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Can the Strategic Action Field theory predict participation in COVID-19 vaccination by bevindelijk gereformeerden?

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INTRODUCTION:

Abstract

“And let me begin my part of the story with the ultimate dot on the horizon. Because when will this be over? When will the coronavirus stop dictating everything in our society? That will only be the case if there is a vaccine”¹

Hugo de Jonge, Minister of Health, Welfare and Sport. 6th May 2020.

A year later does it seem that the COVID-19 pandemic is at the beginning of its end with worldwide vaccination started or just at the beginning?² “The economic and political implications of the pandemic will ripple through the world for years”³ For many, such as the minister of health Hugo De Jonge, it is clear that the pandemic is only over once enough of the population is immunised against COVID-19. However there are groups, everywhere, that for a variety of reasons choose not to vaccinate. In the Netherlands most orthodox Protestants do not object to vaccination although there is a significant minority of orthodox Protestants that do object to vaccination: bevindelijk gereformeerden. It would be of value to the states vaccination effort to anticipate their reaction in regard to vaccination against COVID-19.

It is anticipated that the reaction of bevindelijk gereformeerden to COVID-19 vaccination can be predicted based upon their reaction to other previous pandemics, epidemics and outbreaks of disease. To do this the Strategic Action Field (SAF) theory of Social scientists Neil Fligstein and Doug McAdam will be used to analyse the previous reactions by this group to vaccination following smallpox, polio, measles, and rubella epidemics.

¹ “En laat ik mijn deel van het verhaal beginnen met de ultieme stip op de horizon. Want wanneer is dit voorbij? Wanneer is het coronavirus niet meer allesbepalend voor onze samenleving? Dat is uiteindelijk pas het geval als er een vaccin is.” Hugo de Jonge, Minister of Health, Welfare and Sport.”Letterlijke tekst persconferentie minister-president Rutte en minister De Jonge na afloop van crisisberaad kabinet Rijksoverheid” *Rijksoverheid*. Published online 06-05-2020. Pg 4. Retrieved from Internet April 2021.

<https://www.rijksoverheid.nl/documenten/mediateksten/2020/05/06/letterlijke-tekst-persconferentie-minister-president-rutte-en-minister-de-jonge-na-afloop-van-crisisberaad-kabinet>

² Stephanie Hegarty. “Covid vaccine tracker: How’s my country and the rest of the world doing?” *BBC News*. Published online 12-02-21. Retrieved from internet April 2021.

<https://www.bbc.com/news/world-56025355>

³ “2021 Annual Threat Assessment of the U.S. Intelligence Community.” *Office of the Director of National Intelligence USA*. Published online 13-04-21. Pg 17. Retrieved from internet May 2021.

<https://www.dni.gov/files/ODNI/documents/assessments/ATA-2021-Unclassified-Report.pdf>

Non-vaccinators in the Netherlands

The technique of vaccination itself is nothing new, nor the nature of infectious disease nor pandemics or epidemics⁴. That the COVID-19 pandemic is felt worldwide is nothing new either, joining the illustrious list with the plague, smallpox, polio and SARS.⁵ Despite the enormous scale of the pandemic the impact of both the disease and the restrictions put in place to combat its spread are felt first at an individual level then in the community and then in the nation. The Netherlands has a history of pandemics, epidemics, and immunization that is specific and unique to this country and that influences our reaction to this current pandemic. Although the vast majority of the Dutch agree with Minister Hugo de Jonge, given the high degree of willingness to vaccinate, there are also those who resolutely disagree.⁶ Crucial of course is not the vaccine but the acceptance of such, if the vaccine is the key then vaccination is the use of that key. Despite the pandemic affecting the world's entire population it is not only felt on an individual level but also ends on an individual level. The end as Minister de Jonge sees it begins with a vaccine then vaccination, again on an individual level. Given that vaccination is only effective when there is enough participation and the willingness to participate within the Netherlands is high, at a national level non-participation could be seen to be of little or no consequence, if it were not for the potentially fatal consequences, to the non-vaccinating individual and the impact upon their community at a local level where outbreaks could continue even after (insufficient) vaccination against Covid-19. Even if we disregard the lack of a serious threat to the greater population, the threat to specific local communities remains.

The small but significant minority of the population in the Netherlands that do not vaccinate can be divided into three main groups 'Anti Vaxxers', Anthroposophists, and a minority within the orthodox Protestant faith: bevindelijk gereformeerden.⁷ Anti Vaxxers are also

⁴ Stefan Riedel. "Edward Jenner and the history of smallpox and vaccination" *Baylor University Medical Center Proceedings*, 18:1, 21-25. Published online: 11-12-17. Retrieved from internet May 2021. Pg. 18.
<https://www.tandfonline.com/doi/abs/10.1080/08998280.2005.11928028>

⁵ Peter C Doherty. *Pandemics. What Everyone Needs to Know*. Oxford: Oxford University Press USA - OSO, 2013. Pg 23-25.

⁶ Ministry of Health, Welfare and Sport. "COVID-19-vaccinaties." *Rijksoverheid Corona dashboard*. Retrieved from internet April 2021.
<https://coronadashboard.rijksoverheid.nl/landelijk/vaccinaties>

⁷ Frits Woonink. "Bezwaren tegen vaccinaties.Perspectief van de weigeraar." *Rijksinstituut voor Volksgezondheid en Milieu*. Published online 05-10-2011. Retrieved from Internet April 2021. Pg 3.
<https://www.rivm.nl/documenten/bezwaren-tegen-vaccinaties-perspectief-van-weigeraar>

termed 'critical vaccinators' by Dr. Helma Ruijs of the Public Health Authority in the Netherlands (the RIVM) which may better describe their critical stance towards vaccination, rather than plain refusal. They are a diverse group throughout Dutch society among the general population and so, due to the nature of contagious disease, face little or less risk than the other two groups, due to their numbers being spread geographically throughout (and so protected by) the rest of the (potentially) immunized population.⁸

There are less than 5,000 members of the *Antroposofische Vereniging in Nederland* (the Anthroposophical society).⁹ Inspired by Rudolf Steiner's ideas of an incomprehensible but accessible spiritual world, they traditionally reject child vaccination.¹⁰ These relatively few committed members are at risk of infection within their own social circles should they not vaccinate themselves. The far more numerous 'Anthroposophically inclined' members of the population (such as those educated at Rudolf Steiner schools) are, like the Anti Vaxxers also at little risk of infectious disease by being spread geographically throughout and so too protected by the rest of the population, except in anthroposophical schools (which risk becoming hotbeds of infection). The most numerically significant group of non-vaccinators in the Netherlands are those who trust in God and see no need to vaccinate, those who see vaccination as a breach of their trust and confidence in their personal relationship with God, a small minority of so called *bevindelijk gereformeerden* within orthodox Protestantism.¹¹ This minority within orthodox Protestantism is both significant in number, more than a quarter of a million, and at risk through their close social contact and geographical concentration, primarily in the Netherlands' Bible Belt.¹² Due to the strong community bonds within these communities, there is extensive and intensive close social interaction through a myriad of

⁸ Frits Woonink. "Bezwaren tegen vaccinaties.Perspectief van de weigeraar." *Rijksinstituut voor Volksgezondheid en Milieu*. Published online 05-10-2011 . Retrieved from Internet April 2021. Pg 4. <https://www.rivm.nl/documenten/bezwaren-tegen-vaccinaties-perspectief-van-weigeraar>

⁹ Frits Woonink. "Bezwaren tegen vaccinaties.Perspectief van de weigeraar." *Rijksinstituut voor Volksgezondheid en Milieu*. Published online 05-10-2011 . Retrieved from Internet April 2021. Pg 9. <https://www.rivm.nl/documenten/bezwaren-tegen-vaccinaties-perspectief-van-weigeraar>

¹⁰ Ernst, Edzard. "Anthroposophy: A Risk Factor for Noncompliance With Measles Immunization." *The Pediatric Infectious Disease Journal* 30, no. 3 (2011): Pg, 188.

¹¹ Frits Woonink. "Bezwaren tegen vaccinaties.Perspectief van de weigeraar." *Rijksinstituut voor Volksgezondheid en Milieu*. Published online 05-10-2011 . Retrieved from Internet April 2021. Pg 3. <https://www.rivm.nl/documenten/bezwaren-tegen-vaccinaties-perspectief-van-weigeraar>

¹² WLM Ruijs. "Acceptance of vaccination among orthodox protestants in the Netherlands" *Rijksinstituut voor Volksgezondheid en Milieu*. Published online 22/03/2013. Retrieved from internet April 2021. Pg 4. <https://www.rivm.nl/publicaties/acceptance-of-vaccination-among-orthodox-protestants-in-netherlands>

formal and informal contacts. For example; denominational primary, secondary and tertiary education, youth groups, bible study groups, social clubs and frequent home visits. Studies identify that within *gereformeerde* schooling “the dynamics in primary and secondary schools has long been recognized as the engine behind epidemic outbreak”.¹³ Another study notes the role *gereformeerde* schools play in the spread of the mumps and the positive effects on the spread of disease brought about by school closures further highlighting this group's risk.¹⁴ Although risk to life cannot be measured in financial terms, the fiscal costs of outbreaks of preventable disease are considerable, for example the cost of the 2013-2014 measles outbreak with just 2700 cases was estimated at nearly 2 million euro.¹⁵ Spare to think of the enormous costs of the current pandemic, both in healthcare and in financial support to businesses. On a principle level, the acceptance of vaccination is a real life example of the struggle of the secular state to cope with religion. This issue is universal, far greater than just the issue of *bevindelijk gereformeerden* and vaccination. The ‘right’ to live according to one's religious beliefs, without vaccination, collides with the state's ‘obligation’ to protect the health of its members, through vaccination. The right to vaccination and the right to not vaccinate disclose a compromise as a practical example showing the secular state's dilemma of freedom from and freedom for religion. The debate has been politically active in the Netherlands for more than 150 years, since the smallpox epidemic and the compulsory *pokkenbrief* to allow access to education. A COVID-19 vaccination passport may have further reaching consequences than the *pokkenbrief* but both serve to illustrate the secular state's struggle with religion. Non mandatory vaccination being the norm, the door is open for anyone to not vaccinate, not just those that do not do so for religious reasons. Although this freedom (to not vaccinate) is given to us all, this does not undermine religion as a legitimate reason not to vaccinate. This is one example, vaccination, that illustrates the struggle of the secular state with religion.

¹³ Lisowskia Bartosz, Yuvan Steven, Bierbc Martin. “Outbreaks of the measles in the Dutch Bible Belt and in other places – New prospects for a 1000 year old virus” in *Biosystems*, Elsevier.2019. Retrieved from Internet April 2021. <https://www.sciencedirect.com/science/article/abs/pii/S0303264718303204>

¹⁴ Ruijs, W.L., Hautvast, J.L., Akkermans, R.P. et al. “The role of schools in the spread of mumps among unvaccinated children: a retrospective cohort study”. In *BMC Infectious Disease* 11, 227 (2011). Pg 6.

¹⁵ Suijkerbuijk A, et al. “Economic Costs of Measles Outbreak in the Netherlands, 2013–2014”. In *Emerging Infectious Diseases*, 21(11). Retrieved from internet April 2021. https://wwwnc.cdc.gov/eid/article/21/11/15-0410_article

There is clear identification of *bevindelijk gereformeerden* as being at risk from infection and that they pose a risk to the rest of the population.¹⁶ For these reasons, attention for non vaccinators must be focused on this group within the Netherlands, the *bevindelijk gereformeerden*. Vaccination is only effective for a population (the general population or *bevindelijk gereformeerde* communities) if there is adequate participation in vaccination, which however remains a voluntary act. To understand each and every individual and their reasons not to immunize would be impossible, but to look at the dynamics regarding immunization of the organizations of which they are loyal members however could allow us to understand the groups response to vaccination. The opinions of the leaders of the group may not be precisely the reasoning of the individual but such an analysis allows a real chance to understand (and perhaps influence) non-immunizers. Acceptance of vaccination however differs dramatically among the six main *bevindelijk gereformeerde* churches in the Netherlands as we will see. These differences have a historical and political background which has led to the current differences between denominations in the acceptance of vaccination. These differences between denominations can in themselves account for the measurable differences in vaccination rates between council areas depending upon which denominations are represented.¹⁷

The question

Given the current COVID-19 pandemic and the history of vaccination in the Netherlands, the practical question arises:

“Can participation in COVID-19 vaccination by *bevindelijk gereformeerden* be predicted given their response to earlier vaccination efforts after previous outbreaks of disease and their

¹⁶ WLM Ruijs. “Acceptance of vaccination among orthodox protestants in the Netherlands” Radboud Universiteit, Nijmegen. (2011). Pg 6. Retrieved from internet April 2021.
<https://repository.ubn.ru.nl/bitstream/handle/2066/98582/98582.pdf;jsessionid=39FA38D16BD7D5462C596D3CEFE4269?sequence=1>

¹⁷ Radboud University Medical Center. “Aanzienlijke verschillen in vaccinatiegraad reformatische gezindte” Radboud University Medical Center. Published online 01-07-2011. Retrieved from internet April 2021.
<https://www.radboudumc.nl/nieuws/2011/aanzienlijke-verschillen-in-vaccinatiegraad-reformatische-gezindte#:~:text=Aanzienlijke%20verschillen%20in%20vaccinatiegraad%20reformatische%20gezindte.-Welkom%20bij%20het&text=De%20vaccinatiegraad%20in%20de%20reformatische,gemiddelde%20van%20de%20Nederlandse%20bevolking.>

participation in existing vaccination programs, through use of the Strategic Action Field theory?”

The current COVID-19 pandemic is an event with an unparalleled global effect. The consequences are far wider-reaching than any event before it due to the ever-increasing interconnected nature of the world. The COVID-19 pandemic is arguably the only true pandemic (so far) due to it affecting the entire world rather than just all of the ‘known world’. Neither smallpox nor the Spanish flu was so global in its influence, neither occurring in a world so intensely interconnected as ours is now.¹⁸ Should we be able to predict the response of *bevindelijk gereformeerden* using the theory of Strategic Action Fields, then this could be of use with similar populations of non vaccinators elsewhere.

Literature review

There is a great deal of literature on the subject of vaccination in medical journals and online publications from the medical perspective, internationally, on a European level, and nationally. Regarding vaccination and *bevindelijk gereformeerden*, the RIVM’s (*Rijksinstituut voor Volksgezondheid en Milieu*, the Dutch National Institute for Public Health and Environmental Protection) dr. Helma Ruijs is the most prolific author both in sociological and ecological studies on this subject. The RIVM has large amounts of data available regarding vaccination rates in all *gemeenten* (council areas). Much attention is given to the issue by the media and in politics not just now in times of COVID-19 but also in times of earlier epidemics and outbreaks of infectious disease. This is of particular interest in how the situation is ‘framed’ according to the audience, because this is influential to their decision making. Church and church leaders too have a voice which is prevalent online, despite objections to ‘unfiltered’ internet in the early 2000s *bevindelijk gereformeerden* today have access to and make as much use of the internet as other Dutch people do.¹⁹

¹⁸ Shu Ting Liang, Lin Ting Liang, and Joseph M Rosen. “COVID-19: a comparison to the 1918 influenza and how we can defeat it” *Radboud University Medical Center*. Published 01-07-11. Retrieved from internet May 2021.
<https://pmj.bmj.com/content/97/1147/273>

¹⁹ De wever Robin. “Refo's omarmen het internet. Naïef?” *Trouw*. Published 20 November 2013. Retrieved from internet June 2021.
<https://www.trouw.nl/nieuws/refo-s-omarmen-het-internet-naief~b6850696/>

Synopsis

The application of the theory of SAF to this discussion is a new approach and can offer insight by the use of another parameter to analyse the situation, those of the SAF theory. An analysis of the response to situations in the past which are similar to that in which they now find themselves (with COVID-19) may be illuminating in predicting their response to COVID-19 vaccination. The RIVM compiles extensive data regarding participation in vaccination programs. This data clearly shows less participation in the Netherlands' Bible Belt (*Bijbelgordel*), a broad geographic area running from southwest to northwest through the Netherlands, where many *bevindelijk gereformeerden* live.²⁰ Despite high rates of immunization nationally there have, in recent years, been several outbreaks of preventable (through immunization) disease areas with a concentration of unimmunized *bevindelijk gereformeerde* orthodox Protestants. Polio outbreaks in the Bible Belt in the 1970s and 1990s²¹, recent outbreaks of measles in 2013, 2014,²² and rubella in 2004, 2005 and 2013.²³ Not only a risk to themselves, unimmunized populations within the greater population also pose a risk to those non-immunized individuals among the greater population (those for example that for medical reasons cannot be immunised) by providing a residual source for infection. Within this residual pool the disease not only survives but also may mutate to forms that there may not be vaccines for. This has consequences not only within the Netherlands but also worldwide as shown by the link between outbreaks of the mumps among related communities of *bevindelijk gereformeerden* in the Netherlands and Canada in 2009.²⁴

²⁰ WLM Ruijs. "Acceptance of vaccination among orthodox protestants in the Netherlands" *Rijksinstituut voor Volksgezondheid en Milieu*. Published online 22/03/2013. Retrieved from internet April 2021. Pg, 7.
<https://www.rivm.nl/publicaties/acceptance-of-vaccination-among-orthodox-protestants-in-netherlands>

²¹ Ministry of Health, Welfare and Sport. "Polio" *Rijksoverheid*. Last modified 24-11-2020. Retrieved from internet April 2021.
<https://www.rivm.nl/polio>

²² Ministry of Health, Welfare and Sport. "Ziekten in het Rijksvaccinatieprogramma" *Rijksoverheid volksgezondheidszorg*. Retrieved from internet April 2021.
<https://www.volksgezondheidenzorg.info/onderwerp/ziekten-het-rijksvaccinatieprogramma/regionaal-internationaal/regionaal>

²³ Ministry of Health, Welfare and Sport. "Rodehond". *Rijksinstituut voor Volksgezondheid en Milieu*. Last modified 24-11-2020. Retrieved from internet April 2021.
<https://www.rivm.nl/rodehond>

²⁴ Wielders, C.C et al. "Mumps Epidemic in Orthodox Religious Low-vaccination Communities in the Netherlands and Canada, 2007 to 2009." *Euro Surveillance : Bulletin Européen Sur Les Maladies Transmissibles* 16, no. 41 (2011): 4. Pg, 8.

CHAPTER 1: Methodology

Social Action Field theory

American social scientists Neil Fligstein and Doug McAdam propose a broad all-encompassing theory of Strategic Action Fields (SAFs) in their 2012 publication *A Theory of Fields*. SAFs are seen as interwoven building blocks, providing fundamental order in society. Changes in one field influence other fields and emphasis is placed upon the role of skilled social actors in this process. SAFs influence other proximate and overlapping fields, sudden changes in one field are seen as giving an 'exogenous shock' bringing about change in other SAFs.²⁵ To provide an interpretive framework with which we can understand how *bevindelijk gereformeerden* may or may not participate in COVID-19 vaccination by looking at how *bevindelijk gereformeerden* have participated in previous vaccination efforts following previous outbreaks of infectious disease, the theory of Strategic Action Fields could be suitable for three reasons. Firstly because the theory's all-encompassing scale suits the enormous interconnectedness between the SAFs of state and church in the current wide-reaching situation. Secondly the concept and understanding in the theory of exogenous shock being well suited to the COVID-19 pandemic, due to the sudden and disruptive nature of the measures taken to control the disease. Lastly because of the emphasis on the role of politically skilled actors in effecting or resisting change within SAFs that is offered by the theory. The case studies to be analysed according to the theory have been chosen because they are similar to the situation around COVID-19, namely outbreaks of disease in which vaccination was offered to curb the outbreak just as is the case now with COVID-19. The theory could help understand the reaction of *bevindelijk gereformeerden* to these earlier exogenous shocks within the SAFs affected by vaccination, disease, and faith. The historical reaction to smallpox, polio, measles, and rubella outbreaks can be analyzed according to this theory, providing a pattern to anticipate the response of *bevindelijk gereformeerden* to vaccination against COVID-19 now. Furthermore, there is the possibility to propose how that response to vaccination could or can be influenced in the current COVID-19 pandemic.

²⁵ Neil Fligstein and Doug McAdam. *A Theory of Fields*. Oxford University Press. Oxford 2012. Chapter 4, Pg. 3-4.
<https://oxford-universitypressscholarship-com.ezproxy.leidenuniv.nl/view/10.1093/acprof:oso/9780199859948.01.0001/acprof-9780199859948>

Comparison of the historical responses to previous epidemics and outbreaks of disease could lead to a better understanding of the present situation and so foresee the response to the current COVID-19 pandemic by using the theory of SAF as a framework for that comparison.

SAF theory in relation to *bevindelijk gereformeerden* and vaccination

Fligstien and McAdam's theory of Strategic Action Fields is a general theory of a phenomenon underlying social interaction between actors and organizations, on a meso level. The collective strategic actions of actors are seen as the fundamental unit of collective action in society. SAFs can be seen as a self procreating, fluid, morphic, interwoven set of Russian dolls, whose actors interact in 'conflict arenas' spawned by these SAFs.²⁶ The vaccination issue is one such 'conflict arena'. The SAFs involved in vaccination are vast, wide-ranging, and overlapping. For example the church denominations, educational organisations, commercial organisations, sports and social organisations on local, national, and international levels, as well as the media, the state, its agents, and the political incumbents. The COVID-19 pandemic is a shock affecting all SAFs worldwide. Changes in any one field are seen to affect other fields, wherein the issue of vaccination the SAFs of *bevindelijk gereformeerden* and the secular state meet. The theory holds seven key concepts or phases of SAFs, which are held to be universal, and applicable to all social situations, so too to the case studies discussed here and the current situation.²⁷

1. SAFs have four underlying aspects that are crucial to their construction. Firstly there is a diffuse understanding of the field by the actors in regard to their roles and positions in the field. Secondly, these actors vary in power and in roles, in this case the roles are defined (clergy, media, state, and individuals both within and outside these three) the power is contested (being given by the individual to the state or the church in their choice of vaccinating or not). Thirdly there are rules of engagement in the field and fourthly there is an interpretive framework in place to make sense of the whole (the rules regarding and framework surrounding vaccination in the Netherlands are clear but contested). SAFs are by nature always in flux as a result of changes in these four components: understanding, actors, rules and interpretive framework.

²⁶ Neil Fligstein and Doug McAdam. *A Theory of Fields*. Oxford University Press. Oxford 2012. Chapter 1, pg. 4.

²⁷ Neil Fligstein and Doug McAdam. *A Theory of Fields*. Oxford University Press. Oxford 2012. Chapter 1, pg. 31.

2. The composition of SAFs: incumbents, challengers, internal governance bodies and external governance bodies such as nation states. Internal governing bodies tend to support incumbents while challengers must wait for their chance. In this instance in the SAFs of 'public health' and 'church' both fields have internal governance bodies where neither can interfere in the other's field. These are the clergy, church bodies, church leaders with the SAF 'church' and state organisations, state agents, and political leaders within the SAF 'vaccination'. Vaccination is an area where these SAFs overlap a so-called 'conflict arena'. External governance bodies tend only to interfere if the SAFs cannot organise themselves, or go against state interests or in this case the interests of the church
3. The social skills of incumbents and challengers is crucial in particular to set aside their own interests, form alliances, and frame the situation to effectively mobilize support. In this case these are the clergy, church leaders, politicians, and government agents.
4. The concept of a broader field environment holds that all SAFs are by definition embedded in other SAFs. Three binary factors characterize this relationship: whether the SAFs are distant or proximate (in this case proximate) and whether the relationship between the SAFs is vertical or horizontal. Voluntary vaccination would seem to put the priority of the state at the same level or even below that of the church or the individual by not making vaccination mandatory. Thirdly whether that choice is legitimized by the state or not, in this case it is, as well as by the church. This interconnectedness of SAFs leaves even the most isolated and stable fields (such as those of *bevindelijk gereformeerde* churches) vulnerable to influence from outside by dramatic events from outside so called 'exogenous shocks'.
5. Exogenous shocks, such as in this case outbreaks of disease, epidemics, or our current pandemic are events occurring outside the SAFs but effecting change in them. Change in one SAF influences another, most often the SAF will remain stable with the incumbents supported by the governing bodies trying to maintain the status quo, through collective effort, organizational appropriation (from other SAFs), or innovative action (in this case that may be so). Incumbents (here the position of church leaders as incumbents is just like that of state agents) have less freedom to change than challengers do. If these efforts by incumbents are not successful in maintaining the status quo we see the following:
6. Episodes of contention arising where the SAF is unstable, nobody is in charge of the SAF, and everybody is obliged to act, in an unending reactive struggle. This is often resolved by state interference (generally in favor of the incumbents) either the status quo is reinstated or a new order appears. In this case this is not so, those that are in charge stay in charge in their respective fields both in state and church.

7. Settlement within a SAF is often by ‘spillover’ from proximate SAFs or state interference results, and then the SAF becomes stable. Spillover is likely due to the huge number of potential sources (SAF) affected by the COVID-19 pandemic.

These seven concepts can be used to analyze the three states that SAFs tend towards: unorganised/emerging, organized/stable but not static (such as in this case), and organized/unstable. Organized (stable) SAFs are characterized by well-defined roles and rules. Here incumbents are often certified by the state who is also ready to help incumbents if needed. Therefore challengers are vulnerable in a sort of ‘prisoner’s dilemma’ and must avoid conflict, awaiting their chance. Both socially skilled incumbents and socially skilled challengers continuously work to improve their position within a stable but ever-changing SAF. Even very stable fields, (such as those of and surrounding *bevindelijk gereformeerden*) are vulnerable to exogenous shock (such as the current COVID-19 pandemic), typically taking three forms: invasion of the field by other SAFs, destabilization by proximate SAFs, and most rarely exceptional events whereby all the SAFs in a nation are affected, as is the case here with the COVID-19 pandemic. The more interconnected a SAF is to other SAFs the more stable it will be in relation to other SAFs although isolated SAFs are internally more stable. The greater the hierarchical differences between SAFs or the dependency on resources between them the less stable it will be. In crises both incumbents and challengers focus on outside authority to resolve the crisis. Here we can see religious belief or the belief in scientific authority, of the RIVM for example, as examples of appeals to outside authority, that of God through divine providence or that of science through vaccination although these appeals need not be mutually exclusive. Usually is that the state becomes the incumbent’s ally (however the state is not allowed to actively support the church in the Netherlands) and the status quo remains as has been the case regarding vaccination in the Netherlands where the government accepts non vaccination and in doing so sanctions the wishes of the non-vaccinators, no matter their motivations, religious or otherwise. Or less often the government supports the challengers (there is some change, as challengers become incumbents) or there is a genuine far reaching transformation (which is seen as the least likely outcome of a crisis). Should the latter, genuine transformation, occur then it is most likely because the exogenous shock was very intense, external actors intervened (or incumbents fled or defected) and the challengers in the SAF were united. Incumbents will

always defend the status quo and challengers quickly change to defend the new status quo once they become incumbents.²⁸

It is perhaps possible to use the SAF theory together with RIVM vaccination data to foresee the response of *bevindelijk gereformeerden* to vaccination in the light of what can be held to be the greatest exogenous shock of our lifetimes, the COVID-19 pandemic. In comparison to earlier albeit smaller outbreaks of disease (smallpox, polio, measles, and rubella) the theory can be used to predict the response to vaccination today. Due to the current pandemic being perhaps a far greater exogenous shock to all fields than the earlier epidemics or outbreaks of disease were, we may expect the reaction to COVID-19 to be far greater as well. SAF theory places great influence on the role of 'skilled social actors' whose influence is crucial in bringing about change within fields. Within Protestantism, there is a long tradition of skilled social actors, politicians and clergy going back to Luther. It will be enlightening to see how the response of *bevindelijk gereformeerden* to previous exogenous shocks similar to the current COVID-19 pandemic give us insight into the response to this exogenous shock, the COVID-19 pandemic.

Application of the theory to case studies

The four historical case studies have been chosen because of their similarity to the current COVID-19 situation. These four were outbreaks of infectious diseases where the government offered vaccination as part of the response to quell the outbreaks just as is the case with COVID-19 since the development of a vaccine for the disease. Using the theory, firstly the smallpox epidemic at the end of the 19th century can be explored; then the polio epidemic in the Bible Belt in the 1970s will be analyzed according to the theory and reported changes in vaccination data records of the RIVM. Then, the response to outbreaks of measles and rubella will be analyzed by the theory again with regard to the actions of skilled social actors within the fields and response to vaccination from the RIVM data. Finally participation in the National Immunisation Program (NIP), and response to the current COVID-19 pandemic will also be subjected to analysis according to the theory. This all may provide a prediction for participation in COVID-19 vaccination (or providing methods of influence) based upon the findings of these case studies. Before we do this we must have an understanding of the background where these outbreaks of disease have occurred and who was involved.

²⁸ Neil Fligstein and Doug McAdam. *A Theory of Fields*. Oxford University Press. Oxford 2012. Chapter 1, pg. 30.

CHAPTER 2: Historical Overview

Bevindelijk gereformeerden: a pillarised community

Several Protestant churches and groups are typified as *bevindelijk gereformeerd*: the Hersteld Hervormde Kerk, the Gereformeerde Bond in de Hervormde Kerk, the Christelijke Gereformeerde Kerken, the Gereformeerde Gemeenten, the Gereformeerde Gemeenten in Nederland, the Gereformeerde Gemeenten in Nederland (buiten verband) and the Oud Gereformeerde Gemeenten in Nederland. In addition to these churches there are an estimated five thousand *bevindelijk gereformeerd* members of various unaffiliated churches and an estimated three thousand *thuislezers* (home readers) that attend no church. Politically *bevindelijk gereformeerden* are clearly identified with the reformed political party the *Staatkundig Gereformeerde Partij* (SGP) which was founded as an alternative to the ARP for those protestants who did not identify with Kuypers neo-Calvinism, by Gerrit Hendrik Kersten (1882-1948) in 1918.²⁹ Politician, neo-Calvinist theologian, and journalist Abraham Kuyper (1837-1920) had established the Netherlands first political party the Anti-Revolutionary Party (ARP) in 1879³⁰, motivated by the desire for equal state support of both public and religious schools.³¹ The ARP later merged with other christian parties to form the present day *Christen-Democratisch Appel* (CDA). These political formations are of relevance to the issue of vaccination today, for example the Minister of Health Hugo de Jong is a CDA member, and both parties are in parliament. The present *Bevindelijk gereformeerd* churches in the Netherlands were all established between 1834 and 2004 in response to the perceived latitudinarian character of the *Nederlandse Hervormde Kerk*.

The pillarisation *bevindelijk gereformeerden* in the Netherlands began in the 1960s and 1970s as a response to the perceived 'dechristianisation' of Dutch society. Since the 1960s the rapid secularisation of the Netherlands has meant the churches continuing existence is less than certain, the *bevindelijk gereformeerd* congregation feels threatened by the secular world and

²⁹ Stap, J.J.B. De SGP Voor 1940. *Utrechtse Historische Cahiers* ; Jrg. 6 (1985), No. 3. 802882021. Utrecht: Instituut Voor Geschiedenis Der Rijksuniversiteit, 1985. Pgs. 14-16.

³⁰ Wood, John Halsey. "Going Dutch in the Modern Age: Abraham Kuyper's Struggle for a Free Church in the Nineteenth-Century Netherlands." In *the Journal of Ecclesiastical History* 64, no. 3. (2013): 513–32.

³¹ Exalto, John, Bertram-Troost, Gerdien. "Strong Religion in a Secular Society: The Case of Orthodox Reformed Schools in The Netherlands" in *Education Science* . 9, no. 1: 28. 2019. Pg. 3.

therefore loyally defend their community and church.³² These churches each have their separate organisations with a relatively free role for their pastors to whom the denominations are, in general, deeply loyal due to their close relationship and shared views. However all the *bevindelijk gereformeerden* churches share the same character of faith: seeing the Bible read according to the letter as the infallible Word of God, holding conservative views on homosexuality and the role of women, valuing the primacy of family and observation of Sunday as holy with steadfast church attendance.³³ Here though we must be concerned with their differences to how they regard vaccination and in their vaccination rates. Firstly the vaccination rates. Strikingly all six major *Bevindelijk gereformeerde* churches have inadequate vaccination coverage for most infectious diseases for which the RIVM offers vaccination (95 percent is considered adequate by the RIVM for most infectious diseases) with the vaccination rate varying between 25 and 85 percent.³⁴ The churches can be split roughly into three groups: those with a relatively high immunisation rate of 85 percent, the *Christelijke Gereformeerde Kerken* (who have a minority of *bevindelijk gereformeerde* members) and the *Gereformeerde Bond in de Protestantse Kerk in Nederland* (which has both *bevindelijk* and *non-bevindelijk* members), those with a 50-75 percent immunisation rate (the *Hersteld Hervormde Kerk*, and *Gereformeerde Gemeenten*), and those with a very low, around 25 percent, rate of immunisation (the *Gereformeerde Gemeenten in Nederland*, and the *Oud Gereformeerde Gemeenten*). The bulk of the over 250 thousand *Bevindelijk gereformeerden* in the Netherlands falls into the middle group (around 150 thousand strong), with both of the other two groups counting around 50,000 members.³⁵ If we look specifically at the numbers of unvaccinated *bevindelijk gereformeerden* then there are roughly 22,500 belonging to the

³² Janse, C.S.L. *Bewaar Het Pand : De Spanning Tussen Assimilatie En Persistentie Bij De Emancipatie Van De Bevindelijk Gereformeerden*. Houten: Den Hertog, 1985.. Pg. 21.

³³ Dijk, Gertjan Van. *Het Geloof Der Vaderen : De Denkwereld Van De Bevindelijk Gereformeerden*. Sun, Nijmegen. 1996. Pg 122.

³⁴ Helma Ruijs en Jan van Klinken. "Vaccinatie in de reformatorische gezindte" Academische werkplaats AMPHI and the NPV (Nederlandse Patiënten Vereniging) , Nijmegen, March 2013. Pg 6. Retrieved from internet May 2021.
<https://academischewerkplaatsamphi.nl/wp-content/uploads/2016/08/Brochure-Vaccinatie-in-d-ereformatorische-gezindte.pdf>

³⁵ Helma Ruijs en Jan van Klinken "Vaccinatie in de reformatorische gezindte" Academische werkplaats AMPHI and the NPV (Nederlandse Patiënten Vereniging) , Nijmegen, March 2013. Pg 6. Retrieved from internet May 2021.
<https://academischewerkplaatsamphi.nl/wp-content/uploads/2016/08/Brochure-Vaccinatie-in-d-ereformatorische-gezindte.pdf>

Christelijke Gereformeerde Kerken and *Gereformeerde Bond*, 18,500 of the *Hersteld Hervormde Kerk* and *Gereformeerde Gemeenten* and 37,500 to the *Gereformeerde Gemeenten in Nederland* and the *Oud Gereformeerde Gemeenten*.³⁶ Despite the relatively high vaccination rates the *Christelijke Gereformeerde Kerken* and the *Gereformeerde Bond* account a significant number of unvaccinated due to their high membership numbers, while the two churches with the lowest vaccination rate (*Gereformeerde Gemeenten in Nederland* and the *Oud Gereformeerde Gemeenten*) account for just a third of the total unvaccinated individuals due to their limited size (25,000 and 19, 000 respectively)

The historical context is one of church division, but theologically remarkably little division or dissension regarding reasons not to vaccinate exists despite the vast differences in vaccination rates. A study in 2018 using structured interviews with under-vaccinated groups in Europe noted that for *bevindelijk gereformeerden*:

“The main argument for those who refuse vaccination was the necessity to rely on Divine providence: if God sends an illness to somebody or an outbreak on earth, he has a reason to do so. One must not oppose God’s will and should trust in God.”³⁷

The same study concluded that “firm trust in Divine Providence seems to be the most important reason for not being vaccinated”.³⁸ According to Calvinist doctrine God has predestined our fate and because most are not predestined to salvation most of us are doomed which leads to vaccination being seen as unnecessary (one’s fate has been decided anyway).³⁹ Compulsory smallpox vaccination in the 19th century formed the background for Protestant physician Abraham Capadose’s (1795-1874) negative views on vaccination, influenced by the sometimes severe side effects and sometimes fatal results of the early smallpox vaccinations.⁴⁰ Although today real medical risk from vaccination has been reduced to

³⁶ Helma Ruijs en Jan van Klinken. “*Vaccinatie in de reformatische gezindte*” Academische werkplaats AMPHI and the NPV (Nederlandse Patiënten Vereniging) , Nijmegen, March 2013. Pg 18. Retrieved from internet May 2021.
<https://academischewerkplaatsamphi.nl/wp-content/uploads/2016/08/Brochure-Vaccinatie-in-d-ereformatische-gezindte.pdf>

³⁷ Fournet, N., Mollema, L., Ruijs, W.L. et al. “Under-vaccinated groups in Europe and their beliefs, attitudes and reasons for non-vaccination; two systematic reviews.” In *BMC Public Health* 18, 196 (2018). Pg 10.

³⁸ Fournet, N., Mollema, L., Ruijs, W.L. et al. “Under-vaccinated groups in Europe and their beliefs, attitudes and reasons for non-vaccination; two systematic reviews.” *BMC Public Health* 18, 196 (2018). Pg 13.

³⁹ Ruijs Helma. *Acceptance of Vaccination among Orthodox Protestants in The Netherlands*. Radboud Universiteit Nijmegen, 14 september 2012. Pg. 8.

⁴⁰ Capadose, Abraham. *Het Begrip Van Posing*. 1882.

insignificance there is still mistrust and vaccination is seen as dangerous, for example by *dominee* Antonie Kort, a minister in the *Oud Gereformeerde Gemeenten*:

“Oh gentlemen, what must we think that a lot of people die because of that vaccination. Death is injected, you know it is happening, but it is not prevented”.⁴¹

That the reasoning is flawed (vaccination no longer brings danger) does not mean that this is not still put forth as a reason not to vaccinate, although faith in Divine Providence has been and still is the primary reason most often offered not to accept vaccination. That illness comes from man not following God’s will is also offered as a reason not to vaccinate;

“Is a vaccine really necessary? Are we not getting in God's way? To live our life without God first, and we end up getting sick ”⁴²

Vaccination can be perceived as unnecessary if one follows God’s will and acceptance of vaccination can be seen as a sign that one does not follow God’s will therefore making non vaccination a ‘badge of honour’. Also Matthew 9:12 “Those who are well have no need of a physician, but those who are sick.” is used by all denominations as a reason not to vaccinate and often quoted in the media as their response to vaccination. There is a distinction made between “rightful” means to cope with a disease (including medication) and “inadmissible” ones (such as vaccination, which proactively makes your body “ill”).

All bevindelijk gereformeerden support ‘Freedom of conscience’, to worship in one's own way, as a reason not to accept vaccination (in this case by not vaccinating but instead trusting in God) With the Netherlands history of the *pokkenbrief* (proof of smallpox vaccination for access to education) any call to vaccinate is seen as an infringement of their religious freedom , to worship as they see fit.

⁴¹ “Ach heren wat moeten wij er van denken dat er heel veel mensen sterven door dat vaccineren. De dood wordt ingebracht waarvan je weet dat het gebeurt, maar wordt niet verhinderd” Ds. Antonie Kort of the Oud Gereformeerde Gemeente in Nederland, Mieraskerk, Krimpen Aan de IJssel, 18/4/21. “Kerkdienst 18/4/21” *Kerkdienstgemist.nl*. Retrieved from internet May 2021.

<https://kerkdienstgemist.nl/stations/1391/events/recording/161876340001391>

⁴² “Is een vaccin echt nodig? Lopen wij God niet voor de voeten? Om eerst maar ons leven zonder God te leven, en wij worden uiteindelijk ziek” Captain W.S Stam on Youtube Channel Danny’s wereld by Danny Ghosen. “#5 Waarom gelovigen niet vaccineren”. *DANNY’S WERELD*. Published online 25-02-21 Retrieved from internet May 2021.

<https://www.youtube.com/watch?v=l6lP6ZAeyq8>

CHAPTER 3: Case Studies

Case study smallpox epidemic 1870-1875

During the 1870-1875 smallpox epidemic in Europe around a half million people died of the disease despite the existence and successful use for almost 100 years of vaccination against smallpox.⁴³ Proof of smallpox vaccination to allow access to school had been mandatory in the Netherlands since 1823 but was abandoned in 1857 due to pressure from the *Réveil* movement showing that the SAFs (of state and education) around vaccination were then not stable but contested.⁴⁴ However between 1871 and 1873 18,000 people died in the Netherlands from smallpox. This nationwide epidemic was felt the most in South Holland and Utrecht where people were three times as likely to die of smallpox than those in other provinces.⁴⁵ This led in 1872 to the law on infectious diseases (“Wet op de Besmettelijke Ziekten”). Once again only with evidence of vaccination, a so-called *pokkenbrief*, could children attend school and the vaccination rate rose and the death rate fell dramatically.⁴⁶ Smallpox was most fatal to the young who were themselves at the will of their parents as to whether they were vaccinated or not. A report from the department of Internal Affairs in 1875 noted as a concluding point as to what was to be learnt from the epidemic that: “The spread of smallpox is greatest and deadliest where the resistance to vaccination is fiercest”.⁴⁷ From

⁴³ Koplow, David A. *Smallpox The Fight to Eradicate a Global Scourge*. Berkeley: University of California Press, 2003. Pg. 12.

<http://web.a.ebscohost.com.ezproxy.leidenuniv.nl:2048/ehost/detail/detail?vid=0&sid=2d01e7cf-e570-49b1-9b42-e05d8ec923de%40sessionmgr4008&bdata=JnNpdGU9ZWZwY3QtbGl2ZQ%3d%3d#AN=108496&db=e000xww>

⁴⁴ de Wever Robin. “In 19e eeuw was vaccinatie verplicht, ondanks protestantse kritiek” in *Trouw* 17/7/2013. Retrieved from internet May 2021.

<https://www.trouw.nl/nieuws/in-19e-eeuw-was-vaccinatie-verplicht-ondanks-protestantse-kritiek~b98abd98/?referrer=https%3A%2F%2Fwww.google.com%2F>

⁴⁵ Ministerie Van Binnenlandse Zaken. *De Pokken-epidemie in Nederland in 1870-1873*. 's-Gravenhage: Van Weelden En Mingelen, 1875. Pg 55

6-12. https://books.google.nl/books?vid=KBNL:UBL000031747&redir_esc=y&hl=nl

⁴⁶ Ministerie Van Binnenlandse Zaken. *De Pokken-epidemie in Nederland in 1870-1873*. 's-Gravenhage: Van Weelden En Mingelen, 1875. Pg. 56.

https://books.google.nl/books?vid=KBNL:UBL000031747&redir_esc=y&hl=nl

⁴⁷ “Het verspreiding der kinderpokken is het grootste en het doodlijkst waar de tegenstand tegen het inenten hevigst is” Ministerie Van Binnenlandse Zaken. *De Pokken-epidemie in Nederland in 1870-1873*.

's-Gravenhage: Van Weelden En Mingelen, 1875. Pg. 56.

https://books.google.nl/books?vid=KBNL:UBL000031747&redir_esc=y&hl=nl

the viewpoint of SAF theory the exogenous shock (in this case smallpox) was of a larger magnitude. A comparable number of dead, around 18,000 compared to a far smaller population (less than 5 million). With 17 million inhabitants in the Netherlands today and around 20,000 Covid-19 deaths compared to 18,000 deaths in a population of 5 million during the 1870-1875 smallpox epidemic we could expect a reaction of a lesser magnitude. The reaction of many was not to vaccinate, ultimately government action in 1875 was contested but the fields and boundaries of power (the state as primary) remained understood by both parties, vaccination being only compulsory for school attendance. The SAFs surrounding vaccination of the state and church became stable but not uncontested, compulsory vaccination helped to end the epidemic. That church and state were separate, would within the theory help to explain the actions and resulting stability. Organized (stable) SAFs are characterized by well-defined roles and rules, here in the smallpox epidemic of the late 19th century this appears to be the case, even the drastic action of reinstating the *pokkenbrief* to allow access to resources (education) was tolerated but contested despite the mutual understanding of the defined roles. For example Abraham Kuyper started a petition against the *pokkenbrief*, ultimately action by the ARP and SGP resulted in its abolition in 1928

Case study polio epidemic and outbreaks 1956, 1971, 1992

Vaccination against polio began in the Netherlands in 1957.⁴⁸ The last major epidemic in 1956 claimed 70 lives. “After the introduction of the vaccination, the number of cases of polio has fallen sharply”.⁴⁹ Despite causing relatively few deaths, the polio epidemics in 1971 and 1992 caused much uproar and critical media attention focused on the religious community. Still today some of the polio survivors are engaged to promote vaccination, in the media and by the RIVM, such as Roelofje Mussche from Staphorst (who is severely disabled and in a wheelchair due to polio) who does not hold her parents responsible:

⁴⁸ Rijksoverheid Ministry of Health, Welfare and Sport. ‘‘Polio’’ *Rijksinstituut voor Volksgezondheid en Milieu*. Last modified 24-11-2020. Retrieved from the internet May 2021.
<https://www.rivm.nl/polio>

⁴⁹ “Na invoering van de vaccinatie is het aantal gevallen van polio sterk gedaald” Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 558.

“I therefore blame the church and the pastor. You have no idea what could happen. Really no idea. Unfortunately, I am the example that not vaccinating is extremely dangerous.”⁵⁰

The outbreak of polio in 1971 claimed 5 lives in Staphorst⁵¹ where just half the inhabitants were vaccinated.⁵² A report in 1971 described inhabitants of Staphorst as: “for a large part affiliated with the Reformed Association of the Reformed Church”.⁵³ The government's reaction to this outbreak of polio was the rapid voluntary vaccination of the population by the general practitioners. Information about access to vaccination was brought door to door by the council in the name of the mayor and with success.⁵⁴ “Many parents who have not had their children vaccinated against polio in the past have now reconsidered this decision”.⁵⁵ In terms of the SAF theory this exogenous shock and the action of general practitioners caused a real change in Staphorst where the vaccination rate rose in a matter of days but now 50 years later is no more than 80 percent, well below the 95 percent the RIVM deems necessary to provide protection.⁵⁶ The role of the mayor of Staphorst Pier Anne Nawijn (who was a member of the CDA who were not opposed to vaccination) and that of the general practitioners was perhaps crucial in achieving rapid vaccination, in the words of the SAF theory due to their role as socially skilled actors. General practitioner in Staphorst during the

⁵⁰ “Ik neem het daarom de kerk kwalijk en de dominee. Je hebt geen idee wat er kan gebeuren. Echt geen idee. Ik ben helaas het voorbeeld, dat niet inenten ontzettend gevaarlijk is.” Valkeman Andre. “Poliopatiënt uit Staphorst schrikt van beleid: ‘Zie mij, ik ben nooit ingeënt en zit in een rolstoel’” *Algemeen Dagblad*. Last modified 23-11-19. Retrieved from Internet May 2021.
<https://www.destentor.nl/staphorst/poliopatient-uit-staphorst-schrikt-van-beleid-zie-mij-ik-ben-nooit-ingeent-en-zit-in-een-rolstoel~a9f7a9cc/?referrer=https%3A%2F%2Fwww.google.com%2F>

⁵¹ Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 558.

⁵² “voor een belangrijk deel aangesloten bij de Gereformeerde Bond van de Hervormde Kerk” Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 553.

⁵³ Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 552.

⁵⁴ Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 552.

⁵⁵ “vele ouders die hun kinderen in het verleden niet hebben laten inenten tegen polio kwamen thans op deze beslissing terug” Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 556.

⁵⁶ Rijksoverheid RIVM. “DKTP-vaccinaties per gemeente” *Volksgezondheidszorg*. Last modified 2021. Retrieved from internet May 2021.
<https://www.volksgezondheidszorg.info/onderwerp/vaccinaties/regionaal-internationaal/zuigelingen#node-dktp-vaccinaties-gemeente>

epidemic, doctor Age van Dalfsen, remembers that scared parents of unvaccinated children came to his practise to anonymously get a ‘sugar cube’, containing the vaccine.⁵⁷ Van Dalfsen is in the terms of the theory a pivotal actor who was able to put his own (medical) arguments aside, and simply offer vaccination to all. Unfortunately polio vaccination coverage is still not high enough in the Bible Belt communities such as Staphorst, concluded a report 30 years later:

“Since mandatory vaccination is politically and socially unacceptable in the Netherlands, pockets of susceptibility will remain because persons object to vaccination for religious reasons. Therefore, global eradication is the only means of protecting these persons against poliomyelitis”.⁵⁸

However, the response in Staphorst is seen as a success for the hundreds of involved organisations, agencies, people, and centers.⁵⁹ Here we could see the role of many socially skilled actors, such as van Dalfsen and Nawijn, when the need is high, in this case from the exogenous shock of polio. In the intervening years the immunisation rate has not risen high enough to protect the community despite those same socially skilled actors and others such as Roelofje Mussche, having far longer to exert influence than a few hectic weeks in 1971. That Mussche no longer identifies as *bevindelijk gereformeerd* puts her outside that SAF lessening her influence. In 1992 in Streefkerk a polio outbreak killed 2 and infected 71 unvaccinated people.⁶⁰ A Report in 1994 noted:

“The rapidly increasing demand for vaccination overwhelmed the regional public health services. To enable the authorities to concentrate control activities on the groups most at risk, the vaccination offer was restricted to contacts of cases, people who had not been vaccinated

⁵⁷ Wybo Algra “Geen Kwaad woord over Staphorst” *Trouw*. Published 11/101999. Retrieved from internet May 2021.
<https://www.trouw.nl/nieuws/geen-kwaad-woord-over-staphorst~b8c5ce96/?referrer=https%3A%2F%2Fwww.google.nl%2F>

⁵⁸ Marina A. E. et al “Immunity to Poliomyelitis in the Netherlands” In *American Journal of Epidemiology*, Volume 153, Issue 3, 1 February 2001. Pg 212. Retrieved from the internet May 2021.
<https://doi-org.ezproxy.leidenuniv.nl/10.1093/aje/153.3.207>

⁵⁹ Oostvogel PM. et al (1994). Poliomyelitis outbreak in an unvaccinated community in the Netherlands, 1992-93. *The Lancet* (British Edition), 344(8923). Pg 666.

⁶⁰ Rijksinstituut voor Volksgezondheid en Milieu: “Polio”. *Rijksinstituut voor Volksgezondheid en Milieu*. Last modified 24-11-2020. Retrieved from internet May 2021.
<https://www.rivm.nl/polio>

previously for religious reasons, and children younger than 13 years who were incompletely immunised or not immunised at all”⁶¹

The polio outbreak in 1992 was exclusively among a small number of unvaccinated *bevindelijk gereformeerden*.⁶² Dr Helma Ruijs of the RIVM notes that interest in polio vaccination during the 1992 outbreaks was for the greater deal among those that had not been vaccinated for polio for reasons other than the religious such as Anthroposophists. “From the reformatory denomination there was little enthusiasm for catch-up vaccinations”.⁶³ Despite the outbreak affecting only unvaccinated *bevindelijk gereformeerden* the effect was that other unvaccinated people sought immunisation. Here the SAFs surrounding those affected, the wider community in Staphorst, were affected by disease in the other SAFs of the church and social groups. Those in these fields sought vaccination but those most at risk, on whom the attention had to be focused did not. With just two deaths in 1991 the impact of the shock was limited. This again seems to indicate that the severity of the exogenous shock (in this case polio) is more crucial to achieving change in the fields than the role of actors with plenty of time to achieve such change. The shock of polio brought more change in surrounding SAFs than it did in the one it affected the most, orthodox Protestants. The same report concludes therefore that to protect; “people not vaccinated for religious reasons ... eradication of the causative agent, as has been planned by the World Health Organization ... is probably the only solution.”⁶⁴

Case study measles outbreaks 2013-2014

⁶¹ Oostvogel PM. et al (1994). Poliomyelitis outbreak in an unvaccinated community in the Netherlands, 1992-93. *The Lancet* (British Edition), 344(8923). Pg 666.

⁶² AAC. van Wijngaarden JK, van Loon AM. The polio epidemic in The Netherlands, 1992/1993. *Public Health Revue*. 1993-1994;21(1-2):107-16.

⁶³ “vanuit de reformatische gezindte was er weinig animo voor inhaal vaccinaties” Dr Helma Ruijs “Het vaccinatie debat in de Biblebelt” on Youtube channel *MGM Medische Geschiedenis in Nederland*. Published online 07-02-2. Retrieved from internet May 2021. 5 minutes 23 seconds.
<https://www.youtube.com/watch?v=18pIM0v4CIo&t=326s>

⁶⁴ Oostvogel P.M et al (1994). Poliomyelitis outbreak in an unvaccinated community in the Netherlands, 1992-93. *The Lancet* (British Edition), 344(8923). Pg 669.

The measles is an extremely contagious infectious disease.⁶⁵ Before immunisation began in the fifties, it killed up to 2,000 people a year in the Netherlands.⁶⁶ The measles, due to its highly contagious nature, requires a high immunisation rate to prevent epidemics.⁶⁷ Despite immunisation since 1976 as part of the National Immunisation Program (NIP), it is estimated that 40 percent of *bevindelijk gereformeerden* are not immunized against the measles.⁶⁸ In 2013-2014 “2700 measles cases were notified predominantly among unvaccinated primary school-aged children of orthodox Protestant denomination.”⁶⁹ Just one person died and 174 were hospitalised although the outbreak may have been larger than measured because:⁷⁰

“Orthodox Reformed denominations are familiar with measles ... and do not seek medical care ... A second reason can be that about 10% of the group of unvaccinated orthodox Reformed are not insured and have to pay the hospital admission themselves.”⁷¹

During the epidemic due to the relatively mild course of the disease among adults (compared to, say, polio for example) extra vaccination was solely offered to the unvaccinated under 14 years of age, the group that has the most risk of fatal complications from the disease.⁷² A report in 2013 found that medical arguments for vaccination played less of a role for the parents of the unvaccinated than religious arguments.⁷³ Despite disruption to the SAFs by the disease the answers were sought from within the effected’s own SAF (the church), not by

⁶⁵ Rijksinstituut voor Volksgezondheid en Milieu. “Mazelen in Nederland” *Ministerie van Volksgezondheid, Welzijn en Sport*. Last modified 04-10-2019. Retrieved from the internet May 2021.
<https://www.rivm.nl/mazelen/mazelen-in-nederland>

⁶⁶ Centraal bureau voor de statistiek. “*Statistiek van de sterfte naar den leeftijd en naar de oorzaken van den dood over het jaar 1905*.” Belinfante, Den Haag. Pg 16.

⁶⁷ Guerra FM et al. “The basic reproduction number (R0) of measles: a systematic review”. *The Lancet. Infectious Diseases*. 17 (12). December 2017. Pg. 426.

⁶⁸ van Dam, A.S.G et al. “Effect of Vaccination on Severity and Infectiousness of Measles during an Outbreak in the Netherlands, 2013–2014.” in *Epidemiology and Infection* 148, 2020. Pg 1.

⁶⁹ van Dam, A.S.G et al. “Effect of Vaccination on Severity and Infectiousness of Measles during an Outbreak in the Netherlands, 2013–2014.” in *Epidemiology and Infection* 148, 2020. Pg 1.

⁷⁰ van Dam, A.S.G et al. “Effect of Vaccination on Severity and Infectiousness of Measles during an Outbreak in the Netherlands, 2013–2014.” in *Epidemiology and Infection* 148, 2020. Pg 3.

⁷¹ van Dam, A.S.G et al. “Effect of Vaccination on Severity and Infectiousness of Measles during an Outbreak in the Netherlands, 2013–2014.” in *Epidemiology and Infection* 148, 2020. Pg 4.

⁷² Opstelten Wim, et al. “Er heerst weer mazelen” In *Nederlands Tijdschrift voor Geneeskunde*. 2013;157:A6710. Pg, 5.

⁷³ Opstelten Wim, et al. “Er heerst weer mazelen” *Nederlands Tijdschrift voor Geneeskunde*. 2013;157:A6710. Pg, 5.

spillover from outside the field (the state or RIVM for example). Also the fact that measles is seen as a childhood illness, as part of life, can have played a role in non vaccination. In the terms of the SAF theory the illness does not directly affect many of the SAFs adults find themselves in (although certainly as parents) therefore an exogenous shock such as this has less effect than a disease that affects all, young and old. Also because the measles is seen by many *bevindelijk gereformeerden* as an essential step in childhood development ⁷⁴ that if missed can bring complications if one is later infected many therefore do not vaccinate⁷⁵. Despite the convoluted logic this attitude reduces the effect of the disease on the SAFs as *bevindelijk gereformeerden* do not see the measles as a threat to life but instead as part of life. The RIVM 2015 yearly vaccination report noted no increase in vaccination rates in the Bible Belt area that was affected by the measles in 2013.⁷⁶ Five years later, in 2020, a report bemoaned the low national coverage of 80 percent that despite being a goal of the RIVM has still yet not been achieved.⁷⁷ No social actors emerged outside of the incumbents therefore the field remained stable.

Case study rubella outbreaks 2004-2005 and 2013

Rubella also known as the German measles is of little danger to adults and children but poses a severe danger to the unborn.⁷⁸ In 2004- 2005 an outbreak of rubella caused 2 miscarriages and 11 birth defects among *bevindelijk gereformeerden* starting with an outbreak among unvaccinated school children. In 2013 54 cases again among unvaccinated children at a *gereformeerde* school were reported.⁷⁹

⁷⁴ Opstelten Wim, et al. "Er heerst weer mazelen" *Nederlands Tijdschrift voor Geneeskunde*. 2013;157:A6710. Pg, 4.

⁷⁵ Redactie wetenschap "Refo-jongere buiten Biblebelt krijgt vaker 'laat' mazelen" *Reformatorisch Dagblad*. Last modified 24-05-18. Retrieved from the internet May 2021.
<https://www.rd.nl/artikel/757056-refo-jongere-buiten-biblebelt-krijgt-vaker-laat-mazelen>

⁷⁶ National institute for public health (RIVM): "Vaccinatiegraad Rijksvaccinatieprogramma Nederland Verslagjaar 2015 RIVM Rapport 2015-0067". *Ministerie van Volksgezondheid, Welzijn en Sport*. Retrieved from Internet May 2021. Pg, 25-26
<https://www.rivm.nl/bibliotheek/rapporten/2015-0067.pdf>

⁷⁷ National institute for public health (RIVM): "Vaccinatiegraad Rijksvaccinatieprogramma Nederland Verslagjaar 2020". *Ministerie van Volksgezondheid, Welzijn en Sport*. Retrieved from Internet May 2021. Pg 31.
<https://www.rivm.nl/bibliotheek/rapporten/2020-0011.pdf>

⁷⁸ National institute for public health (RIVM): "Rodehond in Nederland" *Ministerie van Volksgezondheid, Welzijn en Sport*. Last modified 24-11-20 Retrieved from the internet May 2021.
<https://www.rivm.nl/rodehond>

⁷⁹ National institute for public health (RIVM): "Rodehond in Nederland". *Ministerie van Volksgezondheid,*

The shock rubella caused to the general population was limited due to the effects of the illness being mild for the most part (with the exception of the serious health consequences for the unborn and tragedy for their families). The rate of vaccination for rubella follows that of measles, the vaccinations being administered along with mumps vaccine (known as the BMR vaccination), so the conclusion of the lack of improvement from the vaccination rate of the measles is valid here too. Just as with the measles the exogenous shock was not enough to raise vaccination rates in the fields, no new actors emerged and the incumbents in both SAFs of state and church remained entrenched. That rubella affects what is most precious to the pregnant means those that are most affected and perhaps therefore the most motivated to speak out (as social actors as the theory would have it) are women, not a group within *bevindelijk gereformeerde* circles that is used to the limelight or a leading role (at least not in church life).

Participation in the National Immunisation Program

The National Immunisation Program (NIP) of the RIVM offers vaccination against twelve infectious diseases.⁸⁰ Each of these diseases, without such a vaccination program, could themselves cause a deadly epidemic. Participation in the NIP program by *bevindelijk gereformeerden* is not high, compared to the rest of the population, which has led in recent years to epidemics and outbreaks of the diseases polio, measles and rubella.⁸¹ The vaccinations against polio, the measles and rubella are all vaccinations given to children in the NIP program, the decision thereover falling to their parents. Helma Ruijs of the RIVM notes “Reformed parents make the decision to vaccinate their children together ... without involving others in the decision-making process.”⁸² Neither doctors nor pastors are consulted by parents (although they must have some influence). Should COVID-19 vaccination be

Welzijn en Sport. Last modified 24-11-20 Retrieved from the internet May 2021.
<https://www.rivm.nl/rodehond>

⁸⁰ National institute for public health (RIVM): “National Immunisation Programme” *Ministerie van Volksgezondheid, Welzijn en Sport*. Last modified 10-07-20. Retrieved from the internet May 2021.
<https://www.rivm.nl/en/national-immunisation-programme>

⁸¹ Helma Ruijs. *Acceptance of Vaccination among Orthodox Protestants in The Netherlands*. Radboud Universiteit Nijmegen, 2012. Pg. 10.

⁸² “Reformatische ouders nemen het besluit over vaccinatie van hun kinderen samen...zonder anderen in in de besluitvorming te betrekken” Ruijs, W.L.M. et al. “How orthodox protestant parents decide on the vaccination of their children: a qualitative study”. In *BMC Public Health* 12, 408 (2012). Pg. 345.

offered to children then it would be expected that acceptance follows the norms for the NIP program the actors being the same (the parents) and the mechanism of delivery being the same. The situation with the NIP program is a standoff accepted by both parties, media attention bringing no change. The field is extremely stable due to the firm understanding of the role of all parties.

CHAPTER 4: COVID-19 pandemic

COVID-19 analysed through the SAF theory

COVID-19 vaccination is well underway in the Netherlands, the vaccination program utilising the existing organizations surrounding vaccination. The Health Council of the Netherlands, an advice organisation independent of the government, has provided a strategy for COVID-19 vaccination in which they see the goals of the program as wider than just health, namely to prevent social disruption of public administration, education, and security.⁸³ In the terms of the SAF theory that is an acknowledgement of the broader field environments by the Health council. The National Institute for Public Health and the Environment (RIVM) purchases, stores, transports, distributes and registers COVID-19 vaccines and vaccination. The RIVM also provides advice regarding use of the vaccine to hospitals, general practitioners, and the Municipal Health Service (GGD) who administer vaccination.⁸⁴ This is very similar to the administration of vaccines both in the NIP program and the extra vaccinations in response to disease in the case studies. The government's response to COVID-19 is therefore comparable to vaccinations within the NIP program because the manner of delivery is the same. Should COVID-19 vaccination have been through another arrangement, for example by the armed forces, then the response would not be comparable to that of earlier vaccinations in response to disease because of the difference in the delivery. For COVID-19 vaccination to be effective a vaccination rate of 60 to 70 percent is thought to be needed.⁸⁵ The RIVM has since september 2020 surveyed the willingness of the Dutch to receive COVID-19 vaccination. The surveys show that the willingness of the overall population to vaccinate has risen, since September 2020 from 50 percent to 75 percent in the beginning of May 2021.⁸⁶ How much longer the disruption caused by COVID-19 to society

⁸³ Health Council of the Netherlands. *Strategieën voor COVID-19 vaccinatie*. Nr. 2020/23, Den Haag, 19 november 2020. Retrieved from internet May 2021.

<https://www.gezondheidsraad.nl/binaries/gezondheidsraad/documenten/adviezen/2020/11/19/strategieen-voor-covid-19-vaccinatie/Advies-Strategie%CC%88n-voor-COVID-19-vaccinatie.pdf>

⁸⁴ National institute for public health (RIVM): "COVID-19 vaccination" *Ministerie van Volksgezondheid, Welzijn en Sport*. Last modified 05-05-21. Retrieved from the internet May 2021.

<https://www.rivm.nl/en/covid-19-vaccination>

⁸⁵ Vismata Gupta-Smith, Dr Soumya Swaminathan. "Herd immunity" *World Health Organisation*. Last Modified 28-08-20. Retrieved from the internet May 2021.

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/media-resources/science-in-5/episode-1>

⁸⁶ National institute for public health (RIVM) "Corona dashboard: VaccinatieBereidheid" *Rijksoverheid*. Retrieved from the internet May 2021.

<https://coronadashboard.rijksoverheid.nl/landelijk/vaccinaties>

continues, the higher the willingness to vaccinate. However this may not be the case with *bevindelijk gereformeerden*, although no record of religious affiliation is kept by the RIVM of those vaccinated (just regional figures by council area). The national vaccination rate for COVID-19 for those 65 years old and above is 87 percent, but lower (between 35 percent and 71 percent) in the Bible Belt, areas such as Urk, Staphorst and Neder-Betuwe.⁸⁷

Thanks to the Netherlands' enormous wealth and high level of competence in public healthcare the impact of the medical COVID-19 virus has been severely limited. There has been more disruption brought to life by the measures taken against the virus than by the virus itself. Had these measures not been taken, COVID-19 itself would have had more far reaching consequences. Despite these disruptions politically the Netherlands has remained stable, the 2021 parliamentary elections went ahead and the vast majority of people in the Netherlands remained financially unscathed due to financial support from the government.⁸⁸ The social impact of the crisis too has been mild with more of a disruption and deformation of social contacts than the discontinuation or destruction thereof.⁸⁹ The Netherlands has also benefited as a world leader in the use of the internet by having the infrastructure and ability to move online.⁹⁰ *Bevindelijk gereformeerden* today make as much use of the internet as other Dutch people do, limiting the impact of the crisis for them too.⁹¹

Despite the universal impact to all, the depth of the shock has been thus limited, although the impact of death and illness has touched nearly all but over a long period of time thereby lessening the impact. As a comparison in the council area of Staphorst where five people died

⁸⁷ National institute for public health (RIVM) "Advies deel 1 naar aanleiding van het 114e OMT" *Rijksoverheid*. Retrieved from the internet June 2021 Pg. 3.
<https://www.rijksoverheid.nl/documenten/brieven/2021/05/22/advies-deel-1-nav-114e-omt>

⁸⁸ Centraal bureau voor de statistiek: "Wat zijn de economische gevolgen van corona?" *Rijksoverheid*. Retrieved from the internet May 2021.
<https://www.cbs.nl/nl-nl/dossier/cbs-cijfers-coronacrisis/wat-zijn-de-economische-gevolgen-van-corona-#:~:text=Volgens%20de%20tweede%20berekening%20van%20het%20derde%20kwartaal%20van%202020.&text=De%20krimp%20van%200%2C1, van%20de%20consumptie%20door%20huishoudens>

⁸⁹ Centraal bureau voor de statistiek: "Social impact of COVID-19" *Rijksoverheid*. Retrieved from internet May 2021.
<https://www.cbs.nl/en-gb/dossier/coronavirus-crisis-cbs-figures/social-impact-of-covid-19>

⁹⁰ Nederland digitaal: "Conferentie-nederland-digitaal" Nederland Digital. Retrieved from the internet May 2021.
<https://www.nederlanddigitaal.nl/conferentie-nederland-digitaal/programma-2021/maandag-8-februari>

⁹¹ Robin de Wever "Revolutie in refoland: de smartphone 'is erin geslopen' *Trouw*. 4 january 2019. Retrieved from internet June 2021.
<https://www.trouw.nl/nieuws/revolutie-in-refoland-de-smartphone-is-erin-geslopen~bc8ba57d/>

from polio in just a few weeks in 1971⁹², just 19 people have died in the Staphorst council area in the 14 months of the COVID-19 pandemic so far⁹³, four times as many but over a period 14 times as long. If COVID-19 was to be as deadly as polio, then Staphorst would have around 70 deaths instead of 19 in the 14 months to date that the pandemic has run.

Although it is not registered one may assume the deaths from polio were predominantly among those that were unvaccinated whereas the COVID-19 deaths are from all parts of society because no one was yet vaccinated, which also lessens COVID-19s impact on the *Bevindelijk gereformeerde* community. However, the longer the COVID-19 virus continues to circulate and how many more are vaccinated against it, the more the burden will fall upon the unvaccinated. The socially skilled incumbents have remained in their roles, both within the fields of state and church, the impact of COVID-19 not enough to displace them.

Despite members of for example the Outbreak Management Team (the advisory body to the minister of Health, Welfare and Sport and the Ministerial Crisis Management Committee regarding the medical perspective of the epidemic) few new actors have spoken up or spoken out for vaccination by *bevindelijk gereformeerden*, the issue remaining as it is. For example the Nederlandse Patiëntenvereniging (NPV), a Christian health organisation with orthodox Protestant roots, is neutral in its provision of information, the NPV sees vaccination as a choice.⁹⁴ As does the state and most of the churches, neither state nor church being moved to a different standpoint by the COVID-19 crisis. SGP-raadslid Tom de Nooijer supports the status quo, he says: “Mandating vaccination is a step in the wrong direction.”⁹⁵ He is an example, one of the few who in terms of the theory could be an actor looking for influence in the vaccination debate.⁹⁶ On the website ‘Refoweb’ a website for the reformed youth, there is

⁹² Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 558.

⁹³ National institute for public health (RIVM) “Corona dashboard: Sterfte in Staphorst” *Rijksoverheid*. Retrieved from the internet May 2021.
<https://coronadashboard.rijksoverheid.nl/gemeente/GM0180/sterfte>

⁹⁴ Nederlandse Patiënten vereniging: “Vaccinatie”. *Nederlandse Patiënten vereniging*. Retrieved from internet May 2021.
<https://www.npvzorg.nl/themas/vaccinatie/>

⁹⁵ “Verplichten van #vaccinatie is een stap in de verkeerde richting” Tom de Nooijer SGP-raadslid on *Twitter*. Retrieved from internet May 2021.
<https://twitter.com/tidenooijer/status/1096767446722191361>

⁹⁶ De telegraph. “Tim Hofman in felle discussie over kerken probleem - CLUB TRENDING #11” *De Telegraph*. Published 16 December 2020. Retrieved from internet May 2021
https://www.youtube.com/watch?v=k72eSdZ_t18

support offered for non vaccination and the site is clearly anti vaccination.⁹⁷ Some see non vaccination as an act of defiance, such as theoloog Maarten Wisse: “the resistance to vaccination is a product of resistance to the disenchantment of the world, the product of an anti-modern attitude”.⁹⁸ Outside of official *bevindelijk gereformeerd* organisations (such as the SGP) there are no shadow organisations with more freedom of movement, incumbent actors such as Tom de Nooijer have little freedom of movement because they are within the organisation making it harder to define their own course and it is to be expected that they continue to support the status quo. As with the earlier outbreaks of disease the SAFs remain stable. Despite the media attention the risk to life is lower than during the earlier epidemics. According to Doctor Diederik Gommers of the Outbreak Management Team there is “No relaxation of regulations possible in reformed nursing homes if vaccination is refused.”⁹⁹ A ‘different system’ for the unvaccinated is seen as necessary by Gommers, and this logic could easily be extended the Bible Belt in general, although unlikely as the task is too complex in non-homogenous communities (such as the Bible Belt) unlike in homogeneous communities such as reformatrische rest homes. That the state with the *pokkenbrief* forbade, for over 100 years, access to education for the unvaccinated is a tried and trusted model which could again be used albeit at the (huge) cost to the freedom of conscience. Certainly the smallpox epidemic was a comparable event (which caused government interference). The COVID-19 crisis by its far larger scale could justify an even stronger government response. Implementation of a vaccination passport (a so called green card) to allow travel or access to events, locations or facilities would too put real pressure on *bevindelijk gereformeerden* to vaccinate, although due to the social isolation of *bevindelijk gereformeerden* in social activities around their church may be less effective than mandatory vaccination for (compulsory) schooling was. That such a green card may be brought about by European

⁹⁷ Refoweb Christelijke jongerencommunity: “Artikelen met vaccinatie” *Refoweb*. Retrieved from internet May 2021.

<https://www.refoweb.nl/vragenrubriek/tag/vaccinatie/>

⁹⁸ “Het verzet tegen vaccineren is een product van verzet tegen de onttovering van de wereld, het product van een antimoderne houding” Maarten Wisse. 'Niet-inenten is een daad van verzet. Verplicht prikken werkt averechts'. *Dagblad Trouw*. Last modified 15-07-17. Retrieved from internet May 2021.

https://www.trouw.nl/nieuws/niet-inenten-is-een-daad-van-verzet-verplicht-prikken-werkt-averechts-b374483f/?utm_source=link&utm_medium=app&utm_campaign=shared%20content&utm_content=free

⁹⁹ “Geen versoepelingen mogelijk in reformatrische verpleeghuizen bij weigering vaccinatie” Diederik Gommers on Rijnmond publieke omroep: “Gommers: Geen versoepelingen mogelijk in reformatrische verpleeghuizen bij weigering vaccinatie”. *Rijnmond publieke omroep*. Published online 14-03-21. Retrieved from internet May 2021.

<https://www.rijnmond.nl/nieuws/204742/Gommers-Geen-versoepelingen-mogelijk-in-reformatrische-verpleeghuizen-bij-weigering-vaccinatie>

action or that of states other than the Netherlands (to allow travel) is in the words of the SAF theory ‘spillover’ from these proximate fields. The ‘green card’ or QR code will allow for freedom of conscience (a constitutional right) not to vaccinate by accepting previous infection or a recent negative test result. However, should the government not continue to finance testing after vaccination has been offered this could put financial pressure on non-vaccinators to vaccinate (and infringe upon their rights).

Many *bevindelijk gereformeerden* however define themselves by this issue as non-vaccinators, so to give that up would be to give up part of their identity, as if their SAF, made up of those who actively show their trust in God by not vaccinating, would cease to exist. *Bevindelijk gereformeerden* live isolated from what they increasingly see as a big bad world and the state is distrusted.¹⁰⁰ With great success they look within their own ranks for support, leadership, and inspiration, not outside, although when ill they seek medical help just like any other. Matthew 9:12 “Those who are well have no need of a physician, but those who are sick” is often quoted in the vaccination debate. Certainly the *bevindelijk gereformeerde* when sick looks for help. But also in times of sickness, seen the willingness of the unvaccinated to vaccinate, such as in Staphorst for example to the extent that the health providers were overrun.¹⁰¹ This may be seen as an extension of Matthew to include “when there is sickness seek help”. The sudden exogenous shock provided enough influence that, given the low vaccination rates for Staphorst, time could not.¹⁰² Threatened by the exogenous shock that COVID-19 is *bevindelijk gereformeerden* circle the wagons in defiance sticking to what they know and trust but also adopt the arguments from other SAFs (Conspiracy theorists, Wappies, Anti-vaxxers) to support their own argument based upon continuing trust in God. For example the Refoweb website (which is rather mainstream and not specifically for *bevindelijk gereformeerden*) adopts anti-vax arguments related to fertility, government control and the use of fetal material in vaccine development.¹⁰³ These arguments augment the

¹⁰⁰ Newsite Nu.nl ‘Wantrouwen tegen vaccinaties is van alle tijden’ *Newsite Nu.nl*. Published online 11-05-21. Retrieved from internet 2021.
<https://www.nu.nl/advertorial/advertorial-nationale-wetenschapsagenda/6100644/wantrouwen-tegen-vaccinaties-is-van-alle-tijden.html>

¹⁰¹ Bijkerk H, Draaisma FJ, Landheer T, van Os M. “Poliomyelitis Epidemie in Staphorst” in *Nederlands tijdschrift voor geneeskunde* 116 nr.14 1972. Pg. 556.

¹⁰² National institute for public health “DKTP-vaccinaties per gemeente 2020” *Volksgezondheidszorg.info*. Retrieved from internet May 2021
<https://www.volksgezondheidszorg.info/onderwerp/vaccinaties/regionaal-internationaal/zuigelingen#node-dktp-vaccinaties-gemeente>

¹⁰³ Drs. J. DE Jongh-van Hoof: “Minder enthousiast over vaccin van AstraZeneca” *Refoweb*. Published online 18-02-21. Retrieved from internet May 2021.

underlying argument of God's providence and are an added bricolage as is the case with Mr. Hoogendijks's argument in the popular YouTube series Danny's Wereld who also adds these arguments to his initial one of God's providence.¹⁰⁴

Possible influence

In the current vaccination debate around acceptance of COVID-19 vaccination the outcome has yet to be seen and so remains open to influence. What worked to offer change or a solution in the past can be expected to offer the same influence today with COVID-19 immunisation because of the similarities between the situations of the past and now. Does attempting to implement change from outside stand any chance or not? Or is it actually counterproductive? Or is the nature of these communities perhaps beyond the SAF theory? Who to influence and how? The 'why' I leave up to you.

First the who, *bevindelijk gereformeerden* are renowned for their solidarity within their church, community, and politics. It would seem useful in any effort to reach and influence the individual to acknowledge that this group is strongly united and that change from the inside would seem to have more of a chance than change from the outside. Could conditions be ripened to allow such change? As opposed to the NIP vaccines COVID-19 vaccination is only for those over 18 years of age in the Netherlands, whereby the decision comes to rest with the individual adult. This means the decision either way is not necessarily discussed nor is it openly public, no parents are involved nor is the extended family necessarily informed. If non-vaccination is a 'badge of honour' then that badge of non vaccination for COVID-19 could (despite the hypocrisy) more easily be falsely worn than for the vaccination of one's children, perhaps resulting in higher rates of participation in COVID-19 vaccination than for child vaccination. Could the level of exogenous shock be played up or played down (perhaps using real cases in the *bevindelijk gereformeerde* community) to influence acceptance of vaccination? It has been shown by the SAF theory that exogenous shock results in an increase in vaccination willingness, in times of sickness (in the community) not just in sickness (of the individual). To create or increase the sense of crisis (for example by use of the armed forces for vaccination) could increase vaccination rates. Influence is also to be had by enabling or

<https://www.refoweb.nl/vragenrubriek/28308/minder-enthousiast-over-vaccin-van-astrazeneca/>

¹⁰⁴ Danny Ghosen. "'#5 Waarom gelovigen niet vaccineren'" *DANNY'S WERELD*. Published online 25-02-21 Retrieved from internet May 2021.

<https://www.youtube.com/watch?v=l6lP6ZAevq8>

disabling actors through funding or access to the media, again exaggerating or playing down the shock that COVID-19 brings. Protestant local churches are autonomous, the faithful choosing a church council who appoint a pastor. Therefore it can be expected that the views of these three parties are similar on a majority of issues, so too in regard to vaccination (although pastors are chosen not just on their attitude to vaccination but on a wide variety of characteristics and abilities). Because of this, pastors and church councils have little room to maneuver outside of what is expected of them by the council and the congregation. In terms of SAF theory they are ‘incumbents’ and therefore obliged to protect the status quo that has put them in office. For a religious leader “a major change of position on the issue could affect their credibility and undermine their authority [...] dialogue with religious leaders [...] is thus not likely to contribute to increased vaccination coverage.”¹⁰⁵ Certainly they are skilled social actors in the jargon of the theory but with limited space to move, preference should be given to those outside the office that have more flexibility regarding vaccination. Given that *bevindelijk gereformeerd* religious leaders are appointed by their congregations and therefore generally hold views that are compatible with those of the majority¹⁰⁶ promotion and support of them by government agencies could be key to influencing others should a wisely selective choice be made in partners.

RIVM ecological studies have shown that vaccination rates in general are lower in areas with *bevindelijk gereformeerd* churches. This denomination influences vaccination choices of those outside the church.¹⁰⁷ This may be a mechanism that works both ways to influence vaccination. Influence from both within and outside of the church, in these areas could be of use to either end. Not surprisingly:

“as far as unvaccinated orthodox protestant youngsters are interested in vaccination, they are predominantly interested in information on religious aspects and their peer groups’ opinion. Probably these aspects are more important in their decision on vaccination than medical aspects”.¹⁰⁸

¹⁰⁵ Ruijs, W.L.M et al "The Role of Religious Leaders in Promoting Acceptance of Vaccination within a Minority Group: A Qualitative Study." In *BMC Public Health* 13, no. 1 (2013): Pg. 7.

¹⁰⁶ Ruijs, W.L.M et al "The Role of Religious Leaders in Promoting Acceptance of Vaccination within a Minority Group: A Qualitative Study." In *BMC Public Health* 13, no. 1 (2013): Pg. 7.

¹⁰⁷ Ruijs, W.L.M, et al."Religious Subgroups Influencing Vaccination Coverage in the Dutch Bible Belt: An Ecological Study." *BMC Public Health* 11, no. 1 (2011): 102. Pg. 9.

¹⁰⁸ Ruijs, W.L.M. et al. ‘How orthodox protestant parents decide on the vaccination of their children: a qualitative study.’ In *BMC Public Health* 12, 408 (2012). Pg. 345.

If one were to take this advice to heart, influence through youth channels could offer more leverage than through doctors or pastors. Whichever instrument is used for whatever end it can better be from the church if one hopes to influence *bevindelijk gereformeerden* because studies show that *bevindelijk gereformeerden* “prefer to get the information from a Christian organization”.¹⁰⁹ With neither a supreme moral figure (such as the Pope in the Roman Catholic Church) nor a clear theological standpoint *bevindelijk gereformeerden* are themselves in charge in regard to vaccination:

“It is only individual parents or religious leaders and their questionable interpretation of religious practices that are opposed to vaccination, no religion as such.”¹¹⁰

Studies have shown that more highly educated Protestants are more likely to vaccinate their children.¹¹¹ Could an effort be made to raise the levels of education within *bevindelijk gereformeerde* communities for an indirect effect on vaccination rates?

Bevindelijk gereformeerden are an isolated and hard to reach community, but are reachable online. Accessing the target group online by the use of ‘‘online focus groups’’ by the RIVM, is suitable for *bevindelijk gereformeerden* due to the use of the internet as a communication medium as well as for other non-vaccinators such as ‘Anti-vaxxers’.¹¹² Influence upon either SAF in the discussion (*bevindelijk gereformeerden* or the greater vaccinating population) falls on barren ground if it comes from the outside because it is lacking the trust of the audience because both sides trust only their own experts. For example the impeccable credentials of former director, of the RIVM’s Center for Infectious Disease Control, Roel Coutinho (based on his academic qualifications and experience) or popular evangelist Jaap Dieleman (based

¹⁰⁹ Helma Ruijs. *Acceptance of Vaccination among Orthodox Protestants in The Netherlands*. Radboud Universiteit Nijmegen, 2012. Pg. 4.

¹¹⁰ Pelčić, Gordana et al. "Religious Exception for Vaccination or Religious Excuses for Avoiding Vaccination." In *Croatian Medical Journal* 57, no. 5 (2016) Pg. 520. Retrieved from Internet May 2021. https://s2443-www-ncbi-nlm-nih-gov.ezproxy.leidenuniv.nl/pmc/articles/PMC5141457/pdf/CroatMedJ_57_0516.pdf

¹¹¹ Hans van Maanen “Veel SGP’ers laten hun eenjarigen alsnog vaccineren” in *Nederlands Tijdschrift voor Geneeskunde*. 2017;161:C 3724. Retrieved from internet May 2021. <https://www-ntvg-nl.ezproxy.leidenuniv.nl/artikelen/nieuws/veel-sgpers-laten-hun-eeenjarigen-alsnog-vaccineren/artikelinfo>

¹¹² Chris van Mersbergen “Oud-RIVM-baas Coutinho: ‘Ik kon mijn ergernis over het vaccineren niet meer bedwingen’” in *Het Algemeen Dagblad*. Published online 20-02-21. Retrieved from internet May 2021. <https://www.ad.nl/wetenschap/oud-rivm-baas-coutinho-ik-kon-mijn-ergernis-over-het-vaccineren-niet-meer-bedwingen-br~a3b009a1/>

on his conversion experience) both fail to convince their intended audience to the disbelief of their own parties. Nevertheless publications from private initiative such as that of Coutinho Vaxx, *Hoe vaccinaties onze wereld beter hebben gemaakt*¹¹³ and Dieleman's brochure *Eyeopener de grote ontsnapping*¹¹⁴ that was distributed door to door in January 2021, show as the SAF theory suggests that pivotal socially skilled players do stand up and seize their chance if conditions arise so as Coutinho puts it: "I could no longer contain my annoyance about the vaccination."¹¹⁵ However, very qualified figures such as Coutinho are perhaps not trusted by *bevindelijk gereformeerden* because of their background (government), just as influence from such a figure as Dieleman is not accepted by *bevindelijk gereformeerden* nor the wider (vaccinating) public but is within his own community. Although from both sides of the argument these two arise, leaders who open the discussion instead of remaining in their trench. Just as the theory of SAF holds the incumbents, in this case the Church and state leaders, have less room to manoeuvre or to change and remain effectively silent offering nothing new. The exogenous shock of COVID-19 is for these incumbents not enough of a shock, elsewhere in the world where the pandemic has been harsher one could expect more change, for example in India¹¹⁶ and Brazil¹¹⁷ where the government is under pressure to resign because of their handling of the COVID-19 crisis. The situation requires change or we can simply wait for the next new infectious disease to once more push us into this vaccination versus religion debate that has continued for more than 150 years. One might hope COVID-19 is the biggest exogenous shock we will ever see, the time being ripe for actors to step up to the challenge and opportunity it offers. This stepping up could be facilitated by the government for its own ends, financially or structurally. *Bevindelijk gereformeerden* certainly

¹¹³ Coutinho, R.A. Vaxx : *Hoe Vaccinaties De Wereld Beter Hebben Gemaakt*. Amsterdam: Ambo|Anthos, 2021.

¹¹⁴ Dieleman Jaap. "Eyeopener de grote ontsnapping." *Stichting de Heilbode*. 2021. Retrieved from internet May 2021.
<https://docplayer.nl/204680037-Eyeopener-news-pandemie-ontzagwekkendnieuws-nl-fake-voorspeld-wat-staat-ons-te-wachten-de-grote-ontsnapping-miljoenen-mensen-in-een-keer-verdwenen.html>

¹¹⁵ Chris van Mersbergen "Oud-RIVM-baas Coutinho: 'Ik kon mijn ergernis over het vaccineren niet meer bedwingen'" in *Het Algemeen Dagblad*. Published online 20-02-2021. Retrieved from internet May 2021.
<https://www.ad.nl/wetenschap/oud-rivm-baas-coutinho-ik-kon-mijn-ergernis-over-het-vaccineren-niet-meer-bedwingen-br~a3b009a1/>

¹¹⁶ Vishwam Sankaran "India coronavirus: Facebook temporarily blocks hashtag calling on PM Modi to resign." *The Independent Newspaper*. Last modified 29-04-21. Retrieved from internet May 2021.
<https://www.independent.co.uk/life-style/gadgets-and-tech/facebook-india-modi-hashtag-resign-b1839382.html>

¹¹⁷ BBC News. "Brazil: Political crisis and Covid surge rock Bolsonaro". BBC News. Published online 31-03-21. Retrieved from internet May 2021.
<https://www.bbc.com/news/world-latin-america-56581131>

would rally to their flag but in doing so the discussion gains life and debate. To then facilitate the individual to dissent (and immunise) by anonymity such as during the polio epidemic (“suikerklonten halen”) could help to achieve immunisation goals. The debate can remain just that with neither party gaining but both claiming moral sovereignty, while the debate stimulates the individual to make his or her own decision and for that decision to be facilitated anonymously. The current administrative system of COVID-19 vaccination could therefore be loosened to allow for that despite the consequences (lack of insight) regarding the anonymous vaccinations. A more pragmatic approach may be to accept that:

“As religious arguments are decisive regarding vaccination decisions in this specific minority, it is unlikely that public health efforts will be successful in promoting an increase in vaccination coverage to an adequate level to prevent an outbreak.”¹¹⁸

It may perhaps be best to ‘deal with it’ and continue to protect this vulnerable group in the greater population. Time the ‘healer of all things’ and patience may however be equally likely to increase vaccination coverage as it may well be a vain and an unnecessary hope to be able to influence vaccination rates. As a recent report puts it: “vaccination coverage among orthodox Protestants is increasing, without targeted actions to promote vaccination. Probably it is sufficient to [...] let time do its work.”¹¹⁹ Because the acceptance of a decision not to vaccinate for COVID-19 or other infectious diseases remains, “the vaccination decision making of orthodox Protestant parents shows health to not be the only important value in life — at least for them.”¹²⁰ Perhaps incomprehensible to those of no or little faith, willingness to vaccinate against COVID-19 by *bevindelijk gereformeerden* is expected to be low simply because they ‘trust in God’.

¹¹⁸ Mollema, L. et al. “High Risk of a Large Measles Outbreak despite 30 Years of Measles Vaccination in The Netherlands.” in *Epidemiology and Infection* 142, no. 5. 2014. pg 1107.

¹¹⁹ D. Henri Spaan, Wilhelmina L.M. Ruijs, Jeannine L.A. Hautvast, Alma Tostmann. “Increase in vaccination coverage between subsequent generations of orthodox Protestants in The Netherlands” In the *European Journal of Public Health*, Volume 27, Issue 3, June 2017, Pg. 529.

¹²⁰ Ruijs, W.L.M, Hautvast, J.L.A, Ijzendoorn, G. Van, Ansem, W.J.C. Van, Velden, K. Van Der, and Hulscher, M.E.J.L. "How Orthodox Protestant Parents Decide on the Vaccination of Their Children: A Qualitative Study." In *BMC Public Health* 12, no. 1 (2012): 408. Pg. 10.

CONCLUSION:

Conclusion

Due to the high rate of immunisation against polio, the measles and rubella in Europe any exogenous shock to the systems surrounding vaccination is limited in the general population. However within the undervaccinated *bevindelijk gereformeerde* community the impact of such a shock is effectively far greater. Just as the impact from polio in Staphorst in 1971 where the polio outbreak was a shock of far larger proportions for the unvaccinated than the vaccinated, this caused change (acceptance of vaccination) during but not after that shock. Ironically the polio outbreak achieved, in its provision of sickness, what the provision of protection through vaccination against polio (by 20 years of vaccination) had not, namely change and acceptance (albeit temporarily) of vaccination. The impact of the measles and rubella was not enough to cause change. However the smallpox epidemic was a large enough shock to bring change (in terms of the theory, government interference to resolve field instability) namely the *pokkenbrief* which, as a method of preventing disease, we could see echoed in a COVID-19 passport.

The smallpox epidemic in the 1870s was a shock to the whole country. Contrary to the polio outbreak in 1971 which was an exogenous shock specifically to the non-vaccinating community (the rest of the population being vaccinated) and to their reasoning (to not vaccinate) that other outbreaks of disease in the case studies failed to provide. “Although mumps, measles and rubella can also have serious complications, these epidemics resulted in less social unrest”,¹²¹ according to Helma Ruijs of the RIVM. The case study of the smallpox epidemic and the 1971 polio epidemic are the most similar to the COVID-19 situation. Should COVID-19 prove to be as deadly as smallpox was, or polio has been then the exogenous shock could affect the attitudes regarding vaccination held by *bevindelijk gereformeerden*. Ironically effective containment and treatment of COVID-19 (or any other infectious disease for that matter) lessens that effect. Despite the greater size of the exogenous shock that COVID-19 has caused compared to that of the case studies, *bevindelijk gereformeerden* are restrained in adjusting their attitude to vaccination because for those of

¹²¹ “Hoewel ook bof, mazelen en rodehond ernstige complicaties kunnen hebben gaven deze epidemieën minder maatschappelijke onrust” Helma Ruijs en Jan van Klinken *"Vaccinatie in de reformatorische gezindte"* Academische werkplaats AMPHI and the NPV (Nederlandse Patiënten Vereniging) , Nijmegen, March 2013. Pg 5.

<https://academischewerkplaatsamphi.nl/wp-content/uploads/2016/08/Brochure-Vaccinatie-in-d-ereformatorische-gezindte.pdf>

them that are anti-vaccination it is their identity. They are by definition the ones who do not vaccinate and this has become a badge of honour in the last 150 years from which they may not wish to be separated. It can be expected that if COVID-19 is reduced in its risk (ironically through most of the population accepting vaccination) then the vaccination rate among *bevindelijk gereformeerden* would resemble other vaccination rates for them such as those for polio.

As vaccination continues in the Netherlands the burden of the disease will come to bear more and more on those that are not vaccinated. The easing of preventative measures too will bring more disease to the unvaccinated. Once the general population is vaccinated, COVID-19 may break out among the unvaccinated as polio did in 1971. Calls for compulsory vaccination could be expected if the death rate were extremely high as during the smallpox epidemic, which resulted in the so-called *pokkenbrief* allowing access to education. However the government is duty bound to upholding freedom of conscience and therefore expected to maintain the choice to not vaccinate. Despite the enormous impact of the COVID-19 pandemic the vaccination rates for COVID-19 among *bevindelijk gereformeerden* are expected to be relatively low, compared to the national rates, in line with their rates for vaccination in the NIP program.

Further research

Use of the SAF theory to analyse the COVID-19 pandemic historically is an obvious next step. The response of other groups (aside from *bevindelijke gereformeerden*) that also for religious reasons choose to not vaccinate is also an area for further research. The structure that the theory offers may be of use to compare responses between varying cultures.

The use of other social theories, (such as organisational and behavioural theories) could also be of use for further analysis of non-vaccinators. The Netherlands may well be faced with future outbreaks of disease that are far more contagious than COVID-19, requiring even higher rates of vaccination. To be prepared for such an event would seem prudent and research into non-vaccinationing groups wise.

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