility of O_2 with the public policy of LS_i.
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The interpretive incompatibility around n_3 , given by the conflict between A_{ord} and A_{tech} 2, stems from the application of a national and a foreign interpretive rule. In A_{ord} , the ordinary meaning is that of the Italian legal system: provided that trusts are not disciplined by inner laws, there is no specific technical terminology about them and, thus, ordinary language is resorted to. $A_{tech 2}$ refers to the technical language typically employed in Trust Law in LS_{Jer} (see $A_{tech \ 1}$ above). The preference rule, according to which $A_{tech 2}$ prevails over A_{ord} , is correctly applied also because the technical meaning supports the application of foreign law as applied in the foreign system LS_{ler} : in this way, the parties' reasonable expectations are met, while also pursuing the goal of legal certainty in cross-borders disputes and relations.

Applying a systemic interpretation of the provisions involved, $A_{tech 2}$ results to be supported by $A_{tech 1}$ above, ascribing technical meanings to the phrase "transfer or other disposition of property" in n_2 , and shapes the interpretive reasoning as follows.

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SYSTEMIC INTERPRETATION OF n_2 (LS_{Jer}) and n_3 (LS_J)
ARGUMENT FROM CROSS-BORDER CONTEXTUAL HARMONIZATION
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A_{tech 1} implies a harmonised reading of n_3, as in A_{tech 2}:
           (LS_{Jer}, n_2, Z_5^{TJL}, c_{tech} \rightarrow O_2) \rightarrow c_{contHarm} (LS_{Jer}, \overline{LS}_I, n_3, Z_8, Z_9^{TJL}, c_{tech} \rightarrow O_4)
```

Where:

 Z_5^{TJL} and Z_9^{TJL} hold Z_5^{TJL} : 'transfer' and 'other disposition of property' are technical terms in trust law, the first implying disjointed settlor and trustee, the second including the possibility for the settlor to declare him or herself the trustee

 Z_9^{TJL} : 'settlor' and 'trustee' are words of technical language, referring to corresponding legal roles within a trust arrangement, commonly provided for by trust law in LS_{Jer}

ccontHarm: canon from contextual harmonization

 c_{tech} : linguistic canon for technical meaning

Additionally, n_3 includes the vague expression 'under the control of,' and thus avoids to specify what acts of property dispositions set up valid trust arrangements. In this way, it is not clear what the Italian legislator¹⁵² has meant to include under the category of recognisable, valid trusts. The legal doctrine, ¹⁵³ exactly referring to the lawmaker's intentions, has developed (at least) two conflicting interpretations of those terms.

```
INTENTIONS OF THE LS<sub>I</sub> LAWMAKER
A) INTERPRETIVE ARGUMENT A<sub>int 3</sub>
                                                             LS_I, Z_{10}, Z_i^{g2}, Z_{prep \ works}, c_{int}, g_2 \rightarrow O_3
Where:
Z_{10}, Z_i^{g2}, and Z_{prep\_works} hold
```

 $^{^{152}}$ Through the ratification, the 1985 Hague Convention is inner law.

¹⁵³ See Bartoli (2005).

 Z_{10} : LS_I opts for the generic phrase 'under the control of' instead of the technical trust law terminology 'transfer or other disposition of property'

 Z_i^{2} : the choice in favour of the generic phrase reveals the intention to pursue g_2

 Z_{prep_work} : Convention' preparatory works attest the discussion about the opportunity to recognise trusts, self-declared trusts, and trust-like instruments

 c_{int} : canon from intentions

 g_2 : excluding self-declared trusts from the validly established trusts, recognisable in LS_I O_3 : n_3 should exclude self-declared trusts from its applicative scope

B) INTERPRETIVE ARGUMENT A_{int_4} $LS_{l}, Z_{10}, Z_{i}^{g3}, Z_{prep_works}, c_{int}, g_3 \rightarrow O_4$

Where:

 Z_{10} , Z_i^{g3} , and Z_{prep_works} hold

 Z_{10} : LS_I opts for the generic phrase 'under the control of' instead of the technical trust law terminology 'transfer or other disposition of property'

 Z_i^{g3} : the choice in favour of the generic phrase reveals the intention to pursue g_3

 Z_{prep_works} : Convention' preparatory works attest the discussion about the opportunity to recognise trusts, self-declared trusts, and trust-like instruments

 c_{int} : canon from intentions

 g_3 : regulating as validly established trusts, recognisable in LS_I , a broader category of trust-like instruments

 O_4 : n_3 should include self-declared trusts among trusts that are validly recognised in LS_I

Interestingly, the legal doctrine, by applying the same canon (canon from intentions) and resorting to the same extra-conditions (e.g., the preparatory works of the Convention), ends up providing two opposite readings. In particular, A_{int_3} shows a highly cautious and sceptical attitude towards unknown (even unforeseeable, as trust-like institutions) instruments, possibly approaching the inner system. Still, A_{int_4} proves to be more aligned with the commonest foreign law interpretation, O_2 , supported by both technical and systematic reasons. So, considering that the relevant law is Trusts Jersey Law and provided that no compelling reason stands in the way (e.g., public policy concerns), courts should prefer those interpretations that favour the inclusion of self-declared trusts among validly established trusts.

3.2. Compatibility of (Self-Declared) Trusts with Public Policy

The ratification of the 1985 Hague Convention has sanctioned the general compatibility of trusts with the Italian legal system. Goals and effects, which foreign law purses with trusts, have been considered abstractly compatible with goals pursued, and legal consequences favoured, by inner law.

But before then, recognising and enforcing trusts in Italy raised strong doubts, mainly for the segregating effect trusts produce on settlors' assets: not only are such assets subtracted from the settlor's property, but also they constitute a fund separate from the trustee's holdings, even if the trustee is commonly entitled their property. Important legal consequence of separate funds like trusts is that they

cannot be attached by general creditors, whose credit guarantee is therefore correspondingly diminished. A similar result could not but be looked at suspiciously by the Italian lawmaker. In fact, on the one hand, the civil code promotes the autonomy of the parties in contractual matters, also in light of the Constitution, ¹⁵⁴ for example allowing to conclude contracts that are not expressly regulated by the law (art 1322 c.c.). On the other hand, parties' contractual autonomy must respect the law and should aim for interests and effects that are worthy of legal protection. Assessment on lawfulness is made in concrete, checking that the effects, pursued and provoked by a specific agreement, deserve to be safeguarded and recognised by the legal order as a whole. Agreements that do not pass such test are considered invalid for lack of legitimate purpose (articles 1325,1343, 1344 c.c.) and, thus, void (art. 1418 c.c.)

Even if trusts are now generally acknowledged legal worthiness in the effects they try to attain, they cannot escape the same judicial concrete assessment. If anything, this is mandatory for some forms of trusts, e.g., self-declared trusts, which can more easily have elusive effects and hide proper frauds against inner law. Therefore, what the court is required to assess is if the specific purpose of the trust is illegal according to the mentioned code provisions.

Before listing the relevant Italian civil code rules, it is worth noting that, even if trusts are not always seen as contracts in common law jurisdictions due to the multifarious schemes of trust existing in the legal practice (Rounds Jr 2016), Italian courts are used to relating them to contracts, mainly for the major correspondences with contracts than to other institutions of the domestic system.

Art 1322 c.c.: Contractual Autonomy 155

PAR. 1: The parties are free to determine the terms of their contractual relationship within the limits posed by the law and by corporate provisions.

PAR. 2: The parties can also conclude contracts, which are not specifically disciplined by the law, provided that they are meant to serve interests worthy of legal protection according to the legal order.

Art. 1325 c.c.: Requisites of the Contract¹⁵⁶

Requisites of the contract are: 1) the mutual agreement between the parties; 2) the purpose; 3) the subject matter; 4) the form, when it is required by the law for the contract not to be void.

¹⁵⁴ art. 41, Const.: The private economic initiative is free. It cannot contrast with social utility or be undertaken so to damage safety, liberty, and human dignity. The law determines appropriate programmes and controls so that public and private economic activity is oriented and coordinated towards social ends.

¹⁵⁵ Original version: Autonomia contrattuale. 1. Le parti possono liberamente determinare il contenuto del contratto nei limiti imposti dalla legge e dalle norme corporative. 2. Le parti possono anche concludere contratti che non appartengano ai tipi aventi una disciplina particolare, purché siano diretti a realizzare interessi meritevoli di tutela secondo l'ordinamento giuridico

¹⁵⁶ Original version: *I requisiti del contratto*. I requisiti del contratto sono: 1) l'accordo delle parti; 2) la causa; 3) l'oggetto; 4) la forma, quando risulta che è prescritta dalla legge sotto pena di nullità.

Art. 1343 c.c.: Illegal Purpose¹⁵⁷

The purpose is illegal when it is contrary to mandatory legal provisions, to the public policy, or to public decency.

Art. 1344 c.c.: Contract to elude the law¹⁵⁸

It is considered illegal the purpose when the contract is the way to elude the application of a mandatory legal provision.

Art. 2740 c.c.: Financial Liability 159

PAR. 1: Debtors are liable for the fulfilment of their obligations with all their present and future assets.

PAR. 2: Limitations of liability are permitted only by law.

Under sect. 3.1., interpretive conflicts around the validity of self-declared trusts in light of foreign law were considered more suitably solved admitting their validity, i.e., O_2 , both on the basis of linguistic (technical) and systemic canons of interpretation. But is foreign law, interpreted as O_2 , compatible with the inner public policy of LS_I ? Teleological canons of interpretations may help to reply the compatibility question. Bear in mind that, with respect to the previous section, interpretive outcomes (O_1) , goals (g_n) , and extra-conditions (Z_n) are changed in content and numberings are restarted.

Trusts Jersey Law (TJL)

 O_1 : self-declared trusts can be considered valid

 $\neg O_1$: self-declared trusts are invalid

INTERPRETING WITH GOALS

- g_1 : constituting a separate fund
- g_2 : deducting assets from the subject's property
- g_3 : legally protecting worthy interests of the parties
- g_4 : guaranteeing contractual autonomy
- g_5 : protecting private economic initiative
- g_6 : guaranteeing the unity of debtor's financial liability
- g_7 : protecting creditors' interests

1) PRO-VALIDITY

$$\begin{array}{lll} 1. \ LS_{Jer}, \ c_{teleo}, \ g_1^{TJL}, \ g_2^{TJL} \to O_1 & (A_1) \\ 2. \ LS_{I}, \ c_{teleo}, \ Z_1, \ g_1, \ g_2 \to O_1 & (A_2) \\ 3. \ ((a \to b) \land (c \to b)) \to ((a \land c) \to b)) & (Rule) \\ 4. \ (LS_{Jer}, \ c_{teleo}, \ g_1^{TJL}, \ g_2^{TJL}) \land (LS_{I}, \ c_{teleo}, \ Z_1, \ g_1, \ g_2) \to O_1 & (A_3) \end{array}$$

¹⁵⁷ Original version: Causa illecita. La causa è illecita quando è contraria a norme imperative, all'ordine pubblico o al buon costume.

¹⁵⁸ Original version: *Contratto in frode alla legge*. Si reputa altresì illecita la causa quando il contratto costituisce il mezzo per eludere l'applicazione di una norma imperativa.

¹⁵⁹ Original version: *Responsabilità patrimoniale*. 1. Il debitore risponde dell'adempimento delle obbligazioni con tutti i suoi beni presenti e futuri. 2. Le limitazioni della responsabilità non sono ammesse se non nei casi stabiliti dalla legge.

```
Where: c_{teleo}: teleological canon g_1^{TJL}: c_{teleo} ascribes foreign law TJL g_1 g_2^{TJL}: c_{teleo} ascribes foreign law TJL g_2 Z_1 holds and stands for: other provisions/institutions in LS_I pursues g_1 and g_2
```

If O_2 can be derived from applying the teleological canon for interpreting foreign law in the system of origin and recognising that constituting a separate fund is a goal of foreign law, and if the same goal is likewise pursued by LS_I , as results from other legal instruments in $LS_I(Z_1)$, then O_2 is also compatible with the system of destination. Z_1 includes, for example, art. 2645ter c.c., which authorises the conclusion of legal arrangements aimed to separate a fund for specific purposes within a family.

2) COUNTERARGUMENT

```
\begin{array}{ll} I.\; (LS_{Jer},\, c_{teleo},\, g_1^{TJL},\, g_2^{TJL}) \wedge (LS_I,\, c_{teleo},\, Z_1,\, g_1,\, g_2) \to O_1 & (A_3) \\ 2.\; (LS_I,\, Z_2,\, g_6,\, g_7,\, g_3,\, c_{teleo}) \to \neg O_1 & (A_4) \\ 3.\; O_1 \neq \, \neg O_1 & (Interpretive \, conflict) \\ 4.\; (g_6 \wedge g_7 \wedge g_3) > (g_1 \wedge g_2) & (Rule \, of \, preference \, R_1) \\ 5.\; \neg O_1 & (Incompatibility \, with \, LS_I) \end{array}
```

Where Z_2 holds and stands for: other provisions/institutions in LS_I pursue $g_6 \wedge g_7 \wedge g_3$

It is possible to attack the previous argument and support the incompatibility of self-declared trusts within the inner system, i.e., $\neg O_1$, by arguing that other goals, likewise pursued by the Italian lawmaker, prevail over the purpose of constitution of separate funds. The rule, according to which the debtor's financial liability can be diminished by expressed legal provisions (art. 2740, par. 2), is read as implying that a trust, which only aims to diminish that liability, cannot be included in those atypical contract authorized by the legislator (art. 1322). Thus, they are invalid for illegal purpose and, thus, void.

Though, another argumentation move is left in favour of O₁:

3) COUNTER-COUNTERARGUMENT

```
 \begin{array}{lll} 1. & (LS_{l}, Z_{2}, g_{6}, g_{7}, g_{3}, c_{teleo}) \rightarrow \neg O_{1} & (A_{4}) \\ 2. & (LS_{l}, Z_{l}, g_{6}, g_{7}, g_{3}, c_{teleo}) \wedge (LS_{l}, c_{teleo}, Z_{1}, g_{1}, g_{2}) \rightarrow O_{1} & (A_{5}) \\ 3. & \neg O_{1} \neq O_{1} & (Inner Interpretive Conflict) \\ 4. & (g_{1} \wedge g_{2} \wedge g_{3} \wedge g_{6} \wedge g_{7}) & (Rule \ of \ preference \ R_{2}) \\ 5. & R_{2} > R_{1} & (Rule \ of \ preference \ R_{3}) \\ 6. & O_{1} & (1,2,3,\ R_{3}) \\ 7. & (LS_{Jer}, c_{teleo}, g_{1}^{TJL}, g_{2}^{TJL}) \approx (LS_{l}, c_{teleo}, Z_{1}, g_{1}, g_{2}) & (\approx \ Functional \ correspondence) \\ 8. & (LS_{l}, Z_{1}, g_{6}, g_{7}, g_{3}, c_{teleo}) \wedge (LS_{Jer}, c_{teleo}, g_{1}^{TJL}, g_{2}^{TJL}) \rightarrow O_{1} & (2,7, \ Substitution) \\ \end{array}
```

In 3), A_5 shows that LS_I provides for legal institutions (Z_1) that pursue, at the same time, all goals (2.). In fact, LS_I does not only allow to conclude legal arrangements to manage separate funds, but also provides for concurrent ways, through which general creditors can attach the separated assets. One of those legal procedures is the revocatory action, i.e., the action given to creditors exactly to ob-

tain that acts done by the debtor in fraud of their rights (e.g., right for compensation) are inefficacious towards them (art. 2901-2904 c.c.). In front of an inner interpretive incompatibility (3.), preference rule R_1 is subject to R_2 , stating that all the goals should be pursued by the law when possible, under R_3 : if there is a way to pursue all the goals the legal system considers important, that way should be favoured. Self-declared trusts in LS_{Jer} , then, being comparable to separate funds in LS_I as regards goals and effects (above defined "Functional correspondence," step 7.), can be likewise accepted as valid in LS_I as they are in LS_{Jer} (8.). According to this interpretive arguments, the purpose of the self-declared trust is considered generally valid. In other words, the risk of enforcing a foreign institution, the main effect of which may be detrimental to the protection of creditors' interests, is balanced with the analysis of inner law, which provides for legal tools to contrast the possible damaging effects.

In our working example, in particular, no evidence of the settlor's intention to declare a trust in order to damage creditors' rights can be detected. Thus, by interpreting the foreign law as admitting self-declared trusts and arguing than no compelling reasons against such interpretation exist both in the inner system, given that similar institutions are regulated by inner law, and in the specific facts of the case, the court could justifiably opt for recognising the compatibility of foreign law interpretation with the domestic system and its public policy.

4. Concluding Comments

The analysis of the working examples shows that our argumentation framework, based on cross-border interpretive arguments, proves helpful in identifying:

- What canons of interpretation, irrespective of their foreign or domestic nature, are involved: usually, courts resort to the whole range of rules of interpretation (see chapter 2, sect. 4), drawing on the practice of all interested systems. Usually, judges start from foreign linguistic canons (often, in the form of translations), comparing them with the national use of similar terms; afterwards, they consider goals possibly pursued by the foreign law (i.e., teleological argument) as well as any systematic reason that could support a certain interpretation.
- What interpretive incompatibilities may arise from their application: on the one hand, incompatibilities arise from uncertainties of many kind (vagueness of the original rule or of its translation, multiple existing interpretations of the same rule, etc.); on the other hand, they are fostered by the specific legal queries of the parties, which variously challenge the receptive attitude of the domestic legal system and its core of values and principles (i.e., public policy).
- What ways exist to solve interpretive conflicts: conflicts are faced and solved
 having in mind both the position of the parties (i.e., their judicial requests and
 interests) and the legal framework that features their relationship (i.e., national,

- foreign and, possibly, international or EU laws). Also, balancing techniques are used to establish preference among different interpretations.
- What modes, if any, exist to attack or defend different arguments: in fact, interpretive arguments are attacked claiming that canon-specific extra-conditions do not hold in the present case and thus the argument does not have enough justificatory force; that other extra-conditions, supported in either legal system taken as main reference, are better-supported so that another interpretation should be preferred; that interpretive arguments based on technical meanings are overridden because of compelling reasons or general principles.

The argumentative strategy, developed thanks to this argument-based framework, refers both to foreign and inner law, allowing for considering intra- and extra-systemic elements in the legal reasoning: something that courts are more and more forced to do, even on a daily basis, but that informal (and formal) argumentation still had to specifically pay attention to.

The next chapter is going to review the whole research work, in particular investigating whether the research questions posed in the first chapter have been answered to in the end. In chapter 5, it has been anticipated that some results of the present theoretical work have been already object of formalisation (Malerba et al. 2016, in Appendix). Such first formalisation, taking the first legal case here presented as main working example, suggests that the issues raised by foreign law interpretation can be interestingly addressed from more formal perspectives by the AI and Law community.

Chapter 7: Results and Conclusions

In this final chapter, we primarily discuss if the research questions presented in the first chapter have been successfully replied to in the thesis (sect. 1). We then identify the major contributions to knowledge of our research, also in light of what has been already done in the field of argumentation, legal reasoning, and AI and Law (sect. 2). Finally, we suggest that our results reveal two possible lines of future research (sect. 3).

1. Discussion

This study has explored the feasibility and utility of a theory for arguing with canons of interpretation coming from different legal systems, once they have accessed domestic legal systems in private international law disputes. In so doing, it has defined an argument-based conceptual framework that encompasses occurring interpretive interactions, without ignoring the existing, broader normative background each legal system is nowadays part of.

Argumentation and argumentation schemes were not new to the study of legal interpretation and of normative conflicts, for the latter are often brought about by interpretative doubts or mismatches. Both topics had thus been already addressed using argumentation tools, both formally and informally; though, these research efforts had concentrated on normative and interpretive conflicts arising within one legal system, keeping a mainly inward outlook (Sartor 1992, Prakken and Sartor 1995, Sartor et al. 2014, Rotolo et al. 2015, Walton et al. 2016). The examination of the extant literature revealed that also interactions among distinct normative systems had interested scholars in both legal theory and AI and Law with regard to the allocation of jurisdiction and choice-of-law characterising private international law cases. The issues of legal pluralism and the fundamental mechanisms of conflict of laws had consequently been studied through argumentation and logics (Sartor 2005, Dung and Sartor 2011, Hage 2015), but the focus had been maintained on the level of virtual conflicts between legal systems, each considered as potentially competent to rule the case: precisely the kind of conflicts that private international law in fact prevents.

Hence, no specific consideration had been given so far to the issue of application and interpretation of the foreign provision when the conflict rule identifies it as the applicable law to the particular case in front of national judges. In such cases, many legislators¹⁶⁰ require that domestic courts interpret and apply the relevant foreign law using foreign rules of interpretation and application over time. Ultimately, applying foreign canons of interpretation within the domestic legal system may result in conceptual misalignments, normative gaps, interpretive uncertainties, and proper clashes with inner canons of interpretation. The present thesis fills this gap in the literature, building on the research hypothesis, according to which those virtual conflicts between normative systems, avoided by private international law, can still occur at the level of interpretation.

Considering the previous remarks, the thesis posed the ensuing main research question:

 How can theory of argumentation and, specifically, argumentation schemes be used to explain the way domestic courts should reason when they apply and interpret a specific foreign law in order to decide the cross-border case in front of them?

Addressing such question has preliminarily meant to put domestic courts in a convenient epistemic position with reference to foreign law (see chapter 5, sect. 2). In fact, getting familiar with both foreign law content and its modes of interpretation raises significant problems, ranging from reliability, credibility, up to the very legitimacy of the resorted informative channels and, therefore, of the legal information they supply. In spite of many concrete difficulties, we have concluded that, all in all, judges can reach a positive epistemic position, if they profit from external sources of knowledge, which, in turn, comply with certain requirements. Starting from the argument scheme from expert opinion, we have proposed an argument scheme from foreign law expert opinion, in case the court decides to rely on an expert to acquire knowledge of foreign law.

ARGUMENT FROM FOREIGN LAW EXPERT OPINION

Major Premise: Source E is an expert in legal system F containing provision n. *Minor Premise*: E asserts that provision n (in legal system F) is true (false).

Conclusion: n may plausibly be taken to be true (false).

CQ1–Expertise Question: how credible is E as an expert source?

CQ2–Foreign Legal System Question: is E an expert in the legal system that n is in?

CQ3-Trustworthiness Question: is E personally reliable as a source?

CQ4–Consistency Question: is n consistent with what case law and/or legal doctrine asserts?

CQ5–Interpretation(s) Question: are various $n_1, ..., n_n$ presented plausible interpretations of n?

CQ6-Reliable Source Question: is E's assertion based on reliable source(s)?

With this premise in mind, we have presented a cross-border interpretive argument scheme, a definition of interpretive incompatibilities in foreign law application, and a general pattern for dealing with such cross-border interpretive incompatibilities, in reply to sub-questions 1, 2, 3, as structured in chapter 1, sect. 5.

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¹⁶⁰ See art. 15, Italian law no. 218/1995.

1. Which argumentation schemes can help in dealing with interpretive canons coming from foreign legal systems?

In order to answer sub-question 1, we have identified the next reasoning pattern, which allows the domestic court to reason with canons of interpretation coming from the foreign country (see chapter 5, sect. 4.1).

```
 \begin{array}{ll} \text{Interpretive Argument } A_i & Z_1, \dots, Z_l, \ c_i \rightarrow O_i \\ \text{Where:} & Z_1, \dots, Z_l \ \text{are the extra-conditions} \\ & Z_1, \dots, Z_l \ \text{hold} \\ & c_i \ \text{is the interpretive canon to be applied} \\ & O_i \ \text{is the resulting interpretive outcome} \\ \end{array}
```

 A_i reads "If c_i applies and $Z_1, ..., Z_l$ hold, n should be interpreted as O_i ."

Each argument A_i applies to the relevant foreign law n. It has a premise, composed of extra-conditions Z_1, \ldots, Z_l and of a canon of interpretation c_i , and a conclusion, consisting in an interpretive outcome O_i , i.e., the norm derived from provision n. As already in Sartor et al. (2014) and Rotolo et al. (2015), canons of interpretation are considered inference rules in the interpretative argument: additionally, in our argument scheme, rules of interpretation are either foreign or national, depending on the extra-condition considered.

2. How do the identified argumentation schemes help to deal with interpretive incompatibilities occurring in foreign law application?

Interpretive incompatibility is defined as double-sided: on the one hand, it refers to a basic idea of incompatible interpretations (Rotolo et al. 2015), according to which interpretations O_1 and O_m of foreign provision n are incompatible for O_1 is different from O_m , and irrespective of any possible logical relation (entailment, semantic overlapping, etc.) between O_1 and O_m ; on the other hand, foreign law interpretation requires that canons and interpretative outcomes are moved from their natural environment to the national legal system of destination, so that a plain interpretation in the original system may be incompatible with the system of destination as understood by its public policy. As a second compatibility threshold, public policy continues to protect the inner coherence of the domestic system, even if it now includes also values and principles extraneous to the mere national system.

```
\begin{array}{lll} \text{INTERPRETIVE INCOMPATIBILITY} \\ \text{Interpretive Argument } A_1 & Z_1, \ldots, Z_b, \ c_1 \rightarrow O_1 \\ \ldots & \ldots \\ \text{Interpretive Argument } A_m & Z_m, \ldots, Z_b, \ c_m \rightarrow O_n \\ \text{Where} & n \leq m, Z_1, Z_m, \ldots, Z_b \ \text{hold}, \ c_1, \ldots, c_m \ \text{apply} \end{array}
```

Foreign provision n may have more interpretation-outcomes O_1, \ldots, O_n depending on which interpretive canon c_1, \ldots, c_m is applied, where $n \le m$.

Interpretive Incompatibility: 1) $O_1 \neq ... \neq O_n$ 2) O_n is incompatible with public policy in LS_I Through the different extra-conditions $Z_1, ..., Z_l$ that characterise each interpretive arguments involved in the reasoning, national interpreters refer to the different normative systems involved (e.g., LS_I , LS_{CAM} , LS_{INT} as in the first working example in chapter 6, sect. 2) and to the interpretive canons, both national and foreign, that could be applied. Also, they build their argumentative strategy considering goals and values that pertain to various legal orders, all called upon by the specific foreign law application. Thereby, they face all likely interpretive incompatibilities trying to comply with the following needs of private international law:

- Need to meet the reasonable expectations of the parties whenever it is possible (see chapter 3, sect. 2.3.);
- Need to protect the core values and inner coherence of domestic systems (see chapter 4, sect. 3.2.);
- Need to acknowledge that normative systems variously intertwine and carry their own values (see chapter 4, sect. 4.2.).

Any plausible ordering among many interpretations of the foreign rule n will eventually depend on the legal system taken as main reference and on the goals and values it promotes, with a view to the system of destination. These mechanisms are analysed in various hypothetical scenarios (see chapter 5, sect. 4.2.). Critical questions, then, evaluate the reasoning process: in a step-by-step fashion that mirrors the level of reasoning involved, they assess if the interpreters have abided by this network of rules and principles (see the illustrative list in chapter 5, sect. 4.3.).

3. How can the identified argumentation schemes give an explanatory view on what should happen when foreign canons of interpretation enter the national legal system, i.e., on the interactions between intra- and inter-systemic interpretative elements in the judicial reasoning?

Extra-conditions $Z_1, ..., Z_n$ characterise the interpretive arguments $A_1, ..., A_m$, so that there will ultimately be as many interpretive arguments $A_1, ..., A_n$ not only as many different interpretive canons $c_1, ..., c_n$ apply to the same provision n, but also as many different extra-conditions feature that interpretation; they allow to account for extra-systemic factors in the reasoning of the national court, so that the resulting interpretive arguments are able to consider at the same time the intra-and extra-systemic elements that foreign law interpretation in private international law implies.

Our argumentation framework has been then applied to two working examples and has proved to be useful to spot interpretive incompatibilities and, mostly, to outline argumentative strategies to face them (see chapter 6).

We have also presented the first formal developments of the present work, focused on the concept of meta-argumentation (see chapter 5, sect. 5): the logical model uses meta-rules to perform reasoning about foreign and national canons of interpretation (Malerba et al. 2016, in Appendix).

2. Impact

If foreign law is more and more referred to in unexpected scenarios, when national courts use it in order to interpret domestic legislations and constitutions, as illustrated in chapter 1, private international law offers a safe and interesting framework where to analyse the interpretative interactions triggered by foreign law application and the many challenges it poses to domestic legal systems. But studying the application of foreign law and interpretive canons by domestic courts is not only practically relevant, given the frequency of cross-border legal relations and judicial cross-references, but is also theoretically significant, because no theory of legal interpretation could claim completeness if it misses to refer to the application of foreign canons of interpretation by national courts, in domestic contexts.

The thesis takes the required step forward in understanding such complex legal relations that unfold in legal interpretation, the cornerstone of legal reasoning, and that have so far remained substantially unexplored. The contribution to knowledge is thus firstly on the level of analysis of a relevant theoretical problem with highly practical implications: how domestic courts should reason with foreign interpretive canons translates into different modes of impact of the foreign law not only on the regulation of the particular case in front of the judges, but also on the possible consequences within the system at large, in terms of future legislative developments, or of interpretive evolution of domestic legal solutions.

For the purposes of this theoretical analysis, it has been important to account for what concrete factors lead the court to a certain interpretive solution among the many possible. As a result, argumentation and argumentation schemes have been chosen as preferred research methods: in fact, by maintaining the content of interpretive arguments, such methods preserve the "meaningful reasons" that guide interpreters, i.e., national courts, in accomplishing their task.

A second contribution of the thesis can be detected in the fact that the argument-based conceptual framework provides for an initial standard of correctness for reasoning and interpreting in cross-border situations. It has also paved the way to formal studies on the topic, as the first formalisation presented in chapter 5 shows. The cross-border interpretive reasoning is represented in terms of metarules, the head of which consists of interpretation rules, and its antecedents include any type of conditions (Malerba et al. 2016, in Appendix).

Argumentation schemes have already proven powerful analytical tools for practical AI and Law implementations (Walton et al. 2008): technically, they can be modelled as rules of inference of a logical system (Verheij 2003, Prakken 2005, Walton et al. 2008, van Eemeren et al. 2014), where their premises-conclusion relation is seen in terms of conditional rules. The obtained rules are generally defeasible, instantiating the so called defeasible *modus ponens* (Horty 2001).

Any formalisation of argumentation schemes should then preserve their peculiar vocation for maintaining nuances of meaning while reproducing the reasoning process (Prakken 2005). In particular, some parts of informal argument schemes are strictly context-specific and, as such, determined by the content of the sentences they consist of: contextual logic can thus turn out to be more useful than abstract logic in formalising them (Verheij 2003). In line with this vision, also argumentation logic makes use of non-monotonic techniques allowing for expressing exceptions, disagreement, and uncertainty. As a consequence, argument schemes have been embedded in abstract argumentation frameworks (Prakken 2005), where arguments, defined as trees including both deductive and defeasible inferences, can be rebutted, undercut, and undermined. Prakken has further improved this AF in ASPIC+ (Prakken 2010, Prakken et al. 2015) by formalising argument schemes for factor-based reasoning. Argumentation logic expands upon the issue of distinguishing what relation form and content have within an argument scheme, which is also the missing link between common sense knowledge and practical reasoning on the one hand, and logics and formalisms on the other hand. Additionally, such abstract argumentation frameworks are capable of managing conflicts among arguments.

3. Future Work

Discussing results and implications has shed light on at least two possible lines of further research.

Firstly, the formal developments in Malerba et al. (2016), by reconnecting with the mentioned branch of AI and Law research that generally aims to formalise argumentation and argumentation schemes, may represent a starting point for further practical applications in AI and Law. It could, for example, be explored if the proposed logical machinery can also express the characteristic content of cross-border interpretive argumentation schemes, which have been analysed throughout the thesis. This would be a clear step forward in the direction of a full formalisation of cross-border legal interpretation, so far disregarded.

Secondly, resuming a legal theoretical perspective, it could be interesting to investigate whether the developed theory could be a wide-ranging explanatory tool for foreign law application and interpretation by domestic courts, also beyond the borders of private international law. In other words, it could be interestingly studied if our theoretical model is susceptible of broader use. For instance, Dung and Sartor (2011), representing conflict of laws through modular argumentation, have envisioned that, in front of the emerging on the Internet of marketplaces and electronic societies involving human and artificial agents, their model could more generally govern relations between agents belonging to different marketplaces. Likewise, it is conceivable that the proposed theory for arguing with and about foreign canons of interpretation in private international law contexts could be extended, with appropriate adjustments, to other forms of informal references, by domestic courts, to foreign law and foreign legal arguments.

4. Concluding Comment

The thesis has intended to offer usable access keys to understand a growingly complex legal reality, which we, as citizens, experience every day. In detail, it has showed that a rationality can be identified when national courts use foreign canons of interpretation to apply the foreign law to decide on cross-border cases. Still, more and more, that rationality may be given by values and principles that overcome the territorial borders of nation states and necessarily impact on foreign law application and interpretation in national systems.

Intense legal globalisation, specialised international normative cooperation, as well as stronger supranational legal integration cannot but influence the way legislators, judicial bodies, and legal experts in general think of the law: such transformed perspective, open to a network of values and goals other than the domestic ones, is unavoidably assumed firstly when it comes to reasoning with laws and canons of interpretation coming from other legal systems.

References

- Alchourrón CE, Makinson D (1981) Hierarchies of regulations and their logic. In: Hilpinen R (ed) New studies on deontic logic. Reidel, Dordrecht, pp 123–148.
- Aleven V (1997) Teaching case based argumentation through an example and models. Dissertation, University of Pittsburgh.
- Alexy R (1989) A theory of legal argumentation. Clarendon Press, Oxford.
- Alexy R, Dreier R (1991) Statutory interpretation in the Federal Republic of Germany. In: Mac-Cormick N, Summers R (eds) (1991) Interpreting statutes. A comparative study. Dartmouth, Aldershot, pp 73–121.
- Allen LE, Saxon CS (1986) Analysis of the logical structure of legal rules by a modernized and formalized version of Hohfeld fundamental legal conceptions. In: Martino AA, Socci F (eds) Automated analysis of legal texts. North-Holland, Amsterdam, pp 385–451.
- Araszkiewicz M (2013) Towards a systematic research on statutory interpretation in AI and Law. In: Ashley KD (ed) Legal knowledge and information systems JURIX 2013. IOS Press, Amsterdam, pp 15–24.
- Araszkiewicz M (2014) Scientia juris: a missing link in the modelling of statutory reasoning. In: Hoekstra R (ed) Legal knowledge and information systems JURIX 2014. IOS Press, Amsterdam, pp 1–10.
- Araszkiewicz M (2015) Incorporation of complex doctrinal theories in a model of statutory interpretation: an example of adequate causal link. In: Proceedings of the 15th International Conference on AI and Law. ACM Press, New York, pp 161–165.
- Ashley KD (1991) Reasoning with cases and hypotheticals in HYPO. International Journal of Man-Machine Studies 34:753-796.
- Atkinson K, Bench-Capon TJM (2007) Practical reasoning as presumptive argumentation using action based alternating transition systems. Artificial Intelligence 171:855–874.
- Atkinson K, Bench-Capon TJM, McBurney P (2005) Arguing about cases as practical reasoning. In: Proceedings of the 10th International Conference on AI and Law. ACM Press, New York, pp 35–44.
- Bartoli S (2005) Il trust auto-dichiarato nella convenzione de l'Aja sui Trust. Trust e attività fiduciarie 3:355.
- Basedow J (2014) The application of foreign law-Comparative remarks on the practical side of private international law. In: Basedow J, Pißler KB (eds) Private international law in mainland China, Taiwan and Europe (Materialien zum ausländischen und internationalen Privatrecht, 52). Mohr Siebeck, Tübingen, pp 85–97.
- Baxter WF (1963) Choice of law and the federal system. Stanford Law Review 16:1.
- Beale JH (1935) A treatise on the conflict of laws. Baker, Voorhis & Co, New York.
- Bell J (2011) The relevance of foreign examples to legal development. Duke Journal of Comparative and International Law 21:431-460.
- Bell J, Ibbetson D (2014) European legal development. The case of tort. Cambridge University Press, Cambridge.
- Bench-Capon TJM (2003) Persuasion in practical argument using value-based argumentation frameworks. Journal of Logic and Computation 13:429–448.
- Bench-Capon TJM (2011) Relating values in a series of supreme court decisions. In: Atkinson K (ed) Legal knowledge and information systems JURIX 2011. IOS Press, Amsterdam, pp 13–22
- Bench-Capon TJM, Prakken H, Wyner A, Atkinson K (2013) Argument schemes for reasoning with legal cases using values. In: Proceedings of the 14th International Conference on AI and Law. ACM Press, New York, pp 1–10.
- Berman DH, Hafner CD (1993) Representing teleological structure in case-based reasoning: the missing link. In: Proceedings of the 4th International Conference on AI and Law. ACM Press, New York, pp 50–59.

Bermann GA, Glenn P, Scheppele KL, Shalakany A, Snyder DV, Zoller E (2011) Comparative law: problems and prospects. American University International Law Review 26(4):935–968. Bin R, Pitruzzella G (2014) Diritto costituzionale. Giappichelli, Torino.

Björgvinsson DT (2015) The intersection of international law and domestic law: a theoretical and practical analysis. Elgar Publishing, Celtenham.

Bogdan M (2012) Private international law as component of the law of the forum. General course. Brill-Martinus Nijhoff Publishers, Leiden-Boston.

Bogdan M (2016) Concise introduction to EU private international law. 3rd ed. Europa Law Publishing, Groningen.

BonJour L (2010) The myth of knowledge. Philosophical Perspectives 24:57-83.

Boschiero N (1996) Sub art. 14 l. n. 218/1995. In: Bariatti S (ed) Commentario alla legge 31 maggio 1995. Nuove Leggi Civili Commentate 5-6:1034.

Breuker J (2013) A cognitive science perspective on knowledge acquisition. International Journal of Human-Computer Studies 71:177–183.

Breyer S (2015) The court and the world. American law and the new global realities. Alfred A. Knopf, New York.

Brożek B (2014) Law and defeasibility. Revus 23:165-170.

van Calster G (2013) European private international law. Hart Publishing, Oxford.

Canale D (2015) Norme opache. Il ruolo degli esperti nel ragionamento giuridico. Rivista di filosofia del diritto, Special Issue, pp 93–124.

Canale D, Tuzet G (2014) Analogy and interpretation in legal argumentation. In: Ribeiro HJ (ed) Systematic approaches to argumentation by analogy. Springer, Dordrecht, pp 227–242.

Carbone SM (2009) La conoscenza del diritto straniero e il giudice italiano. Diritto Commerciale Internazionale 23(2):193–206.

Cavers DF (1965) The choice of law process. University of Michigan Press, Ann Arbor.

Cheng EK (2010) Scientific evidence as foreign law. Brooklyn Law Review 75(4):1095-1113.

Comoglio LP, Ferri C, Taruffo M (2011) Lezioni sul processo civile. I. Il processo ordinario di cognizione. Il Mulino, Bologna.

Comoglio LP, Consolo C, Sassani B, Vaccarella R (eds) (2014) Commentario del codice di procedura civile. UTET Giuridica, Milano.

Conforti B (2014) Diritto internazionale. 10th ed. Editoriale Scientifica, Napoli.

Cook WW (1942) The logical and legal bases of the conflict of laws. Harvard University Press, Cambridge.

Craig P, de Búrca G (2015) EU law. Text, cases and materials. Oxford University Press, Oxford Crawford EB, Carruthers JM (2011) United Kingdom. In: Esplugues C, Iglesias JL, Palao G (eds) (2011) Application of foreign law. Sellier European Law Publishers, Munich, pp 391–408.

Crisafulli V (1964) Disposizione (e norma). In: Enciclopedia del Diritto, XIII. Giuffrè, Milano, np. 195-209

Currie B (1963) Selected essays on the conflict of laws. Duke University Press, Durham.

D'Amato A (2014) Groundwork for international law. American Journal of International Law 108(4):650-679.

Deplano R (2013) Fragmentation and constitutionalisation of international law: a theoretical inquiry. European Journal of Legal Studies 6(1):67–89.

Dorsen N (2005) The relevance of foreign legal materials in U.S. constitutional cases: a conversation between Justice Antonin Scalia and Justice Stephen Breyer. International Journal of Constitutional Law 3(4):519–541.

Douven I (2011) Abduction. In: Zalta EN (ed) The Stanford Encyclopedia of Philosophy. http://plato.stanford.edu/archives/spr2011/entries/abduction/.

Dung PM (1995) On the acceptability of arguments and its fundamental role in non-monotonic reasoning, logic programming and n-person games. Artificial Intelligence 77:321–357.

Dung PM, Sartor G (2010) A logical model of private international law. In: Governatori G, Sartor G (eds) Deontic Logic in Computer Science. Springer, Berlin-Heidelberg, pp 229–246.

Dung PM, Sartor G (2011) The modular logic of private international law. Artificial Intelligence and Law Journal 19(2-3):233–261.

Dworkin R (1978) Taking rights seriously. Harvard University Press, Cambridge.

Dworkin R (1986) Law's Empire. Harvard University Press, Cambridge.

van Eemeren FH, Garssen B, Krabbe ECW, Snoeck Henkemans FA, Verheij B, Wagemans JHM (2014) Handbook of argumentation theory. Springer, Dordrecht, pp 615–675.

Esplugues C, Iglesias JL, Palao G (eds) (2011) Application of foreign law. Sellier European Law Publishers, Munich.

Floridi L (2014) The Fourth Revolution–How the infosphere is reshaping human reality. Oxford University Press, Oxford.

Franzina P (2010) L'azione dell'Unione Europea nel settore del diritto internazionale privato e processuale. Revista Direitos Fundamentais & Democracia 7(7):2–13.

Friedenberg J, Silverman G (2006) Cognitive science: an introduction to the study of mind. Sage Publications, New York.

Glenn P (2014) Legal traditions of the world: sustainable diversity in law. 5th ed. (2000, 1st ed.). Oxford University Press, Oxford.

Gordon TF (1993) The pleadings game. Artificial Intelligence and Law 2(4):239-292.

Gordon TF (1995) The pleadings game. An artificial intelligence model of procedural justice. Kluwer Academic Publishers, Dordrecht.

Gordon TF, Walton D (2009) Legal reasoning with argumentation schemes. In: Proceedings of the 12th International Conference on AI and Law. ACM Press, New York.

Grabmair M, Ashley KD (2011) Facilitating case comparison using value judgments and intermediate legal concepts. In: Proceedings of the 13th International Conference on AI and Law. ACM Press, New York, pp 161–170.

Grimm LM (2014) Psychology of knowledge representation. WIREs Cognitive Science 5:261–270.

Grossi D, Rotolo A (2011) Logic in the law: a concise overview. In: Gupta A, van Benthem J (eds) Logic and philosophy today. College Publications, London, pp 251–274.

Guastini R (1998) Teoria e dogmatica delle fonti. Trattato di Diritto Civile e Commerciale. Giuffré, Milano.

Hage JC (1997) Reasoning with rules. Wolters Academic Publishers, Dordrecht.

Hage JC (2003) Law and defeasibility. Artificial Intelligence and Law 11:221-243.

Hage JC (2005) Studies in legal logic. Springer, Berlin.

Hage JC (2015) Logical tools for legal pluralism. Maastricht European Private Law Institute Working Paper 7.

Hage JC, Verheij B (1994) Reason-Based Logic: a logic for reasoning with rules and reasons. Information and Communications Technology Law 3(2-3):171–209.

Hannon M (2017) A solution to knowledge's threshold problem. Philosophical Studies 174 (3):607-629.

Hansen H (2015) Fallacies. In: Zalta EN (ed) The Stanford Encyclopedia of Philosophy (Summer 2015 ed). http://plato.stanford.edu/archives/sum2015/entries/fallacies/.

Hardegree GM (2011) Symbolic logic. A first course. 4th ed. McGraw-Hill College, New York.

Hart HLA (1994) The concept of law. 2nd ed. (1961, 1st ed.) Oxford University Press, Oxford.

Hausmann R (2008) Pleading and proof of foreign law-a comparative analysis. The European Legal Forum 1:1-14.

Hill J (2004) Choice of law in contract under the Rome Convention: the approach of the UK courts. International and Comparative Law Quarterly 53(2):325–350.

Holmes OW (1897) The path of the law. Harvard Law Review 10(3):457-478.

Horty JF (2001) Nonmonotonic logic. In: Goble L (ed) The Backwell Guide to Philosophical Logic. Amsterdam University Press, Amsterdam, pp 336–361.

Ichikawa JJ, Steup M (2016) The analysis of knowledge. In: Zalta EN (ed) The Stanford Encyclopedia of Philosophy. http://plato.stanford.edu/archives/win2016/entries/knowledge-analysis/.

Jänterä-Jareborg M (2003) Foreign law in national courts: a comparative perspective. Recueil de cours 304:181–385.

Kiestra LR (2014) The impact of European Convention on Human Rights on private international law. Springer, Berlin-Heidelberg.

Kirchmair L (2016) The theory of the Law's Creators' Circle: re-conceptualizing monism-dualism-pluralism debate. German Law Journal 17(2):179–214.

Kowalski R (2011) Computational logic and human thinking: how to be artificially intelligent. Cambridge University Press, Cambridge.

Kramer X (2014) In-depth analysis European Parliament (JURI Committee). In: Workshop on upcoming issues of EU law. Compilation of in-depth analyses. European Parliament Brussels, pp 77–105.

Lalani S (2016) Ascertaining foreign law: Problems of access and interpretation. International Journal for the Semiotics of Law, pp 1–16.

Lamond G (2016) Precedent and analogy in legal reasoning. In: Zalta EN (ed) The Stanford Encyclopedia of Philosophy. http://plato.stanford.edu/archives/spr2016/entries/legal-reas-prec/.

Legrand P (1997) The impossibility of 'legal transplants.' Maastricht Journal of European and Comparative Law 4:111–124.

Legrand P (2006) On the singularity of law. Harvard International Law Journal 47(2):517-530.

Legrand P (2012) Foreign law in the third space. Juridikum 1:32-43.

Legrand P (2013) Proof of foreign law in U.S courts: a critique of epistemic hubris. Journal of Comparative Law 8(2):344–388.

Leflar RA (1966) Choice-influencing considerations in conflicts law. New York University Law Review 41:267–282.

Liebwald D (2013) Law's capacity for vagueness. International Journal for the Semiotics of Law 26:391–423.

Lierman S (2014) Law as a complex adaptive system. The importance of convergence in a multi-layered legal order. Maastricht Journal 4(21):611–629.

Lollini A (2012) The South African Constitutional Court experience: reasoning patterns based on foreign law. Utrecht Law Review 2(8):55–87.

Luhmann N (2004) Law as a social system. Oxford University Press, Oxford.

Lyons D (1999) Open texture and the possibility of legal interpretation. Law and Philosophy 18(3):297–309.

MacCormick N (1994) Legal reasoning and legal theory. Oxford University Press, Oxford.

MacCormick N (1998) Legal reasoning and interpretation. In: Routledge Encyclopedia of Philosophy. http://www.rep.routledge.com/articles/legal-reasoning-and-interpretation/v-1/.

MacCormick N, Summers R (1991) Interpretation and justification. In: MacCormick N, Summers R (eds) Interpreting statutes. A comparative study. Dartmouth, Aldershot, pp 511–544.

MacCormick N, Summers R (eds) (1997) Interpreting precedents: a comparative study. Dartmouth, Aldershot-Ashgate.

Main TO (2013) The word commons and foreign laws. Cornell International Law Journal 46:219–289.

Malerba A, Rotolo A, Governatori G (2016) Interpretation across legal systems. In: Bex F, Villata S (eds) Legal Knowledge and Information Systems JURIX 2016. IOS Press, Amsterdam, pp 83–92.

Markesinis BS, Fedtke J (2005) The judge as comparatist. Tulane Law Review 80:11-167.

Markesinis BS, Fedtke J (2009) Engaging with foreign law. Hart Publishing, Oxford.

Mayer P (2013) Conflicting decisions in international commercial arbitration. Journal of International Dispute Settlement 4(2):407–419.

McComish J (2007) Pleading and proving foreign law in Australia. Melbourne University Law Review 31(2):400–442.

Michaels R (2008a) The functional method of comparative law. In: Reimann M, Zimmermann R (eds) The Oxford Handbook of Comparative Law. Oxford University Press, Oxford, chapter 10.

- Michaels R (2008b) The new European choice of law revolution. Tulane Law Review 82:1607–
- Michaels R, Pauwelyn J (2012) Conflict of norms or conflict of laws? Different techniques in the fragmentation of international law. Duke Journal of Comparative and International Law 22(3):349–376.
- Mills A (2009) The confluence of public and private international law–Justice, pluralism and subsidiarity in the international constitutional ordering of private law. Cambridge University Press, Cambridge.
- Mills A (2012) Towards a public international perspective on private international law: variable geometry and peer governance. Working Paper, available at (accessed on 22/07/16): http://papers.srn.com/sol3/papers.cfm?abstract_id=2025616.
- Mills A (2013) The identities of private international law: lessons from the U.S. and EU revolutions. Duke Journal of Comparative & International Law 23:445–475.
- Mosconi F, Campiglio C (2015) Diritto internazionale privato e processuale. Volume I: parte generale e obbligazioni. 7th ed. UTET Giuridica, Torino.
- Nerhot P (ed) (1991) Legal knowledge and analogy. Fragments of legal epistemology, hermeneutics and linguistics. Kluwer Academic Publishers, Dordrecht.
- Noriega P, Chopra AK, Fornara N, Lopes Cardoso H, Singh MP (2013) Regulated MAS. In: Andrighetto G, Governatori G, Noriega P, van der Torre LWN (eds) Normative Multi-Agent Systems. Dagstuhl Publishing, Saarbrucken, pp 93–133. http://www.dagstuhl.de/dagpub/978-3-939897-51-4.
- Nuzzo L (2012) Pasquale Stanislao Mancini. Enciclopedia Italiana Treccani, Contributo italiano alla storia del Pensiero Diritto, p 307.
- Perelman Ch, Olbrechts-Tyteca L (1958) Traité de l'argumentation. Presses Universitaires de France. Paris.
- Perelman Ch (1978) Logique juridique. Nouvelle rhétorique. 2nd ed. coll. Méthodes du droit, Dalloz, Paris.
- Pino G (2013) Norma giuridica. In: Pino G, Schiavello A, Villa V (eds) Filosofia del diritto. Introduzione critica al pensiero giuridico e al diritto positivo. Giappichelli, Torino, pp 144–183. Pollock JL (1987) Defeasible reasoning. Cognitive Science 11:481–518.
- Pollock JL (1995) Cognitive carpentry. A blueprint for how to build a person. Massachusetts Institute of Technology Press, Cambridge.
- Prakken H (1997) Logical tools for modelling legal argument. A study of defeasible reasoning in law. Kluwer Academic Publishers, Dordrecht.
- Prakken H (2005) AI & Law, logic and argument schemes. Argumentation 19:303–320.
- Prakken H (2010) An abstract framework for argumentation with structured arguments. Argument and Computation 1(2):93–124.
- Prakken H (2011) An overview of formal models of argumentation and their application in philosophy. Studies in logic 4(1):65–86.
- Prakken H, Sartor G (1995) On the relation between legal language and legal argument. In: Proceedings of the 5th International Conference on AI and Law. ACM Press, New York, pp 1–10.
- Prakken H, Sartor G (1996) A dialectical model of assessing conflicting arguments in legal reasoning. Artificial Intelligence and law 4(3-4):331–368.
- Prakken H, Sartor G (1997) Argument-based extended logic programming with defeasible priorities. Journal of Applied Non-Classical Logics 7(1-2):25–75.
- Prakken H, Sartor G (2002) The role of logic in computational models of legal argument–a critical survey. In: Kakas AC, Sadri F (eds) Computational logic: logic programming and beyond. Springer, Berlin-Heidelberg, pp 342–381.
- Prakken H, Sartor G (2004) The three faces of defeasibility in the law. Ratio Juris 17:118–139.
- Prakken H, Sartor G (2009) A logical analysis of burdens of proof. In: Kaptein H, Prakken H, Verheij B (eds) Legal evidence and proof: statistics, stories, logic. Ashgate Publishing, Farnham, pp 223–253.

- Prakken H, Sartor G (2015) Law and logic: a review from an argumentation perspective. Artificial Intelligence 227:214–245.
- Prakken H, Wyner A, Bench-Capon TJM, Atkinson K (2015) A formalization of argumentation schemes for legal case-based reasoning in ASPIC+. Journal of Logic and Computation 25(5):1141–1166.
- Pritchard D, Turri J (2014) The value of knowledge. In: Zalta EN (ed) The Stanford Encyclopedia of Philosophy. https://plato.stanford.edu/archives/spr2014/entries/knowledge-value/.
- Reiter R (1980) A logic for default reasoning. Artificial Intelligence 13:81–132.
- Remien O (2001) European private international law, the European Community and its emerging Area of Freedom, Security and Justice. Common Market Law Review 38(1):53–86.
- Rogerson P (2013) Collier's conflict of laws. 4th ed. Cambridge University Press, Cambridge.
- Ross A (1959) On law and justice. University of California Press, Berkeley.
- Ross A (1968) Directives and norms. Routledge & Kegan Paul, London.
- Rotem Y (2014) Foreign law as a distinctive fact—To whom should the burden of proof be assigned? Chicago Journal of International Law 14(2):627–651.
- Rotolo A (1998) Morale, diritto e discorso pratico. Il contributo di R. Alexy. In: Bongiovanni G (ed) La filosofia del diritto costituzionale e i problemi del liberalismo contemporaneo. Clueb, Bologna, pp 51–77.
- Rotolo A, Governatori G, Sartor G (2015) Deontic defeasible reasoning in legal interpretation: two options for modelling interpretive arguments. In: Proceedings of the 15th International Conference on AI and Law. ACM Press, New York, pp 99–108.
- Roughan N (2013) Authorities: conflicts, cooperation, and transnational legal theory. Oxford University Press, Oxford.
- Rounds Jr CE (2016) Why do we need the trust when we have the corporation and the third party beneficiary contract? In: Rounds Jr CE, Rounds III CE (eds) Loring and Rounds: A Trustees Handbook. (2016 Ed) Wolters Kluwer, New York, pp 1306–1312.
- von Savigny FC (1869) Private international law-A treatise on the conflict of laws. T.&T. Clark Publishers, Edinburgh.
- Sartor G (1992) Normative conflicts in legal reasoning. Artificial Intelligence and Law 1(2-3):209-235.
- Sartor G (2005) Legal reasoning: a cognitive approach to the law. Vol 5. Treatise on legal philosophy and general jurisprudence. Springer, Berlin, pp 659–667.
- Sartor G (2009) Sillogismo e defeasibility. Un commento su *Rhetoric and the Rule of Law* di Neil MacCormick. Diritto & Questioni pubbliche 9:9–27.
- Sartor G (2010) Doing justice to rights and values: teleological reasoning and proportionality. Artificial Intelligence and Law 18(2):175–215.
- Sartor G (2012) Defeasibility in legal reasoning. In: Ferrer Beltrán J, Ratti GB (eds) The logic of legal requirements. Essays on legal defeasibility. Oxford University Press, Oxford, pp 89– 107.
- Sartor G, Walton D, Macagno F, Rotolo A (2014) Argumentation schemes for statutory interpretation: a logical analysis. In: Hoekstra R (ed) Legal knowledge and information systems JURIX 2014. IOS Press, Amsterdam, pp 11–20.
- Schiff Berman P (2012) Global legal pluralism. Cambridge University Press, Cambridge.
- Sciarratta N (2015) La Cassazione su astreinte, danni punitivi e (funzione della) responsabilità civile. Diritto civile contemporaneo, 7 July 2015.
- Siems MM (2007) The end of comparative law. Journal of Comparative Law 2:133-150.
- Slaughter A-M (2003) A global community of courts. Harvard International Law Journal 44(1):191–219.
- Smits JM (2010) The complexity of transnational law: coherence and fragmentation of private law. Electronic Journal of Comparative Law 14(3):10.
- Steup M (2016) Epistemology. In: Zalta EN (ed) The Stanford Encyclopedia of Philosophy. https://plato.stanford.edu/archives/fall2016/entries/epistemology/.

- Strasser C, Antonelli GA (2014) Non-monotonic logic. In: Zalta EN (ed) The Stanford Encyclopedia of Philosopy. http://plato.stanford.edu/archives/win2014/entries/logic-nonmonotonic/.
- Summers R, Taruffo M (1991) Interpretation and comparative analysis. In: MacCormick N, Summers R (eds) Interpreting statutes. A comparative study. Dartmouth, Aldershot, pp 461– 510.
- Sunstein CR (1993) On analogical reasoning. Harvard Law Review 106(3):741-791.
- Tarello G (1980) L'interpretazione della legge. Giuffrè, Milano, pp 341-396.
- Thagard P (2005) Mind: introduction to cognitive science. 2nd ed. MIT Press, Cambridge.
- Tomassi P (1999) Logic. Routledge, London-New York.
- Toulmin S (1958) The uses of argument. Cambridge University Press, Cambridge.
- Troper M (2012) Les concepts de l'histoire constitutionelle. In: Herrera CM, Le Pillouer A (eds) Comment écrit-on l'histoire constitutionnelle? Éditions Kimé, Paris.
- Twining W (2000) Globalisation and legal theory. Cambridge University Press, Cambridge.
- Verheij B (1996) Rules, reasons, arguments: formal studies of argumentation and defeat. Dissertation, University of Maastricht.
- Verheij B (2003) Dialectical argumentation with argumentation schemes. An approach to legal logic. Artificial Intelligence and Law 11(1–2):167–195.
- Verheij B, Hage JC (1994) Reasoning by analogy: a formal reconstruction. In: Prakken H, Munt-jewerff AJ, Soeteman A (eds) Legal knowledge based systems. The relation with legal theory. Koninklijke Vermande, Lelystad, pp 65–78.
- Verhellen J (2016) Access to foreign law in practice: easier said than done. Journal of Private International Law 12(2):281–300.
- Vickers J (2016) The problem of induction. In: Zalta EN (ed) The Stanford Encyclopedia of Philosophy. http://plato.stanford.edu/archives/spr2016/entries/induction-problem/.
- Wagemans JHM (2011) The assessment of argumentation from expert opinion. Argumentation 25:329–339.
- Wahlgren P (2000) Legal reasoning. A jurisprudential model. Stockholm Institute for Scandinavian Law 1957-2009, 40:199–282.
- Waldron J (2005) Foreign law and the modern ius gentium. Harvard Law Review 119:129-147.
- Wallace RJ (2014) Practical reason. In: Zalta EN (ed) The Stanford Encyclopedia of Philosopy. http://plato.stanford.edu/archives/sum2014/entries/practical-reason/.
- Walton D (1995) A pragmatic theory of fallacies. University of Alabama Press, Tuscaloosa.
- Walton D (2001) Abductive, presumptive and plausible arguments. Informal Logic 21(2):141–169.
- Walton D (2004) Relevance in argumentation. Lawrence Erlbaum Associates, Mahwah, New Jersey.
- Walton D (2005) Argumentation methods for Artificial Intelligence in law. Springer, Berlin-Heidelberg.
- Walton D (2010a) Why fallacies appear to be better arguments than they are. Informal logic 30(2):159–184.
- Walton D (2010b) Similarity, precedent and argument from analogy. Artificial Intelligence and Law 18(3):217–246.
- Walton D, Reed C (2002) Argumentation Schemes and defeasible inferences. In: Carenini G, Grasso F and Reed C (eds) Proceedings of the Workshop on Computational Models of Natural Argument (CMNA), pp 1–5.
- Walton D, Koszowy M (2016) Arguments from authority and expert opinion in computational argumentation systems. AI & Society, pp 1–14.
- Walton D, Reed C, Macagno F (2008) Argumentation Schemes. Cambridge University Press, Cambridge.
- Walton D, Sartor G, Macagno F (2016) An argumentation framework for contested cases of statutory interpretation. Artificial Intelligence and Law 24(1):51–91.
- Ward DA (2007) Use of foreign court decisions in interpreting tax treaties. In: Maisto G (ed) Courts and tax treaty law. IBFD, EC and International Tax Law Series, Vol. 3, chapter 7.

Wasserstein Fassberg C (2015) Realism and revolution in conflict of laws: in with a bang and out with a whimper. University of Pennsylvania Law Review 163:1919–1944.

Watson A (1974) Legal transplants. Scottish Academic Press, Edinburgh.

Wilson MJ (2011) Demystifying the determination of foreign law in U.S. courts: opening the door to a greater global understanding. Wake Forest Law Review 46:887–936.

Wróblewski J (2000) Il problema della traduzione giuridica. Ars Interpretandi:155–164 (It. trans. Marescotti A).

Zuffi B (2014) Decisioni di rilievo internazional-processualistico. Int'l Lis 2:65.

Appendix

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Interpretation across Legal Systems

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Abstract. In this paper we extend a formal framework presented in [6] to model reasoning across legal systems. In particular, we propose a logical system that encompasses the various interpretative interactions occurring between legal systems in the context of private international law. This is done by introducing meta-rules to reason with interpretive canons.

Keywords. Legal Interpretation; Defeasible Reasoning; Private International Law

1. Introduction

Developing formal methods to study legal reasoning and interpretation is a traditional topic of AI and Law (cf., e.g., [4,6,8] and [5] for an overview). The topic has been addressed using argumentation tools, both formally and informally; though, these research efforts had concentrated on interpretive issues arising within one legal system, keeping a mainly inward outlook. An examination of the literature reveals that also interactions among distinct normative systems had interested some scholars in both legal theory and AI and Law with regard to the allocation of jurisdiction and choice-of-law characterising private international law cases. The issues of legal pluralism and the fundamental mechanisms of conflict of laws had consequently been studied through argumentation and logics [7,2,3], but the focus had been maintained on legal dogmatics or at the level of virtual conflicts between legal systems, each considered as potentially competent to rule the case: precisely the kind of conflicts that private international law in fact prevents.

Hence, no specific consideration had been given so far to the issue of application of canons and interpretation of the foreign provision when, e.g., the conflicting rule identifies it as the applicable law to the particular case in front of national judges. Filling this gap in the literature, the present paper builds on the research hypothesis, according to which those virtual conflicts between normative systems, avoided by private international law, can still occur at the level of interpretation and of interpretive canons. In spite of the difficulties faced to get acquainted with both foreign law content and its interpretation, domestic courts are nevertheless required to apply it as if they were the foreign court, as it happens, e.g., in the Italian legal system. Indeed, applying a foreign piece of legislation within the domestic legal system means to tackle conceptual misalignments, to deal with normative or interpretive gaps, and to solve clashes between canons of interpretation.

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This paper aims at developing a fresh logical framework, based on Defeasible Logic (DL), which properly addresses the research issue of reasoning about interpretive canons across different legal systems. The proposed framework extends the contribution of [6]. The layout of the paper is as follows: Section 2 describes the theoretical context of our framework, the specific problem we address, and offers an example; Section 3 presents a simplified version of one of the variants of DL of [6]; Section 4 proposes the new system extending the logic of Section 3 to handle the interpretation of legal provisions across legal systems.

2. Reasoning across Legal Systems: The Case of Private International Law

When applying and interpreting the foreign law in cross-border disputes, domestic courts are required to behave as if they were the foreign court and, at the same time, to protect the inner coherence of their own legal system: this raises interpretive doubts of many kinds. From an argumentation perspective, for instance, applying the same canon of interpretation to the same normative provision and obtaining opposite outcomes in different legal systems could correspond to incompatible arguments and, thus, requires for effective ways to cope with them in the national system. The purpose of this paper is to offer a formal method to model how domestic courts should reason about foreign law by handling conflicting interpretive arguments that are relevant to interpret the identified foreign law. Reasoning in the context of private international law and of interpretation of the foreign law means to consider also that:

- canons of interpretation refer to at least two legal systems, the domestic and the
 foreign one, but both systems may consist of normative sub-systems, and may be
 part of larger systems, e.g., EU system: assuming the existence of many legal systems LS_i,...,LS_z, from a set-theoretical perspective, each LS_i is either included
 in or including other systems (more and more often, both cases hold), with which
 it is in various relations;
- in the foreign legal system, priority may be given to interpretive arguments that are hardly or not used in the domestic one (e.g., the argument from precedent, common in the USA, is not so familiar to civil law courts);
- interpretive conditions may change from one system to the other;
- an ordering among all interpretations has to be made: this will depend on the legal system taken as main reference and on the goals and values it refers to.

Summing up, private international law states the principle that courts in a given system have to apply (and somehow import) the law from other systems. This requires sometimes to also use foreign interpretive standards and canons (see, for the Italian case, Article 15 of legislative act 218/1995). We will illustrate our method by elaborating the following real example.

Example 1 A woman, Cameroonian citizen, put forward an Italian court a paternity action with respect to her daughter, also Cameroonian citizen, underage at the time, on the basis of article 340 Cameroonian Civil Code and article 33 law no. 218/1995. She alleged that the child was born within a relationship she had with an Italian citizen, who initially took care of the girl and provided financial support for her, then refusing to recognise the child. The judicial question is thus the recognition of the legitimate pa-

ternity in favour of the girl, whose main legal consequence would be to burden the presumed father with the duty to give her due support in the form of maintenance and education. Art. 340, Civil Code of Cameroon, states that the judicial declaration of paternity outside marriage can only be done if the suit is filed within the two years that follow the cessation, either of the cohabitation, or of the participation of the alleged father in the support [entretien] and education of the child. At a first glance, it appears crucial to properly interpret the term entretien for it represents a condition for lawfully advancing the judicial request of paternity. Different interpretations of this term can be offered in Cameroon's law, and may fit differently within the Italian leal system.

3. Defeasible Logic for Reasoning about Canons

In [6] we proposed two variants of Defeasible Logic for reasoning about interpretive canons. Let us recall here the simplest one, in which we further simplify language and proof theory for space reasons. This framework handles the overall meaning of legal provisions intended as argumentative, abstract (i.e., non-analysed) logical units. The following basic components (among others) are introduced:

- a set of legal provisions n_1, n_2, \ldots to be interpreted;
- as set of literals a, b,..., corresponding to any sentences, which can be used to offer a sentential meaning to any provision n (a literal a is the meaning of provision n);
- a set of interpretative acts or interpretations I_1, I_2, \dots (literal interpretation, teleological interpretation, etc.) that return for any legal provision a sentential meaning for it;
- a set of rules encoding interpretive arguments (i.e., rules that state what interpretive act can be obtained under suitable conditions); these rules expresses modes of reasoning within any given legal system.

Definition 1 (Language) Let PROP = $\{a,b,...\}$ be a set of propositional atoms, NORM = $\{n_1,n_2,....\}$ a set of legal provisions, INTR = $\{\mathcal{I}_1,\mathcal{I}_2,....\}$ a set of interpretation functions (for example, denoting literal interpretation, etc.), MOD = $\{OBL, Adm\}$ a set of modal operators where OBL is the modality for denoting obligatory interpretations and interpretation outcomes and Adm for denoting the admissible ones.

- 1. The set $L = PROP \cup \{ \neg p \mid p \in PROP \}$ denotes the set of literals.
- 2. The complementary of a literal q is denoted by $\sim q$; if q is a positive literal p, then $\sim q$ is $\neg p$, and if q is a negative literal $\neg p$, then $\sim q$ is p.
- 3. The set ModLit = $\{\Box a, \neg \Box a | a \in L, \Box \in MOD\}$ denotes the set of modal literals.
- 4. The set $INT = \{I_i(n,a), \neg I_i(n,a) | \exists \mathscr{I}_i : NORM \mapsto L \in INTR : \mathscr{I}_i(n) = a\}$ denotes the set of interpretive acts and their negations: an expression $I_i(n,a)$, for instance, means that the interpretation I_i of provision I_i returns that the literal I_i is the case.
- 5. The complementary $\sim \phi$ of an interpretation ϕ is defined as follows: ²

$$\begin{array}{ll} \phi & \sim \phi \\ \hline \mathsf{I}_i(n,a) & \sim \mathsf{I}_i(n,a) \in \{\neg \mathsf{I}_i(n,a), \mathsf{I}_i(n,b), \mathsf{I}_j(n,c) | a \neq b, a \neq c\} \\ \neg \mathsf{I}_i(n,a) & \sim \neg \mathsf{I}_i(n,a) = \mathsf{I}_i(n,a). \end{array}$$

²This does not cover cases where, e.g., a is semantically included in b, which was considered in [6].

We will also use the notation $\pm l_i(n,a)$ to mean respectively $l_i(n,a)$ and $\sim l_i(n,a)$. Hence, $\sim \pm l_i(n,a)$ means $\mp l_i(n,a)$.

- 6. *The set of* qualified interpretations *is* ModIntr = $\{\Box \phi, \neg \Box \phi \mid \phi \in INT, \Box \in MOD\}$.
- 7. The complementary of a modal literal or qualified interpretation l is defined as follows ($\phi \in L \cup INT$):

$$\begin{tabular}{ll} \mathbf{l} & $\sim \mathbf{l}$ \\ \hline OBL\phi & $\sim \mathrm{OBL}\phi \in \{\neg \mathrm{OBL}\phi, \mathrm{OBL}\sim\phi, \mathrm{Adm}\sim\phi, \neg \mathrm{Adm}\phi\}$ \\ $\neg \mathrm{OBL}\phi$ & $\sim \neg \mathrm{OBL}\phi = \mathrm{OBL}\phi$ \\ $\mathrm{Adm}\phi$ & $\sim \neg \mathrm{Adm}\phi \in \{\neg \mathrm{Adm}\phi, \mathrm{OBL}\sim\phi\}$ \\ $\neg \mathrm{Adm}\phi$ & $\sim \neg \mathrm{Adm}\phi = \mathrm{Adm}\phi$ \\ \hline \end{tabular}$$

We use *defeasible rules* and *defeaters*³ [1] to reason about the interpretations of provisions; these rules contain literals, interpretations and qualified interpretations in their antecedent, and interpretations in their consequents.

Definition 2 (Interpretation Rules) *Let* Lab *be a set of arbitrary labels. The set* Rule *of interpretation rules contains rules is of the type*

$$r: A(r) \hookrightarrow^X C(r)$$

where (a) $r \in \text{Lab}$ is the name of the rule; (b) $A(r) = \{\phi_1, \dots, \phi_n\}$, the antecedent (or body) of the rule is such that each ϕ_i is either a literal $l \in L$, a modal literal $Y \in \text{ModLit}$, or a qualified interpretation $X \in \text{ModIntr}$; (c) $\hookrightarrow \in \{\Rightarrow^I, \rightsquigarrow^I\}$ denotes the type of the rule $(if \hookrightarrow is \Rightarrow^I, \text{ the rule is a defeasible rule, while } if \hookrightarrow is \rightsquigarrow^I, \text{ the rule is a defeater})$; (d) $C(r) = \psi$ is the consequent (or head) of the rule, where $\psi \in \text{INT}$ is an interpretation.

Example 2 Consider the following provision from the Italian penal code:

Art. 575. Homicide. Whoever causes the death of a man [uomo] is punishable by no less than 21 years in prison.

Consider now that paragraph 1 of art. 3 of the Italian constitution reads as follows:

Art. 3. All citizens have equal social status and are equal before the law, without regard to their sex, race, language, religion, political opinions, and personal or social conditions.

The interpretation I_s (interpretation from substantive reasons⁴) of art. 3 leads to c, which corresponds to the following sentence:

All persons have equal social status and are equal before the law, without regard to their sex, race, language, religion, political opinions, and personal or social conditions.

The following interpretation defeasible rule could be:

$$r_1$$
: $kill_adult, kill_female, OBLI_s(art.3, c) \Rightarrow^I I_c(art.575, b)$

where b = "Whoever causes the death of a person is punishable by no less than 21 years in prison". In other words, if art. 3 of the Italian constitution states formal equality before

³A defeater is a rule which prevents opposite conclusions without allowing to positively deriving anything.

⁴An argument from substantive reasons states that, if there is some goal that can be considered to be fundamentally important to the legal system, and if the goal can be promoted by one rather than another interpretation of the statutory provision, then the provision should be interpreted in accord with the goal.

the law without regard also to gender identity, then b is the best interpretation outcome of art. 575 of the penal code, with l_c denoting, for example, interpretation by coherence.

Given a set of rules R, R^I_{\Rightarrow} and R^I_{\Rightarrow} denote, respectively, the sets of all defeaters and defeasible rules in the set R; $R^I[\phi]$ is the set of rules with the interpretation ϕ in the head.

Definition 3 (Interpretation theory) An Interpretation Theory D is a structure (F,R,>), where F, the set of facts, is a set of literals, modal literals, and qualified interpretations, R is a set of interpretation rules and >, the superiority relation, is a binary relation over R.

An interpretation theory corresponds to a knowledge base providing us with interpretive arguments about legal provisions. The superiority relation is used for conflicting rules, i.e., rules whose conclusions are complementary.

Example 3 The following theory reconstructs a very simple interpretive toy scenario in the Italian legal system. Assume that a = "Whoever causes the death of a adult male person is punishable by no less than 21 years in prison" and that l_l stands for literal interpretation or from ordinary meaning.

```
F = \{kill\_adult, kill\_female, OBL \mid_{s} (art.3, c)\}
R = \{r_1 : kill\_adult, kill\_female, OBL \mid_{s} (art.3, c) \Rightarrow^{I} \mid_{c} (art.575, b),
r_2 :\Rightarrow^{I} \mid_{l} (art.575, a)\}
>= \{r_1 > r_2\}
```

Rule r_1 has been already introduced above. Rule r_2 establishes by default that art. 575 be literally interpreted as a. However, when r_1 is applicable, it prevails over r_2 .

Let us now present the proof theory.

Definition 4 (Proofs) A proof P in an interpretation theory D is a linear sequence $P(1) \dots P(n)$ of tagged expressions in the form of $+\partial_{\square}^{I}\phi$ and $-\partial_{\square}^{I}\phi$ (with $\phi \in INT$ and $\square \in MOD$), $+\partial_{\square}^{\square}l$ and $-\partial_{\square}^{\square}l$ (with $l \in L$ and $\square \in MOD$), where $P(1) \dots P(n)$ satisfy the proof conditions below⁵.

The tagged interpretation $+\partial_{\square}^{I}\phi$ means that the interpretation ϕ is *defeasibly provable* in D with modality \square , while $-\partial_{\square}^{I}\phi$ means that ϕ is *defeasibly refuted* with modality \square . The tagged literal $+\partial^{\square}l$ means that l is *defeasibly provable* in D with modality \square , while $-\partial^{\square}l$ means that l is *defeasibly refuted* with modality \square . The initial part of length n of a proof P is denoted by P(1..n).

Notice that an interpretation can be *admissible* or *obligatory*. For instance, I of n is admissible, if it is provable using a defeasible interpretation rule; it is obligatory, if this interpretation of n is the only one admissible [6]. Let us work on the conditions for deriving qualified interpretations.

Definition 5 A rule $r \in R^I$ is applicable in the proof P at P(n+1) iff for all $a_i \in A(r)$:

⁵For space reasons, we present only the positive conditions $(+\partial_{\square}^{I}\phi \text{ and } +\partial^{\square}l)$; see [6].

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2. if a_i = \neg \Box \psi then -\partial_{\Box}^I \psi \in P(1..n) with \Box \in MOD;
       3. if a_i = \Box l, l \in L, then +\partial^{\Box} l \in P(1..n);
       4. if a_i = \neg \Box l, l \in L, then -\partial^{\Box} l \in P(1..n);
       5. if a_i = l \in L then l \in F or \exists I_i \exists n : +\partial_{\square}^I I_i(n, l) \in P(1..n).
A rule r \in R^I is discarded iff \exists a_i \in A(r) such that
       1. if a_i = \Box \psi, \psi \in INT, then -\partial_{\Box}^I \psi \in P(1..n) with \Box \in MOD;
       2. if a_i = \neg \Box \psi, \psi \in INT, then +\partial_{\Box}^I \psi \in P(1..n) with \Box \in MOD;
       3. if a_i = \Box l, l \in L, then -\partial^{\Box} l \in P(1..n);
       4. if a_i = \neg \Box l, l \in L, then +\partial^{\Box} l \in P(1..n);
       5. if a_i = l \in L then l \notin F and \forall I_i \forall n : -\partial_{\square}^I I_i(n, l) \in P(1..n).
Let us define the proof conditions for +\partial_{Adm}.
+\partial_{\mathsf{Adm}}^{I}: If P(n+1) = +\partial_{\mathsf{Adm}}^{I}\phi then
(1) \mathsf{Adm}\phi \in F or \mathsf{OBL}\phi \in F, or
                                                                            +\partial^{\mathsf{Adm}}: If P(n+1) = +\partial^{\mathsf{Adm}}l then
      (2.1) \sim \mathsf{Adm} \phi \not\in F, and
                                                                            (1) Adml \in F or OBLl \in F, or
     (2.2) \exists r \in R^I_{\Rightarrow}[\phi]: r is applicable, and
                                                                            (2) \exists I_i \in INT, \exists n \in NORM:
     (2.3) \forall s \in R[\sim \phi], either
                                                                                  +\partial_{\mathsf{Adm}}^{I}\mathsf{I}_{i}(n,l)\in P(1..n).
              (2.3.1) s is discarded, or
              (2.3.2) \exists t \in R[\phi, k]:
                         t is applicable and t > s.
```

1. *if* $a_i = \Box \psi$, $\psi \in INT$, then $+\partial_{\Box}^I \psi \in P(1..n)$ with $\Box \in MOD$;

To show that an interpretation ϕ is defeasibly provable as an admissible interpretation, there are two ways: (1) Adm ϕ or OBL ϕ are a fact, or (2) Adm ϕ must be derived by the rules of the theory. In the second case, three conditions must hold: (2.1) any complementary of Adm ϕ does belong to the facts; (2.2) there must be a rule introducing the admissibility for ϕ which can apply; (2.3) every rule s for $\sim \phi$ is either discarded or defeated by a stronger rule for ϕ . The result l of an interpretation is admissible if this is a fact, or if there is an applicable rule proving an interpretation supporting l.

Proof conditions for $\pm \partial_{\text{OBL}}$ are much easier but we need to work on the fact that ϕ is an interpretation of any given provision n and we have to make explicit its structure. Indeed, that an interpretation I_i for the provision n is obligatory means that I_i is admissible and that no other (non-conflicting) interpretations for n is admissible.

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+\partial^{I}_{OBL}: \text{If } P(n+1) = +\partial^{I}_{OBL} \pm \mathbb{I}_{l}(n,a) \text{ then}
(1) \text{ OBL} \pm \mathbb{I}_{l}(n,a) \in F \text{ or } +\partial^{OBL}: \text{ If } P(n+1) = +\partial^{OBL} \text{ then}
(2.1) \sim \text{OBL} \pm \mathbb{I}_{l}(n,a) \notin F, \text{ and } (1) \text{ OBL} l \in F, \text{ or}
(2.2) +\partial^{I}_{Adm} \pm \mathbb{I}_{l}(n,a) \in P(1..n), \text{ and } (2.3) \forall s \in R[\pm \mathbb{I}_{m}(n,b)]: (2.1) \exists I_{i} \in \text{INT}: +\partial^{I}_{Adm} \mathbb{I}_{l}(n,a) \in P(1..n)
\mathbb{I}_{m}(n,b) \neq \sim \mathbb{I}_{l}(n,a), \text{ either}
(2.3.1) \text{ s is discarded, or } (2.3.2) \exists t \in R_{\sim} [\sim \pm \mathbb{I}_{m}(n,b),k]: \text{ if } x \neq a.
t \text{ is applicable and } t > s.
```

Example 4 Consider the theory in Example 3. Facts make rule r_1 applicable. Rule r_2 has an empty antecedent, so it is applicable, too. The theory assumes that r_1 is stronger than r_2 , thus we would obtain $+\partial^I_{\mathsf{Adm}}\mathsf{l}_c(art.575,b)$ (and so $-\partial^I_{\mathsf{Adm}}\mathsf{l}_l(art.575,a)$). Trivially, we also get $+\partial^I_{\mathsf{OBL}}\mathsf{l}_c(art.3,c)$, and $+\partial^I_{\mathsf{OBL}}\mathsf{l}_c(art.575,b)$ is also the case because it is the

only admissible interpretation of art. 575. We also have $+\partial^{\square}c$ and $+\partial^{\square}b$, where $\square \in \{Adm, OBL\}$.

4. Defeasible Logic for Reasoning about Canons across Legal Systems

Let us now develop a fresh logical framework which properly addresses the research issues outlined in Section 2 and which extends the machinery of Section 3. In this perspective, reasoning about interpretive canons across legal systems requires

- to specify to which legal systems legal provisions belong and in which legal system canons are applied;
- the introduction of meta-rules to reason about interpretation rules;
- that such meta-rules support the derivation of interpretation rules; in other words, the head of meta-rules are interpretation rules, while the antecedents may include any conditions.

Consider, for instance, the following abstract rule:

$$r: (\mathsf{OBLI}^{\mathsf{LS}_i}_{l}(n_1^{\mathsf{LS}_i}, p), a \Rightarrow_C (s: \mathsf{OBLI}^{\mathsf{LS}_j}_{s}(n_2^{\mathsf{LS}_i}, d) \Rightarrow^I \mathsf{I}^{\mathsf{LS}_j}_c(n_1^{\mathsf{LS}_i}, p)))$$

Meta-rule r states that, if (a) it is obligatory the teleological interpretation (l_t) in legal system LS_i of legal provision n_1 belonging to that system and returning p, and (b) a holds, then the interpretive canon to be applied in legal system LS_j for n_1 is the interpretation by coherence, which returns p as well, but which is conditioned in LS_j by the fact that n_2 in this last system is interpreted by substantive reasons as d. In other words, r allows for importing interpretive results from LS_i into LS_j in regard to the legal provision n_1 in LS_i which can be applied in LS_i .

Definition 1 requires a few adjustments: Definition 6 only specifies the aspects that are changed in the language.

Definition 6 (Language 2) Let $LS = \{LS_1, ..., LS_m\}$ be the set of legal systems and $\bigcup_{1 \le i \le m} NORM_{LS_i} = \{n_1^{LS_i}, n_2^{LS_i}...\}$ the set of legal provisions for each legal system.

- 1. The set INT = $\{I_i^{LS_k}(n^{LS_j},a), \neg I_i^{LS_k}(n^{LS_j},a) | \exists \mathscr{I}_i : NORM_{LS_j} \mapsto L \in INTR : \mathscr{I}_i(n^{LS_j}) = a\}$ denotes the set of interpretive acts and their negations.
- 2. The complementary of an interpretation ϕ is denoted by $\sim \phi$ and is defined as follows (where, possibly, j = k):

$$\begin{array}{ll} \phi & \sim \phi \\ \overline{\mathsf{I}_{i}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, a)} & \sim & \mathsf{I}_{i}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, a) \in \{\neg \mathsf{I}_{i}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, a), \mathsf{I}_{i}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, b), \mathsf{I}_{s}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, c) \\ & & \mathsf{I}_{i}^{\mathrm{LS}_{m}}(n^{\mathrm{LS}_{k}}, b), \mathsf{I}_{s}^{\mathrm{LS}_{m}}(n^{\mathrm{LS}_{k}}, c) | a \neq b, a \neq c \} \\ \neg \mathsf{I}_{i}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, a) & \sim \neg \mathsf{I}_{i}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, a) = \mathsf{I}_{i}^{\mathrm{LS}_{j}}(n^{\mathrm{LS}_{k}}, a). \end{array}$$

Definition 7 (Rules) Let $Rule_{atom}^{I}$ be the set of rules of Definition 2^{6} . The set $Rule^{I}$ of rules is defined as

$$\begin{aligned} \text{Rule}^{I} &= \text{Rule}^{I}_{atom} \cup \\ &\{\neg(r:\phi_{1},\ldots,\phi_{n} \hookrightarrow \psi) | (r:\phi_{1},\ldots,\phi_{n} \hookrightarrow \psi) \in \text{Rule}^{I}_{atom}, \hookrightarrow \in \{\Rightarrow^{I}, \leadsto^{I}\} \} \end{aligned}$$

⁶Atomic rules do not substantially change, except for the notation for interpretations in Definition 6.

By convention, if r is a rule, $\sim r$ denotes the complementary rule (if $r: \phi_1, \ldots, \phi_n \hookrightarrow \psi$ then $\sim r$ is $\neg (r: \phi_1, \ldots, \phi_n \hookrightarrow \psi)$; and if $r: \neg (r: \phi_1, \ldots, \phi_n \hookrightarrow \psi)$ then $\sim r$ is $r: \phi_1, \ldots, \phi_n \hookrightarrow \psi$).

Definition 8 (Meta-rules) Let Lab be a set of labels. $Rule^C = Rule^C_d \cup Rule^C_{\sim}$ is the set of meta-rules such that

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Rule<sub>d</sub><sup>C</sup> = {r : \phi_1, ..., \phi_n \Rightarrow_C \psi | r \in \text{Lab}, A(r) \subseteq L \cup \text{ModLit} \cup \text{ModIntr}, \psi \in \text{Rule}^I}

Rule<sub>c</sub> = {r : \phi_1, ..., \phi_n \Rightarrow_C \psi | r \in \text{Lab}, A(r) \subseteq L \cup \text{ModLit} \cup \text{ModIntr}, \psi \in \text{Rule}^I}
```

Definition 9 (Interpretation theory 2) An Interpretation Theory D is a structure $(F, R^I, R^C, >)$, where F, the set of facts, is a set of literals, modal literals, and qualified interpretations, R^I is a set of interpretation rules, R^C is a set of meta-rules, and >, the superiority relation, is a binary relation over R such that $> \subseteq (R^X \times R^Y) \cup (R^C \times R^C)$, where $R^X = \{C(r) | r \in R^C[s], s \in \text{Rule}_{atom}\}$.

In the rest of the paper, to make our presentation more readable, we will omit defeasible arrows for defeasible nested-rules r^{\Rightarrow_C} with the empty body. That is, a defeasible nested rule $\Rightarrow_C (p \Rightarrow^I q)$ will be just represented as $p \Rightarrow^I q$.

Before providing proof procedures to derive rules, let us

- introduce specific proof tags for this purpose. Remember that \hookrightarrow denotes either \Rightarrow or \rightsquigarrow to simplify our presentation. $\pm \partial_C r^{\hookrightarrow}$ means that rule $r \in R^I$ is (is not) defeasibly provable using meta-rules;
- highlight that applicability conditions for meta-rules are exactly as in Definition 5, because the body of meta-rules do not differ from those of interpretation rules.

Defeasible derivations of non-nested rules are based on the following procedures. The general rationale behind the following proof conditions recalls what we discussed in regard to the provability of literals. The proof of a rule runs as usual in three phases. We have to find an argument in favour of the rule we want to prove. Second, all counterarguments are examined (rules for the opposite conclusion). Third, all the counterarguments have to be rebutted (the counter-argument is weaker than the pro-argument) or undercut (some of the premises of the counter-argument are not provable). In the case of the derivation of rules using meta-rules, what we have to do is to see when two rules are in conflict: thus, conflict-detection is based on the notion of incompatibility.

Definition 10 Two non-nested rules r and r' are incompatible iff r' is an incompatible atomic rule of r or r' is an incompatible negative rule of r.

- 1. r' is an incompatible atomic rule of r iff r and r' are atomic rules and A(r) = A(r'), $C(r) = \sim C(r')$;
- 2. r' is an incompatible negative rule of r iff either r or r' is not an atomic rule and A(r) = A(r'), C(r) = C(r').

The set of all possible incompatible rules for r^{\hookrightarrow} is denoted by $IC(r^{\hookrightarrow}) = \{r'|r' \text{ is incompatible with } r^{\hookrightarrow}\}.$

Example 5 Case 1: $r: a \Rightarrow^I b$ and $a \Rightarrow^I \neg b$ are incompatible. Case 2: $r: a \Rightarrow^I b$ and $\neg (r': a \Rightarrow^I b)$ are incompatible.

Let us state the proof procedures for the defeasible derivation of atomic rules in an interpretation theory $D = (F, R^I, R^C, >)$.

```
+\partial_C^{\hookrightarrow}: If P(n+1) = +\partial_C r^{\hookrightarrow}, then 
(1) r^{\hookrightarrow} \in R^I, or 
(2) (2.1) \forall r'' \in IC(r^{\hookrightarrow}), \forall r' \in R_s^C[r''], r' is discarded and 
(2.2) \exists t \in R_{\Rightarrow}^C[r^{\hookrightarrow}]: t is applicable, and 
(2.3) \forall r'' \in IC(r^{\hookrightarrow}), \forall s \in R^C[r''], either 
(2.3.1) s is discarded, or 
(2.3.2) \exists z \in R_{\Rightarrow}^C[r''']: r''' \in IC(C(s)), z is applicable and z > s.
```

The provability condition of $-\partial_C^{\hookrightarrow_X}$ is omitted for space reasons. Suppose we want to derive $r: \mathrm{OBL}_i^{LS_1}(n_1^{\mathrm{LS}_1},a) \Rightarrow^I l_j^{LS_2}(n_2^{\mathrm{LS}_2},b)$. We have the following options. Condition (1): r is in R^I ; or, Condition (2): We use a defeasible meta-rule to derive r. This must exclude, as a precondition, that any rule, which is incompatible with r, is supported: (condition 2.1). That is, rules such as

$$r': \neg(\mathsf{OBLI}_i^{LS_1}(n_1^{\mathsf{LS}_1}, a) \Rightarrow^I \mathsf{I}_j^{LS_2}(n_2^{\mathsf{LS}_2}, b)) \qquad r'': \mathsf{OBLI}_i^{LS_1}(n_1^{\mathsf{LS}_1}, a) \Rightarrow^I \mathsf{I}_j^{LS_2}(n_2^{\mathsf{LS}_2}, d) \\ r''': \mathsf{OBLI}_i^{LS_1}(n_1^{\mathsf{LS}_1}, a) \Rightarrow^I \mathsf{I}_k^{LS_2}(n_2^{\mathsf{LS}_2}, d)$$

should not be supported.

With this done, condition (2.2) states that there should exist a meta-rule such as

$$t: d \Rightarrow_C (r: \mathrm{OBLI}_i^{LS_1}(n_1^{\mathrm{LS}_1}, a) \Rightarrow^I \mathsf{I}_i^{LS_2}(n_2^{\mathrm{LS}_2}, b))$$

such that t is applicable. But this fact must exclude that any meta-rule s supporting, e.g., r', r'', r''' above is applicable. Alternatively, if s is applicable, we have to verify that there exists a meta-rule z that proves r, such as

$$z: e \Rightarrow_C (r: \mathrm{OBLl}_i^{LS_1}(n_1^{\mathrm{LS}_1}, a) \Rightarrow^I \mathsf{l}_j^{LS_2}(n_2^{\mathrm{LS}_2}, b))$$

such that z is applicable and is stronger that s (see condition 2.3.2).

Given the above proof conditions for deriving non-nested rules, we must also slightly adjust proof conditions for deriving interpretations of Section 3. The only, but substantial, difference is that here, each time a rule r is used and applied, we are required to check that r is provable. Analogously, to discard incompatible rules (when we consider all possible attacks to the rule we want to use), an additional option is that these incompatible rules are not provable in the theory.

```
+\partial_{\mathsf{Adm}}^I: If P(n+1) = +\partial_{\mathsf{Adm}}^I \phi then

(1) \mathsf{Adm} \phi \in F or \mathsf{OBL} \phi \in F, or

(2.1) \sim \mathsf{Adm} \phi \notin F, and

(2.2) \exists r \in R_{\Rightarrow}^I [\phi] : +\partial_C r, r is applicable, and

(2.3) \forall s \in R[\sim \phi], either

(2.3.1) -\partial_C s, or

(2.3.2) s is discarded, or

(2.3.3) \exists t \in R[\phi, k] : t is applicable and t > s.
```

Example 6 Let us freely elaborate the case described in Example 1. Suppose that the domestic literal interpretation of art. 340, Civil Code of Cameroon, returns p, saying that the judicial declaration of paternity outside marriage refers to a rather minimal idea

of entretien, which can even consist in some discontinuous support. With children under 14, teleological interpretation in Cameroon's system, instead, would interpret entretien as regular support (q), but literal interpretation is institutionally preferred. In Italian private law (art. 147, Italian Civil Code), instead, mantenimento, which corresponds to entretien, means regular support (q), a reading which depends by coherence on art. 30 of the Italian constitution⁷. One can argue we should align to the case considered in Cameroon's law (under 14) but resorting to an interpretation by coherence that takes art. 30 of the Italian constitution into account.

$$F = \{OBL_{l}^{LS_{ii}}(art.30^{LS_{ii}}, a)\}$$

$$R^{I} = \{r_{3} :\Rightarrow^{I} |_{l}^{LS_{cam}}(art.340^{LS_{cam}}, p), r_{4} : children_under14 \Rightarrow^{I} |_{l}^{LS_{cam}}(art.340^{LS_{cam}}, q)$$

$$r_{5} : OBL_{l}^{LS_{ii}}(art.30^{LS_{ii}}, a) \Rightarrow^{I} |_{c}^{LS_{ii}}(art.147^{LS_{ii}}, q)\}$$

$$R^{C} = \{r_{6} : OBL_{l}^{LS_{ii}}(art.30^{LS_{ii}}, a) \Rightarrow^{C} (r_{7} : children_under14 \Rightarrow^{I} |_{c}^{LS_{ii}}(art.340^{LS_{cam}}, q)\}$$

$$>= \{r_{3} > r_{4}, r_{7} > r_{3}\}.$$

 r_7 is applicable and r_7 is provable. This determines a conflict with r_3 , but r_7 is stronger than r_3 .

5. Summary

This paper extended [6]'s contribution to explore the feasibility of formal methods for arguing with canons of interpretation coming from different legal systems, once they have accessed domestic legal systems in private international law disputes. In so doing, we aimed at defining a logic-based conceptual framework that could encompass the occurring interpretive interactions, without neglecting the existing, broader normative background each legal system is nowadays part of.

References

- [1] G. Antoniou, D. Billington, G. Governatori, and M. Maher. Representation results for defeasible logic. *ACM Trans. Comput. Log.*, 2(2):255–287, 2001.
- [2] P. M. Dung and G. Sartor. The modular logic of private international law. Artif. Intell. Law, 19(2-3):233–261, 2011.
- [3] J. Hage. Logical tools for legal pluralism. Maastricht European Private Law Institute Working Paper 7, 2015.
- [4] H. Prakken and G. Sartor. A dialectical model of assessing conflicting arguments in legal reasoning. Artificial Intelligence and Law, 4(3):331–368, 1996.
- [5] H. Prakken and G. Sartor. Law and logic: A review from an argumentation perspective. Artif. Intell., 227:214–245, 2015.
- [6] A. Rotolo, G. Governatori, and G. Sartor. Deontic defeasible reasoning in legal interpretation: two options for modelling interpretive arguments. In *Proceedings of the 15th International Conference on Artificial Intelligence and Law, ICAIL 2015, San Diego, CA, USA, June 8-12, 2015*, pages 99–108, 2015.
- [7] G. Sartor. Legal Reasoning: A Cognitive Approach to the Law. Springer, 2005.
- [8] D. Walton, G. Sartor, and F. Macagno. An argumentation framework for contested cases of statutory interpretation. Artif. Intell. Law, 24(1):51–91, 2016.

⁷"It is the duty and right of parents to support, raise and educate their children, even if born out of wedlock. [...] The law ensures such legal and social protection measures as are compatible with the rights of the members of the legitimate family to any children born out of wedlock. [...]".