

Archimedean Platforms for Quality Improvement

In accordance with its motto "Dare to Think", Ghent University trains its students to be seekers and risk-takers. These are people who can go beyond the existing assumptions, who can think outside of the box and gain new insights. The box is our established way of seeing and thinking, which gives us a sense of direction but also keeps us from approaching a problem with fresh eyes. We cannot step outside of the box unless we see the box for what it is, with all its limitations. Any undertaking is invariably approached from a particular viewpoint, with fixed assumptions and implicit background theories. This attachment to a specific viewpoint can also be referred to as one's perspective. As soon as one is able to approach a problem from multiple perspectives, there is more room for creativity and a wealth of thought.

This applies not only to individuals, but also to institutions: their wealth and creativity are linked to their ability to define and approach their tasks and goals from multiple perspectives. For example, education has several social functions: among other things, it ensures the transfer of knowledge from one generation to the other, it prepares students for the labour market, and it socializes students in a cultural environment. An institution that explicitly defines and organizes its teaching activities with an eye for these numerous functions of education will – in line with the philosophy of Ghent University – deliver better education than an institution that fails to do so. For example, while we pay attention to the heritage of knowledge that must be preserved and transmitted through our education, we also consider the technical skills that education must impart to lawyers, engineers and linguists. We shape our education, based on not just one of these features, but on all of them: our education is general enough to allow our students to participate in all kinds of cultural environments, but it is also founded on sound and thorough professional training and contributes to the transmission of knowledge. The term for this way of thinking is "multiperspectivism".

This multiperspectivism is a translation and interpretation of the mission statement of Ghent University. There are also relationships between multiperspectivism and the four other major substantive strategic objectives of Ghent University: basing education on research, developing the talents of students and teachers alike, ensuring the participation of stakeholders in education, and focusing on the internationalization of education. In addition, Ghent University has a formal objective: meeting (international) quality assurance criteria. These six objectives together determine what "quality of education" means for Ghent University. It is this kind of education – multiperspectivist, based on research, and inherently internationally oriented – that makes it possible to develop students' and teachers' talents and that is the result of participation from the stakeholders in education. Finally, all these processes are organized according to mechanisms that form a closed, dynamic quality circle.

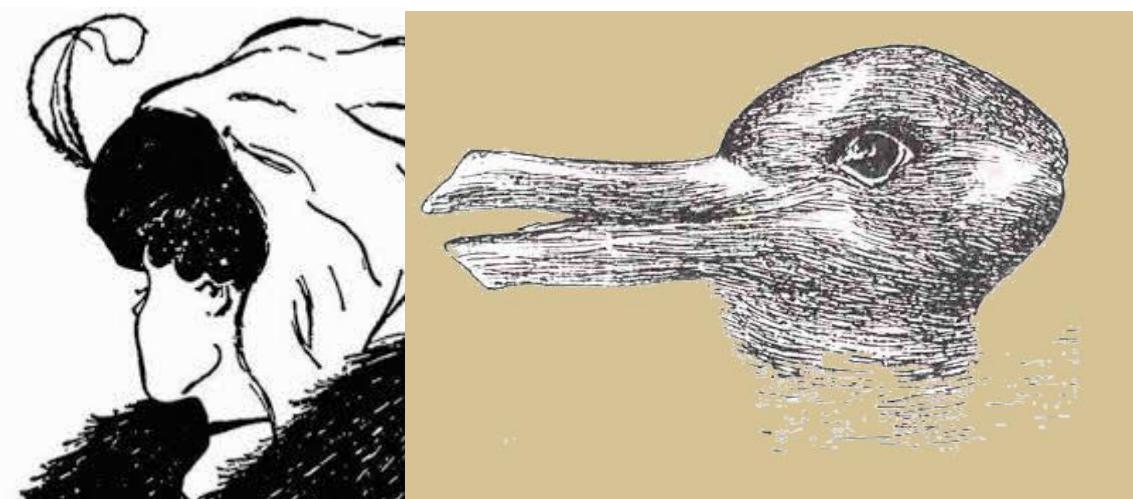
As Archimedes would have said, if he was given a place to stand, a point, and a lever long enough, he would be able to raise the Earth. What we want to raise is the quality of education. In our case, education based on research, stakeholdership, talent development and internationalization are the Archimedean points – or rather, *platforms*, because points are dimensionless. What connects these platforms is multiperspectivism. That is the focus of

the present text: how the choice for the Archimedean platforms is connected to our multiperspectivist basic philosophy.

1. Multiperspectivism and Education Based on Research

By definition, academic education is based on research. This idea is central in the Humboldtian model of higher education: a place where independent researchers, dedicated to the free and critical examination of social problems and debates of very various kinds, provide education with scientific education as the main objective. All universities worthy of the name draw their status from this Humboldtian model; Ghent University is no exception. Providing education based on research is in itself quite a task. However, Ghent University adds yet another dimension, by advocating that education should be closely related to the dynamics of scientific research itself. Scientific creativity is indeed closely related to the ability to take on a different perspective towards problems, the ability to organize known data in a different way.

Fine examples of that process are found in visually ambiguous figures, such as the famous rabbit/duck and young girl/old woman optical illusions.



In these cases, the same data give rise to the perception of different images. In other words, the data do not unambiguously determine which figure you see. The *Gestalt* that you perceive also determines the role of the data.

The idea that theory and data mutually determine each other was pervasive in Thomas Kuhn's theory on the origin of great scientific revolutions (such as Galileo's mechanics and Lavoisier's chemical oxygen theory). The origin of these revolutions, he claimed, were paradigm shifts – changes in the way data is organized into theoretical concepts. Within the framework of an accepted paradigm, "normal" science is done. Gradually, however, particular anomalies emerge, which eventually give rise to a radical re-thinking of the

foundations of science itself. Lavoisier's oxygen theory replaced the older phlogiston theory, because it offered a better explanation of these anomalies, thus reorganizing the existing data into a new whole.

The concept "paradigm" is well-known in the scientific community. Kuhn used it to refer to great scientific discoveries in the natural sciences, such as Newton's theory of gravity and Einstein's relativity theory(ies). Problem-solving in the context of "normal" science was to him mere "puzzle solving", while it was the revolutions that brought with them actual paradigm shifts. The extent to which this view is justified is currently under discussion, but this is beyond the scope of the present text. Kuhn's constructivist approach has produced several timeless insights which correspond with the broader approach of Ghent University. Equally important is that puzzle solving in regular science is not only a matter of devising a solution based on common presuppositions. It also often requires creativity and a new way of looking at existing principles (similar to the task connect 3² points with 4 lines). The decisive factor is often the willingness and ability to approach problems from other positions than the familiar ones.

To make sure that education facilitates the creation of new knowledge, the existing perspectives on problems should therefore be multiplied and students should be actively confronted with other ways of organizing data. This may happen in several ways. It is well known that textbooks tend to present a discipline or an area as a closed construction with an essentially unchangeable core of knowledge. Education can compensate for this by making students aware of the unfinished and open nature of science, by presenting today's results as solutions to the problems that were associated with it at some point. To this end, education may do the following:

- referring to the way currently accepted theories were discovered (e.g. Harvey's discovery of blood circulation based on a mathematical calculation)
- getting students to reflect on how older theories were created to solve contemporary problems (e.g. how it could be explained without any knowledge of DNA that children resemble their parents, or how the ancient Greeks and Romans could write down their arithmetic theorems without the use of Arabic numerals)
- pointing out any loose ends, anomalies or unexplained elements in accepted theories
- confronting them with alternative explanations from competing theories (e.g. in biology: ecosystem invasibility theories)

Another manifestation of a multiperspectivist approach is to introduce students to a multitude of theoretical perspectives on reality. Ghent University attaches great importance to offering different disciplines and combining them in meaningful ways, to ultimately construct a rich and multi-faceted approach (*multidisciplinarity*, *interdisciplinarity*, *transdisciplinarity*).¹

In the first years of a study programme, this is expressed in the fact that students are introduced to a variety of sciences. Some of these can be auxiliary sciences (e.g. statistics in virtually all disciplines; biochemistry in medicine); others can offer a broadening of some sorts (e.g. ethics in medicine; economics in geography; geology in environmental technology; environmental management in industrial sciences, political science in history). In this case,

¹ For the sake of convenience, the umbrella term "interdisciplinarity" will be used in the remainder of the text to refer to one of these three forms, unless otherwise specified.

the programme has a multidisciplinary component. Later on it can – more thoroughly – deal with transdisciplinarity (when a researcher uses tools from multiple sciences) or interdisciplinary studies (which aims at the integration of disciplines). After all, different disciplines have different approaches to problems. For practitioners of a discipline, these different angles are only natural, but for people from other disciplines they are not. A theoretical physicist approaches problems differently than an engineer in applied physics, a molecular biologist has a different outlook than a morphologist, a bioengineer sees things differently than an ecologist, and so does an economist compared to a geographer. Multiperspectivism is expressed in the extent to which trans- and interdisciplinary courses are offered (e.g. bio-informatics, environmental sanitation). In the treatment of problems that involve major challenges (such as sustainable development and climate change, population growth and the depletion of resources, the gap between rich and poor, problems of conflict management and peace management, discrimination against women), the integration of different theoretical and design perspectives is an absolute must to arrive at adequate problem statements and appropriate solutions.

Incidentally, education aimed at activating and problem-based learning automatically exhibits some general features that are multiperspectivist in nature. By using activating methods in practice sessions, lab sessions, discussions and other learning sessions, lecturers and students can reach the experimental core of scientific research. Discovery learning is essentially also enquiry-based learning. Credible higher education should sufficiently and regularly confront students with conflicting sources of information and theories. When incongruous information is provided and possibilities to use a different perspective are offered, this allows us to adjust the specificity and fixed nature of our own perspective.

2. Multiperspectivism and Talent Development of Students and Staff

As the multiplication of perspectives with regard to a problem is the key to a versatile and creative approach to that problem, the multiplication of talents is the key to building a versatile and creative university. This multitude of talents is responsible for the intellectual wealth of the institution. The university community should be a platform for talents that are as diverse as possible, as long as this is compatible with its basic mission of offering people an academic education.

The main target group of higher education are still young people who are usually straight out of secondary school. Although their talents have already partly developed in their former school career, we assume that the transition to university can be difficult for some, for many different reasons. Others may have to deal with circumstances that objectively complicate their self-development. These disadvantaged groups may be young people with disabilities or with an ethnic or social background that puts them at a disadvantage compared to others.

The basic philosophy of Ghent University is that (1) its students deserve equal opportunities for talent development (i.e. the principle of equal opportunities), and that (2) they all deserve a second chance without exception (i.e. the principle of second chances). Teenagers may simply have (had) bad luck once, and they may lose a valuable development opportunity without even realizing it.

The principle of equal opportunities implies that the institution should actively exert itself to give students equal starting positions. For some, this means that technical assistance is provided, for example by improving the accessibility of buildings for wheelchair users or by offering equipment to process information. For others, it may involve extra help in the form of mentorship or peer group support. Whatever may be the case, what matters is that initial differences are eliminated or compensated for, thus creating genuinely equal opportunities. In other words, Ghent University has an active diversity policy.

In this process, the equalization of opportunities, no matter how essential, may be even less important than the added value and opportunities that diversity offers. Variety is not a defect that must be eliminated, but an enrichment for the entire university community.

Obviously, this does not mean that Ghent University is indifferent to the ideological, political, social and cultural backgrounds and convictions of its students and staff. Rather, it acknowledges the value of diversity and aims to treat all these backgrounds and convictions with equal respect, as it considers them a source of inner wealth. Ghent University provides education in which ideological, social, cultural and physical differences can and may play a role, education that actively caters to a wide variety of perspectives. Our student and HR policy respectfully acknowledges the diversity of the students and staff and welcomes that variety.

The principle of equal opportunities does not mean that great and exceptional talent is held back, but quite the contrary: all talents – also the great ones – should have equal opportunities for further development. This is expressed in a wide range of linking and preparatory programmes, allowing students to explore new horizons or to build on previously acquired skills. Moreover, a wide range of elective course units and special statuses (such as those for student-entrepreneurs and student athletes) make it possible for students to diversify their skills.

Ghent University advocates the use of a safety net for the more vulnerable students, without nipping exceptional talent in the bud. In that sense, too, a multitude of perspectives is paramount. To accommodate this, additional incentives are in place for those who want or need it, for example in the form of honours programmes.

The motivation behind the principle of second chances is a principle of care: human capital must be treated with care. It is not always clear for young people which study programme would best serve their talents and interests, and it is easy to make a mistake. Ghent University therefore has a sound and extensive orientation and remedial system in place, which aims at finding a match between the talents of a particular student and the requirements of a study programme. This is one way of making sure that talent gets to where it belongs, where it thrives. Giving young people a second chance is not careless or lenient. If you do not have the talents that are required for an academic study programme, then reorientation is certainly called for. However, if you *are* suitable, you should not be dismissed after your first attempt. Talents must not be excluded on the basis of irrelevant criteria. Ghent University is working on two main avenues to arrange this: more support for those who need it, and more opportunities for those who can take them on.

For its staff, too, Ghent University recognizes the opportunities generated by diversity and seeks the development of talents. Cultural, social and gender diversity is an added value that

should be stimulated. To this end, Ghent University applies strict equality standards for the recruitment of its staff (i.e. professorial staff, assistant academic staff and administrative and technical staff). In addition, the principle of self-development is promoted and actively supported in various ways. The assistant academic staff are given opportunities for professionalization in the doctoral training programme, and efforts are made to promote the diversification of career planning and career expectations, both in the direction of inflow and outflow. For the administrative and technical staff, there are opportunities for internal mobility, not only at the place of employment, but also as far as job content and job category are concerned. Finally, the professorial staff have the opportunity to take a sabbatical and have a more varied career through the system of personalized objectives. There is also a wide range of in-service training for all categories of staff, not only in terms of professionalization, but also personnel management, IT use, financial management, and so on.

Multiperspectivism is also manifested in Ghent University's conviction that the development of its students and staff members does not have to be limited to professional and disciplinary skills. Naturally, these are a central concern for any university, but Ghent University also pays attention to other roles that students will face at some point in their lives. In particular, students should be prepared for the numerous roles that await them in a complex society such as ours: their role as global citizens, as responsible members of local communities, as family members, consumers, entrepreneurs, employees, and many others. Education at Ghent University is not only aimed at professional and disciplinary-academic development, but also considers that multitude of future roles. Scientific education is all well and good, but it is just as crucial that the curriculum offers students opportunities to actually put the acquired academic skills to use as socially committed or critical citizens, as people who are kind towards their social and natural environment.

In particular, Ghent University strives to offer a moral education that is closely linked to multiperspectivism. After all, taking a perspective and changing your perspective are, as is known from moral psychology, powerful tools to develop normative skills and value-based emotions. Ethical skills are largely based on what psychologists refer to as 'social cognition'. Social cognition is the ability to perceive oneself through the eyes of another. Moral development is related to the way in which one positions oneself towards overarching perspectives. Decentralization of one's own needs and interests can be achieved when people view themselves as members of a small group, a larger community, an entire society, and from the perspective of what a desirable social structure might be. Moral-educational studies show that the incentive to assume the perspective of the other or of a larger whole is a powerful moral learning tool. Asking yourself whether you would want certain events to happen to you and viewing situations through the eyes of the other – this is what allows you to identify with the desires and needs of another, fuelling a moral impulse. Incidentally, it is also a change of perspective that lies at the basis of the golden rule, which various religions have taken as an ethical starting point: "Treat others how you want to be treated yourself". In other words, multiperspectivism is not limited to education, but it also involves values and norms, a sense of identifying with larger wholes, with principles that are supposed to shape this whole. In this respect, it is important for Ghent University that the principle of changing perspectives is a formal concept and does not impose any moral content. It does require a particular way of viewing and encourages neutrality in the sense of "decentralization": "do

not just look at matters from your own perspective". This way of seeing things is compatible with a wide range of ideological principles.

3. Multiperspectivism and Participation of Stakeholders

"The university is not alone" is an important element in Ghent University's self-awareness. Here, multiperspectivism is reflected in the realization that the university as a knowledge centre is but one link in the wider knowledge ecology driving our society. The university is but one – albeit important – hub where numerous interests and stakeholders come together: it is where the government and the private sector meet, where students and their parents or partners connect, and where they interact with the university staff. Whereas a knowledge centre in the past could have afforded to see itself as a free port for critical and independent thinking, as well as a conduit for acquired knowledge, this is certainly no longer the case today. The university does have these tasks, but this self-centeredness must not turn into complacency. Universities today should live up to their mission of freedom and independence, in a context focusing on the wider *Umwelt*, with all the (negligible) risks of being bound to particular interests that go along with this. An ethically acceptable balance needs to be found between independence and social relevance.

For Ghent University, this approach is translated in the view that academic education should invariably be comprehensive, but that there should also be great emphasis on the social employability of the graduates in the fields for which they are qualified. In addition to a general and critical training, employability is another important goal of education.

This employability can be accomplished if we integrate the perspectives of declining fields into the fabric of our education. This is achieved by including representatives of those fields in the study programme committees, or by consulting them regularly in an institutionalized format.

Apart from the interests of the work fields, the students' interests (and indirectly also their parents') should also be taken into account in the university processes. There are several reasons for this. One is that academic education is a value in itself for students and their parents, a value that to a large extent can only be detected and put into words by themselves. The skills that students acquire at the university should contribute to a richer life, a life that allows them to be integrated into a fast-moving society, which expects its citizens to assume a multitude of roles. A second, even more important reason is that the university is there for the students, and not the other way around: *their* educational interests are paramount. Thirdly, the university is also the community in which the students live for a considerable amount of time. Students get the opportunity to leave their mark too. These aspects are all reflected in the participation of the students (and their parents) on matters related to student facilities.

In other words, there is an obvious emphasis on student participation. Ghent University offers students an extensive and guaranteed representation in the relevant advisory and decision-making bodies. They are in charge of particular central advisory bodies themselves (such as the student union of Ghent University) and participate substantially in study programme committees, Faculty Boards, selection committees and central advisory and

decision-making bodies. As far as student facilities (i.e. housing, nutrition, social activities, sports) are concerned, they have the casting vote. Ghent University intends to boost students' participation even more by granting them access to the necessary information and by actively involving them in advisory and decision-making bodies. Ghent University also devotes efforts to develop complaint and redress procedures, which offer students access to legal remedies.

Other direct stakeholders in the educational process are the lecturers and some of the other university staff members. After all, it is (in part) their livelihood. As lecturers, people proving support for educational programmes, researchers or education professionals, they have profound expertise in providing and organizing education, but also in controlling the educational processes. They are not just at the service of the other stakeholders, but as experts they may also rightly claim professional autonomy. Their perspective is irreplaceable and was once undeniably and invariably considered as the dominant viewpoint. The teaching staff is well represented in the study programme committees and other advisory and decision-making bodies which are set up around educational organization, among other things. Their professional judgment is indispensable and has its own value compared to the perspectives of the other stakeholders.

Internal bodies such as the Internal Appeals Committee (*Interne Beroepscommissie, IBC*) are not seen as the result of an annoying tendency towards legalization, but as platforms where the legitimate interests and rights of the two main groups of stakeholders – the students and education providers – meet and find a balance.

The university's attention to the participation of stakeholders is reflected in the fact that a multitude of roles are included in the university's knowledge ecology. The university is but one link in a chain that connects universities, colleges, higher professional education, secondary education, Strategic Research Centres (SRCs) and Strategic Innovation Platforms (SIPs), valorisation clusters and corporate R&D units – all within a dynamic of economic exchanges (for businesses) and public regulation (for governments).

Depending on their position in this ecology, the dissemination, transfer, production and protection of knowledge all play a different yet interconnected role. For example, the university creates new knowledge but also passes on established insights. It trains knowledge workers for companies and governments but also employs these knowledge workers itself, creative as well as productive ones.

Ghent University as a knowledge centre consciously takes on many roles: as an educator for educators (teachers) in the specific teacher training programme (Dutch: Specifieke Lerarenopleiding or SLO), as a trainer for governments and businesses (in-service training), as a supporter of professional study programmes of higher education at university colleges (e.g. via the Industrial Research Fund [Dutch, Industrieel Onderzoeksfonds, IOF]), as a place for secondary school pupils to continue their studies, as a bridge between professional Bachelor's programmes and academic education, and as a re-orientation system for academic graduates towards other areas of study. Each of these roles opens another window to the *Umwelt* of the university and thus also to the social interests that should be taken into account.

The multiplicity of perspectives that stakeholders bring to this is also manifested in the university governance. At the highest echelons (i.e. the Board of Directors and the Executive

Board), Ghent University involves external stakeholders (i.e. representatives from socio-economic, political and cultural circles). All policy-making bodies, albeit advisory or decision-making, are composed of members from all sections of the staff (i.e. professorial staff, assistant academic staff, administrative and technical staff, and students). When this rule is deviated from in advisory bodies devising strategies, experts take over the place of staff members, who participate in the higher echelons. Ghent University's entire governance structure is a tool to combine and coordinate the perspectives of students, staff and representatives of society.

4. Multiperspectivism and Internationalization

Ghent University does not see itself as a stand-alone unit, but as a link in an international learning network. How education quality is interpreted, for example, is increasingly determined by international standardization and benchmarking. Universities learn from each other across traditional borders: for instance, they observe examples of good university governance, efficient ways to organize training processes, or appropriate standardization of learning processes. Today, excelling in Flanders is only possible according to international standards. In Ghent University's vision statement, internationalization is therefore not a goal in itself, but a means towards more academic quality.

Internationalization is defined by Jane Knight as "the integration of the international, intercultural or global dimension in the post-secondary education" (Knight 2003:2). The link with multiperspectivism is obvious. The Integrated Policy Plan for Internationalization 2014-2018 of Ghent University states the following:

In many ways, international cooperation in higher education builds (...) on the notion that one may gain access to higher knowledge by integrating insights and methods developed elsewhere.

Through cooperation and coordination across borders and through the exchange of students and staff, internationalization ensures the influx of new ideas and perspectives. These electrify ways of thinking and cultivate a attitude of "daring to think". Moreover, through contacts with institutions from around the world and with foreign students, lecturers and researchers, our own students and staff are given the chance to acquire the intercultural and international competences that are such a great asset today for any job, inside or outside academia.

Ghent University welcomes the influx of new ideas and perspectives and actively encourages it, through the international exchange of students. We send out our students to give them the chance to develop into the global citizens that we will need in the future. Studying in another country – no matter how near or far – offers them the chance to become aware of the hidden beliefs of their own culture and background, as it confronts them with the beliefs of another. Learning to see yourself through the eyes of another is a fine example of the power of a perspective change. Naturally, getting as many students an international experience is thus an important objective of our education.

The same applies, mutatis mutandis, to the reception of foreign students: the more students we welcome here, the more opportunities we offer all students to learn something about themselves and their own culture, as well as about others and their culture. This also contributes to the development of intercultural skills, which are so indispensable in today's society.

Just like the exchange of students is an enrichment, this is also the case for the exchange of personnel. Ghent University aims to be an institution that is open to external researchers and professors. Each "foreigner", thanks to his/her individual experiences, may open the door to a wealth of new perspectives. Here, too, the multiplication of perspectives paves the way for new forms of integration and therefore also new forms of innovation. A university that is shut off from the world is doomed to lapse into provincialism – which is synonymous with a lack of quality.

Just like Ghent University welcomes the in- and outflow of students and staff, it pays close attention to international partnerships. Here, too, the link with multiperspectivism is obvious: international cooperation is an encounter between diverse perspectives. The strengths and weaknesses of the collaborating institutions are put together and are balanced to form a synergistic whole, from which all participating institutions benefit. Usually, this leads to multidisciplinary enterprises, in terms of research or education or both. An added advantage of international cooperation is that it offers a lever to bring together expertise previously spread across multiple faculties within the university itself.

To ensure the quality of these international partnerships, Ghent University is working on establishing a set of fixed criteria. Not every international cooperation automatically contributes to an increase in quality. Selectivity is required to guarantee the equivalence of the partners and to make sure that there is a synergy between their weaknesses and their strengths. Only by selecting a limited number of thematic and regional clusters can we reach a sufficient level of focus.

Ghent University pays special attention to development cooperation with partners in the South and uses quality criteria for this too. Through this international cooperation, the university realizes its social mission in a global context. Our objective is to provide support with capacity building in an initial phase, before moving on to a strictly academic cooperation. This way, Ghent University strives to be a link in the production and circulation of knowledge worldwide. After all, knowledge is one of the most vital resources that we have. It cannot be created in cooperation with the strongest possible academic partners, but should also be shared with partners in the south, not only because this is the right thing to do but also because we can achieve mutual development.

5. Conclusion

In conclusion, our aim is to further improve the quality of our education. To this end, we follow formal rules of quality assurance: our educational processes must meet programme requirements, reach the intended learning outcomes, meet international benchmarks, evaluate the required final level, and be based on closed PDCA-circles, to name but a few things. These requirements are formal in the sense that they apply to any higher education institution, whatever its views on education quality may be. Ghent University's specific view

on quality is rooted in a teaching philosophy that puts multiperspectivism central and that is the lever with which we strive for quality assurance and improvement from four Archimedean platforms. These platforms are the stepping stones towards education based on research, stakeholdership, talent development and internationalization.