



Person and Disability: Legal Fiction and Living Independently

Paolo Heritier¹

Accepted: 18 March 2021
© The Author(s) 2021

Abstract

Without extending the historical analysis, this article analyzes the relationship between the legal concept of person with regard to the notion of living independently. The concept is normatively established in Article 19 of the CRPD and is presented as a legal fiction. The legal technique of *fictio iuris* is the premise for analyzing contemporary problems, for example, the attribution of responsibilities to non-human personalities, such as robots. The article, however, develops the problem of attributing rights to persons with disabilities. The contraposition of robots and disabled people, understood as opposing visions of anthropological and human models, is part of the philosophical dispute between humanism and post- or transhumanism. The conception of man appears different if created in the image and likeness of God, or as the fruit of evolution from primates, or as a transhumanist entity that can be replaced by the robot. The latter vision is rooted in the mechanization of the mind triggered by cybernetics and cognitive sciences and referable to problems of justice theory and political philosophy concerning the inclusion in society of disabled people. In this article I will limit myself to analyzing, against the background of this complex problem, the link between person, legal fiction and the right to disability starting from the criticism addressed by Nussbaum to Rawls based on the convention and following the methodology developed by Marchisio and Curto in order to clarify the legal connection between thirdness, disability, and person. However, I go one step further by including the issue of disability as justice within the evolution of the notion of the legal person, through the inclusion of *fictio iuris* and rhetorical methodology in positive law, as a criterion for the interpretation of art. 19 CRPD.

Keywords Fictio iuris · Legal person · Independently living · Rhetoric methodology · Thirdness · Severe disability

✉ Paolo Heritier
paolo.heritier@uniupo.it

¹ DIGSPES, University of Eastern Piedmont, Alessandria, Italy

1 Introduction

Without extending the historical analysis, this article analyzes the relationship between the legal concept of person with to the notion of independently living. The concept is normatively established in Article 19 of the 2006 UN Convention on the Rights of Person with Disabilities (CRPD) and is presented as a legal fiction. The legal technique of *fictio iuris* is the premise for analyzing contemporary problems, for example, the attribution of responsibilities to non-human personalities, such as robots. The article, however, develops the problem of attributing rights to persons with disabilities. The contraposition of robots and disabled people, understood as opposing visions of anthropological and human models, is part of the philosophical dispute between humanism and post- or transhumanism. The conception of man appears different if created in the image and likeness of God [27], or as the fruit of evolution from primates [50], or as a transhumanist entity that can be replaced by the robot [11, 30, 31]. The latter vision is rooted in the mechanization of the mind triggered by cybernetics and cognitive sciences and referable to problems of justice theory and political philosophy concerning the inclusion in the society of disabled people [12, 13, 60]. In the article I will limit myself to analyzing, against the background of this complex problem, the link between person, legal fiction and the right to disability starting from the criticism addressed by Nussbaum to Rawls based on the convention and following the methodology developed by Marchisio and Curto [14, 41, 71] in order to clarify the legal connection between thirdness, disability, and person.

However, I go one step further by including the issue of disability as justice within the evolution of the notion of the legal person, through the inclusion of *fictio iuris* and rhetorical methodology in positive law, as a criterion for the interpretation of art. 19 CRPD.

2 Legal Fiction and Legal Entity: A Brief Summary

Roman law did not develop a concept of the legal person, as I understand it today. The natural person is in fact the center of the legal experience, as the Digest specifies.¹ While the distinction between person and collective association or collectivity of goods remains clear, it is nevertheless a distinction that will serve to elaborate on the concept later.²

The origins of the notion of legal person go back to the Roman notion of *fictio iuris*, as later developed in medieval canon law. As Thomas recently pointed out, legal fiction [*fictio iuris* or *legis*] is a procedure belonging to juridical pragmatics which consists in the first place in disguising facts, in declaring them other than what they are, and in drawing from this same adulteration the juridical consequences that would be referred to the truth which is pretended [70].

¹ “Totum ius hominum causa constitutum est”, D.1.5.2..

² Ulpianus, [67] 4.2.9.1, 12.

The *factio iuris* is a precise technique dating back to Roman law and subsequently elaborated by Medieval Canon law, which p. Positivist juridical modernity has discarded the *factio iuris*, which is proposed again today [9, 24, 70]. This short historical reflection is only intended to show the connection between the notion of legal person and the use of the *factio iuris* technique. It raises, however, a current problem for legal theory: whether legal fiction represents exclusively a technical means that the law is free to get rid of through an effort of purification or whether it is constitutively inherent in the logic of juridical experience [71, p. 5] and in particular in the concept of the person [53].

This historical evolution proposes a possible re-evaluation of the *factio* technique in the legal sphere, following the crisis of legal positivism, the hierarchical model of the legal system [23, p.18] and the appearance of new profiles of non-human subjectivity [11, 27, 31]. In the article I intend to analyze how the issue also concerns the notion of independently living for the disabled person, in particular in the light of Art. 19 CRPD on the theme of justice and social bond [52].

The historical origin of the *factio* technique in Roman law is sacrificial: with the emergence of the magical-sacral ambit of *ius pontificium* there was a gradual replacement of human sacrifices with animal sacrifices, and then with fictitious sacrifices of objects of lesser value, where instead of the real animal a clay or wax simulacrum was sacrificed. In this symbolic substitution would reside the religious foundation of *factio*, which gave rise to a subsequent “secular” use of this technique by the legislator, as well as by the Roman praetor. The topic can be developed with the theme of the gift [1, 22, 46] and the sacred origins of law.

There are numerous and well-known examples of the use of *factio* in Roman law such as the *factio legis Corneliae* [about 81 BC]. The citizen who died in captivity [*in hostium potestate*] was considered to have died free: because if he had fallen into the hands of the enemy, he would otherwise have become, under Roman law, his property, losing *libertas and civitas* [freedom and citizenship]. The *lex Cornelia* reversed this perspective, in order to safeguard the testamentary succession of the prisoner, through the fiction of the death of the prisoner as a free citizen in Rome. Techniques of this kind, therefore, provide an example of how the “legal reality” can be built through the negation of “historical reality”, for the realization of a specific “goal” of an equitable nature [72, p. 21].

Important figures in this evolution were also the *formulae ficticiae* of the Roman praetor and the figure of *hereditas iacens*. [24, 53].

Roman law never elaborated a real conceptual and theoretical definition of *factio*, nevertheless, this concept was relevant for the subsequent legal construction of a fictional reality having effects on natural reality.

It was, in fact, Medieval and Canon law that developed the notion of the legal person, through a tradition rooted in the notion of St. Paul of the Church as *corpus mysticum* [33] and as an antechamber of the modern notion of State [4, 21, 38, 39, 50, 58].

Medieval law, in fact, substantially changed the overall picture in which the *factio* was inserted. The rebirth of the Justinian law of *Corpus Iuris Civilis* and the affirmation of Roman law as the law in force became the salient fact of a period which, with ups and downs, ran from the beginning of the eleventh century until the

“age of codifications”, on the threshold of the nineteenth century. The use of the *fic-tio* underwent, with the Glossator of Irnerius’ Bologna School, a profound change. From the Romans’ simple casuistic use, an attempt to systematize its essence began, arguing, distinguishing, deducing. The *fic-tio* was placed theoretically in a broader context, already steeped in ontological concerns, to the point of arriving at a theory in which the fictitious or intellectual persons developed by the jurists could not easily be distinguished from the universals that the nominalists used to call *fictiones intellectuales*.

Although, in fact, the nature of *universitas* as distinct from its constituent parts still eluded the Glossators, it was the Decretists, following the work of Gratian and the process of reorganization of the Church by Gregory VII, who began to consider the Church as a bride, reasoning “as if” it were in fact a bride: therefore, applying to it rules relating to physical persons [72, p. 89].

The theoretical recourse to *fic-tio* can be observed in the Glossators in the idea of the thing judged as a legal fiction of truth (taking up the Ulpian’s well-known adage “*res iudicata pro veritate accipitur*”). However, it is in the formation of the concept of the person that the use of *fic-tio* opens explicitly for the first time to new, unpredictable developments, up to the formalization of Sinibaldo de’ Fieschi (Pope Innocent IV) and his theory of the ‘*persona ficta*’, aimed at signifying how the adjective has a value that emphasizes the artifice, but in a positive sense, the creative dimension of the construction of a world through abstract figurations incidental to reality [21, p. 221].

I hypothesize that the concept of disabled person living independently can be interpreted in this way, as a notion in part fictional, but referable to a possible non-exclusive world of the disabled person, configuring a ‘new right of the person’, based on the inclusion of disability in the theory of law starting from the theories of the social bond of Sequeri [69], Nussbaum [51] and Heritier [26].

Without any pretension of historical continuity, the problem of finality is, in fact, not absent in modern legal theory, which is divided into Savigny’s [64] and Puchta’s [59] fictionalist theories and von Gierke’s [19] realistic theories, but at the same time certifies a mentality opposite to the medieval one [14, p. 26, 64, p. 205]. If for the Medieval, the fiction derived from the recognition of an already existing de facto situation, for the modernity, the State has the task of introducing, through fiction, new collective legal categories [54, 14, pp. 26, 27]. Kelsen’s normativism, then, in juxtaposing legal science and natural science, considers the norm as the mere center of attribution of rights and duties to subjects based on rules laid down by the legal system [34]. Apparently, Kelsen overcomes the finality of positive law by basing it on logic and science; in reality, he reopens the debate on the fictional foundation of law [24, 25].

3 Disability as a Matter of Justice After Rawls and Nussbaum

Following the publication of Martha Nussbaum’s book on the subject [51] and the almost contemporary drafting of the 2006 CRPD, the contemporary debate has perceived disability as a central issue of reflection on justice. How administrations,

businesses, judges, states, all citizens consider and treat disabled people poses fundamental problems of justice. In Italy, beyond the declarations of principle, in the courts, hospitals, schools, businesses, homes, and health centers, there are still many prejudices and conceptions that are irreconcilable with the theoretical approach of the CRPD.

On the one hand, disability emerges as a matter of theoretical interest for the philosophy of justice; on the other hand, it can become a useful tool to reflect on the notion of legal person, as it emerges from the history of the concept. Disability cannot be considered as a fixed and definable reality once and for all, but must be considered a constantly changing phenomenon within the system from which the definition of the notion of person emerges. Even the notion of legal person is, in fact, the result of a complex and always evolving historical evolution.

In Nussbaum's text, in fact, the problem of disability is linked to a fundamental critique of the most relevant contribution to the problem of justice in the last fifty years: the Rawlsian model of the 'veil of ignorance' as an attempt to establish a theory of justice as equity. Her words sound clear: "... Rawls omits from the situation of basic political choice the more extreme forms of need and dependency that human beings may experience, both physical and mental, both permanent and temporary. This is no oversight: it is deliberate design. As I shall see, Rawls recognizes the problem posed by the inclusion of citizens with unusual impairments, but he argues that this problem should be solved at a later stage, after basic political principles are already chosen" [51, p. 108].

The reason Rawls does not include the disabled person at the moment of the fiction of the founding social contract is, fundamentally, the adoption of a still traditional conception of contractualism. According to Rawls, the reasons for departing from the state of nature are to reap benefit from cooperation; a very traditional economic vision defines the benefits [51, p. 118]. By including the disabled, in his model, he would lose "a simple and straightforward way of measuring who is the least well-off in society" [51, p. 113]. This loss has severe consequences on the profile of mutual benefit in cases of rare or severe disability situations, where the measures taken cannot be defended with economic but moral arguments. Nussbaum, then, relying on Sen's economic doctrine, develops a list of the capacity that presupposes the adoption of a moral and not an economic argument. A more comprehensive view of the human underlies her position, capable of allowing some form of measurement useful for the adoption of public policies. At the same time, Nussbaum is perfectly aware of the temporariness and modifiability of this list of capabilities, not to be confused with a sort of new natural right [if conceived as fixed and stable]. She explicitly states about the capacity threshold of each citizen, "The approach as set forth in my philosophical account specifies this threshold only in a general and approximate way, both because I hold that the threshold level may shift in subtle ways over time, and because I hold that the appropriate threshold level of a capability may, at the margins, be differently set by different societies in accordance with their histories and circumstances" [51, p. 180].

The thesis I intend to argue is that these theoretical positions also reveal that the evolution of the concept of a legal person has never really taken the issue of disability into account. I do not intend, however, to develop in this article an analysis

of the other contexts in which Nussbaum addresses the notion of person, in particular, gender studies, but also immigration and the frontier between what is an animal and what is a man. I only indicate the link between disability, justice, and notion of person.

The theme of art. 19 CRPD is linked to this approach on disability, which analyses the theme of living independently as a frontier not only for justice, but also for the concept of human beings. Without being able to analyze here the perspective of the capabilities, I could advance some embryonic considerations. For Nussbaum, such an approach is a kind of legal approach, one of the human rights, a political doctrine concerning a humanistic way of conceiving fundamental rights and not only a moral theory based on values [51, p. 159]. It takes into account the need for an individualized care based on an Aristotelian, and not Kantian, conception of dignity, which recognizes the evolution over a lifetime of dependence on others [first as children, and differently in the third age], requiring, however, some list of abilities although modifiable [‘tentative and open’] [51, p. 166].

4 A Methodology for Independently Living

In the Italian context, the primary methodology concerning the implementation of Article 19 of the UN Convention³ has been developed by the ‘Centro DIVI’ [in Italian *Diritti e vita indipendente*, English translation *Rights and Independently Living*] Centre. The researchers Cecilia Marchisio and Natascia Curto, have developed a methodology to implement ‘living independently’ (Art. 19 CRPD). In Italy, the theme of inclusion in society and the closure of treatment centers has been studied starting from Basaglia’s work, the psychiatrist creator of the theoretical and legislative process that led to the closure of asylums [16, 66]. Marchisio and Curto developed the methodology of Open Dialogues and Anticipation Dialogues by Jakko Seikkula [65, 66]. It consists of the construction of a transformative dialogue situated within a social network, based on the intuitions of Bakhtin and Bateson [41, p. 56, 5, 6, 18]. In the elaboration of the shared meaning built through dialogue, “the meaning does not pre-exist, but is generated by the succession of the interventions of the different actors in the dialogue” [41, p. 57]. According to Marchisio, “the main consequence of this way of understanding the discourse in the psychosocial field is a different distribution of power between operator and person who comes into contact

³ Article 19 [Living Independently and being included in the community]. States Parties to the present Convention recognize the equal right of all persons with disabilities to live in the community, with choices equal to others, and shall take effective and appropriate measures to facilitate full enjoyment by persons with disabilities of this right and their full inclusion and participation in the community, including by ensuring that: [a] Persons with disabilities have the opportunity to choose their place of residence and where and with whom they live on an equal basis with others and are not obliged to live in a particular living arrangement; [b] Persons with disabilities have access to a range of in-home, residential and other community support services, including personal assistance necessary to support living and inclusion in the community, and to prevent isolation or segregation from the community; [c] Community services and facilities for the general population are available on an equal basis to persons with disabilities and are responsive to their needs.

with the [public] service to be supported” [41, p. 58]. In this perspective, it is crucial to consider the point of view of the disabled person: “everyone is free to take the difficulties they encounter in the project, or, indeed, their concerns about obstacles and risks of the path” [41, p. 83]. A simple example can make the point clear: if a report states that: ‘F. does not want to go to the internship anymore; his mother says that it is because he is tired this week’ I am presenting two opinions putting them on different levels. The operator’s opinion [i.e., that F. does not want to go any more] is presented as fact, while the mother’s opinion [i.e., that F. is tired] is inside the frame of the opinion. It would be correct—and more dialogical—to present both sentences as opinions: “According to the operator F. says that he does not want to go to the internship anymore, according to his mother, he is tired” [41, p. 57].

The author clarifies not by chance how the point is also taken from Barthes’ rhetorical perspective [41, p.57]. The Bakhtinian presence of polyphony of voices in dialogue and the construction of shared meaning leads to the formation of a polyphonic society of people and personality. The rhetoric methodology is relevant also for disability law’s approach.

This rhetorical reference to the construction of discourse represents the proper method for the application of legal norms, with particular reference to the right to disability. It is a useful way to go beyond the traditional way of interpreting disability legislation, which refers to a theory of legal-positivistic interpretation.

While the particularity of the text of the CRPD is the ‘dynamic’ character of the notion of disability, the rhetorical method seems useful to grasp this evolutionary and contingent trait, that is to say, linked to the specific case. The traditional positivist interpretation of the norms is, instead, aimed at reasoning in general and abstract terms. This paper will develop the two methodological aspects, starting with disability in this paragraph, and, in the next paragraph, briefly outlining the rhetorical methodology.

Disability is a mobile and dynamic situation, susceptible to evolution and always referred to the relational and social context in which it is embedded. The CRPD preamble recognizes how “disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others”. Article 1 reiterates the concept, specifying how the purpose of the Convention is “to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity”. In the second paragraph, it states, referring again to the social and relational dimension of barriers “persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others” [8, 15].

The methodological value of this definition indicates, for the theory of law, that the convention refers to an evolving historical definition, in which the barrier preventing the inclusion of the disabled person in society is not static, but to be understood dynamically and according to a relentless historical evolution. While the point appears to be adequately developed by the approach of living independently, the implications for legal thought seem to me still unclear [3].

The relevant legal conception of person, according to the complex legal process of recognition of the right to live independently in Italian law, shows how this right and, in general, the implementation of the rights recognized in the CRPD implies a shift in the interpretation and implementation of legal rules and the notion of legal person.

I hypothesize that the notion of living independently is the topic where the process of re-articulation of inclusion, and therefore also of the legal notion of person, can find its propulsive center, within the opposition between two models of the human being today in opposition: the man-machine and the man-disabled. In other articles I have indicated how the fictional representation of the concept of person is to be understood in a historical development that moves from the definition of the human in relation to the representation of a specular Other, first and until modernity in relation to the divine; then to the animal following the emergence of the evolutionary paradigm; finally, at the time of the emergence of posthuman and transhumanist perspectives, in relation to the image of the robot [27, 31]. These two conceptions also represent two different competing evolutions of the legal notion of person. The first one, however, does not seem to take into account the demands of social justice highlighted by Nussbaum's criticism of Rawls, denying the vulnerability inherent in the human condition, which the second one instead shows with evidence. This point does not mean that every man is disabled but that the perspective of aging that everyone faces brings them closer to the condition of the person with disabilities, distancing them from the model of technological immortality promised by the religious use of new cyborg technologies [26]. The link between disability and the normal condition is part of the *fictio juris* elaboration technique [9]: we are all 'as if' we were disabled to build an inclusive society. This condition of 'as if' is relevant for both the concept of living independently and of the legal person. The technique of elaborating on the legal notion of person entails the inclusion of the disabled person in the founding social contract [52, 60].

Seikkula and Marchisio and Curto's methodology, in the simple example mentioned above, in fact, helps to clarify how the meaning emerges from the dialogue of all participants [the Bakhtinian polyphony of voices]. This approach seems to be entirely consistent with the rhetorical methodology applied to the context of the trial and, more generally, the whole process of disability law enforcement. The CRPD itself, first of all, in recognizing the situated and relational character of the definition of disability and inclusion, then in considering barriers as due to non-inclusive social practices, suggests, in my opinion, the adoption of a rhetorical methodology in the analysis of cases. The rhetorical methodology is a particular form of dialogue between the parties in the trial. It is a path of enforcement of rules concerning people with disabilities, the meaning of which must emerge from dialogic practices involving those who apply them and those who are affected by their application. In other words, the interest of the configuration of the disability law as a unitary discipline appears not only to be directed to the application of the CPRD but also to the very theory of the interpretation of the law: the change in the view disability is viewed, in the reconfiguration of the legal concept of person, implies a change in the point of view to be adopted. Concerning the idea of living independently, the

interpreter must apply the law following a rhetorical methodology. In the next paragraph, I will briefly analyze this problem.

5 Rhetorical Method, Severe Disability and Thirdness

The inclusion of the disabled person in a social context shows how no one can live independently and be sufficient unto himself: even the ‘living independently’ of each (supposedly able) person is necessarily limited.

So, the introduction of the problem of disability in the evolution of the resumption of the use of the *fictio iuris* technique for the elaboration of the concept of person seems to provide an answer to two different convergent objectives. On the one hand, it allows us to deal with a difficulty typical of living independently where severe disabilities are concerned. A seriously disabled person can never be independent in the same sense as an able-bodied person. The ‘living independently’ approach can, however, also be useful for persons with severe disabilities, inserting a perspective of evolution and empowerment even in very difficult conditions of life. However, the legal technique of the *fictio iuris* will make it possible to include him/her in the concept of a person with full rights and genuine independent living (as if he/she were independent), making it possible to apply the same treatment to the severely disabled person as to any able-bodied person and the slightly disabled person. This research perspective must, of course, be explored and coordinated with the existing positive law and disability legal studies, analyzed by an approach to unify disability studies and policy and legal aspects of empowerment [36, 42–45] However, it allows us to understand why the issue of disability is central to the evolution of the legal concept of person. It remains to be seen how the problem is linked to the adoption of a rhetorical method in the analysis of the legal case.

The topic of disability can be read not only from the perspective of ability. It could propose some measurement criterion that is effectively more comprehensive than the economic-utilitarian one and is inspired by a humanistic conception of the person. It seems appropriate to search for such a criterion with the instruments for evaluating justice proper to the legal culture according to a rhetorical method inspired by the Thirdness.

The theory of capacity for Nussbaum is a way of rethinking the human rights of the disabled person from the perspective of social inclusion. This interesting reversal of the perspective configures the inclusion of ‘disabled’ as the opposite of the human mechanization [11, 12] imposed by contemporary society. In a text dedicated to the concept of ‘disabled dignity’ [24] an idea was proposed, undoubtedly ambiguous, that disability is a state that everyone will experience at some point in their life, if it does not occur suddenly or at a young age. The condition of disability is, therefore, a situation not to be only understood as ‘pathological’, but paradoxically as ‘normal’ for the human being, even if it is highly problematic and never desired. The language used to speak about it should not only be expressed in terms of skills or abilities but starting from the idea that every able-bodied person can expect throughout his or her own life different

moments or periods of ‘disability’, at different levels. Capability and disability, dependence and independence, are conditions that can intersect throughout a person’s life. It does not seem possible to think of oneself only as ‘able’, but as ‘provisionally not-disabled’. The conditions in which every person may encounter the problem vary: it is impossible to conceive of the category as a whole. However, this transitional situation of disability can never be assimilated to those who are permanently disabled [26].

In this article, I go one step further by including the issue of disability as justice within the evolution of the notion of the legal person, through the inclusion of *fictio iuris* and rhetorical methodology in positive law, as a criterion for the interpretation of art. 19 CRPD.

So, the proposal that I would like to indicate is the adoption of a measurement criterion not based on an economic or utilitarian knowledge, but on a properly legal parameter, the notion of Thirdness. The framework following the CRPD mentioned above and the adoption of the resulting legislation and policies on disability can be indicated adequately through a simple observation, which concerns the very ambiguity of the legal effectiveness of human rights in the face of the primacy of economics and utilitarianism in our societies, as already noted in Nussbaum’s criticism of Rawls’ concept. The process of implementing the contents of the UN Convention is undoubtedly not limited to their reception by national or supranational legislation, but to the complex task of putting into practice the anthropological vision that such legislation implies. Often such processes imply profound changes not only in the social representation of the concrete processes of “disabling”, but also how the law is conceived, interpreted, and applied. The Convention strongly affirms that the disadvantages experienced by people with disabilities are the product of social and environmental factors, interacting with individual impairments, placing barriers to full participation and inclusion in general. As Lawson and Priestley point out, the law can be part of the solution [enabling law] or part of the problem [disabling law] of disability, because “the discipline of law is a relatively recent newcomer to the multidisciplinary feast of *disability studies*” [37, p. 15]. Disability law needs a rhetoric methodology to be applied, focused on criticism of the syllogistic model in judicial reasoning focused on criticism of the syllogistic model in judicial reasoning, to be replaced by a rhetorical methodology aimed at reconstructing the case topically [40, 56].

One of the biggest problems with disability law is precisely the lack of a unified approach as a discipline. Dispersed in different areas of the legal system, from civil law to administrative and labor law and criminal and tax law, the problem of disability law is that of its fragmentation. As noted by the judge Giorgio Latti, the risk is the lack of a discipline inspired by the unity of the person. The lack of coordination, therefore, that is often observed between the services with different profiles involved, in the life of a person with disabilities suggests “an activity of elaboration of the rules that inserts them in a homogeneous system, inspired by some fundamental principles” [36, p. 15]. The text of the Convention configures disability as a social relationship and bases the right to disability on the right to live independently and full inclusion. This process, therefore, can be combined with an experience already well known in Italy,

the process of deinstitutionalization of asylums following the adoption of the Basaglia law in the 1980s [16, 41, 68]. The regulatory framework, the judges' interpretation, and the practices of the public administrations involved in the enforcement of the CRPD, still seem to be inspired by a vision in which the rights incorporated in national legislation represent little more than a legally due option, but in reality not feasible, in the light of the economic crisis and the significant public debt, or merely an outdated vision of the phenomenon of 'disability'. As Marchisio and Curto effectively point out, "it is as if the law plan is fading as it approaches practices, making full citizenship for people with disabilities an option of which technicians can assess the opportunity" [7, p. 157].

In the light of this situation, I can see how useful it would be to form a class of legal practitioners sensitive to the new jurisprudential and applicative perspective.

To develop a disability laws attentive to the notion of person appears useful a narrative method inspired by the Law and Humanities [2, 10], a topical and rhetorical-argumentative methodology in the trial as an instrument of control of reasoning based on the adversarial principle [20, 40].

The methodology followed aims to promote the distinction between 'representation of the human situation' and 'legal analysis of the case', without confusing the planes but also without removing the ethical connection that is generated. It may be appropriate to represent the case narratively or by making a documentary that illustrates some of its specificities and explores the problem in its social dimension where possible, thus, solving it from a legal point of view. The two paths imply a 'third' position - between the documentary and narrative view and the legal - in a dialectic between relationship and distance that seems to indicate the sense of the difference between legal Thirdness and pure human sympathy.

Jacob, using the paradoxical sentence of the Czech novelist Capek, attributes the following methodological dilemma to legal education: "'Every man should know something about everything and everything about something'. The question is whether there remains enough time to learn 'everything about something' if you have to learn 'something about everything'" [32, p. 258].

This complex problem, to which the twofold use of the narrative or documentary tools tries to respond, it not easily resolved. The documentary juxtaposition is necessarily humanistic and holistic; the legal one is more concentrated and restricted in providing a norm-based response to a case. The desired result is the connection of the two approaches, one holistic, the other specific, in an interpretation of national disability legislation inspired by the CRPD vision and the consequent education of a generation of lawyers able to understand the disability issues on a methodological level. In the current context of disability law, the problematic point is the contrast between the two approaches that can be identified. The first is the holistic and unitary approach to the issue of disability, based on the concept of person, suggested by the UN Convention and its implementing texts. The second approach, still prevalent today in Italian courts and public administration [51] is the one in which the legislation on disability is seen merely as rules whose enforcement must respect financial budget constraints. Therefore,

the second approach implicitly forgets the issue of justice related to the position of the disabled and the first approach suggested by the Convention.

6 The Rhetorical Method, Ethics, and Thirdness

The methodology proposed is helping to resolve the contrast between CRPD guiding principles and regional and national interpretative legal practices. Such a method aims at implementing a rhetorical method linked to a Thirdness theory in order to promote a new culture of disability law. Through a Thirdness theory, the law of disability conceived as a unitary figure and inspired by a rhetorical methodology can contribute to the theoretical evolution of the methodology of legal interpretation, thus not limiting itself to raising fundamental questions of philosophy of justice, such as a new theory of the concept of legal person. The rediscovery of the rhetorical method, therefore, could provide a transformation of legal reasoning capable of going beyond some aporia proper to the positivistic conception of law. Moreover, the return of the rhetorical method may make it possible to understand the structural role of the *factio iuris* technique in legal reasoning. A few final words can be spent on the relationship between ethics and rhetoric with the rhetorical structure of the Thirdness in the trial, in which the judge is third before the parties.

Kojève proposed the Thirdness theory [35] as a characteristic trait of the law as such, not only related to the judge's work before the parties or the administration, following his reading of Hegel [57]. Today it can be re-read in the light of the problem of the concrete application of the CRPD rules.

Within the contemporary debate, the rhetorical and argumentative method is based on Perelman's rediscovery of classical rhetoric, founded on ethical grounds. Perelman is part of the debate between the doctrine of natural law and legal positivism after the end of the Second World War and the Holocaust. He tried to escape the alternative between positivism and skepticism or ethical nihilism [17, p. 177]. According to Perelman, formalist legal positivists like Kelsen and Bobbio believe that legal reasoning is a logical inference (model of a logical syllogism) whose premises are the authoritative legal norms established by the legislator. Perelman, on ethical grounds, denounced the reductionist nature of legal justice after the Holocaust and World War II. He criticized the Cartesian method expelling rhetoric from philosophical reasoning and recovered the persuasive argumentation of classical rhetoric as a different form of contingent quasi-truth, analogous to empirical reasoning, useful to reintroduce a form of justice into legal reasoning [56]. After Perelman, however, the reflection on the truthful status of legal claims based on a rhetorical methodology into the trial was further explored. The judge's Thirdness within the trial is related to the arguments of the parties in the controversy playing a role in the composition of the judicial reasoning's premises. The legal decision making could be regarded as a rhetorical dialogue ending with an argumentative syllogism, conceived as a dialectical and rhetorical form of reasoning by the judge as Third.

However, Perelman's position seems to be, methodologically anticipated with greater theoretical effectiveness by the Giambattista Vico's legal rhetoric. Francis Mootz III notes: "Perelman is less vigorous in his critique of Cartesian rationalism than Vico, who argued against the incipient rationalism of the Western tradition by defending the priority of rhetoric and its connections to our imaginative capacities and the metaphoric structure of human understanding" [44, p. 383]. The legal clinics' methodological aim is to resume a rhetorical methodology inspired by Giambattista Vico in the legal clinic of disability as a social philosophy for public life. As Mooney points out, Vico's interest in the vitality of public life assured by the rhetorical form of education was a central topic of his work [43]. For Vico's philosophy, societies fall apart when wisdom and eloquence become disjoined and the distinction between the two cultures emerges [40, 70], favored on the one hand by Cartesian rationality, and on the other hand by rhetorical mannerism that dissociates narrative and truth. Again, Mooney on Vico:

"[...] there was nothing Vico abhorred as a society of isolated individuals. Whether original brutishness or ultra-sophistication caused it made no difference: solitude of spirit was a cultural disease. He went so far at one point, in fact, as to suggest a kind of state curriculum and civil religion non unlike that of Rousseau. If Descartes's passion was indubitability, and Hobbes's was security, that of Vico was *civitas*, the well-functioning republic in which man acted as citizens" [43, p. 86].

The use of rhetorical methodology *à la Vico* in the interpretation of the norms seems to share the same objective of inclusion of the disabled person in the society of the CPRD. However, it extends it to the whole society: proposing an overcoming of the Hobbesian principle *auctoritas non veritas facit legem*, which inspires the contemporary legal positivism.

As already mentioned, the prevailing view held today by jurisprudence and public administration favors a reductionist interpretation of disability law based on mainly economic arguments concerning the need to safeguard the financial budget of the state. However, the demands for justice raised by disabled people or associations of the disabled cannot be disregarded. Undoubtedly, these problems relating to the economic balance sheet of the state must be considered, but within a logic of reorganization of the structures which do not see the dominant interests protected. At the center of legal protection must be the position of the disabled person, and ideally of every citizen, considered as a potentially disabled person: overcoming any difference in position between the presumed 'normal' and the 'disabled' citizen.

Seen within the rhetorical method *à la Vico* and a theory of the legal Thirdness *à la Kojève*, this social and civic itinerary shows a social and public utility for the whole society, outlining the CPRD model as the primary instance for the solution of intercultural problems.

The limited role of the notion of living independently could be re-thought within a broader social and political framework linked to a new vision of the concept of 'legal person'. The objective of seeking a 'Thirdness position' between the political and the legal, inspired by the rhetorical method in the interpretation of the law, can, therefore, assume a role of introducing a perspective of reform of the entire legal system by reintroducing the issue of social justice as a political philosophy. The question of living independently suggests a humanistic goal for education already

hoped for by Nussbaum, but with a different philosophical model underlying and aimed at building a new theory of the Thirdness inspired by Vico [28, p. 113].

An interesting philosophical perspective on which to base such an approach is the rhetoric of reason proposed by the philosopher Jean Robelin [61]. Fichte inspires Robelin's theory. He believed that university knowledge can play a civil and social role. The French philosopher articulates a theory of reason in which a socially constructed conception of the Thirdness as 'we' (political, communitarian) is opposed in a complex way to a figure of the Thirdness as the impersonal 'it is' (in French 'on') legal and inaccessible, where reason is constituted as a public power in the gap between the "we" that presides over the interlocution of the various communities and the "it is" that embodies the impersonality of social relations out of all inauthenticity: in the gap, therefore, between the impersonality of social relations and their inter-individuality.

I can consider the rhetorical method as a dialogical method of transformation of society based on disability as a matter of justice, reintroducing the notion of *factio iuris* in the configuration of the legal concept of person starting from a reading of art. 19 CRPD. A founding method of disability law in which, beyond the mere numbers of economic calculation, space is given back to the ideal of the Thirdness as a form of adequate legal evaluation of the social interest, within a dynamic and evolutionary conception of legal norms. The disability law as a new unitary discipline within the specialized legal discipline seems particularly suitable to develop this methodology precisely because, as repeatedly indicated, it analyses a phenomenon, disability, which is a relational, social, evolving phenomenon, dependent on the cultural and social evolving conception of disability. Beyond the Thirdness of the judge and the public administration, even the 'Thirdness' perspective of university legal knowledge can perhaps lead to the identification of innovative interpretations that are both internal to national law and capable of accepting the radical provocation that the CRPD has posed as a challenge to existing interpretative practices [63, p. 106, 29, p. 117].

The rhetorical method is aimed at persuading and, therefore, at building an audience that is culturally willing to change its view of reality. In this sense, the rhetorical method represents an indispensable methodology for removing the prejudices of judges and public administrators in the exercise of their functions. In the case of the judge, the rhetorical method consists in preventing a formalistic interpretation of the norms in force, issued prior to the adoption of the CRPD. An example of this is the case of 'Anna' (a fictitious name) in which, in the first instance and in the appeal, the judge's argument was aimed at granting a modest reduction in parking fees in the centre of the city of Turin, for owners of cars used only for the purpose of transporting persons with disabilities to health care or work.

Only the highest level of appeal to the Court of Cassation made it possible to identify the discriminatory behavior inherent in that decision, allowing the reasoning underlying the judicial interpretation of the rule to be reformulated starting from the right to live independently, recognizing to 'Anna' the right to benefit from the modest economic contribution for parking in all situations of a normal and independent life, thus implicitly recognizing her right 'to go to the cinema' like any other person [63]. Following this different narration and reconstruction of the legal fact, and the

pronouncement of the Court of Cassation, the city of Turin modified its resolution on parking for the disabled, implementing a different vision of the concept of living independently of the disabled.

The rhetorical method makes it possible to rearticulate the narrative of the fact in the process, allowing the judge to avoid forms of discrimination. The same methodology can be reconstructed in everyone's relationship with the public administration, public opinion and newspapers, in everyday life. The goal of the rhetorical method is to build through argumentation and communication an audience willing to accept the cultural content that the revolution in practices imposed by the CRPD enforces, transforming culture from small changes observable in individual cases. With this end in mind, the rhetorical method emerges from the very way in which the notion of legal person developed, through the legal science coming from the use of the rhetorical technique of argumentation in the context of Roman and Medieval law [33]. At the same time, it is precisely the use of the rhetorical method that demonstrates how the very notion of legal personhood is now challenged in its complex reconstruction, even in relation to man-made technological products such as new forms of artificial subjectivity like the robot, as indicated by the difficulty of conceptually understanding the field of social robotics and its relationship to human emotions [11]. The evolution of the notion of legal person and the history of the rhetorical method in the construction of its elaboration appears far from exhausted, in an arc that is delineated from its roots in Roman law to the future scenarios of robotics.

Funding Open access funding provided by Università degli Studi del Piemonte Orientale Amedeo Avogadro within the CRUI-CARE Agreement.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

1. Anspach, M. 2002. *A charge de revanche. Figures élémentaires de la réciprocité*, Paris: Seuil.
2. Amsterdam, Anthony G. and Bruner, Jerome. 2000. *Minding the Law. How Courts Rely on Storytelling, and How Their Stories Change the Way We Understand the Law – and Ourselves*, Cambridge Mass: Harvard University Press.
3. Barnes, Colin, and Geof Mercer. 2006. *Independent Futures: Creating User-led Disability Services in a Disabling Society*. Bristol: Policy Press.
4. Berman, Harold. 1983. *Law and Revolution. The Formation of the Western Legal Tradition*, Cambridge: Harvard University Press.
5. Curto, Natascia, and Cecilia Maria Marchisio. 2019. *Diritto al lavoro e disabilità. Progettare pratiche efficaci*, Roma: Carocci.

6. Curto, Natascia, and Cecilia Maria Marchisio. 2017. *Costruire futuro, Ripensare il Dopo di noi con l'Officina della vita Indipendente*. Trento: Erikson.
7. Curto, Natascia, and Marchisio, Cecilia Maria, 2018. Focus. La clinica legale della disabilità e della vulnerabilità. Esperienze, in Di Donato, Flora and Heritier, Paolo, La 'nuova' attualità di Vico e la clinica legale della disabilità, *Theory and Criticism of Social Regulation*, 16, 1, 153–160, <https://www.mimesisjournals.com/ojs/index.php/tcrs/issue/view/18>
8. Fina, Della, Cera Valentina, Palmisano Rachele, and Giuseppe. 2017. *The United Nation Conventions on the Rights of Persons with Disabilities*. A Commentary, Cham: Springer.
9. Mar, Del, and Maksymilian and Twining, William, , eds. 2015. *Legal Fiction in Theory and Practice*. Heidelberg, New York, Dordrecht, London: Springer.
10. Di Donato, Flora, 2008. *La costruzione giudiziaria del fatto. Il ruolo della 'narrazione' nel processo*, Milano: FrancoAngeli.
11. Dumouchel, Paul, and Luisa Damiano. 2017. *Living with Robots*. Cambridge, Mass.: Harvard University Press.
12. Dupuy, Jean-Pierre. 2002. *On the origins of cognitive science*. The mechanization of the mind, Cambridge, Mass.: MIT Press.
13. Dupuy, Jean-Pierre. 2002. *Avions-nous oublié le mal? Penser la politique après le 11 septembre*. Paris: Bayard.
14. Fabris, Costantino-M. 2018. *La natura della persona giuridica nell'ordinamento canonico. Profili generali e particolari. Il Caso della Caritas Internationalis*, Torino: Giappichelli.
15. Flynn, Eilionóir. 2001. *From Rhetoric to Action. Implementing the UN Convention on the Right of Persons with Disabilities*, Cambridge: Cambridge University Press.
16. Foot, John. 2015. *The Man Who Closed the Asylums. Franco Basaglia and the Revolution in Mental Health Care*, New York: Verso.
17. Frank, David A., Bolduc, Michelle K., Clark, Robert B. 2003. Chaïm Perelman's "First Philosophies and Regressive Philosophy: Commentary and Translation", in *Philosophy & Rhetoric* 36, 3.
18. Gergen, Kenneth. 1999. *An Invitation of Social Construction*. New York: Sage.
19. Gierke, Otto Friedrich, and von. 1936. *Deutsches Privatrecht. Allgemeiner Teil und Personenrecht*. Lipzig: Duncker & Humblot.
20. Giuliani, Alessandro, 1974. La filosofia retorica di Vico e la nuova retorica, in *Atti dell'Accademia di Scienze Morali e Politiche della Società Nazionale di Scienze, Lettere ed Arti in Napoli*. Napoli: Libreria Scientifica.
21. Grossi, Paolo. 2004. *L'ordine giuridico medioevale*. Roma: Laterza.
22. Hénaff, Marcel. 2002. *Le prix de la vérité. Le don, l'argent, la philosophie*. Paris: Seuil.
23. Heritier, Paolo. 2009. *La rete figurale del diritto. Materiali per un ipertesto didattico*. Torino: Giappichelli.
24. Heritier, Paolo. 2012. *Estetica giuridica. Vol. 2, A partire da Legendre. Il fondamento funzionale del diritto positivo*. Torino: Giappichelli.
25. Heritier, Paolo. 2014. Legal Liturgies: The Aesthetic Foundations of Positive Law. In *Polemos*, 8, 137–152. Dordrecht: de Gruyter.
26. Heritier, Paolo. 2014. *La dignità disabile. Estetica giuridica del dono e dello scambio*. Bologna: Dehoniane.
27. Heritier, Paolo. 2015. L'immagine analogica del robot nelle neuroscienze normative, in Sequeri, Pierangelo, ed., *La tecnica e il senso. Oltre l'uomo*. Milano: Glossa, 193–230.
28. Heritier, Paolo. 2016. Vico e le law and humanities nella clinica legale della disabilità e della vulnerabilità, in Di Donato, Flora, Scamardella, Francesca, *Il metodo clinico-legale. Radici teoriche e dimensioni pratiche*. Napoli: Edizioni Scientifiche.
29. Heritier, Paolo. 2018. "Provvedenza vichiana e metodo clinico legale della terzietà", in La nuova attualità di Vico e la clinica legale della disabilità, *Theory and Criticism of Social Regulation*, 1/18. <https://www.mimesisjournals.com/ojs/index.php/tcrs/issue/view/18>.
30. Heritier, Paolo. 2018. 'Creazione' e 'generazione' tra prospettiva umanista e teologia. In *Il potenziamento umano*, ed. Enrico Larghero, 173–199. Effatà: Prospettive bioetiche, Cantalupa.
31. Heritier, Paolo. 2019. Body and Image. Vico, Suzuki and Nam June Paik. Critique of Western Logocentrism, in *Diaphanes. Art and Philosophy* 7, Kyoto: Kyoto University, 1–19.
32. Jacob, Andras. 2007. Dilemmas of Legal Education: a Comparative Overview, in *Journal of Legal Education*, Vol. 57, 2.
33. Kantorowicz, Ernst. 1957, *The King's two Bodies. A Study in Medioeval Political Theology*. Princeton: Princeton University Press.

34. Kelsen, Hans. 1967. *Pure Theory of Law*. Berkeley: University of California Press.
35. Kojève, Alexander. 2000. *Outline of a Phenomenology of Right*. Lanham, MD: Rowman and Littlefield.
36. Latti, Giorgio. 2010. *I diritti esigibili. Guida normativa all'integrazione sociale delle persone con disabilità*. Milano: FrancoAngeli.
37. Lawson, Anne and Priestley, Mark. 2017. The social model of disability: question for law and legal scholarship? in Peter Blanck, Ellinóir Flynn, eds., *Routledge Handbook of Disability Law and Human Rights*. London: Routledge.
38. Legendre, Pierre. 1963. *La pénétration du droit romain dans le droit canonique classique de Gratien à Innocent IV [1140–1254]*. Paris: Jouve.
39. Legendre, Pierre. 2009 *Leçons IX. L'autre Bible de l'Occident: le Monument romano-canonique*. Paris: Fayard.
40. Manzin, Maurizio. 2014. *Argomentazione giuridica e retorica forense. Dieci riletture sul ragionamento processuale*. Torino: Giappichelli.
41. Marchisio, Cecilia Maria. 2019. *Percorsi di vita e disabilità. Strumenti di coprogettazione*. Roma: Carocci.
42. Marchisio, Cecilia Maria. 2021. *I diritti delle persone con disabilità. Percorsi di attuazione della Convenzione ONU*. Roma: Carocci.
43. Marra, Angelo. 2009. *Diritto e disability studies. Materiali per una nuova ricerca multidisciplinare*. Reggio Calabria: Falzea.
44. Marra, Angelo. 2018. *Società, disabilità, diritti. Come i disability studies hanno attecchito nella giurisprudenza italiana*. Vicalvi: Key.
45. Monceri, Flavia. 2017. *Etica e disabilità*. Brescia: Morcelliana.
46. Mauss, Marcel. 1950. *Essai sur le don*, Paris: P.U.F. *The Gift. The Form and Reason for Exchange in Ancient Society*, trans. London, New York: Routledge. 1990.
47. Mooney, Michael. 1985. *Vico in the Tradition of Rhetoric*. Princeton, NJ: Princeton University Press.
48. Mootz III, Francis J. 2010. Perelman's Theory of Argumentation and Natural Law, in *Philosophy & Rhetoric*, 43, 4.
49. Naffine, Ngairé. 2009. *Law's Meaning of Life. Philosophy, Religion, Darwin and the Legal Person*. Oxford and Portland: Hart Publishing.
50. Nemo, Philippe. 1996. *Historie des idées politiques dans l'antiquité et au Moyen-Age*. Paris: PUF.
51. Nussbaum, Martha. 2006. *Martha Nussbaum, Frontiers of Justice: Disability, Nationality, Species Membership* Cambridge, Mass.: Belknap Press of Harvard University Press.
52. Orestano, Riccardo. 1968. *Il problema delle persone giuridiche in diritto romano*. Torino: Giappichelli.
53. Orestano, Riccardo. 2004. "Persona" e "persone giuridiche" nell'età moderna, in *Peppe*. Leo, Persone giuridiche e storia del diritto, Torino: Giappichelli.
54. Ost, François, De Kerchove, and Michel. . 2002. *De la pyramide au réseau? Pour une théorie dialectique du droit*, Bruxelles: Facultés Universitaires Saint-Louis.
55. Pallante, Francesco, 2014. "Il Consiglio di Stato: dall'inderogabilità dei diritti (sociali) all'equilibrio di bilancio?", in *Democrazia e Diritto*, 1, 175–189.
56. Perelman, Chaïm. 1963. *The Idea of Justice and the Problem of Argument*. London: Routledge and Keagan.
57. Portinaro, Pier Paolo. 1986. *Il terzo*. Una figura del politico, Milano: Franco Angeli.
58. Prodi, Paolo. 2006. *Il sovrano pontefice. Un corpo e due anime: la monarchia papale nella prima età moderna*. Bologna: Il Mulino.
59. Puchta, Georg Friedrich. 19853–54. *Cursus der Institutionem*. Leipzig: Breitkopf und Härtel.
60. Rawls, John. 1971. *A Theory of Justice*. Cambridge, Mass: Harvard University Press.
61. Robelin, Jean. 2006. *Pour une rhétorique de la raison*. Paris: Kimé.
62. Robelin, Jean, 2018. La retorica giuridica come produzione politica del luogo del terzo, in *La nuova attualità di Vico e la clinica legale della disabilità, Theory and Criticism of Social Regulation*, 1/18.
63. Romano, Santi. 1947. *Frammenti di un dizionario giuridico*. Milano: Giuffrè.
64. Salvadori, Luca, "Argomentazione e interessi metagiuridici: le contraddizioni delle norme e degli interessi nella tutela dei diritti delle categorie vulnerabili. Anna ha il diritto di andare al cinema?" in *La nuova attualità di Vico e la clinica legale della disabilità, Theory and Criticism of Social Regulation*, 1/18.

65. Savigny, Friedrich Carl von. 1840–49. *System des heutigen römischen Rechts*, Berlin: Veit und Comp.
66. Scheper-Hughes, Nancy, and Anne Lovell. 1987. *Psychiatry Inside Out: Selected Writings of Franco Basaglia*. New York: Columbia University Press.
67. Seikkula, Jakko, and Tom Erik Arnkil. 2006. *Dialogic Meeting in Social Networks*. London: Karnac.
68. Seikkula, Jakko, and Tom Erik Arnkil. 2014. *Open Dialogues and Anticipations: Respect Otherness in the Present Moment*. Tampere: Juvenes.
69. Sequeri, Pierangelo. 2020. *Deontologia del fondamento*. Torino: Giappichelli.
70. Snow, Charles Percy, *The Two Cultures*. Cambridge: Cambridge University Press.
71. Thomas, Yan. 2011. *Fictio legis*. L'empire de la fiction romaine et ses limites médiévales, in Y. Thomas, *Les opérations du droit*, EHESS. Paris: Gallimard Seuil.
72. Todescan, Franco. 1979. *Diritto e realtà. Storia e teoria della fictio iuris*. Padova: Cedam.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.