

## Abolish 2.1.

### Every governmental institution develops into incompetence.

Updated 2021-06-20, Conclusions and Epilogue.

The extended Peter's Principle,

based on: "A new challenge by ending undesirable government policies".

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A shtick:

*"The nine most terrifying words in the English language are, 'I'm from the government and I'm here to help'".*

Ronald Reagan. The first showbusiness president (Andersen).

*"De overheid doet wat moet en laat aan de burgers en de markt over wat kan".*

Liberaal Reveil 2, 2014.

It's all about taxpayers money.

## Prologue

In 2014 I wrote a paper about the subject how to improve research at the universities in the Netherlands by abolishing some governmental institutions. The paper was published in "*Liberaal Reveil*", a publication the Dutch Liberal political Party. Liberal in the continental sense.

In 2018 I added some further ideas about the subject matter and published the extended paper on my website, [www.leennnoordzij.me](http://www.leennnoordzij.me).

Due to a publication in The Economist June 5th 2021, I again pay attention to the subject matter.

*"The government does what it has to do and leaves it to the citizens and the market what can be done".*

Liberaal Reveil 2, 2014

The above motto shows in a nutshell what liberal policy includes. What does this mean for everyday practice? The Theme Number of Liberal Reveil – Abolish 2.0 – discusses several aspects of an abolishing policy. It is about: legislation, international legal order, local government, key technology focus areas and climate policy. In the following considerations, these aspects are followed up and proposals are made for the abolishing and reducing several organizations.

## Introduction.

The government has several organizations under its control which execute policy underpinning activities. The budgets of these organizations are financed for the greater part from general resources, i.e., the tax revenue. The organizations<sup>1</sup> discussed in this story are NWO and TNO. STW and ECN can also be considered. Since what applies to NWO and TNO also applies to ECN and STW, only NWO and TNO are discussed further. However, the conclusions for NWO and TNO are also valid for STW and ECN<sup>2</sup>. TNO is the oldest and best known of the four organizations mentioned.

These organizations were once created with a certain objective. This objective is certainly interesting. However, the question at stake is: do we need the organizations to realize the objectives? Can these objectives be realized by the market, are certain objectives redundant and what are the benefits of terminating these objectives?

Most people in The Netherlands do have an idea about TNO. Such an idea of ECN is missing in whole or in part. NWO and STW are well known in the scientific world and in particular universities.

NWO( [www.nwo.nl](http://www.nwo.nl) ) is funding the university's scientific research with a budget of €650 million in 2014. NWO's statutory tasks are listed on its website. One is to promote the transfer results of research initiated and funded by NWO for the benefit of society.

STW([www.stw.nl](http://www.stw.nl)) is part of NWO. The foundation realizes knowledge transfer between technical sciences (STEM) and users of research results.

TNO,[www.tno.nl](http://www.tno.nl). TNO themes are industry, health, environment, defense, safety, and energy. Topics recently been discussed in the press (Technische Weekblad and de Volkskrant, among others): algae research for industrial applications, gas, and oil research. gas".

ECN([www.ecn.nl](http://www.ecn.nl)), now part of TNO positions itself as a partner in energy innovation. Energy innovation includes the following themes: improving business processes, innovations for clean technologies, research into new technologies and strategic advice about the subject matter.

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<sup>1</sup> I shall not translate the names of these organizations into the English language. My paper is about their activities.

<sup>2</sup> ECN is merged now, 2021, with TNO.

I will also discuss NWO and TNO.

In view of the themes of TNO and NWO, the reader may wonder why I want to abolish these government-funded institutions. An understandable question to which I hope to give a liberal answer in the following chapters with reflections on NWO and TNO. It should be noted once again: what applies to TNO also applies to ECN. And what applies to NWO also applies to STW.

Finally, I dedicate a few thoughts to the key technology areas (Top Sectors) in connection with NWO.

### NWO – Abolish 2.0.

In the theme issue Liberal Reveil 2, 2014 Wissenburg pays attention to "dumb laws" and the consequences of such laws. NWO, the government's implementation organization, will also receive attention. In a general sense, Wissenburg makes it clear what the consequences are of NWO subsidizing scientific research. In this chapter on NWO, I will add several issues that are also reason to conclude that creating intermediaries such as NWO for budget allocation for scientific research has undesirable consequences for research.

It's in the air, then, and now 2021 (The Economist-3). On the opinion pages and in the scientific sections of national newspapers, NWO is being viewed with a lot of suspicion<sup>3</sup>. The literary magazine Hollands Maandblad is also not unconvinced (Tolbeek, 2012). How would this displeasing have arisen? Is it right universities world not being enthusiastic with respect to NWO?

NWO, the Netherlands Organization for Scientific Research, manages an annual budget of €650 million and finances research in the scientific fields covering Earth Sciences to Science for Global Development. NWO is part of the Ministry of Education, Culture and Science. The tasks of NWO are laid down in the Law on the Netherlands Organization of Scientific Research. The tasks are:

- Foster the quality of scientific research (WO) and initiating and stimulating new developments in WO.
- Execute their task by allocating resources.
- Foster the transfer of knowledge of the research results of research initiated and financed by it for the benefit of society.
- Focus mainly on research at universities, about coordination and promote it where necessary.

NWO is normative and instrumental in valorization of exploitation of the results of university research<sup>4</sup>.

NWO finances more than 5000 research projects at universities and knowledge institutes. Researchers from universities submit proposals for these projects to NWO.

In addition, several institutes are governed by NWO, such as the Centre for Mathematics and Information. A question not dealt with is the financing of these institutions. These

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<sup>3</sup> It is not clear why neoliberalism is being staged here (De Volkskrant, 6 Sept. 2014) as a bogeyman. Van Hees et al (2014) explains how this comes about.

<sup>4</sup> Here we have a clear and present danger: the market is nowhere in sight.

institutions execute R&D programs. Hence, in a direct or indirect way conflicts of interest can arise. Well, Murphy's law is around the corner.

In this section I will focus on the financing of Universities. This type of financing is the so-called "tweede geldstroom". Let's denote this "tweede geldstroom" the Budget.

The Budget is a kind of diversion of some of the funds that, in the past, were provided directly by the government to the universities. This direct financing is denoted the first flow of money.

An important question, perhaps the most important in this context, is: why did the government create the second flow of money? Why has the government created an extra layer of governance between the Ministry of Education, Culture and Science and the universities? Is the government concerned about the quality of universities? Is the government concerned about the applicability of the research? Or is NWO set up to arrange budget cuts? This last question must be answered by our politicians.

It is obvious to note that NWO managing the Budget for scientific research, the professors/chairmen of departments of the universities are passed over. Outsiders, via NWO, determine which research (by research I always mean scientific research) is done within a department of a university. Is the quality of the university, faculty, and department insufficient and should NWO therefore be added as an additional financial instrument? Let us see how NWO works and how it works for scientific research.

If a university department is seeking funding outside the first funding stream (funds made available directly by the government to the university), the researcher(m/f) must write a research proposal for one of the relevant parts of NOW program. This proposal must also reflect the objectives of NWO. The researcher(m/f) will do his or her best to formulate the research in such a way that it fits within the objectives of NWO. The fact that this is a difficult and time-consuming process arises because research results that are not known a priori (otherwise there is no research) are not easy to translate into an application or, if you like, into social relevance.

The Economist-3, 2021: *".....Some researchers spend more than 40% of their time on administrative tasks such as grant-writing. Studies have found grant evaluations are inconsistent and subjective. Since the number of grant applications has increased faster than available funding, high-quality work may be languish unfunded. And though scientists tend to do their best work in their younger years, the recipients of research grants have been getting steadily older."*

So, writing the proposals takes a lot of time – just think of the applicability issue – the researcher(m/f) will not make risky proposals and will stay within appropriate paths with groupthink, careless research (The Economist 19th October 2014) and (sometimes) fraud as a result (Rörsch, Liberal Reveil 3, 2014).

If no budgets are made available for reproducing research, disciplinary bodies such as NWO for scientific integrity are insufficient.

The Economist-3 2021: *"...government agencies that fund research have become sclerotic: [he] sees a "compliance culture" resulting from risk-averse leadership wary of heavy handed (political-Nz) congressional oversight. That is a problem, says Benjamin Reinhardt, an independent researcher who has studied DARPA, because big wins come from taking risks. "All the value", he says, "is in the long tail"."*

Well, there is some silver lining out there. In The Economist-2, in the section of Science and technology an article has been published about the scientific method. Under the heading *"Let's just try it again"* The Economist writes: *"Reproducibility should be at science's heart. It isn't. But that may soon change"*. Maybe it is. An example of reproducibility is given in an article by Amgen published in Nature(2012). The Economist-2 conclude its article with the statement: *"But mopping up messes is an honourable activity, and this week's launch of a new outlet for the publication of duplication is part of the clean-up."*

It should be noted here that integrity is the theme of Liberal Reveil 3- 2014 and Rörsch's story: *"Political decision-making and the nature of deception in science"*.

The decision-makers at NWO also do not take any risks – it is about success – and opt for the popular research areas, resulting into the Matthew effect.

What is even worse, highly educated people at NWO are not working on the primary process for which they are trained – research – but on assessing research proposals written by others. Conflicting criteria are used: innovation, feasibility, and applicability. Our Dutch knowledge workers should not be exposed to such contradictions.

NWO should not assess research proposals. Research involves spontaneity, creative destruction of old ideas and a bit of luck.

NWO also creates a false certainty for politicians who think that the right decisions are being taken to strengthen our economy. By using an institute like NWO, thinking out of the box is not stimulated. If a research proposal does not fit in the egalitarian box of group's think, to create new allies of research is (almost) impossible. Smolin (2007) shows where to group's think can lead, but also indicates that it can be done differently. But that comes with a lot of pain and effort.

We return to a task of NWO: *".. transfer of knowledge... for the benefit of society."*

Alternatively formulated: research must be socially applicable. This used to be called socially relevant. An oxymoron. Results of research are sometimes irrelevant and often premature, and the applicability question is often irrelevant. Still, this does advance research. Even in a negative sense. The results of research may lead to the abandonment of a research area. To do this is a signal of courage.

If the results of research are directly applicable, this is rather an invention. The use (valorization) of university research is not inconvenient but is and cannot be the goal of the universities. Sometimes results of research can be further developed and recorded in a patent. This commitment is useful (KNAW, 2014).

Of course, good scientific results are achieved. But socially applicable? Our top Dutch physicists would have no chance at NWO. What to do with string theory, information theory and quantum mechanics? Einstein would not have been eligible for NWO funding.

As Liberals (Continental), we must ask ourselves what kind of university we want: the research university, a university for vocational training or a mixture of both (Noordzij-3).

It is out of the question to ask results of research to be applicable. Those cases where research leads to innovation are based on mere coincidence. Innovation is based on serendipity and a lot of luck. If research led to innovation, we would have found the holy grail. We know this is going to take a while (Noordzij-1).

Innovation cannot be the argument for research at our universities (Taleb, 2012). Kuhn (1962) also gave his opinion on this: *"Under normal conditions a research scientist is not an*

*innovator. The scientist is a solver of puzzles and the puzzles on which he/she concentrates are just those he/she believes can be both stated and solved within the scientific tradition".* Surely it will not be the case that the government thinks NWO to be instrumental to escape the innovation paradox? The paradox: the Netherlands scores high in the world's top when it comes to scientific research, while we are not among the world's top in terms of innovation. However, the paradox does not exist. Scientific research is not the essential condition for innovation. The authors Davids et al (2013), explain this in their book *'Innovation and knowledge infrastructure, many paths to innovation'*.

This is the reason why valorization of research can be terminated immediately. The National Commission for Valorization can be dissolved.

The Budget of NWO does not improve the quality of the university. As a self-reinforcing mechanism, the quality of the university is reduced precisely because groundbreaking research is shunned. That cannot be the intention. Remains the argument for austerity. But how has the government been able to think that the extra layer of governance – NWO – can lead to austerity? The extra layer of government has created a juvenalis dilemma for itself. It is important that the government terminates the funding of the universities by NWO. As a result, the productivity of the scientific staff of the universities will immediately improve. Freed from writing proposals for NWO, they can make the most of the time for education and research led by the department chair. At the same time, the government is freed from the juvenalis dilemma: Who controls NWO?

Well, to conclude with a statement by the president of NWO is entertaining. Technisch Weekblad, nr. 48, 2015: *"My own experience is, writing of a proposal is a scientifically challenging activity, studious and satisfactory. It is scientific work and keeping your colleges who will review your proposal in mind during the writing of this proposal it will improve"*. Cicero would have agreed: An Oratio pro Domo indeed.

When reflecting on Research and Development I like to recall the statement of Vannevar Bush, the godfather of the National Science Foundation, who knew a thing or two about Research:

*"The distinction between applied and pure research is not a hard and fast one, and industrial scientists may tackle specific problems from broad fundamental viewpoints. But it is important to emphasize a perverse law governing research: under pressure for immediate results, and unless deliberate policies are set up to guard against this, applied research invariably drives out pure."*

*This moral is clear: It is pure research which deserves and requires special protection and special assured support"*.

Furthermore, The Economist-3: *"... Bush(V) felt that scientific research should be directed by the scientists themselves. In a report for the president called "Science: The Endless Frontier", Bush summarised his ideas. Government, he said, should fund research. But rather than direct this research toward meeting social needs, it should seek to advance science for its own sake: basic, not applied, science was to be the primary objective. ...."*

Lederman made the following statement: *"Most of the major advances in technology that have influenced the quality and quantity of life have come out of pure, abstract, curiosity-driven research. Amen"*.

To conclude this section, I cite Isaacson's *Einstein His Life and Universe*:

*“Had he been consigned instead to the job of an assistant professor, he might have felt compelled to churn out safe publications and be overly cautious in challenging accepted notions. As he later noted, originality and creativity were not prime assets for climbing academic ladders, especially in the German-speaking world, and he would have felt pressure to conform to the prejudices of prevailing wisdom of his patrons. ‘an academic career in which a person is forced to produce scientific writings in great amounts creates a danger of intellectual superficiality,’ he said.”* Well, this is about the beginning of the 20<sup>th</sup> century and Germany. Now, 2021, it applies for the whole academical western world.

## TNO-Abolish 2.0.

Why include TNO in the list of implementing organizations to be abolished? This is not obvious, is it? TNO does useful work, doesn't it? Whether TNO does useful work could be investigated. However, the usefulness is not paramount in the considerations. What matters most is whether the government needs an implementing organization and whether taxpayers' money should be spent on it.

Abolish TNO? A quote from an article in De Volkskrant about 3D printing: National Aerospace Laboratory, together with TNO and some other companies, are starting a research project (September 2014, LN) to find out whether Dutch companies can use 3D printer in the production process. If not, what then? If yes, why this investigation? Companies are already busy with the subject matter. Still, the taxpayer is partly paying for this research project. It is debatable whether the government should spend taxpayers' money on research which the market itself can and should do. If such a research project can be executed by market parties, it is clear who must do this job, and who do not. Certainly not by a government-funded institution. In addition to the above on 3D printing subject, I will add some observations that support the abolishing policy.

Looking back, we take notice that TNO originated from the so-called economy Plan of the Economy and the Labor Plan: the National Industry Organization (1930). For an overview of the history of TNO see Davids et al. Those days there was a strong belief in the Planning Instrument: Society could be constructed according to a plan.

One of the government's assumptions is that TNO can contribute to innovation in industry including SMEs. In the Technische Weekblad of 11 December 2012 TNO reported a lot of work needed to be done. This work needs to be focused on increasing the innovative capacity of the Netherlands. Increase the Netherlands' capacity for innovation? A country does not innovate. Furthermore, innovation capacity is there or is not there. In May 2010, the chairman of TNO reported that TNO's role is the same as that assigned to TNO in 1930: Support SMEs. However, practice shows that TNO focuses on the larger companies.

According to the government, TNO plays a role in innovation policy— an oxymoron- of the government. Is that about key technology focus areas? Labohm covers the policy on key technology focus areas in Liberal Reveil 2-2014 and calls it a selective industrial policy in a different way. Abolition of this policy is appropriate. There is also a link with NWO here. The university research funded from the Budget of NWO should also focus on the key technology focus areas. Poor universities.

We may assume that of TNO's approximately 3000 employees, a number is involved in innovation. This leads to the pitfall for the government to think that TNO's end product is innovation. According to the law on the large numbers-3000 employees- it can be assumed that a number of TNO employees are always involved in innovation or an invention. Top-down, it seems as if TNO's R&D program is producing innovation. The R&D program is produced bottom-up within TNO. The employees responsible for drawing up this program are certainly able to write their projects into the program. As a result, the R&D program produces innovations or inventions. That is also why TNO organizes so-called innovation markets (Technische Weekblad, 24 March 2014) to find companies that further develop the innovation or invention into a market-ready product. I think this to be a cul de sac. Is this the way for the government to do something about innovation? Of course, it may happen that a match takes place between TNO and a company. If you put (tax) money in something long enough, something will come out.

Moreover, the TNO employee concerned-made the innovation- should have started working directly for a (SME) company. In this way, he/she is involved in building or maintaining the innovation culture in the (SME) company.

In TW- Technische Weekblad nr. 13, 2015 it was mentioned that TNO and ECN-are working on a roadmap for sustainable energy with a budget of € 2 million. Sustainable Energy for the chemical industry. So, you would expect the chemical industry to be involved considering the objectives of both institutions. Well maybe they have tried it but in an insufficient way to state it mildly. The roadmap has been postponed writing a more coherent one. Well, you would guess that TNO and ECN should have contacted the industry in the first place before starting their job. The Ministry of Economic Affairs, Agriculture and Innovation never should have allowed a budget before adequate contacts with the industry had been made. A disqualification of the government, apparently too big. See below.

In TW- Technische Weekblad nr. 25, 2016 TNO presents itself to be the institution to support companies with innovation. What does this support exactly comprise? Reading carefully, TNO wants to generate income with their inventions. Well, generate income like a normal company? Or just for the fun? In such hybrid fashion I am afraid a lot of money is wasted due to inherent inefficiencies.

The abolition of TNO is an important innovation for the government in favor of the taxpayer and for the TNO employee with the prospect of a nice job in the industry.

#### [Key Technology Focus Areas - Abolish 2.0.](#)

"Picking Winners", is part of the policy for Key Technology Focus Areas ( Labohm, Liberaal Reveil 2, 2014). Focus Areas targeted by the Dutch industry and researchers: targeted research. Here again an oxymoron.

Is this how an innovation culture in industry is stimulated? This is a far cry from serendipity and has a high Sesame Street content. In the 1980s, there was an act on Sesame Street with a king ordering the court's chief inventor to invent the toothbrush.

The government controls the flow of money and is in the driver's seat as far as the Key Technology Focus Areas are concerned. However, this ride goes nowhere and keeps the researchers away from their core task. The civil service is also expanded as usual. "Inventing



the toothbrush": targeted scientific research is an oxymoron. In The Economist Technology Quarterly of September 2003 and in Intelligent Life of January 2012, serendipity is explained again. 70% of the innovations arise by chance and/or serendipity.

### Abolish Subsidies 2.1.

A major Dutch innovator, admitted into the National Hall of National Fame, abhors the subsidy policy of the Dutch Government for Innovation. A policy for innovation is an oxymoron in the first place (Noordzij, *Innovation and its Fallacies*). The Government tries to stimulate innovation with subsidies; however, the opposite is obtained. Innovation is smothered in the cradle. The so-called innovator writes a sort of application for a subsidy. When successful in getting the money, the so-called innovator forgets that innovation has something to do with the marketplace. The so-called innovator becomes lazy and starts to prepare for the next round of subsidies. The Dutch innovator denominates this to be a beauty contest. Present a nice story which politicians want to hear at the end of the day and the new subsidy is there.

Who is to blame for this? In the first place a too big government and in the second place the politicians. So, without reducing government and without politicians focussing on their real job, the taxpayer will be fleeced. Reducing the ministry of economic affairs, agriculture and innovation is the first job to be done. However, since politicians can still find time for their so-called hobbies like image building on talk shows to no avail. Hence, the House of Representatives must be reduced in size, say from 150 into 75 representatives. For a start. With subsidies it is like advertisement. You know 50% of the advertisement budget does the job at maximum, except you do not know which 50%.

### Conclusions.

In the previous considerations of NWO(STW) and TNO(ECN), it was examined whether the taxpayer's money was spent in a meaningful manner. It is not. It is about non-creative destruction.

Dit leidt tot de volgende acties:

- Abolish NWO and the similar organizations. The researcher is freed from writing obligatory research proposals and the NWO employee, highly educated, becomes fully available for the market, or can fill a vacancy at a university. The immediate advantage is that no more money is "pumped around". As a result, the officials concerned can start doing meaningful work in the business sector. Politics also stops fooling itself with the idea that the right research is being selected by NWO - the so-called "picking winners". In the Volkskrant of 7 June 2014, the subject is explained under the heading "Research proposals industry". In this context, it should be noted that valorization of research at universities can be terminated immediately. The WRR report 90 (2013) refers to the government's leading role for a learning economy. The government can do this to some extent by promoting education and research at universities, but not with the NWO instrument. The government should

pay more attention to the level of secondary education. If that is right, we'll keep high-level scientific research.

You cannot always get what you want, so to speak. Well, I know to abolish institutions like NWO (a sort of Dutch NSF) is a bridge too far in a consensus driven society. Regression to the mean is what can be expected. So, what is less bad and may be even feasible to minimise the flaws, like group think, of the system? Smolin discussed this to some extent. He illustrated the workings of group think with examples of the fields where he is active: string theory. Can we mitigate the negative effects of institutions like NWO to stimulate curiosity driven research instead of main street, middle of the road research? A possibility is to allocate 10% say of the NWO budget for revolutionary research. It will not be easy; however, it can be done. It has been mentioned already many times: Einstein would never have been awarded a research grant in the present-day system. To create a lot of patent bureaus to stimulate the birth of a new Einstein goes a bit too far.

Abolish NWO will not be a simple job and the need for political courage. May be a more positive approach could be to create another far more meaningful job to execute by NWO. As I mentioned in *"Innovation, Education, Research and Re-engineering"*, Universities should appoint a chief replication officer. In a small country like The Netherlands this job could better be centralized at NWO. The other activities of NWO can be faded out. Hence it is positive to read NWO started a pilot Replication study and allocated a budget of 3 million euro (2016).

This example illustrates the need for new institutions.

- Abolish TNO. Rather rigorous? The work done at TNO can be executed by the market. TNO's employees can look for a challenging job in the market. The so-called beta deficit in the Netherlands is reduced a lot. The part of the TNO job that cannot be transferred to the business community can go to the universities. Some of the vacancies at the universities may be cancelled. Shortage of technicians in the Netherlands? Instead of predicting, we should open up to the "Black Swan" (Taleb, 2010). If government were to end subsidizing of a number of these institutes and organizations, at least 2000 highly educated people would be made available to industry. Over the years, the government has put billions into TNO. That didn't get a Dutch Google, Apple, etc.
- Reduce the Ministry of Economic Affairs, Agriculture, and Innovation to stop throwing taxpayer's money in the black hole of innovation.

The foregoing does not include an exhaustive list of organizations that the government does not need to interfere with. However, these are probably, relatively speaking, the easiest.

If we look more broadly, liberals may wonder what is the point and necessity of central banks. The "Hamiltonians" versus the "Jeffersonians" (Ledbetter, 2009 and 2010).

What do we think of institutions that contribute to the tribalization of our society, so cause the breakdown of democracy (Fukuyama, 2014)?

What do we think of a European monetary union without political union?

Simply, abolishing it will not be. It takes a lot of political courage.

After this creative destruction, how to proceed?

We should not follow the policy of the British government after the referendum on Brexit (July 2016). A policy which you could describe as meddling with the industry. Then what? Well, where are governments of democratic states for? You could think of safety, education, and infrastructure. Take for example safety. Taxpayers money spend on safety, must be focussed on improving safety. So, R&D budget of government should be directed to private enterprises and Universities working on safety. TNO could play an intermediate role (DARPA?) in this respect. A DARPA-Light version.

A sustainable infrastructure, the environment included, asks for R&D executed by private enterprises and Universities. TNO could play a DARPA Light role in managing this R&D budget. Targets need to be set for the goals to meet and not for the means. For example, no wind, no solar but  $CO_2$  reduction including taxation.

## Epilogue

The last 5 years up to 2020 the executive branch in the Netherlands expanded with about 10%. To no avail

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