Introduction: Different Levels of Cooperation

Consortia, networks, alliances, joint ventures, associations. Just some examples of inter-organisational arrangements that have recently emerged in the international sphere of higher education. This paper will attempt to provide some clarity into such arrangements. In choosing terms like alliances, networks, joint ventures, consortia, associations, partnerships, et cetera, the creation of a well sounding and appealing acronym seems to be the decisive argument in naming the arrangements. We will attempt to go beyond these nominal differences and focus on the essential features. A well-grounded typology of these arrangements might therefore be able to uncover the critical characteristics of inter-organisational linkages, based on the properties of these linkages and its constituent parts, instead of the names and acronyms. International cooperation has been a part of higher education since its first institutions emerged. The relations however can be established on different levels. This paper will explore the various arrangements that have been established on the organisational level. Before analysing the cooperation on the organisational level, we will briefly focus on other levels where cooperation appears.

On the national level, a wide range of international cooperative relations has emerged over the past decades. National policies for higher education often consist of programmes and funds enabling students and researchers to be internationally mobile. Part of the policies however contains joint policies with other governments in which agreements about a framework for international activities are jointly agreed upon. Many of such relations are established as a framework in which higher education institutions can develop their international activities. The relations can also be more direct, like agreements on mutual adaptation of educational systems. In Western Europe, these international linkages are often established within the framework of the European Union, although even this supra-national organisation increasingly uses a direct approach towards higher education institutions and therewith bypassing national governments. Frequently, cooperation also takes place directly between two or more national bodies outside a supranational framework. The most common forms are the bilateral agreements between countries for promoting student and staff exchange and promoting institutional cooperation. These bilateral linkages were in general very much based either on ‘west-west’ cooperation and exchange or on north-south development aid relations or twinning programmes. In recent decades however, south-south relations are getting more frequent, for example in the ASEAN region or the SADCC region (see appendix for the meaning of acronyms). On regional levels, multilateral agreements between governments have emerged to create a more open area for educational exchange and institutional cooperation and to overcome obstacles that obstruct these activities.

Cooperation can also take place between individuals. Obviously, cooperation – be it on the national or institutional level – will always boil down to cooperation between individuals. It does however also occur that individuals cooperate internationally outside the domain of the organisation they are associated with (higher education institutions or governmental bodies). First of all, there are the informal links between academics. These links or academic communities are probably the oldest and still most important form of international cooperation and are apparent in all fields and disciplines, with international journals and conferences functioning as a vehicle for communication. Modern techniques
however have intensified this international communication and cooperation between academics. In many cases, these informal relations have been formalised by the emergence of a wide range of associations, networks et cetera. Examples of suchlike associations in the field of higher education research are the Consortium for Higher Education Researchers (CHER), European Association for Institutional Research (EAIR) and the Association of Institutional Research (AIR), of which the latter two are open both to individual and institutional membership. Associations have also been established among other groups in higher education like administrators or students. Examples of these are the European Association for International Education (EAIE; for international relations officers in higher education institutions) and the Association des Etats Généraux des Etudiants de l'Europe (AEGEE). Although the members of these associations are all affiliated with some organisation, their membership is (partly or exclusively) on an individual basis. These types of individual cooperation above all have a long-term focus, meaning that they are not focused on a particular task and are not dissolved after the task is accomplished. International relations that are based on a certain task or project and that are finite in their existence, often come in the form of task forces or expert groups and are in general assigned by a higher order international body. Examples of such linkages are expert groups on quality in higher education established by the OECD or a working group on the Bologna Declaration set up by the CRE. Likewise, here the individuals are installed and operate on a personal title.

Another phenomenon is inter-regional cooperation in higher education between supra-national or inter-governmental organisations. With the foundation of several regional inter-governmental organisations (IGO’s), frequently arising from the need of economic integration, cooperation in the field of higher education also emerged between such regional blocks (e.g. the ASEAN-EU University Network Programme). Finally, we should point to another level that can be distinguished but can not be placed in the range national-institutional-individual. This cooperation takes place within the realm of the Non-Governmental Organisations (NGO’s). More and more NGO’s become involved in higher education, mainly those in the field of development aid, human rights or economic restructuring. These organisations generally directly cooperate with national bodies, institutions or individuals in their target countries.

The reflections above enable us to define the exact definition of our study-objects. This definition needs to emphasise that the relations are established between organisations, as opposed to relations between national governments; they are established at the level of the institution, as opposed to individual linkages; we will restrict ourselves to formal linkages, which are based on at least some form of interaction between the participants, and thus exclude unilateral relations. Hence the objective of this paper can be formulate as the development of a typology for international inter-organisational arrangements in higher education, which are based on interaction between its participants. Before we start our exploration, we will first briefly explain the emergence of these international arrangements on the basis of macro-developments in higher education. Next we will present a brief overview of existing typologies of cooperation in higher education and analyse their amenities and shortcomings. Finally, we will attempt to create a comprehensive typology in which several different perspectives will be taken into account.

The Emergence of International Inter-organisational Arrangements: Macro-developments and Institutional Responses

The terms international and inter-organisational indicate the crossing of national and organisational boundaries. These boundaries have long been relatively fixed for universities as predominantly national institutions with rather rigid structures. In order to provide explanations for the appearance of international inter-organisational arrangements, we need to
look at why national and organisational boundaries are being crossed. Various developments, both inside and outside the field of higher education, have increased the permeability of organisational and national boundaries. The emergence of various international inter-organisational arrangements can therefore be explained by analysing the developments that have contributed to this increased permeability and the possible reasons for organisations to transcend these boundaries.

Crossing organisational boundaries
Inter-organisational arrangements can be seen as a means of expanding organisational boundaries. We assert that in the contemporary context, long established organisational structures and boundaries of the university are subject to change as a result of macro developments in the academic domain, the policy domain and the technological domain. The changes in the academic sphere, are related to what Gibbons (1998: 4-10) calls the changes in the production of knowledge leading to a transformation from knowledge produced in disciplinary structures to knowledge produced in the context of application. In the 20th century, research structures have been established that support practices guaranteeing the scientific results of research. These practices set the terms of what shall count as a contribution to knowledge, who is allowed to participate in the contribution to knowledge, what problems should be tackled and how accreditation is organised. “The disciplinary structure defines both what shall count as ‘good science’ and prescribes, as well, what students need to know if they intend to become scientists” (ibid.: 4).

These specialist disciplinary structures have become institutionalised and still play an essential role in the organisation and management of both teaching and research in most of the current universities. Gibbons observes the emergence of a new set of cognitive and social practices, characterised by the following attributes:

- Knowledge produced in the context of application instead of a context governed by the interests of a specific community;
- Transdisciplinarity instead of disciplinary;
- Heterogeneity and organisational diversity as opposed to a relative homogeneity of skills;
- Enhanced social accountability and reflexivity;
- More broadly based system of quality control where peer review still exists but now includes a wider, more temporary and heterogeneous set of practitioners, collaborating on a problem defined in a specific and localised context.

These changes in the production of knowledge demands for an adaptation of the organisational structures of contemporary universities. Although the primary changes will have to take place within universities, the outer boundaries will not remain unaffected by these changes. The main implication is that specific competencies and capabilities can not be found within the conventional structures and therefore have to be pursued in other disciplines and in other sectors, which are not represented within the traditional university structures. Research projects become moulded around themes, requiring knowledge and expertise spread throughout different universities and thus requiring inter-organisational coordination and cooperation. The new mode of knowledge production requires new skills, obtained through linkages with those who can provide these skills. Relevance and quality is no longer exclusively determined and judged by peers but require the involvement of representatives from other sectors, calling for linkages with associations, organisations and individuals from outside the university.

The developments in the policy domain that affect organisational boundaries and promote the establishment of inter-organisational linkages are related to the changes in resource dependencies that universities confront through a more diversified funding base and an increase in institutional autonomy. Although the pace and intensity of these developments differ from one country to another, it is acceptable to say that they are apparent on a world-
wide scale, in both developed and developing countries. While many universities, especially in continental Europe, have long dealt with national governments as their single source of funding, universities in many countries now are partly dependent on other parties for their required financial resources. These parties can be students paying student fees, other organisations contracting universities to conduct (applied) research, provide education and training or consultancy activities, or non-governmental or inter-governmental funding agencies providing research budgets on a competitive basis. Besides, also government funding has been increasingly distributed on a competitive basis and related to output indicators. The nature of resource dependencies has been changed by the emergence of non-traditional education providers, depriving universities of their monopoly in the production of scientific knowledge. As a response to the increasing competition for resources, universities have, among several other instruments, increasingly focused on their external environment to control the newly gained vulnerabilities. Through engaging in inter-organisational arrangements, universities can co-opt potential competitors to make them allies in the struggle for scarce resources or to gain access to and exploit the complementary assets that they bring into the arrangement. In addition, they can combine their specific strengths and competencies in order to achieve added value through the synergy created by means of cooperation.

A final development that has a considerable impact upon the organisational boundaries is the ongoing expansion in opportunities for information exchange and communication. To begin with, transportation and communication technologies and technologies for information exchange have fostered cooperation between academics for a long time. The impact of printing technologies, telephones, air transport et cetera, have enabled academics and professionals to create platforms for the exchange of research results or best practices in governance and management. The developments over the last decade of the 20th century however, have vigorously expanded these opportunities. Advances in information and communication technologies serve as a vehicle that enables and intensifies the changes expressed above. Inter-organisational relations – especially if close cooperation is envisaged – are very much dependent on information exchange and personal communication. Although this technological revolution may not be the direct cause for the changes in the production of knowledge, the diversifying funding base or the increased institutional autonomy, it has contributed to both the choice for inter-organisational coordination as a means to deal with these new challenges and to the intensity of coordination and cooperation between professionals and academics within these arrangements. Furthermore, it has expanded the range of possible partners to cooperate with due to the decreasing restrictions caused by distance. Next to a facilitating interaction, new technologies have also increased the need for interaction between universities. The increased use of these technologies, in both the primary and supporting processes of the university, has produced a demand for financial means and specific skills and expertise. Furthermore, the new technologies have enabled a more flexible delivery of courses, opening up new markets for higher level education such as ‘second-chance students’, additional education for professionals not able to attend regular classes and students that are unable to physically attend classes due to distance. These new markets and new demands for resources have pushed universities into relationships with organisations that can provide access to these markets or to the resources that were not available within the universities.

Crossing national boundaries

In addition to organisational boundaries, national boundaries also become more porous for higher education institutions. There are different explanations for the outward expansion of university linkages and activities, each driven by different actors or developments. First, there is the demand for international linkages from the traditional groups within the university. Many contemporary students demand opportunities for international experiences within their
regular curriculum because they acknowledge the merit of such an experience for their future careers and their personal development. This added value is also recognised by teachers and those that assess the quality of education. International experience is often promoted by the teaching staff and is included in quality assessments. Due to a growing level of global interconnectedness in the economy and other sectors and a growing multicultural society, future employers likewise acknowledge the advantage of employees with international and cross-cultural experiences. Similar observations are also apparent for teaching and research staff. International lectures or the involvement in international research projects is highly appreciated in the academic communities. This demand for international activities forces universities to expand their linkages in order to attract and retain students and academics. In addition to the need for logistic coordination, this trend demands inter-organisational coordination in fields like credit transfer and recognition and in quality assessment. The arrangements to co-ordinate these activities have frequently been formalised in bilateral relations, although the past decade many multilateral arrangements in the form of networks have emerged. Another development promoting international interaction between universities is the increasing pressure of internationalisation and globalisation processes on the curriculum and the content of research. The globalisation of business and markets, the increasing impact and number of international treaties and regulations, the awareness of the global nature of ecological problems, increased international migration are all events that have to be covered and analysed in business studies, economics, law, environmental studies, sociology, anthropology et cetera, and therefore demanding more international interaction. For this last category however, interaction frequently takes place on an individual basis instead of the organisational level.

Another – more recent – phenomenon is the increase in opportunities for transnational education. Transnational delivery of education can take on different forms. The modes of transnational education distinguished by the World Trade Organisation are fourfold: students can travel abroad and register for programme in a university in that country, scholars and teachers can provide education in other countries, institutions can have an actual presence in another country and universities can provide programmes in other countries while being located in the home country (cross border supply through distance education). The first mode might require active recruitment in other countries and knowledge of their qualification structures but does not require the establishment of inter-university arrangements. In the present context, it is mainly the third mode – actual presence of universities – that requires inter-organisational arrangements. Due to governmental regulations, formal arrangements with local universities are frequently mandatory for providing education in another country. But even where such arrangements are not mandatory or where cross-border distance education is supplied, inter-organisational linkages can be established in order to explore the distinctive features of foreign markets. In addition, relations with local institutions can provide better access to target groups through the utilisation of the local partners reputation and infrastructure in the country. Current developments in the liberalisation of global markets and the expanding opportunities for on-line delivery might contribute to a substantial increase of these forms of international inter-organisational arrangements.

A final development that endorses the emergence of inter-organisational relations outside the national domain calls for a more utilitarian perspective of universities. Universities have long been used as a vehicle for nation building and national development. The role of the university in national development – economic as well as political – is acknowledged by several national governments and inter-governmental organisations which therefore encourage and financially promote the establishment of linkages between universities in developed countries and those in the less developed countries. This role of universities is also recognised on the regional level. Because of the establishment of several regional alliances in the post-war period, often with political as well as economic rationales, universities have been used as a vehicle for creating regional awareness and development.
The encouragement of cooperation between the universities and of the mobility of students in the EU, provide a well-known example of ‘region-building’. Suchlike policies however can now also be observed in other regional entities and trade blocs.

As was observed in the case of organisational boundaries, the developments in technology have also played an essential role in the crossing of national boundaries. Through the emergence of the internet, potential students throughout the world (albeit with great differences in density) have access to information about courses in other countries and about arrangements for financial support, researchers can communicate and exchange information with colleagues on a global level, complete degree programmes can be offered on-line to students in all parts of the world. This promotes the demand for international exchange, the need for access to foreign markets and other opportunities for creating international arrangements. Also, when these arrangements have been established, cooperation can be intensified through the current technological opportunity in communication and transportation.

### Typologies of International Collaboration in Higher Education: a Review

Now that we have provided a background for the emergence of international organisational arrangements, we will focus on the different shapes these arrangements can adopt. In the past decades merely a few studies have been published that attempt to classify various types of cooperation in higher education. In this section, we will take a brief look at five recent studies that present a classification or typology of such arrangements. The first classification we will discuss – Harman (1988) – is not developed explicitly for international cooperation but refers to cooperation within the national domain. The other three typologies – Neave (1992), Wächter (2000) and Van Ginkel (1996)/De Wit (2001) – explicitly refer to international cooperation.

Harman’s organisation linkages continuum (based on Peterson, 1974 and applied by Goedegebuure, 1992) ranges from cooperative to unitary arrangements, with arrangements in between (consortia and federations) indicated as coordination. This classification was developed for relating mergers to different forms of inter-organisational cooperation. Harman’s continuum focuses primarily on the structure of cooperation ranging from loose cooperation between institutions to full blown institutional mergers. This also involves a certain level of transfer of authority and autonomy ranging from only moderate transfer in the case of cooperation to full transfer of authority to a new organisation in the case of amalgamation.

<table>
<thead>
<tr>
<th>Harman (1988)</th>
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<tr>
<td>- Voluntary cooperative agreement</td>
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<td>- Formalised consortium</td>
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<td>- Federation</td>
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*Table 1: Organisation linkages continuum (Harman, 1988)*

One could consider his continuum a market-hierarchy continuum with on the one side competition (which is not taken up in Harman’s continuum) and on the other side full hierarchy, where two or more organisations give up their autonomy and create a new organisation. It is particularly useful since it points to potential arrangements that are in
between loose cooperation and amalgamation. As we will see later, these intermediate forms are also apparent in international inter-organisational arrangements.

The next three classifications are explicitly developed for international arrangements in higher education. The first categorisation comes from Neave (1992) who presents the different forms of cooperation as five stages in network development (Table 2).

<table>
<thead>
<tr>
<th>Neave, 1992</th>
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<tr>
<td>- Monodisciplinary bilateral linkages</td>
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<tr>
<td>- Exchange partnerships</td>
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<tr>
<td>- Network partnerships</td>
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<td>- Multidisciplinary networks</td>
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<td>- Consortia</td>
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*Table 2: five stages in international network development (Neave, 1992)*

This classification is mainly based upon the organisational complexity of inter-organisational cooperation. The importance of this classification is that it relates complexity to both the number of participants and to the number of disciplines involved. The process of network development is vital in the interaction between national systems of higher education and international cooperation. The transition from the first to the second stage of network development is mainly determined by the existence of a formal and permanent administrative structure, operating at the level of the institution. Their operating base however, remains rooted in the base units of the university. The next stage, the network partnerships, moves the pattern of international cooperation from the classical bi-lateral linkages to the multi-institutional partnership. These might be disciplinary, but can also become multi-disciplinary in nature. The final stage, the consortium, is characterised by the existence of a coordinating unit or division, common to all partner institutions with its own financial competencies. Furthermore, the coordination is no longer performed in the units that are located in each establishment but it constitutes a further administrative layer above that of the institution. An important addition contributed by this classification is the observation that the degree of cooperation between the institutions matters but also the incorporation of the arrangements within the organisations.

On the basis of a description of 37 European and 14 international arrangements in the field of higher education, Wächter (2000: 170) presents a categorisation of associations in higher education consisting of five groups (table 3)

<table>
<thead>
<tr>
<th>Wächter (2000)</th>
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<tr>
<td>- Associations of higher education institutions</td>
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<tr>
<td>- Associations of associations from higher education</td>
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<tr>
<td>- Associations composed of individual members</td>
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<tr>
<td>- Regional associations</td>
</tr>
<tr>
<td>- Associations with members from outside and inside higher education</td>
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*Table 3: categorisation of associations in higher education (Wächter, 2001)*
This typology takes a broader perspective on the international linkages in higher education by including individual membership associations and even associations of associations. Furthermore, it does not only focus on close cooperation but also on other functions of arrangements such as advocacy and information exchange. It also points to the fact that arrangements can also include members from other sectors outside higher education. The main shortcoming however, which is inherent in the broad perspective taken by the author, is that categories are too broad and show too much overlap. In fact, the first category – associations of higher education institutions – covers all formal arrangements between higher education institutions. Wächter however, does indicate that this group “can be further differentiated into networks which are discipline- or theme- unspecific (comprehensive) and those which focus on a particular academic field or theme” (p. 171).

The final typology we will review was developed by De Wit (2001) and is based on Van Ginkel’s (1996) typology of inter-institutional cooperation in Europe (table 4). Within the first category – associations – De Wit makes a further distinction between three types of associations. The first are associations as an organisation of academics or administrators and/or their academic units. These associations which have a long history in higher education, are based on individual membership, they are single purpose, academic and discipline based and they are faculty driven. A second type consists of the arrangements of an individual, administrative nature, such as the International Association for University Presidents. The final type distinguished by De Wit consists of associations that are institutional, multipurpose, management-based and leadership-driven, like the International Association of Universities. Academic consortia are described as a group of academic units who are united for the single purpose of fulfilling a contract. They are characterised by a limited life span, and are faculty or leadership driven. According to De Wit (p. 180) “suchlike consortia will continue to be the most common form of international organisation in higher education, and increasingly as part of academic associations or institutional networks. The final type – the institutional networks – are groups of academic units who are united for multiple purposes, are leadership-driven and have an infinite life-span. The past decades, many institutional networks have emerged in the European domain (e.g. UNICA, Coimbra Group, ECIU) or even in sub-European regions (e.g. ALMA), but also other regions have witnessed the emergence of such networks (e.g. AUGM in Latin America or the ASEAN University Network in the ASEAN region). Recently, also several supra-regional networks have emerged which cover multiple regions or are even global in scope (e.g. Universitas 21; Global University Alliance).

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<tbody>
<tr>
<td>- Associations</td>
<td>- Academic associations</td>
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<tr>
<td>- Inter-university cooperation projects</td>
<td>- Academic consortia</td>
</tr>
<tr>
<td>- university-enterprise training partnerships</td>
<td>- Institutional networks</td>
</tr>
</tbody>
</table>

*Table 4: Types of international multilateral organisations in higher education*

Although the initial classification presented by De Wit is rather broad, leading to a wide diversity of international arrangements within the categories, it does provide several helpful insights. First of all, the distinction between associations and other arrangements is important, with the first more related to development of the associated actors and the other arrangements related to actual co-operation between participants. Other useful additions to other typologies are based on the subdivisions applied to the three categories. De Wit does not only discriminate between institutional and sub-institutional arrangements but divides the latter.
into cooperation in thematic and disciplinary issues. Furthermore, he makes a distinction between cooperation for a limited and infinite life span.

A review of these categorisations brings forth several features of cooperative arrangements between organisations that should be taken into account. Most categorisations are based on a particular perspective on inter-organisational cooperation. One can focus on size, composition, coordination mechanisms, origins et cetera. Although the analysis portrayed above provides useful new insights, they either lack a systematic derivation of their classifications or they focus on one specific aspect on inter-organisational arrangements. In the following part we will proceed from the findings above and complement these findings with perspectives from other fields, to arrive at both a systematic and multidimensional typology of international inter-organisational linkages in higher education.

**Inter-organisational Arrangements in Higher Education: Towards a typology**

In order to arrive at a systematic typology we will take the following approach. We will start by looking at some basic features of inter-organisational arrangements. If we take into account the previous typologies some basic features can be distinguished: size (Neave, 1992) and reach or scope (Neave, 1992; De Wit, 2001). Other features that we will distinguish need a more in-depth analysis of the arrangements: the nature of integration (Van Ginkel, 1996; Wächter, 2000) and the intensity of the linkages (Harman, 1988). These dimensions – size & scope, nature of integration and intensity of linkages – will be further analysed in order to arrive at a multidimensional typology of inter-organisational relations in higher education.

**Basic Features of Inter-organisational Arrangements: Size & Scope**

One of the most mentioned features in distinguishing inter-organisational relations is the amount of organisations represented in the arrangement. (Alter & Hage, 1993, 1997; Child & Faulkner, 1998; Faulkner, 1995; Aldrich & Whetten, 1981, Whetten, 1981). This element is also mentioned above in Neave’s classification. Although many authors agree on the importance of the number of participants, the reasons for the relevance of this dimension differ. Many distinguish between dyadic linkages on the one hand and multilateral linkages or networks on the other. Aldrich & Whetten base their distinction on the complexity of the cooperation. Child and Faulkner (1998), in their typology of strategic alliances, also make the distinction between bilateral and multilateral cooperation on the basis of complexity of the structure of cooperation. Child and Faulkner in this respect talk about two-partner-alliances and consortia. The distinction between the number of participants is an obvious one, although the demarcation between different sizes poses problems. We agree with the distinction between two and multiple participants, since bilateral linkages are \textit{(ceterus paribus)} easier to maintain than linkages that are to be maintained among a large amount of members. Multilateral inter-organisational relations in higher education however can differ widely in their amount of participants, ranging from only a few to several hundreds (e.g. EUA or IAU). There thus needs to be a further distinction apart from the distinction between two vs. more than two.

We suggest here that a distinction by the number of participants is not only based on complexity but also on the interests that are represented in the arrangement. Here we can distinguish two broad categories: those where individual interests of the participants are represented and those where a collective interest is represented. Arrangements that fall within the first category will consist of two or more members that will invest a certain amount of financial or human resources or knowledge into the arrangement, and expect a rate of return on these investments. In this view, organisations establish linkages to strengthen their own
position vis-à-vis the external environment. Reasons for entering into cooperative arrangements that can be mentioned here are: risk reduction, economies of scale and/or rationalisation, technology exchanges, co-optation, overcoming trade or investment barriers, facilitating international expansion, vertical integration advantages. In general, organisations try to actively control their external environment to cope with uncertainty; a perspective advocated by resource dependence theorists (e.g. Aldrich, 1979; Pfeffer and Salancik, 1978; Pfeffer and Nowak, 1976). The networks among organisations thus emerge to serve the individual organisational interests of the participants. Obviously, no organisations will get involved in such cooperative arrangements if they do not expect to gain from the cooperation. They all expect to reap their benefits, but have to cooperate to do so. The relations in these arrangements are thus reciprocal, where each individual organisation has to do one’s bit to make the arrangement work and therewith profit from the cooperation. This also explains why membership to such arrangements is not open, but the selection of appropriate partners forms an important part of the cooperative strategy.

Other arrangements however are established in order to pursue a particular collective interest (see also Galaskiewicz, 1985). These arrangements are not so much based on resource exchanges but on advocacy. According to Olson (1965), organisations engage in collective action and contribute time and resources to the collective effort without being overly concerned about the return they should expect in the short term. This is explained by the existence of shared values and a sense of “we-ness” among the members of the coalition. Inter-organisational linkages that emerge in this arena can be referred to as coalitions or associations, which are established for the representation of collective interests. They are usually characterised by a large amount of member institutions and an open membership (for a particular type of institutions). The participating institutions can gain from the activities within such associations without transferring a significant share of power to the collective. Activities within the framework of these associations do not demand close cooperation among their members but are focused upon the representation of those interests that form the basis for the association. Often, such arrangements are accompanied by providing several platforms for dissemination of information, such as journals and international conferences. Examples of such associations of higher education institutions are ample. They can emerge around several interests which can range from regional interests (e.g. EUA, AUN, ASAHL, AARU), disciplinary interests, professional interests, thematic interests (e.g. ACA, EDEN), etc. We thus arrive at three broad types of inter-organisational arrangements: associations with numerous members, bilateral partnerships with two members and multilateral networks with a limited amount of members. These three basic types can be further subdivided on the basis of their scope.

With respect to our second feature – scope – we can refer to both the scope in time and scope in activities. De Wit already pointed to the distinction between arrangements with a limited or an infinite time-span. The first types are in general project-based cooperative arrangements aimed at a particular task, while the second type are of a more strategic nature, anticipating on future developments. We must add here that this distinction does not apply to associations since they are generally established for an indefinite time-span. Since they are formed around a particular issue (discipline, theme, etc) they will continue to represent these interests for as long as they exist or as long as they maintain the member support for this task (which are both indefinite). The temporal scope of partnerships and networks concerns the question whether the relation is established for short-term operations or for long term adaptation. In the first category, Lorange & Roos (1992) include ad hoc pools and project based joint ventures. In these forms, the various parties invest resources on a temporary basis to accomplish an operational goal, after which the relation will be revoked. These joint operational ventures are finite and will be dissolved when the mission is accomplished. Research and development arrangements with business and industry can take this form of cooperation if research on a
particular problem or development of a particular product is the aim of the arrangement. Arrangements with an indefinite time-span can be seen as organisational forms, which will lead a strategic life of their own and are therefore not established to be dissolved in a later stage. Consequently, the objectives of suchlike arrangements are more abstract and do not envisage a direct tangible result. The objectives of such strategic inter-organisational arrangements should be broad and flexible enough to enable adaptation to future challenges. Examples of such strategic objectives are foreign market entry, access to new target groups, access to new knowledge, diversification of risks et cetera.

Scope can also refer to the scope of activities that are being undertaken within the arrangements or the domain in which the arrangement operates. This domain can be linked to Dill’s (1958) concept of ‘task environment’: those parts of the environment which are ‘relevant or potentially relevant to goal setting and goal attainment’: customers, suppliers, competitors (for both markets and resources) and regulatory groups. Although Dill used the concept for individual organisations, it can also be applied to a collection of cooperating organisations. The question than becomes: on which part of the environment does the collective or the participants focus. Here we can make a distinction between arrangements that focus on a particular task performed within higher education institutions and those that are more comprehensive in scope. The former type of arrangements evolve around particular issues which can be either disciplinary or thematic in nature (De Wit, 2001). They are not institution-wide but emerge in a particular part of the organisation1. Disciplinary arrangements among higher education institutions or with other organisations emerge within particular locations of the institutions, usually faculties, schools or departments and can involve cooperation in research, in student exchange, in professional development et cetera. Thematic arrangements evolve around issues that exceed disciplinary boundaries, such as quality assurance, use of new technologies, library cooperation et cetera. Such partial arrangements thus are limited to particular themes or disciplines and to a particular part of the organisation. Many arrangements however consist of cooperation on multiple themes and disciplines and have an institution-wide impact. Next to multiple discipline and thematic areas of cooperation, such institutional arrangements frequently involve institutional cooperation on a central level around issues such as the admission of new members, cooperation with other sectors, or organisational arrangements for the establishment of virtual universities. What must be added here is that these institutional arrangements are very unlikely to be formed around operational goals. As we saw before, operational partnerships or networks will be abolished as soon as the goal has been achieved. When they are not formed around one but around several goals, the network or partnership gains a more strategic character. Operational and institutional thus should exclude each other in our typology. The observations above provide us with a first subdivision between inter-organisational arrangements based on size and scope as illustrated in table 5. The table also summarises the statements made about the objectives of the arrangements – or the interests represented in them – the amount of members and the form of membership. This will form the basis for our final typology.

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<tr>
<th>Arrangements</th>
<th>Size</th>
<th>Temporal scope</th>
<th>Scope of activities</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic/Disciplinary associations</td>
<td>Numerous</td>
<td>Long term</td>
<td>Them / Discipl</td>
<td>- Representation of common thematic or disciplinary interests</td>
</tr>
</tbody>
</table>

1 In the case of particular themes, the distinction between thematic and institution-wide can become rather blurred. The themes quality or new technologies for instance, have such an institution-wide impact, that it is arguable to designate networks formed around such themes, thematic.
Composition and the integration of activities

Van Ginkel and Wächter mentioned the possibility of cross-sectoral cooperation in higher education (e.g. university-industry linkages). As we observed before, organisational and sectoral boundaries are frequently crossed in the current higher education environment. The increasingly porous traditional boundaries between organisations, and between sectors, make a rigid distinction between university and industry or business and between public and private less functional (see Middlehurst, 2001). We therefore prefer to discuss the nature of integration instead of composition. After all, cooperation between industry and higher education can come in a variety of forms: cooperation in R&D, in training, in supplier or distribution relationships, etc. The distinction between university-university cooperation and university-industry cooperation would thus leave too many options open in one of the categories. A distinction between public-public cooperation and public-private cooperation also leaves too many options open. First of all, public-private cooperation can also encompasses cooperation between a public and a private higher education institution. Furthermore, universities cooperate with many other public agencies, not only as representatives of public interests, but also in the relation of consumer-producer or vice versa. Distinctions between public and public-private arrangements or between higher education and cross-sectoral arrangements loose their meaning in the complex relations between the university and the environment it faces. A more meaningful distinction can be made on the basis of the nature of integration. Associations, partnerships and networks are all established with the aim of integrating certain activities. The nature of integration however differs from one arrangement to the other. A generally accepted distinction in the nature of integration is based on the difference between horizontal and vertical integration (e.g. Goedegebuure, 1992; Alter and Hage, 1993, 1997). Horizontal integration occurs between organisations that produce the same products or services, while vertical integration occurs between organisations of which one is the actual or potential supplier or distributor of the other.

Horizontal integration usually occurs between organisations that have a competitive relation with each other because they are serving the same markets or drawing from the same resource pools. The relationships organised along these horizontal lines can be based on technology exchange, knowledge exchange or (financial and/or human) resource pooling.
Since organisations engaging in horizontal arrangements are providing the same services, which in our case would be the provision of higher education and scientific research, these arrangements will often consist of two or more higher education institutions. Horizontal arrangements between higher education institutions and organisations in other sectors however, are also possible. R&D departments of private companies frequently cooperate with university departments in the field of research or a human resource department of a company might cooperate with a university in the training of its personnel.

While horizontal arrangements emerge between organisations or parts of organisations that have a competitive relationship (or expect to be in a competitive relationship in the future), vertical arrangements can emerge between organisations that have a symbiotic relationship. These organisations are not connected because they serve similar markets or are engaged in similar services but because one provides the input for the other. These vertical arrangements are often between higher education and business or industry where one needs the expertise or products of the other. This can for instance be in the form of providing research or training for private companies. Another example is the cooperation between a university and a private enterprise where the private partner distributes and markets products developed by the university (e.g. University of Twente and IBM). Vertical arrangements can however also emerge between higher education institutions. This can for instance be the case in franchising or twinning arrangements and foreign market entry strategies. One institution can deliver the content while another provides infrastructure and human resources. The characteristics of these different forms of integration are illustrated in table 6.

<table>
<thead>
<tr>
<th>Vertical integration</th>
<th>Horizontal integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>- between organisations providing different services</td>
<td>- between organisations involved in similar services</td>
</tr>
<tr>
<td>- between (parts of) organisations with a symbiotic relationship</td>
<td>- between (parts of) organisations with a competitive relationship</td>
</tr>
<tr>
<td>- incorporating activities</td>
<td>- pooling and exchanging resources</td>
</tr>
</tbody>
</table>

Table 6: the nature of integration

The organisation of associations, partnerships and networks: the intensity of collaboration

The various associations, partnerships and networks can all be organised in different ways, representing a different level of intensity of cooperation. We will analyse the various potential organisational structures in this section. Here we will take Harman’s classification of cooperation-coordination-amalgamation as a starting point.

In the case of associations, organisational structures of the arrangements are rather uniform and independent from the question whether they are cross-sectoral or uni-sectoral and partial or institutional. We already noted that associations serve as a means of advocacy and are representatives of particular collective interests. The associations are based on open membership for a particular type of institutions, disciplines or themes. They operate rather autonomous and membership participation is based on membership fees for which the members expect the associations to represent them vis-à-vis other actors and to organise various activities (e.g. conferences, journals, workshops). In addition to periodical membership meetings (in which activities are discussed and board members are elected), the main power of the member institutions is the possibility to withdraw themselves from membership. In these arrangements, interaction is very limited and one can hardly speak of cooperative arrangements. These arrangements are generally organised loosely and are only
moderately integrated into institutional policies since they do not have high institutional priority. This does not mean that they do not perform significant roles. Their significance can be very high for a certain discipline, for a certain theme or for the general role of ‘the university’ in a region. The significance of an association for one particular institution on the other hand, is only moderate. In terms of Harman’s continuum, we can say that associations represent loose collaboration on a particular collective interest. There is no matter of delegation of authority and the loss of autonomy is minimal. A further sub-division for the intensity of cooperation is therefore insignificant for the case of associations.

**Bilateral partnerships** and **multilateral networks** however come in several organisational forms. Harman’s continuum of linkages presents a linear transition from loose corporation to amalgamations. The transfer of authority is the central issue in this model. It is valuable that Harman makes a distinction between cooperation (voluntary cooperative agreements) and coordination (formalised consortia and federations). This distinction is also made by Mulford and Rogers (1982). They define coordination as: “the process whereby two organisations create and/or use existing decision rules that have been established to deal collectively with their shared task environment”. Coordination is then seen as a more formalised way of cooperation. This formalisation can be expressed through decision rules, intermediary agencies, project bureaux etc. The important feature is that a particular new arrangement is established to coordinate the inter-organisational activities. The differences between both processes are emphasised in figure 1.

![Figure 1: interorganisational cooperation and coordination](Based on: Mulford and Rogers, 1982: 13-14)

It is obvious that coordination is likely to have more far-reaching consequences than cooperation. If we take into account Harman’s classification, an ultimate next step would be amalgamation. In this case, ownership or autonomy is totally transferred from the original organisations to the new organisation. In line with figure 1, one could characterise amalgamation as having formal rules, unitary goals, all resources involved and a full transfer of authority and thus loss of autonomy. The cooperation-coordination-amalgamation continuum can be applied to horizontal as well as vertical integration and to bilateral as well as multilateral arrangements. Although the continuum cooperation-coordination-amalgamation applies to enduring integration on the institutional level, with some alterations the continuum can be applied to all types of partnerships and networks identified above.
Alterations then have to be added to the operational arrangements and to the partial arrangements.

Operational arrangements can be loosely organised where members of the participating organisations work together in loosely formalised teams. A more formalised form of operational cooperation can emerge when such teams get more institutionalised through bodies like a steering committee or working groups. The most far-reaching form of operational cooperation is when the joint activities are accommodated in an independent executive organisation. These can for instance be project bureaux or project joint ventures/networks, operating independently under a fixed budget and staffed with temporary personnel. Such international arrangements can be established both for combining different kinds of expertise or infrastructure necessary for the project or for pooling resources in the case of projects requiring large investments. Partial – that is thematic or disciplinary – arrangements can also have different levels of integration. In this case however, only parts of the participating organisations integrate and therefore only the authority over a part of the organisation will be transferred to a higher level. Amalgamation in this case, means the full transfer of authority over a particular task to a newly established organisation. Here the original organisation does not cease to exist but only part of it. The other activities remain unchanged. This type of arrangement is also known as a joint venture. If we combine our notions about the intensity of inter-organisational arrangements with tables 5 and 6, we arrive at our final typology as pictured in table 7. In this table, inter-organisational arrangements are grouped according to our dimensions of size & scope, the vertical or horizontal nature of integration and subdivided on the basis of the cooperation-coordination-amalgamation continuum.

In both table 7 and 5, we use the terms partnerships and networks in order to distinguish between bilateral and multilateral arrangements. The use of terms like partnerships, networks, joint ventures, alliances and linkages are often used interchangeably or are distinguished on the basis of different characteristics. We will use the terms partnership and networks as respectively bilateral and multilateral cooperative arrangements, irrespective of their nature or level of integration. Joint ventures, in our typology, imply a shift in ownership from the parent organisations to the new organisation. Mergers can in this terminology be seen as a particular joint venture where all parts of the parent organisations are integrated and where the parent organisations cease to exist. Alliances will be referred to as a mode of inter-organisational coordination and these can be both horizontal and vertical. Loose vertical cooperation between two or a limited amount of organisation is usually in the shape of contracts, sometime these are onetime contracts, in other cases they are not fixed or renegotiated on a regular basis.
### Table 7: A typology of international inter-organisational arrangements in higher education

<table>
<thead>
<tr>
<th>Size:</th>
<th>Temporal scope:</th>
<th>Scope of activities:</th>
<th>Classification according to size &amp; scope:</th>
<th>Vertical integration</th>
<th>Horizontal integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerous</td>
<td>Long term</td>
<td>Institutional</td>
<td>Institutional associations</td>
<td>- Cross-sectoral associations</td>
<td>- Higher education associations</td>
</tr>
<tr>
<td>Bilateral</td>
<td>Short term</td>
<td>Them/Disc.</td>
<td>Project Partnerships</td>
<td>- onetime contracts</td>
<td>- cooperative project</td>
</tr>
<tr>
<td>Bilateral</td>
<td>Long term</td>
<td>Institutional</td>
<td>Institutional partnerships</td>
<td>- long term contracts</td>
<td>- loose cooperation</td>
</tr>
<tr>
<td>Multilateral</td>
<td>Short term</td>
<td>Them/Disc.</td>
<td>Project networks</td>
<td>- onetime contracts</td>
<td>- cooperative project</td>
</tr>
<tr>
<td>Multilateral</td>
<td>Long term</td>
<td>Institutional</td>
<td>Institutional Networks</td>
<td>- long term contracts</td>
<td>- loose cooperation</td>
</tr>
</tbody>
</table>

**Conclusions:**

*On Fads, Myths & Realities*

In this paper, we have attempted to give an insight in the maze of international inter-organisational arrangements in higher education. Developments fuelling the establishment of such linkages have been identified. First, the changes in the production of knowledge, changes in resource dependencies and increased opportunities for interaction through new technologies, demand interaction with other universities and organisations, in activities that previously took place within the organisational boundaries of the university. In addition, universities cross national borders on an increasing scale. Students, scholars and employers
demand and value the experience gained through international experiences. Liberalisation of trade markets and new modes of delivery expand opportunities for transnational education and the need for interaction and cooperation. On the basis of several classifications of cooperation in higher education and using insights from organisational and management studies, we have developed a typology of international inter-organisational cooperation. Ultimately we have presented one multidimensional typology. The critical dimensions in these perspectives were size, scope, nature of integration and intensity.

In theory, these developments might have a substantial impact on the future composition of the higher education sector. Caution for too much optimism (or pessimism) is especially necessary in the cooperative arrangements that rely heavily on information and communication technologies and on the new segments of the market. The demand for professional training and executive education is a rather recent phenomenon, at least in this magnitude. The application of new technologies is also a process that is still unfolding and that is still surrounded by many uncertainties. Furthermore, many market driven arrangements and activities have been established in the latter part of the 1990’s and the start of the 21st century, a period marked by high economic growth, creating opportunities for employers to provide their personnel with additional training and education and opportunities for students to ‘consume’ higher education abroad. With declining economic growth, the profits and the return of investments in the new education markets are all but guaranteed. This paper shows that inter-organisational arrangements that transcend national borders are not a novelty as such. International relations between institutions have existed for decades or even ages. However, it is clear that new forms of interaction and cooperation are emerging. Whether the new forms are based on profound and sound considerations and evaluations or whether they are ‘managerial fads’ based on ‘corporate myths’ is something that future developments will indicate.

Further Research
Research in industrial economics point to several examples where alliances, mergers and take-overs have failed to lead to increased performance. Also, costs related to negotiations and coordination are substantial and even exceeds resources spent on research and development (Schenk, 1997). Others point to the necessity and opportunities for cooperative strategies in international business (e.g. Contractor and Lorange, 1988; Doz and Hamel, 1998). In the field of higher education, the research on performance of inter-organisational arrangements has been rather scarce until now. Empirical studies have mainly focused on national consortia, mainly in the US (e.g. Neal, 1988, Beder, 1984). Empirical studies on international arrangements appear even less frequent (for an exception, see Saffu and Mamman’s study (2000) on Australian Inter-university alliances). The studies that have appeared are mainly anecdotal in nature or focus on central level considerations for entering alliances. Interesting directions for further research should focus on whether alliance formation should be seen as strategic behaviour or whether they are reactions to institutional processes. Furthermore, insights should be provided into the relationships between these motivations, the intensity of these arrangements and their actual performance. The research project of which this paper is part, will focus on this relation for the case of horizontal strategic alliances established on the institutional level.
References


Appendix:
Abbreviations of inter-organisational and international arrangements:

- AARU: Association of Arab Universities
- ACA: Academic Cooperation Association
- AIR: Association of Institutional Research
- ASAHIL: Association of Southeast Asian Institutions of Higher Learning Asian
- ASEAN: Association of South East Asian Nations
- AUGM: Associación de Universidades Grupe Montevideo
- AUN: ASEAN University Network
- CHER: Consortium for Higher Education Researchers
- CRE: European Universities Association (now EUA)
- EAGEE: Association des Etats Généraux des Etudiants de l'Europe
- EAIE: European Association for International Education
- EAIR: European Association for Institutional Research
- ECIU: European Consortium for Innovative Universities
- EDEN: European Distance Education Network
- EU: European Union
- EUA: European Universities Association (formerly CRE)
- NAFTA: North American Free Trade Association
- OECD: Organisation for Economic Cooperation and Development
- SADCC: Southern African Development Co-ordination Conference
- UNICA: Network of Universities from the Capitals of Europe