

# **Social impact @ sciences: the end of the ivory tower?**

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# Valorisation at the EUR

Eric Claassen

I am very excited to contribute to this discussion. I have been a professor of immunology for twenty years. Fourteen years ago I started as an entrepreneur, so I quit my day job and for 100 per cent of my time I started building up small companies from the medical faculties in Amsterdam and Rotterdam. I vividly remember in 2007, or maybe early 2008, when Professor Pols had just started as the dean of the medical faculty. We were sitting in The Hague a few buildings down the road. NGI (Netherlands Genomics Initiative) announced that every year they would give a prize for valorisation. Professor Pols said to me: "We are going to win that prize". He meant, "YOU have to win that prize". So I wrote a proposal on ViroNovative, one of the first spin out companies in Erasmus. I wrote a proposal on maintaining long-term academic industrial relationships and we actually won the prize of one million euros.

I tried to buy a Ferrari with the prize money, but the Ministry of Economic Affairs did not allow that, so then I had to spend the prize, unfortunately, on a couple of PhDs. The PhDs then worked out why we were so successful before that period, because what we described in the position paper we wrote to get the prize was "how we dealt with society in a broad sense". So not just industrial relations, but also why we were on television, Ab Osterhaus and myself, and why we were in the newspapers, and in Dutch life-style magazines such as *Libelle* and the *Viva*, and why we also won prizes in different areas, that is different fields than just the content field. These experiences taught us that there are basically four pillars of science, of knowledge:

- Knowledge for knowledge
- Knowledge for prosperity
- Knowledge for social well-being
- Knowledge for culture

*Pillar 1: Knowledge for knowledge*

The most important pillar is knowledge for knowledge and that is what we would call “curiosity driven research”. Also, as explained by professor Buchanan in Chapter 5, excellence in that knowledge for knowledge pillar is the only factor. It is not one of the factors, there is only one factor there and that is excellence. I truly believe that, and that is also why I truly believe that whatever we do today or tomorrow we have to create new jobs for that particular knowledge for knowledge column. That is what keeps us afloat in the long run. I say this as an entrepreneur, not as a professor.

*Pillar 2: Knowledge for prosperity*

The second column is coupled to the first column and is easy for us in the medical field. That is knowledge to generate money, so knowledge for prosperity. So not just for the Erasmus medical faculty, but also for society. Those two pillars are very important, but knowledge for knowledge is the most important.

*Pillar 3: Knowledge for social well-being*

The third pillar is knowledge for social wellbeing. This is where you see policy support, policy analysis and all those issues that actually support society, in an intangible way. It is very difficult to measure how the results that ISS or other social science institutes generate actually contribute to prosperity and also to the other pillars, because they are intangible. If you influence policy, it is very difficult to measure what your initial contribution was or maybe even what your initial idea was, after 5 years.

*Pillar 4: Knowledge for culture*

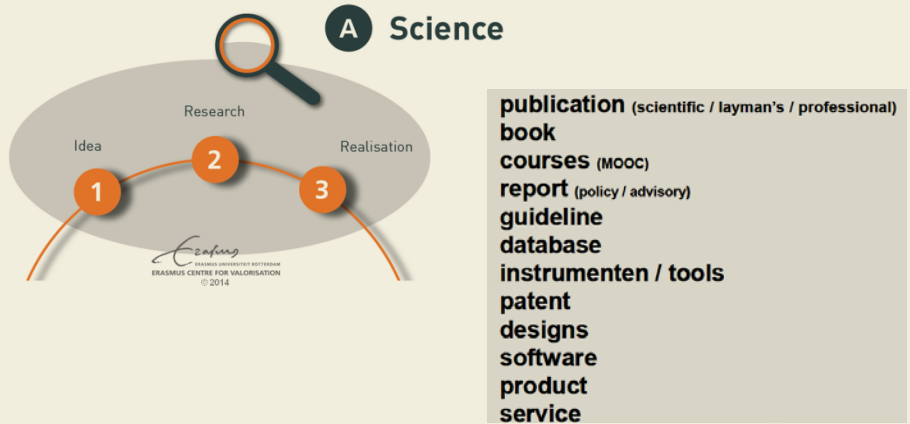
The fourth pillar is knowledge for culture. In this pillar knowledge is used in the communication with the general public; by science blogs, media performances or interviews in newspapers or magazines, new scientific insights are discussed with the general public.

I view these four pillars as the legs of a chair. In a team you would like to have the chair stand on all four legs, but it is ok if you just rest on the back two legs or the front two legs. If you forget a leg it is ok, but in the team or in the institute you have to be sure that this chair stands solid on the ground.

**Lessons Learned**

We have described what we learnt in a number of papers, which we published this year and last year. There is also a

Figure 4 From idea to realisation



schematic view of our learning under construction which forms the basis of a Multi-Author Valorisation Manual. This book will not consist of chapters and monographs but instead will be a crowd-sourced book in which lessons and ideas are integrated in an actual manual. It is a multi-author valorisation manual that incorporates as many tools and visions on valorisation as possible. All professionals engaged in valorisation are invited to join this venture. The valorisation manual can be found at [www.valorisationmanual.nl](http://www.valorisationmanual.nl). The word 'valorisation' was, by the way, coined by Karl Marx. So if anybody asks you who invented that stupid word, it was Karl Marx.

### Professor Brilliant

It all starts when a professor (let's call him 'professor brilliant') has an idea and with that idea he goes into the field or into the lab and he does research. That research results in something being realised (Figure 4). That realisation is usually a publication or a book chapter, or in the medical world, usually a patent or another form of intellectual property (IP) protection. It could be a copyright or a trade secret. But what you see is that this realisation is usually very limited, because it is usually just an academic realisation and at the end of almost every academic paper we see the sentence: "more research is needed".

Figure 5 Dutch Knowledge Paradox

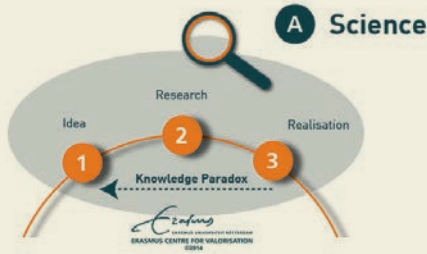


Figure 6 Valorisation cycle

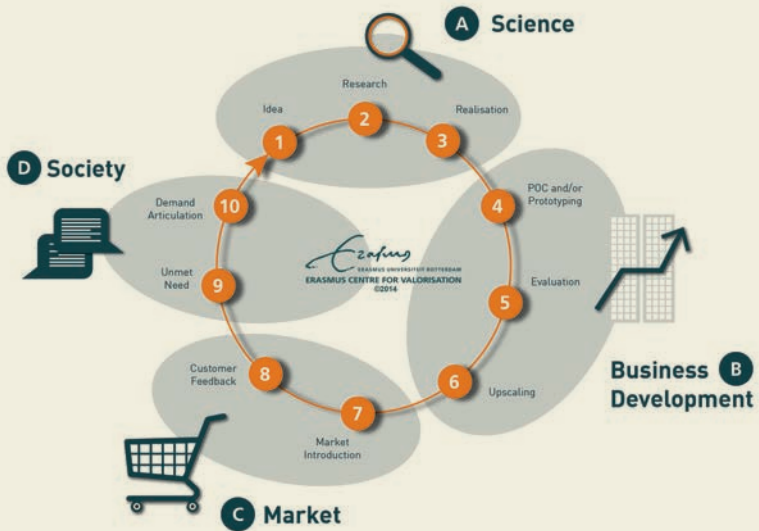
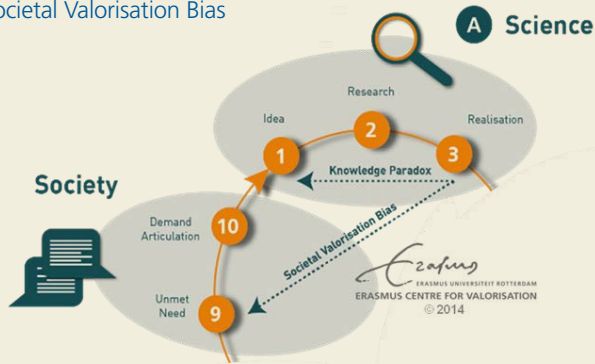


Figure 7 Societal Valorisation Bias



This is more serious than you would think because this is actually generating what we could call the Dutch knowledge paradox (see Figure 5). It means that if you really think that you can get away with that last sentence then that last sentence would also generate the ideas for new research and that is, of course, not right, because your new research should come from society as a whole. That is why we think you have to work in the complete cycle (see Figure 6).

### The valorisation cycle

As illustrated in Figure 7, one can also make another mistake, that you go from your realisation direct to society, direct to the unmet need and completely skip the market. That market could be parliament or a minister or an NGO. It does not really matter. That would also skip your business development completely. We think that if

you use that cycle to your advantage and if you go through every step of the cycle and you do that again and again, you can then touch upon the real issues that are needed. So where would ISS fit?

In my view, that would be in the society box. In the society box, we see a huge problem. There is an unmet need in the market, it does not really matter what the unmet need is, there is a perceived unmet need and there is an academic reservoir where people have ideas in research. So what we actually need are translators and liaisons that can make this into an articulated demand. So, going from unmet need to demand articulation, to the idea and then the realisation, is very important.

We also include customer feedback in a broad sense, because customer feedback

may also be wise. That is the improvement cycle. Let me take the example of clean energy. I live in Lelystad and people there were very happy with the windmills, but now there are so many windmills that many houses have a shadow in the living room, so these people are not happy anymore. Things change over time, so customer and political feedback is something that you have to gather continuously, not just once. People forget that, especially my colleagues in the beta science. They forget the customer feedback part. So customer feedback and market introduction has to be kept in the loop all the time. What do we think is the ideal situation then?

**The societal valorisation value chain**

At the bottom of the value chain (Figure 8) we have excellence, so excellent

fundamental research, curiosity driven research. This research also makes it possible for you to deliver excellent education. This seems like stating the obvious, but this is not the case. This point is really important. The education you offer must be based on world class science, as education will be the sustainable base that keeps you afloat for the long haul. I cannot overestimate this in any way.

A further key feature of our valorisation scheme is what I would call the ‘academic knowledge work-places’. Now this is easy for medics, because in Rotterdam we have the academic hospital. So if you do research in academic health and health sciences, then you have the hospital as your academic work-place. However, if you do research on making sick politicians

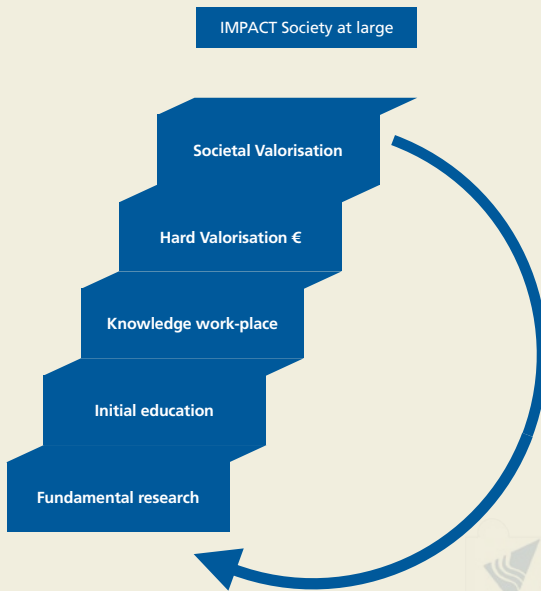




better or making sick NGOs better, then you could also have a work-place, here in The Hague, at ISS. Your academic work-place would be focussing on how to make these systems better, even if they are not sick, because you can also make things better, even if they are not broken. Look at Philips. This knowledge work-place is very important, because it does several things. First of all, it gives you a direct link with your unmet need, with the market place. Secondly, if you leave this work to consultants (that is what usually

happens if you look at economics faculties, they give this knowledge to consultants), the consultants go to the market, they make these sick NGOs better, but the knowledge they gain in repairing these defaults is not captured and reused within the academic environment. So that means that the knowledge database that is created by actually repairing faulty managers, faulty NGOs and faulty systems, ends up outside of Academia and that is not what you want. You want to keep the knowledge and expand on it.

Figure 8 Societal Valorisation Value Chain



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The other important part is that if you do this correctly, you can, as a team, generate extra funding for extra jobs in curiosity-driven research. Next we have hard valorisation. That is what I do as an entrepreneur and it is the focus of the Erasmus centre for entrepreneurship. It is where we just make money and part (about 80%) of that money is ploughed back directly into the curiosity driven research and that is a sizeable sum I can tell you. The next part of the value chain is societal valorisation. Societal valorisation is of course the link you have with society. That could be as simple as a patent that generates money for Dutch society instead of for the society in the US. It could be as complex as policy support for decisions concerning invasions in the Ukraine. But that is what it is all about. If you do it correctly, the stream of knowledge becomes a cycle which involves money, because with money you have control. You will generate money and with that money you will create new jobs and with



these jobs you will generate new curiosity driven research.

**Become an entrepreneur!**

That is my story. That is why we have the Erasmus Centre for Valorisation and that is why with a number of people who work there we very much want to help you, if you want our help. If you say 'yes', I would really like to do something with social media or with serious gaming or with entrepreneurship. We can help you. We have the networks and I think in most cases we can also make money available. We have some expertise and we also have a lot of questions. I am here to learn from you and not just to offer my services. I hope you can also learn as much from me as I can learn from you.

# ISS-Hivos Knowledge programme

An example of the collaboration of ISS researchers with societal groups is the Knowledge programme on Civil Society Building together with the Dutch development NGO Hivos (2007-2011; EUR 1.8 million). It was a vibrant programme of applied research and debates, with participatory research programmes in Southern Africa and Central America, as well as strategizing programmes in the Netherlands such as on 'civic-driven change' in which also Cordaid, Oxfam-Novib, SNV, and ICCO participated. In addition, ISS students were doing research internships with Southern partners of Hivos to prepare their thesis, also creating a vibrant international network. The ISS-Hivos programme would lay the basis for the formulation of the new Civic Innovation Research Initiative, involved over a dozen staff members and generated a range of discussion papers, special issues as well as four books. The final evaluation indicated the programme was a paradigmatic example of how academics and practitioners could be working productively together, which had been a success also due to the joint commitment of the directors of the organizations.

**Remko Berkhout (Hivos programme officer)  
on the collaboration with the ISS**