HYPERTEXT IN DIPLOMACY

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This article presents some reflections based on almost ten years of research on the use of hypertext in diplomacy and international law.[1] As part of our attempt to validate theory through practice, we have developed a hypertext software application for use in online learning courses and information management. This article describes some aspects of our research and outlines potential uses for hypertext in diplomacy and international law. Case studies and illustrations in this paper are based on our hypertext application.

1. WHAT IS HYPERTEXT?

Hypertext is the concept which underlies the World Wide Web. Ted Nelson, who coined the term *hypertext*, describes it as "non sequential text fragments linked together with hot spots called hypertext links."[2] Basically, hypertext consists of a network of nodes and links.

Nodes are usually text fragments, but they can equally well consist of graphics, sound, film, or any other element that can be displayed on the Internet.[3] A node is any integrated and self-sufficient unit of information, of a smaller size than the complete document. Janet Fiderio states that nodes "consist of a single concept or idea."[4] A reader should be able to distinguish a node from the surrounding text. Developers of the *Oxford Electronic Dictionary* indicate that "a key characteristic of hypertext is the discrete nature of its components."[5]

Links connect nodes. The simple format of links on the World Wide Web (WWW) is familiar to Internet users: they usually appear as segments of blue, underlined text which the user can click on in order to go to some other document. Often when we follow these links we do not know where they will take us. More sophisticated links may offer the user two additional elements of information: a) the link destination (where the link will take the user); and b) the purpose or meaning of the link (a note that it presents further information, proof, counter-arguments, analogy, etc.). When following this type of link the user knows that the link points to a particular document or web page containing further resources, arguments, counter-arguments, an analogy, or other relevant materials.

While the simplest use of hypertext is to connect documents, other, more complex uses include:

- organising information; especially interlinked materials such as dictionaries and encyclopaedias;
- writing; especially collaborative writing;
- argumentative debate, discussion and negotiation;
- revolutionising the way we think and create.

Vannevar Bush, the conceptual father of hypertext, wrote that hypertext would introduce "a new relationship between thinking man and the sum of knowledge." Bush based the concept of hypertext on the following understanding of the functionality of the human mind: "It operates by association. With one item in its grasp, it snaps instantly to the next that is suggested by the association of thoughts, in accordance with some intricate web of trails carried by the cells of the brain."[6] By nature hypertext both requires and stimulates the user to think in terms of the relationships and possible connections between various concepts and pieces of information.

2. HISTORY

Although the term *hypertext* is recent, the concept itself has roots in all attempts throughout history to develop associative thinking, facilitate continuous discussion around a text, and to present arguments in an efficient way. Holy texts, such as the Bible, Koran and Talmud, include a sort of non-technological hypertext aspect in the interplay between the basic text and on-going interpretation. In *The Talmud and the Internet*, Jonathan Rosen writes "I have often thought, contemplating a page of the Talmud, that it bears a certain uncanny resemblance to a home page on the Internet, on which nothing is whole in itself but where icons and text boxes are doorways through which visitors pass into an infinity of cross-referenced texts and conversations."[7]

Medieval codices represent an early attempt to include some hypertextual features in written text. In many codices you can find glosses in the margins, beside the main text. The central part of the page contains the primary, often ancient, text, while subsequent readers have added explanation and commentary in the margins. Thus, the codex becomes, over time, a network of text and interpretation.

With the introduction of Guttenberg's press the non-linear structure of the hand-copied medieval codex was gradually transformed into the linear structure of modern books. In order to improve access to information in books, authors introduced various techniques such as tables of contents, which present a hierarchical outline of the document structure; and indices, which allow the reader to see horizontal lines through the text, indicating the pages that contain listed words.[8]

A more recent key event in the human attempt to organise information and knowledge in the most efficient way was Vannevar Bush's conception of the Memex, which he wrote about in the early 1930s. Although Bush did not use the term *hypertext* he laid down the fundaments for this concept. Bush used technology available at the time—microfilm—in order to simulate the associative linking of information.

Bush's concept was fully realised with the development of computer technology. In the 1960s Ted Nelson merged the concept introduced by Bush with computer technology to create hypertext. His creation inspired many scientists, linguists, and programmers, including Tim Berners-Lee, to attempt to build computer systems based on hypertext.

Until the introduction of the World Wide Web, most of those attempts were confined to limited, academic circles. Tim Berners-Lee implemented the hypertext concept on the Internet and created the World Wide Web, today a familiar tool for the millions of Internet users worldwide. Although the WWW has developed explosively, the use of hypertext has been limited so far to basic linking of information. The current use of hypertext is still far from the concept of hypertext as a tool that, according to Bush's prediction, will reinvent the way we think and create.

3. HYPERTEXT AND TYPES OF INFORMATION

Hypertext is a useful tool for managing particular types of information. Before examining some practical applications of hypertext we will make a brief survey of the various types of information: structured, semi-structured and non-structured. We will illustrate each explanation with two examples: general (library) and diplomacy-related (collection/database of international treaties).

Structured Information

Structured information can be logically described and completely classified. It is usually stored in a database, for example, an address book or a library database. In a library database, each book is registered according to clearly defined fields such as: title, author, subject, publisher, and date of publication. Structured information stored in a database can be easily manipulated. For example, a library user can easily find a book written by a particular author, or all information about a particular topic.

In diplomacy, each convention in a database of international treaties will be specified by a logical information structure with fields such as title, keywords, date of signature, and date of ratification. Information can be easily retrieved from such a structured database. For example, a simple search produces a list of conventions meeting certain criteria: bilateral conventions, conventions signed in Paris, conventions signed in the last three years, or conventions signed by Malta. A more complex search could combine two or more criteria—for example: conventions signed in Paris in the last two years, or conventions signed by Malta on environmental issues. An even more complex search could be based on several criteria combined with Boolean operators, for example: conventions signed by Austria AND Italy BUT NOT Japan on environmental protection, or conventions signed by Austria, Italy and Japan BUT NOT ratified by Italy on environmental protection.

Semi-Structured Information

Semi-structured information consists of both logically structured elements and free text. Books, for example, are semi-structured information. They contain some structured elements which help us to access information. When we open a new book we have some expectations about its organisation and content, based on our previous experience with books. We expect, depending of the type of publication, an introduction, dedications, a table of content,[9] chapters divisions, an index, etc. Similarly, if we read the newspaper frequently we read according to the organisational patterns to which we have become accustomed: we know, based on experience, in which parts of the paper we will find certain information (editorials, latest news, commentary, sports). The semi-structured nature of this type of information is in the content of structural elements: for example, we do not have prior expectations based on our experience about the text of the chapters in a book.

In diplomacy, most international treaties are semi-structured information. In any agreement we expect certain parts: a title, a preamble, articles and a closing. While these parts can be identified, their content cannot be standardised. The content is free text and depends on the particular circumstances (see Table 1). Most knowledge management projects focus on computerised management of semi-structured information.

Table 1: Example of Semi-Structured Information - The Vienna Convention on Diplomatic Relations

STRUCTURE	CONTENT
Title	Vienna Convention on Diplomatic Relations
Preamble	The States parties to the present Convention, Recalling that peoples of all nations from ancient times have recognized the status of diplomatic agents, Having in mind the purposes and principles of the Charter of the United Nations concerning the sovereign equality of States, the maintenance of international peace and security, and the promotion of friendly relations among nations, Believing that an international convention on diplomatic intercourse, privileges and immunities would contribute to the development of friendly relations among nations irrespective of their differing constitutional and social systems, Realizing that the purpose of such privileges and immunities is not to benefit individuals but to ensure the efficient performance of the functions of diplomatic missions as representing States, Affirming that the rules of customary international law should continue to govern questions not expressly regulated by the provisions of the present Convention, Have agreed as follows:
Operational Part	Article I For purpose of the present Convention, the following expressions shall have the meanings hereunder assigned to them: ....
Closing	IN WITNESS WHEREOF the undersigned plenipotentiaries, being duly authorized thereto by their respective governments, have signed the present Convention. DONE AT VIENNA, this eighteenth day of April one thousand nine hundred and sixty-one.

Non-Structured Information

We cannot identify any regular logical structure in non-structured information. Essays, novels, poems and other free texts are examples of non-structured information.

Management of non-structured information is one of the biggest challenges of modern science. We often spend hours trying to find a specific sentence or paragraph in a book we once read, months or years later when we finally realise its significance. How can we more easily access the vast amount of information and knowledge stored in the millions of volumes written worldwide? Each of us has some tools to try to cope with this problem: bookmarks, notes, yellow stickers, etc. While most of us can easily find addresses in our structured address book or database, it is much more difficult to find particular parts of a text when we need them.

A first step in solving this problem technologically came with the development of free text search tools in text processors, and with powerful Internet search engines like Yahoo, AltaVista, and Google. Another more versatile and flexible tool is hypertext.

4. WHY IS DIPLOMACY HYPERTEXT-FRIENDLY?

For a number of reasons, diplomacy and international relations seem ideally suited as fields for the use of hypertext tools. First, **text is central to diplomacy**. Text is the immediate or ultimate result of most diplomatic activities. The richness and complexity of diplomatic activities found not only in negotiation and representation but also in social activities and media coverage is crystallised in diplomatic documents, the foremost of which are international legal agreements. The phrase *Verba Volant, Scripta Manent* applies very strongly to diplomacy. Sir Harold Nicolson said "...an agreement which is committed to writing is likely to prove more dependable in the future than any agreement which rests upon the variable interpretation of spoken assent."[10]

Second, **diplomatic documents are the result of complex, multilayered activities.** The final diplomatic and international legal documents are only the top layer—the visible result of a wealth of reference materials, supporting documents, negotiations, collaborations, etc. Full understanding and interpretation of diplomatic documents requires reference to all supporting sources. This is difficult unless they are organised in a simple and manageable way, for example, through a hypertext presentation of layers of information. Unlike with print and paper, hypertext allows for the presentation of information in multiple layers. The first layer might contain a synthesis or summary of the argument, with links to the next layers. Each layer would progressively elaborate and support the argument, or particular facets of the argument. The reader could decide how far to delve into each particular topic. Ultimately, the entire Internet is a resource that can be accessed via such links. Bush described hypertext as a "computer glue" binding information from a wide variety of books, documents, communications and other artefacts to enhance its accessibility and usefulness.[11]

Third, **modern diplomacy is faced with an information glut**. The information explosion in diplomacy can be seen in two principle areas. First, the number of documents produced within the framework of various international organisations and regimes is increasing to unmanageable amounts. Second, given the complexity of contemporary international relations, diplomatic documents are becoming unmanageable in size. For example, the Marrakesh Final Act establishing the WTO contains 26,000 pages of agreements, promises and commitments.[12] Information is available in quantities far beyond our capacity to process. Finnish author Jaako Lehtonen identifies an "information discrepancy" between the information flow and our processing capacities.[13] Diplomats often fall victim to this discrepancy due to their need to quickly find relevant information and make important decisions. Hypertext tools cannot reduce complexity, but they can help harness it.[14]

Fourth, **diplomatic developments are multi-causal**—the result of a complex interplay of various national and international actors, factors, coincidences, and paradoxes. We can rarely determine exactly which events or factors led to any particular development. After the fact descriptions of diplomatic events tend to focus on the predominant line of events, which may not have been the only important one. Hypertext can represent multicausality realistically, showing the complex networks of cause and effect.

Criteria for Analysis of Hypertext Suitability

Documents of diplomacy and international law are particularly suited to hypertext, as demonstrated by their fulfilment of the criteria listed below. The first several criteria are from Schneiderman's "Golden Rules of Hypertext".[15]

1. A large body of text is organised into numerous segments. Treaties, agreements, conventions, reports of international conferences, and other diplomatic documents are usually long texts fragmented into smaller, self-contained segments, modules or articles. For example, the *Millennium Report*[16] of the Secretary General of the UN, prepared for the UN Millennium Summit and the resulting initiatives, is divided according to a hierarchical structure based on the following four agendas: development,[17] security,[18] environment[19] and reform of the UN. This modular structure allows the reader non-linear access to information.

2. The fragments relate to each other. The segments of diplomatic documents have some cohesion to justify their inclusion in the same text. Even if cohesion is low, diplomatic documents are not simply collections of unrelated textual fragments. The cohesive "glue" may sometimes consist of either the subject or the purpose of the document. In the case of the *Vienna Convention on Diplomatic Relations* cohesion is provided by the subject: regulating diplomatic relations. The document includes a wide variety of issues, from personal immunities to the use of telegraphs and the status of families, but all are related to diplomatic relations. Alternately, a document such as the UN *Millennium Report* is held together by purpose: all parts of the document were prepared for a particular meeting, activity, or initiative.

3. The user refers to only fragments of the text at a time. Diplomatic documents are not often read from beginning to end. Users usually consult a particular chapter, section or article, depending on their needs. Articles in international legal documents like the *Vienna Convention on Diplomatic Relations* carry a high level of autonomy.[20] Equally, in the case of the *Millennium Report* it is unlikely, for example, that those interested in nuclear weapons would need to consult the section on youth employment.

The potential applications of hypertext and requirements of diplomacy suggest the introduction of two additional criteria for determining if a particular text is suitable for hypertext: transtextuality and the life-cycle or time dimension.

4. Documents should be *transtextual.* *Transtextuality* means that a text contains text-external references: pointers towards other texts and documents.[21] Post-modern theoretician Michael Foucault considers a complete book to be a huge network of texts in which the frontiers "are never clear-cut…books are caught up in a system of references to other books, other texts, other sentences…"[22] Transtextuality is a strong characteristic of diplomatic documents, which include a complex and visible net of references to other documents, conventions, reports, and texts.

5. **Life-cycle (time aspect) may bring about a different interpretation of the document.** Documents have a life-cycle: a document is created under a particular set of circumstances, which may later change, influencing both the function and meaning of the document. At least two phases can be distinguished in the life-cycle of any diplomatic document.

Pre-text (negotiation phase): International legal documents are the result of long negotiations, proposals and counter-proposals, and the interplay between actors. Consulting the *travaux preparatoires* of an agreement is useful not only for the sake of the historical record, but also for determining the initial intentions of the negotiating partners behind particular formulations. Such references become particularly important when the context surrounding the agreement changes. Each agreement is negotiated within a specific social, political and technological context; if that context changes, the application of norms changes as well.

Post-text: Once adopted, a text has life of its own. In the case of international legal documents, the post-text steps include ratification and implementation. Even with the most precise and carefully negotiated formulations, application in real life brings new implications and sheds new light on existing texts.

5. PRACTICAL APPLICATIONS OF HYPERTEXT IN DIPLOMACY

Below are several scenarios demonstrating the use of hypertext in diplomacy, all based on our hypertext software platform. The examples are all fictitious, but as realistic as possible. The following scenarios are presented:

- Hypertext for Diplomatic Services (Consultation and Reporting)
- Management of International Regimes
- Negotiation
- Analysing Diplomatic and International Legal Documents

Hypertext for Diplomatic Services (Consultation and Reporting)

Background: Diplomatic services are organised as complex networks involving different level of interaction, including:
- within the ministry of foreign affairs;
- between the ministry and missions, and among missions;
- among governmental departments;
- with national society;
- with international partners.

By nature, diplomatic activity focuses on interaction with international partners, but it is often the case that national coordination of negotiation requires more energy and time. This has become even more the case with the greater openness of diplomatic services and the demand for more public diplomacy brought by the end of the Cold War.

Most diplomatic interaction is text-based. This example of one diplomatic initiative shows how hypertext may assist with the management of complex diplomatic interactions.

Scenario: The ministry of foreign affairs is developing a new strategy to deal with the "brain drain," with the intention of returning, or at least reintegrating, professional nationals abroad. To design an effective strategy the ministry needs to learn from the experience of other countries and to conduct a survey of available multilateral resources and initiatives. Figure 1 shows how hypertext is used for creating discussion around the topic of the “brain drain”. Tables 2 and 3 compare traditional and hypertext-based methods for this initiative.

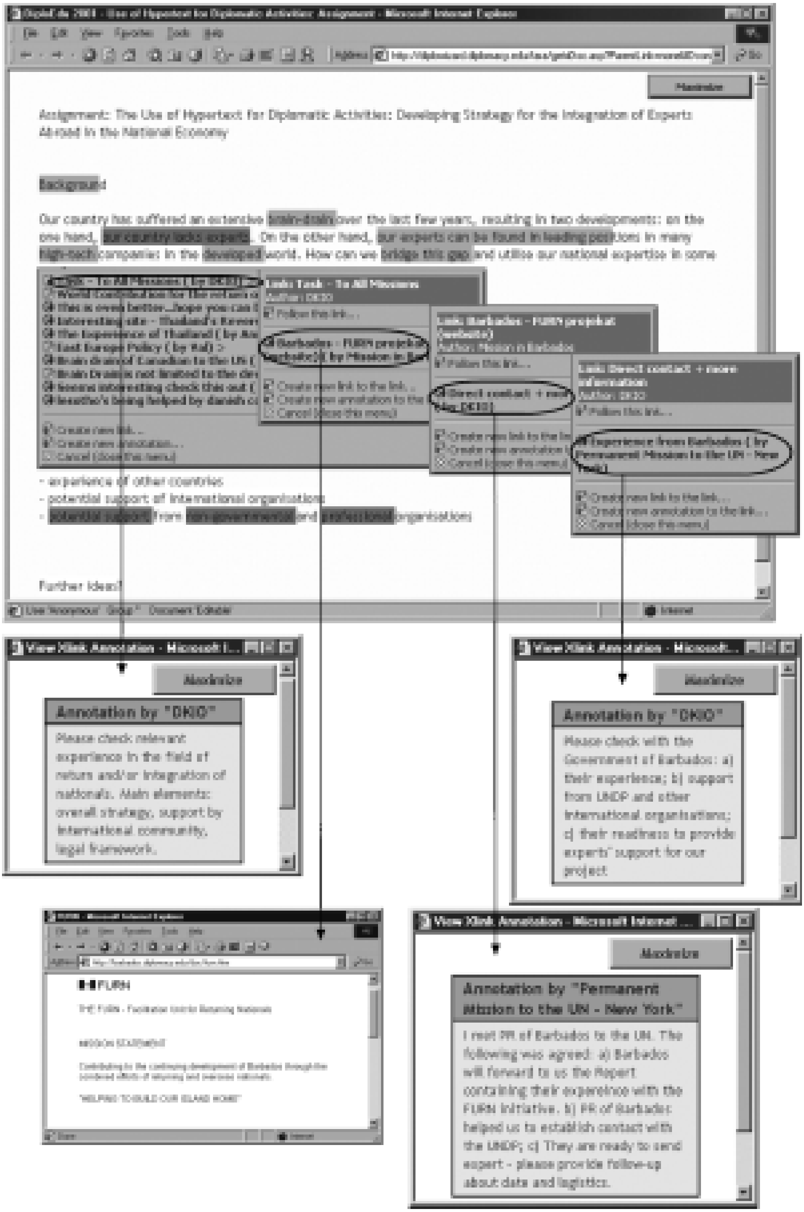
Table 2: Comparison of Methodologies

Traditional	Hypertext-based
1. Ministry writes letters to missions inviting their input.	1. Ministry posts text as hypertext-document on Internet and invites missions to add hypertext annotations (comments) or links.
2. Missions send ministry letters and reports in reply.	2. Missions make hypertext annotations or links to other hypertext resources.
3. Ministry compiles strategy document to guide implementation and on-going debate.	3. Text with annotations is used as basis for strategy document to guide implementation and on-going debate.

Table 3: Comparison of Advantages/Disadvantages

Criteria	Traditional	Hypertext-based
Speed	Slow.	Almost instant (all communication via the Internet).
Relevance	Low (each report will include the full range of “official documentation trappings”).	High (hypertext encourages users to focus on relevant observations and comments).
Peer-to-peer exchange	Low (circulation of documents among missions is inefficient).	High (all contributions are immediately available for peer review by other missions; interaction among missions increases quality of output, stimulates additional ideas and avoids unnecessary duplication).
On-going discussion	Final document stored in passive format.	All through the process original document remains available for consultation and discussion.
Achievement	Passive: many modern institutions do not know what they know.	Active: knowledge and information remain available for future reference and use.

Figure 1: Hypertext for Diplomatic Activities - Scenario “brain drain”



Management of International Regimes

Background: Stephen Krasner defines international regimes as "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations."[23] The intensive development of international regimes in recent years coincides with two processes in international relations: globalisation (need to regulate issues on an international scale) and the increasing importance of technical issues (e.g. environment, chemical weapons, technology). According to some estimations approximately 600 international regimes now exist.

Most international regimes are established by international conventions in order to implement the provisions of a particular convention, often in the field of the environmental, human rights, etc.[24] The establishment of an international regime includes setting up a secretariat, technical assistance, reporting, review processes, and other such elements. The whole process is text and document-intensive with frequent exchanges of reports and documents between the secretariat, parties and other entities. Implementation procedures are usually triggered by particular articles of the original convention. Hypertext provides a technical tool for easy management of this information (linking to particular articles).

Following are some "hypertext-friendly" features of international regimes:

a) Centrality of text: International regimes are usually established in order to implement international conventions. Implementation processes are triggered by particular articles of the text.
b) Implementation—reporting: States and other actors party to an international regime are obliged to provide reports on the implementation process.[25] These documents are more easily consulted if they are linked directly to the relevant articles of the convention.
c) Communication and information exchange: Regimes are usually established to increase communication and trust among states. The need for sharing, transparency and openness is built into the very fundaments of international regimes, making them potential beneficiaries of IT, the Internet, and especially hypertext.
d) Multi-actor environment: While regimes are usually founded by states, NGOs are increasingly important, especially in the fields of

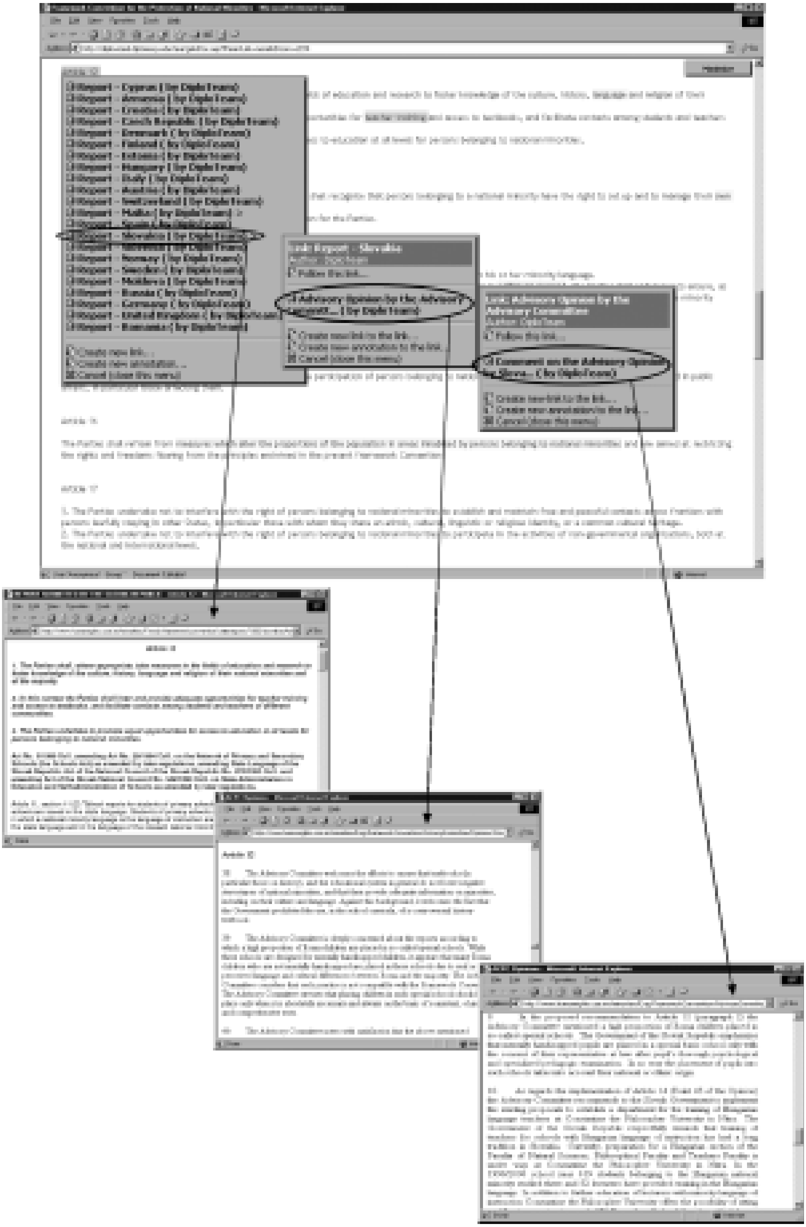
environment and human rights. The complexity of actors involved is increased by the fact that implementation of regimes often affects a variety of actors within a state (companies, banks, individuals, etc.).

e) Epistemic community: As many international regimes deal with highly technical fields (environment, chemical weapons, etc.), the epistemic community has an important role in running regimes. The most successful example of the influence of the epistemic community on the development of a regime was the Mediterranean Action Plan (MAP). MAP was created through the interaction of a variety of actors including academics, scientists, diplomats, and UN officials.[26]

Using hypertext, the complete management of an international regime can be centred around the text of the initial international convention. Each article can be linked to relevant reports, academic resources, NGOs actions, or media coverage. Such an approach would anchor regime management to the basic nature of the regime, based on the initial international convention.

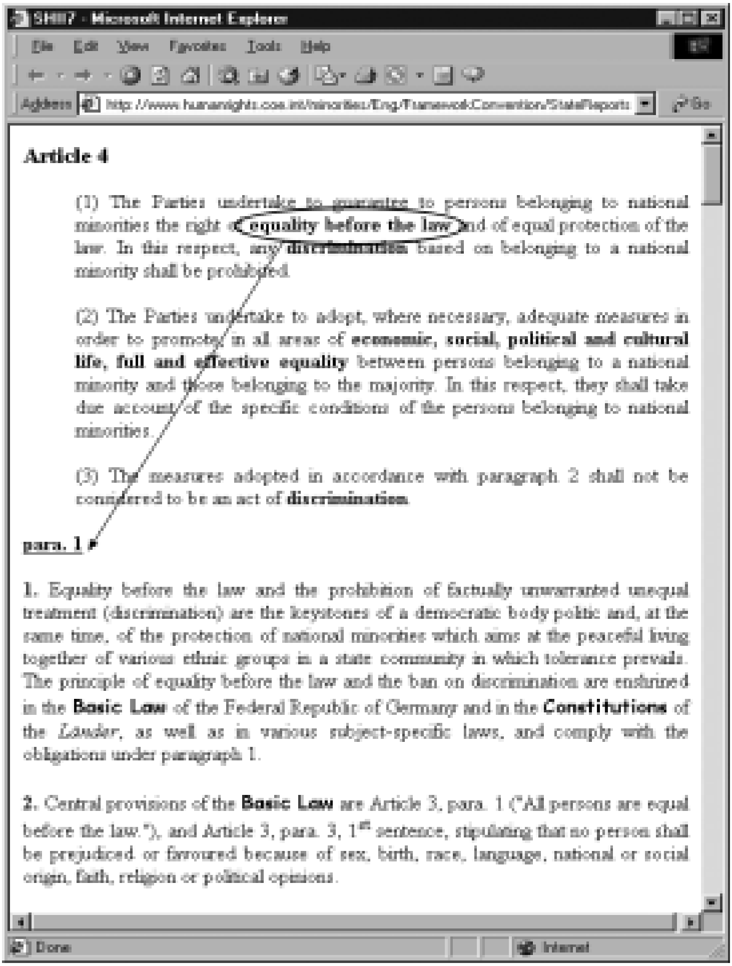
Scenario: The *Framework Convention on National Minorities*, adopted within the Council of Europe, established a regime which imposes several obligations on signatory states—including the obligation to provide regular reports on the implementation of the Convention.[27] Management of these reports can be done through hypertext, as shown in the figures below. Reports presented as hypertext documents can be directly linked to corresponding articles in the Convention. State Reports are analysed by the Advisory Committee which produces the Advisory Opinion (so far published for Finland and Slovakia). States have the option of commenting on the Advisory Opinion.

Figure 2: Reporting Via Hypertext



Hypertext suitability of Germany's Report: Germany's report is particularly suitable for hypertext, as the drafters comment on particular phrases within each article (see Figure 3). Germany's report shows how a "hypertext approach" can be used for the organisation of information even without technology. Obviously, technology provides convenience and additional features.

Figure 3: Germany's Report



SHII7 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.humanrights.coe.int/minorities/Eng/FrameworkConvention/StateReports

Article 4

(1) The Parties undertake to guarantee to persons belonging to national minorities the right of **equality before the law** and of equal protection of the law. In this respect, any **discrimination** based on belonging to a national minority shall be prohibited.

(2) The Parties undertake to adopt, where necessary, adequate measures in order to promote, in all areas of **economic, social, political and cultural life, full and effective equality** between persons belonging to a national minority and those belonging to the majority. In this respect, they shall take due account of the specific conditions of the persons belonging to national minorities.

(3) The measures adopted in accordance with paragraph 2 shall not be considered to be an act of **discrimination**.

para. 1

1. Equality before the law and the prohibition of factually unwarranted unequal treatment (discrimination) are the keystones of a democratic body politic and, at the same time, of the protection of national minorities which aims at the peaceful living together of various ethnic groups in a state community in which tolerance prevails. The principle of equality before the law and the ban on discrimination are enshrined in the **Basic Law** of the Federal Republic of Germany and in the **Constitutions** of the *Länder*, as well as in various subject-specific laws, and comply with the obligations under paragraph 1.

2. Central provisions of the **Basic Law** are Article 3, para. 1 ("All persons are equal before the law."), and Article 3, para. 3, 1st sentence, stipulating that no person shall be prejudiced or favoured because of sex, birth, race, language, national or social origin, faith, religion or political opinions.

Done Internet

Negotiation

Negotiation is as old as humanity; an essentially human activity which has not been substantially affected by technology at any point in the history of mankind. Will the Internet change negotiation? Or more concretely, can we negotiate via the Internet? The answer is yes: the Internet can be used for negotiation in certain situations. While face-to-face interaction will remain the primary form of negotiation, especially at the highest levels, negotiation via the Internet may be a more convenient method in the following situations:

1. **Problems with negotiation venue.** In some situations physical meetings are not possible or practical. For example, the most recent World Bank meeting, scheduled to take place in Barcelona, was held via the Internet due to the threats of protesters.

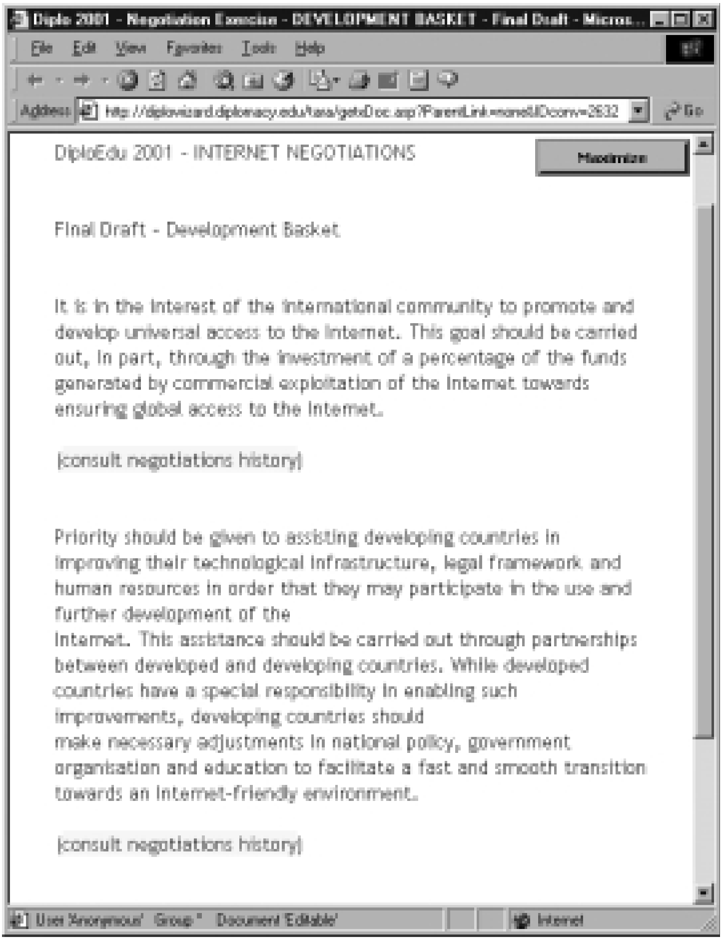
2. **Need to reduce "emotional noise" of direct contact.** Usually the lack of emotion associated with Internet-based communication is considered a negative aspect. Emotions are often an important element of negotiations, guaranteeing a certain solidarity to agreements reached. Sometimes, however, negotiations can be too emotionally charged, creating an obstacle to their successful outcome. For example, in Dayton and Rambouillet proximity talks were used to avoid the delegations coming in direct contact. In certain situations, what is usually considered a disadvantage of Internet-based communication (lack of direct contact) could, paradoxically, become an advantage.

3. **Need for stronger focus on text.** Through the use of group editing functions of hypertext tools, negotiating parties can concentrate specifically on the text of an agreement.

4. **Highly technical and prolonged negotiations.** When negotiations go on for a long period of time, for example, with the *Law of the Sea Convention*, the Internet can be used as medium for on-going communication between direct meetings of the negotiating parties.

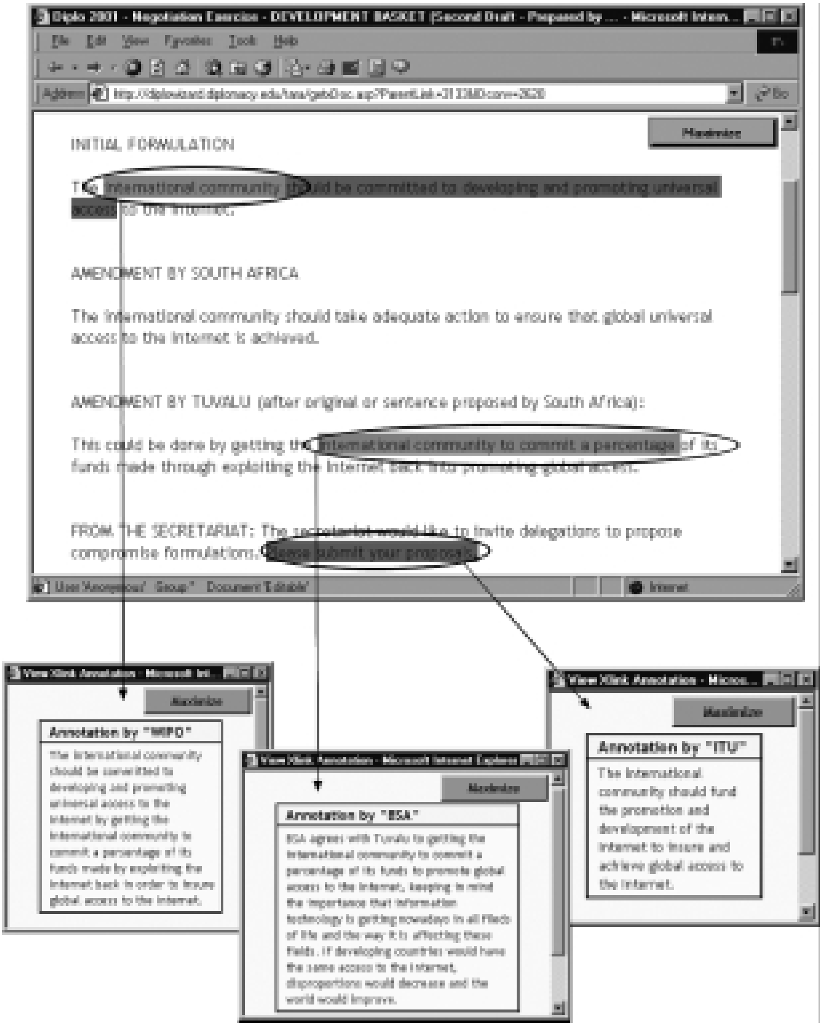
The screen shot in Figure 4 shows the final draft of the Development Basket of the International Declaration on the Internet—part of a simulation exercise on Internet-based negotiation conducted during our postgraduate course on IT and diplomacy. Part of the negotiation process took place with hypertext tools for collaborative composition of document drafts. Highlighted sections of text include links to other documents or comments by the drafters of the text.

Figure 4: Hypertext Negotiation Tools



By clicking on the links or comments, the user can follow the process of how a particular text was negotiated and drafted. All phases of negotiations are presented as layers. Figure 5 shows several of the comments added by negotiators in the drafting process.

Figure 5: Hypertext Negotiation Tools

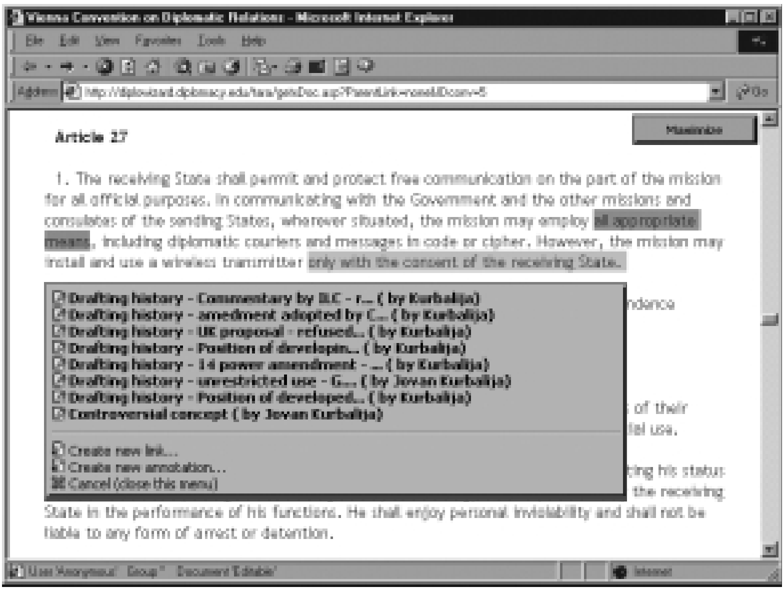


Analysing Diplomatic and International Legal Documents

The following examples present several hypertext techniques useful for the analysis and management of diplomatic and international legal documents.[28]

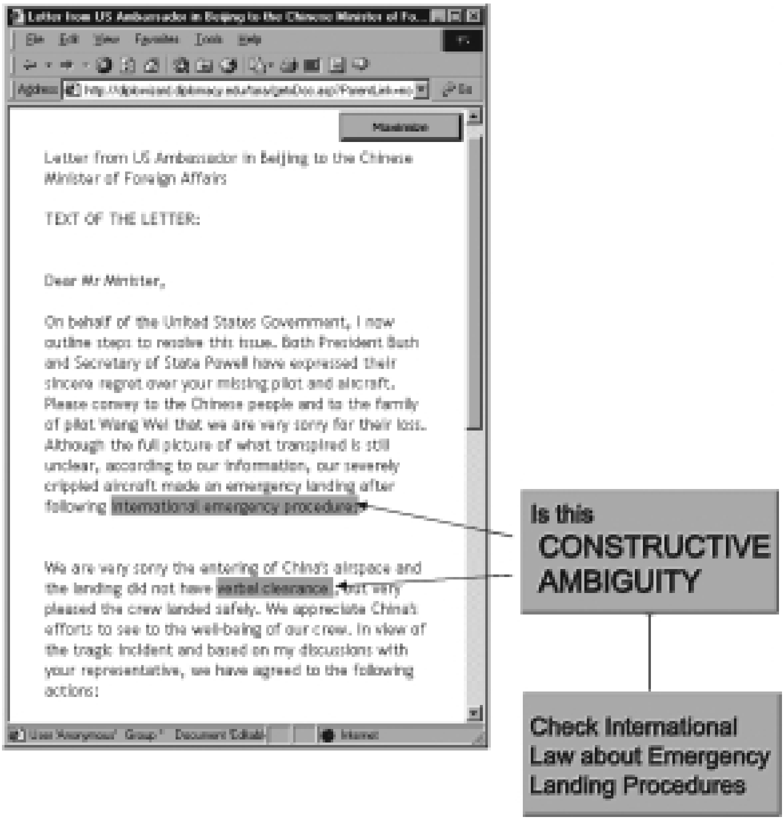
1. **Diplomatic Trail and *Travaux Preparatoires.*** Looking for the "diplomatic trail" means tracing the evolution of a particular article or phrase found in the final version of a diplomatic document, from the draft formulation through all of the intermediate versions. Similarly, in international law, the *travaux preparatoires* for a document present a temporal perspective; a history, linked mainly to the drafting of the agreement. The drafting history is important for the interpretation of documents, especially when it is necessary to identify the original intentions of negotiating parties. Figure 6 shows how hypertext can be used for the analysis of *travaux preparatoires.*

Figure 6: *Travaux Preparatoires*



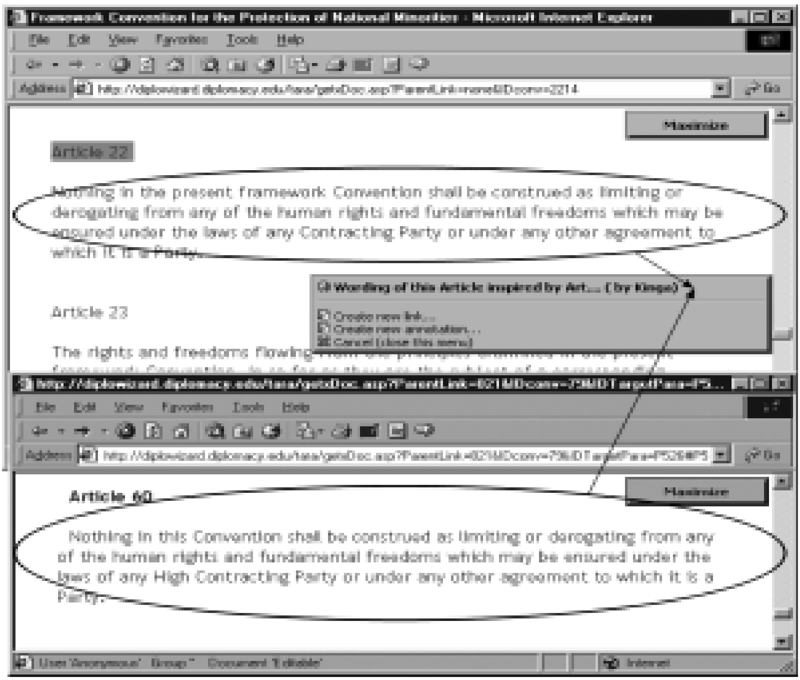
2. **Constructive Ambiguities.** Constructive ambiguities are frequently used to bridge differences between negotiating parties in order to produce diplomatic solutions.[29] The following example, Figure 7, uses hypertext to highlight the ambiguity in the letter sent by the US Ambassador to Chinese authorities during the “spy plane” incident. The letter first indicates that the US plane landed following international emergency procedures. However, in the next paragraph the US apologises for landing without verbal clearance from the Chinese side. The ambiguity lies in whether or not the US has disregarded international law—to clear up this ambiguity we would need to know if international emergency procedures require verbal clearance.

Figure 7: Constructive Ambiguity



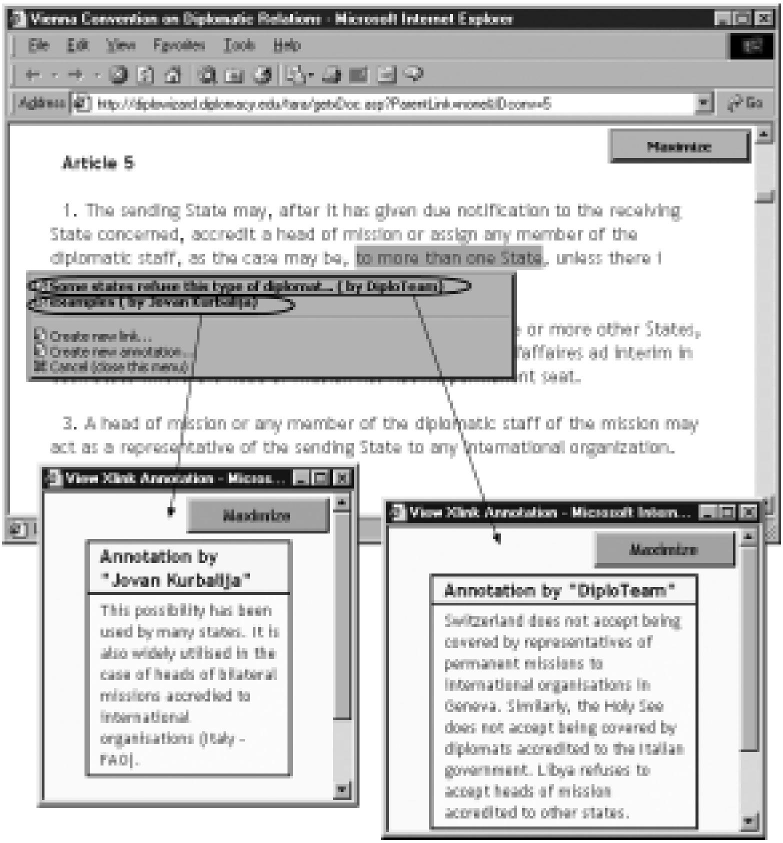
3. **Discovering Paternity of International Legal Documents.** As more and more international conventions are drafted and adopted, certain templates for these documents are emerging. These templates are especially prevalent with bilateral agreements such as air-service, double taxation, health cooperation and investment protection. Figure 8 shows how hypertext can be used to highlight and link similar formulations in two multilateral agreements drafted by the Council of Europe (the *European Convention on Human Rights* and the *Framework Convention for the Protection of National Minorities*). This example also shows the evolution of diplomatic language: signatories of the ECHR in 1950 were considered "High Contracting Parties" while in the Framework Convention of 1995 they are referred to as "Contracting Parties".

Figure 8: Paternity of Formulations in International Conventions



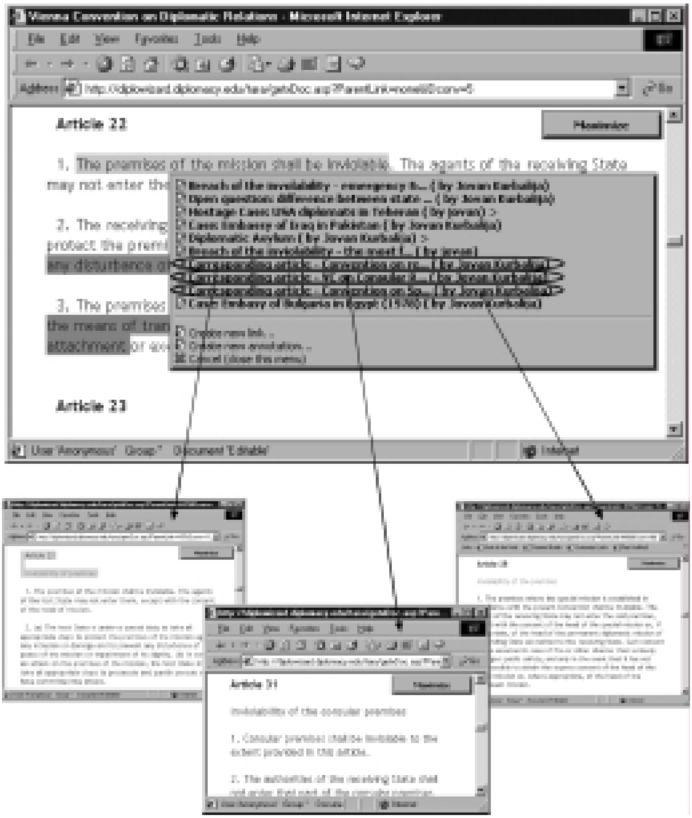
4. **Following Application of Particular Rules in Practice.** Once implemented, legal norms may not have the precise impact intended. In day-to-day practice the application of norms is usually more complex than the initial drafters envisaged. As shown in Figure 9, hypertext can be used to link information about the differences between particular norms and their implementation and eventual impact.

Figure 9: The Implementation of Article 5 of the Vienna Convention on Diplomatic Relations



5. **Comparative Analysis**. Hypertext can be used to present a comparative analysis; in this case (Figure 10), of the regulation of the question of "inviolability of the premises of the missions"in the four main instruments of diplomatic law. The original article 22 is from the *Vienna Convention on Diplomatic Relations*, while the other three articles are from the *Vienna Convention on the Representation of States in their Relations with International Organizations of a Universal Character,* the *Vienna Convention on Consular Relations,* and the *Convention on Special Missions.*

Figure 10: Comparative Analysis Vienna Convention on Diplomatic Relations



6. CONCLUSION

Hypertext made its initial impact through the World Wide Web. The explosive development of the Internet and the underlying importance of hypertext to connect pages on the Internet demonstrates its important function. However, the current use of hypertext lies far below its full potential and the initial expectations of Ted Nelson and Tim Berners-Lee. Hypertext is not yet in use as a means of organising and linking the vast amounts of available information and enhancing intellectual work. Why has hypertext not reached its full potential despite its obvious advantages?

The main reason is that at its current level of development human society is prepared to digest only a certain level of innovation and novelty. Wider use of hypertext would require substantive changes in the way we think. Moreover, a series of vested interests exist in the current organisation of intellectual and creative work, starting from individual interests linked to the formation of our intellectual profiles, extending to commercial investments (printing business, universities), and ultimately, to the very basis of the organisation and running of society.

Certain paradoxical elements can be noted related to the application of hypertext. On the one hand it is simple and straightforward: on first encounter most people wonder why it is not in wider use, as it is so obvious and natural. On the other hand, difficulties arise when users try to develop hypertext materials or documents. Although non-linear reasoning guides us in everyday life, our cognitive development shaped by education and our text-centered culture leads us to think in a predominantly sequential way in intellectual exercises. Thus, while we can appreciate hypertext as an obvious method for presenting information, it is not so easy to use it as an intellectual tool for creating new information and knowledge. This gap will likely be bridged with the arrival of a new generation cognitively shaped by multimedia and multi-sequential thinking.

Multi-disciplinarily, text-centrality and context-dependence make diplomacy highly suitable for the application of hypertext. Whether hypertext will eventually be used to its full potential in diplomacy depends on many aspects of the specific professional culture of diplomats. The importance of knowledge and information as key criteria for career success creates certain reservations among diplomats about the use of tools for information and knowledge sharing. As an optimistic scenario we can imagine that one day the promotion of diplomats will depend on the number and quality of links created, or on the use of a particular trail of links for successful diplomatic action.

ENDNOTES

1 This article is an abbreviated version of *Hypertext and Diplomacy*, an upcoming DiploProjects publication.

2 Theodor Holm Nelson, *Literary Machines* (Sausalito, CA: Mindful Press, 1990) 2-3.

3 In the literature on hypertext theory a variety of terms have been used for nodes, including: *lexia*, *windows*, *chunks*, *units of information*, *documents*, *cards*, *information items* and *frames*.

4 Janet Fiderio, "A Grand Vision," *Byte* (October 1988), 238.

5 Raymond R. Darrel and Frank Wm. Tompat, "Hypertext and the New Oxford English Dictionary," in *Hypertext '87 Papers* (Baltimore: ACM Press, 1987), 143.

6 Vannevar Bush, "As We May Think," originally published in 1945 in the *Atlantic Monthly*, currently available online at http://www.isg.sfu.ca/~duchier/misc/vbush/vbush6.shtml

7 Jonathan Rosen, *The Talmud and the Internet: A Journey between Worlds* (New York: Farrar Straus and Giroux, 2000), 8.

8 Orientation techniques used in traditional print include title page, pagination, page headers and footers, references and footnotes, indices, chapters and sections, and the book jacket.

9 I experience difficulty in re-adjusting my expectations of book organisation when switching from books written in Serbian to those written in English, because in Serbian books the table of contents is usually at the end of the book, while in English books it is at the beginning.

10 Sir Harold Nicolson, speaking to new entrants in the British diplomatic service, quoted in Peter Marshall, *Positive Diplomacy* (London: Macmillan Press, 1997), 155.

11 Robert J. Glushko, “Design Issues for Multi-Document Hypertext,” in *Hypertext ’89 Proceedings* (Pittsburgh: ACM Press, 1989), 51.

12 Norman Scott, “Ambiguity Versus Precision: The Changing Role of Terminology in Conference Diplomacy,” in *Language and Diplomacy*, ed. Jovan Kurbalija and Hannah Slavik (Malta: DiploProjects, 2001), 153.

13 Jaako Lehtonen, “The Information Society and the New Competence,” *American Behavioral Scientist* (November/December 1988), 104-11.

14 The information explosion has raised new issues and dilemmas about the synthesis and simplification of information. Developments seem contradictory: on the one hand, more information is available than ever before. On the other, in order to process so much information we need it to be presented in a condensed and simple format. The British theologian William of Ockham argued that the simplest argument is the best. We use the so-called “Ockham razor” to trim complexity out of an argument. Interestingly, Ockham argued that simpler arguments are not only more elegant but also more correct.

15 Found in J. Nielsen, *Multimedia and Hypertext: The Internet and Beyond* (New York: Harcourt Brace, 1995).

16 Available at: http://www.un.org/millennium/sg/report/

17 The development agenda includes sections on the following topics: poverty, water, education, HIV/AIDS, clearing the slums, youth employment, building digital bridges, trade access, debt relief, ODA, Africa.

18 The security agenda includes sections on the following topics: international law, peace operations, targeting sanctions, small arms, nuclear weapons.

19 The environment agenda includes sections on the following topics: climate change, green accounting, ecosystem assessment, ten years after the earth summit.

20 However, contextual interpretation may require consultation of other parts of the document, particularly the preamble, which is relevant for interpretation of the entire document.

21 The term transtextual was introduced by G. Gennete, *The Architext: An Introduction*, trans. J. Lewin (Berkeley: University of California Press, 1992), 81. (Original 1979 title: *Introduction a L'architexste.*)

22 Michael Foucault, *The Archaeology of Knowledge and the Discourse of Language* (New York: Harper and Row, 1976), 23.

23 Stephen D. Krasner, "Structural Causes and Regime Consequences: Regimes as Intervening Variables," in *International Regimes*, ed. Stephen D. Krasner (Ithaca: Cornell University Press, 1983), 2.

24 While the majority of international regimes are established by international conventions there are also self-generating or spontaneous regimes.

25 The main features of the implementation process are monitoring, sanctioning and dispute-resolution.

26 For more about epistemic communities and international regimes consult Peter M. Haas, "Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control," *International Organizations* 43, 3 (Summer 1989), 377-403.

27 See Articles 25 and 26 of the Framework Convention for the Protection of National Minorities.

28 These and other techniques are part of our DiploAnalytica methodology, a comprehensive hypertext-based approach to analysing diplomatic documents.

29 For more details on the use of ambiguities in diplomatic documents consult Norman Scott, "Ambiguity Versus Precision: The Changing Role of Terminology in Conference Diplomacy," in *Language and Diplomacy*, ed. Jovan Kurbalija and Hannah Slavik (Malta: DiploProjects, 2001), 153; and Drazen Pehar, "Use of Ambiguities in Peace Agreements," in *Language and Diplomacy*, ed. Jovan Kurbalija and Hannah Slavik (Malta: DiploProjects, 2001), 163.