CHAPTER 19

Making Sense of Overwhelming Flows of Financial Data

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Abstract: This chapter asks what investigative journalists working on revelations such as the Panama Papers, Paradise Papers, Lux Leaks, Swiss Leaks, etc. can teach journalism educators. Can this type of cross-border cooperation help prepare journalism education for a future in which money increasingly flows across borders? Without having some understanding of the core concepts of finance, it will be difficult to hold power to account. This chapter builds mainly on qualitative interviews with journalists around the world working on stories connected to illicit financial flows, corruption and tax havens. In the conclusion, we discuss the challenges and paradoxes educators must consider when designing journalism education for the future. Considering the growing importance of Problem-Based Learning (PBL), the journalists interviewed here emphasize the promise of teams learning together while investigating and solving problems as they arise. However, there are limitations to the usefulness of PBL in understanding economic or financial theories. For instance, it is doubtful that PBL alone would be the best and most effective way to learn the quantitative methods needed to understand economic theories. It would be helpful if journalism education could include basic instruction, at least, in economics and finance.

Keywords: journalism education, investigative journalism, illicit financial flows, economy, problem-based learning
Introduction

Imagine being at the receiving end of a massive leak such as the Panama Papers, consisting of c. 11.5 million documents including emails, bank statements, passport scans, etc. (Obermayer, 2017). Even an experienced auditor would be hard pressed to sift through much more than a few dozen, perhaps a hundred, documents per day, not to speak of the time needed to do in-depth analyses of the complicated and impenetrable (on purpose) transactions described in the documents. At the rate of 100 documents per day, it would take a reader more than 300 years to get through the 11.5 million documents.

Journalists allowed to visit the ‘war room’ at Süddeutsche Zeitung, speak of “whiteboards hanging on the room’s walls […] covered in complicated-looking diagrams” (Zerofsky, Elisabeth, How a German newspaper became the go-to place for leaks like the Paradise Papers, The New Yorker, 11 November 2017). To make it possible to analyze the millions of files, the newspaper installed computers that had never been connected to the internet, “so that they could be used to store securely the 13.4 million files” of the so-called Paradise Papers. The journalists at Süddeutsche Zeitung understood that a much larger collective of journalists was needed to read and analyze the documents. At least 381 journalists in 67 countries, in collaboration with the International Consortium of Investigative Journalists, worked to make sense of the millions of files. So far, much of the academic literature dealing with journalistic coverage of the Panama Papers, Paradise Papers, Lux Leaks, Swiss Leaks, etc. focuses on the emergence of a global network of journalists working together and sharing information, or the use of computers to analyze the data and facilitate secure communication among the journalists in the network. (See for instance Sambrook, 2017; Baack, 2016; McGregor, 2017.)

The Panama and Paradise Papers are not the only examples of journalists using leaked information to reveal illicit financial flows and their financial and political benefactors. Previously, the Lux Leaks exposed conditions many considered even worse: that large multinational companies were effectively allowed to write their own tax arrangements, which were signed by the authorities in Luxembourg. The revelation showed that the authorities allowed multinational companies to channel huge
sums of money through Luxemburg, thus avoiding billions of dollars in tax. Another leak, the Swiss Leaks, exposed how one of the world’s biggest banks, HSBC, had profited from helping over 100,000 customers hide $100 billion in Switzerland. The customers were multinational companies wanting to avoid taxes, as well as criminals. In South Africa, the journalists of AmaBhungane managed to expose the murky dealings of the so-called Gupta-Zuma scandal using 100,000 emails and scores of other documents. After many years the network collapsed upon those involved, leading up to former president Zuma’s resignation.

Computers can indeed make the job of analyzing data quicker, easier and more user-friendly. For the individual journalist, however, the challenging task of understanding complex financial data and the workings of a complex financial industry remains. To be able to write stories that will hold under scrutiny, journalists must understand not only the legal and financial concepts used in the emails and documents. They also need to understand basic concepts in accounting, finance, economics and different countries’ tax laws in order to understand how transactions may work, and for which ultimate purposes they may have been done. In particular, in order to explain why a story is important, journalists need a good understanding of the difference between the legal forms created and the actual financial substance achieved. So far, relatively little research has been done on this aspect of this emerging form of global investigative journalism.

Newspapers and weeklies around the world, such as the Financial Times, The Economist and other business dailies, can count on the expertise of journalists educated and trained in economics and finance. However, many of the groundbreaking stories published on the leaks and scandals mentioned above have not been written by journalists specializing in economics and finance, but rather by generalists with little previous experience in investigating global finance, who had to rely on the expertise of financial investigators and forensic accounting to make sense of the data before them.

We believe the experiences of these investigative journalists contain valuable lessons to be learned for the next generation of journalists. In this chapter, we are mainly interested in what such experiences can teach
journalism educators and others concerned with training and educating journalists for a future where money and information increasingly flow across borders. Without having some understanding of the core concepts of finance, accounting and law, and especially how they relate to the differences in form and substance, it will be difficult for journalists to hold power to account. This chapter builds mainly on qualitative interviews with journalists around the world working on stories connected to illicit financial flows, corruption and tax havens. We organized conferences, workshops and seminars to discuss aspects of cross-border journalism with 20 investigative journalists from almost as many different countries. Ten journalists later provided short stories based on detailed questions about their investigative journalism. Additionally, we conducted open in-depth qualitative interviews with eight journalists. The main goal of this chapter is to contribute to a better understanding of how journalists without formal training in economics, finance, accounting and law work to make sense of overwhelming amounts of complex financial data. Moreover, what can journalism education gain from these experienced investigative journalists when it comes to making sense of data on illicit financial flows and the complex service industry facilitating it?

Literature review

Transnational networks of investigative journalists are a relatively new phenomenon, yet to be fully explored by researchers. So far, research on journalism related to leaks, such as the Panama Papers, has focused on cooperation among journalists and newsrooms across borders, on the role of technology, on safety and security issues, and access to information and sources. In comparison, relatively little has yet been published on how journalists understand the complex data on the complicated legal set-ups and financial transactions revealed by the leaks. Here, we understand this as a hermeneutical process where journalists draw on their own knowledge and experience to make sense of the information found in the leaks. However, we also frame it as a learning process, where the key issue is not so much the knowledge and experience the journalists already have, but the ability of journalists to find ways to learn about new topics.
The debate on how best to educate journalists is as old as journalism education itself. Often journalists and editors have been quite critical, if not negative, towards developing programs for journalism education around the world. Many have argued that journalism is best learned by doing. (See for instance Folkerts, 2014; Kjos Fonn, 2015; Hovden, 2016.) From this perspective, journalism should not be made into an academic discipline in itself, but rather be understood as a skill or trade that draws on all types of other disciplines, such as social science, history, economics, law, and so forth. Eric Newton represents a different view. According to Hilary Akers Dunn (Dunn, 2018), “Newton argues for knowledge-based journalism education environments, where journalism schools pull from their resources throughout the whole university to assist their students in specific beats of journalism. For example, knowledge-based journalism courses are taught under the instruction of journalism educators, as well as educators from other fields (e.g. business, economics, law, science) to better equip the student to create media knowledgeably on the specific subject.” (p. 13). To some extent, this was the predominant model in the early days of journalism education in the Nordic countries (Kjos Fonn, 2015; Hovden, 2016). Still, a significant number of educators at journalism schools and institutions around the world have PhDs not in journalism studies, but in history, social science, sociology, media studies, anthropology and similar disciplines. Nevertheless, as journalism studies has matured as an academic discipline, it appears that many journalism curriculums emphasize language skills, storytelling and mastering new technical equipment, rather than subjects such as economics, social science and history, which were on the agenda in the early days. Hovden et al. note some important differences in the journalism education models of various countries and regions. Nevertheless, the authors find that “the general aims of teaching journalism in most countries are quite similar: students need to know how to express themselves, understand the genres, master the instruments of production and how to handle sources, become familiar with the national professional norms, and so forth. As a consequence, the teaching of journalism is in important ways quite similar all over the world.” As we see from the list of goals presented above, understanding economics, politics, law, etc. is not obviously amongst the
general aims of current journalism education. However, many journalism programs do still teach politics and economics, if not as subjects on their own, then as part of courses designed mainly to train students in news reporting, understanding statistics, making documentaries, and so forth.

Some journalism scholars such as Mark Deuze see the debate on practice and theory in journalism education as outdated (Deuze, 2001). Instead, education should focus on critical self-reflection. Nevertheless, according to Deuze, education needs to prepare students to understand ongoing changes in society, the economy and technology. Building on Deuze to make his argument, Hans Henrik Holm argues that journalism education needs to break the national mold (Holm, 2001). Instead, journalism needs to build an understanding of globalization. According to Holm, the time has come to develop truly transnational journalism education.

Richard Sambrook et al. in *Global Teamwork: The rise of collaboration in investigative journalism* provide fresh lessons on cross-border investigative journalism from some of those closely involved in the investigations (Sambrook, 2018). Charles Lewis, sums up the need for

broader, amassed knowledge and understanding across borders, professional disciplines, and cultures, perhaps through the precise prism of documented, reliably sourced, public accountability issues in the world, in the context of the uses, the occasionally glaring, wilful non-uses, misuses, and abuses of political, corporate, and other power in the world.” Lewis imagines combining “the most authoritative, known information from various disparate sectors, including journalism, but also such academic areas of expertise such as investigative history, forensic accounting, computer science and statistics, political science, economics, public anthropology, human rights, public interest, and other law-related fields (…). (Lewis in Sambrook, 2018)

Computers and digital communication accelerated the process of producing ever-increasing complexity in ways not seen before. For investigative journalists, this means not only “breaking the national mold” and being able to “collaborate in global networks”, but also conducting
interdisciplinary investigations not only by drawing on experts from relevant disciplines, but also by learning to understand basic concepts in key disciplines well enough to undertake independent investigations and source criticism.

Through the Panama Papers and similar leaks, citizens all over the world have gotten a glimpse into a world of finance and financial flows of ever-increasing complexity. As Linn Anker Sørensen explains, ever-changing complex structures are being created on purpose to make it increasingly difficult for tax authorities and others to investigate and understand financial flows across borders (Sørensen, 2016).

Richard Sambrook concludes that journalists “should stop thinking they can always ‘go it alone’”.

International accountability is an issue for lawyers, economists, politicians and lobbyists, scientists, healthcare professionals, academics, accountancy, business and finance professionals, and more. In a modern approach to accountability journalism, newsrooms should seek to partner and collaborate outside their profession as widely as possible, being open to the expertise of others. (Sambrook, 2018)

**Methodology**

The field of journalism studies often lags far behind the historical development of the subject of its study (Nash, 2016, p. 234; Conboy, 2013, p. 4). Digital investigative journalism and cross-border cooperation to uncover illicit financial flows are developing at increasing speed. Meanwhile, the research process and academic publication happen slowly. It can take years from when the research begins until results are published in peer review journals. Consequently, the research group within the project Making Transparency Possible has put emphasis not only on making the project interdisciplinary, but also making sure that researchers work closely alongside investigative journalists in analyzing this emerging field. This methodology is inspired by the Collaborative Action Research Network (CARN). CARN supports research that “involves active involvement with practitioners and participants” and seeks to generate inquiry
“where practitioners actively contribute to the generation of knowledge and theory”.1

This chapter builds mainly on qualitative methodologies. We have organized conferences and workshops (December 2016 and February 2018) with a total of 30 participating investigative journalists from Asia, Africa, Latin America and Europe. The participating journalists represent important backgrounds in investigative journalism from countries as diverse as Guatemala, Ecuador, Colombia, Nigeria, Ivory Coast, Ethiopia, South Africa, Russia and Norway. In selecting participants, the diversity of experience also ensures equal representation of genders.

The workshops were organized to facilitate open discussion. Each participant presented the main features and challenges of the investigation they had been doing. The other participants could then comment or ask questions before the presenter would sum up. In addition to the journalists, professors of journalism, economics and law also participated. The methodology in the workshops has much in common with ‘focus groups’. “Focus groups are typically used to reveal through interaction the beliefs, attitudes, experiences and feelings of participants” (Litosseliti, 2003, p. 16). Here, the seminars were designed to reveal a multiplicity of experiences that most likely would not have been uncovered employing for instance individual interviews or surveys.

Additionally, ten participants were invited to write and publish accounts of the investigations they conducted. These stories were published on the website of the NGO, Publish What You Pay Norway, and the journalists received a small compensation for the time spent writing the requested stories.2 These stories have been used in the research for this chapter.

We have also analyzed more than 300 articles in the Norwegian daily Aftenposten during the publication of the Panama Papers. The articles have been analyzed in order to understand which expert sources the newspaper used to define and explain information arising from the investigation. We have also looked for stories that break the ‘national mold’, in

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1 CAR, Mission and philosophy. An outline statement. Retrieved from https://www.carn.org.uk/about/2016, on 1.9.2018.
2 https://www.publishwhatyoupay.no/en/node/17478
trying to explain the importance of the Panama Papers without using a national (Norwegian) angle.

Finally, eight additional qualitative interviews were made with selected participating journalists. These journalists come from countries in the global South as well as from Europe. Some live in environments that are not very friendly to investigative journalists. Rather, they may be targeted for doing investigative journalism. Following the guidelines of the Norwegian Centre for Research Data (NSD), we have not recorded any personal information on the interviewees from these interviews. These eight additional interviews are therefore anonymous.

Stories becoming more and more complex

“A very difficult topic to work with,” said Jan Lukas Strozyk, an investigative journalist for the German broadcaster Norddeutscher Rundfunk (NDR) and author in the International Consortium of Investigative Journalists (ICIJ). “Access. The main idea of using a tax haven is to make access to information impossible. We are talking about an industry where very rich people and clever companies are paying some of the most expensive lawyers to prevent our reporting from happening.”

There are many reasons why investigating economic or financial stories is becoming ever more complicated. At least three parallel clusters of processes seem to make illicit financial flows more opaque. First, since the beginning of the Swiss banking secrecy laws in the early 1930s the intensity of establishing secrecy jurisdictions exploded in the 1970s, and today tax havens and their service industries play a prominent role in the global financial system (Baker, 2015). An investigative journalist trying to hold power to account today will find that almost a third of the world’s financial transactions pass through a tax haven.

We should clarify that we do not find it necessary or even purposeful to discuss questions of legality and illegality in relation to the use of tax havens. In most cases, it is not possible to determine whether something

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3 Strozyk, Jan Lukas (2016, December 13). How can a journalist explain to the world what is going on in a tax haven? Retrieved from https://www.publishwhatyoupay.no/nb/node/1715401.09.2018.
is legal or not, because of the available secrecy. The secrecy provided in
tax havens makes it possible to convert profit from criminal activities,
through whitewashing, into legal activities while curbing traceability,
since the core business idea is making access to information and trans-
actions opaque.

Second, other developments of the past few decades are the signifi-
cant integration of the world economy and international trade, which has
grown rapidly since the 1970s. By one estimate, the value of world trade
has increased four to five times (at constant prices) between 1980 and 2015
(Ortiz-Ospina, 2018). In fact, international trade has increased twice as
fast as world GDP, according to statistics released by the WTO. Other
indicators also illustrate how world economies are becoming increasingly
integrated. According to a World Bank paper, there is “only one publicly
available dataset on international intra-firm trade with a comprehensive
set of partner economies” (World Bank, 2017). The US dataset shows that
around half of all US imports are intra-firm. Estimates floating around
the OECD and the EU suggest that between 60–70 percent of world
trade takes place within groups of related companies. This makes clear
why attention to transfer pricing becomes important. Anything that has
a price can be mispriced. A reader may understand transfer pricing as
the pricing of single transactions, which should take place between unre-
related parties (arm’s length principle). This is a fully legal way to value
transactions. However, if the reader views transfer pricing more broadly,
it may include all transfer mechanisms available to multinational compa-
nies that enable the transfer of untaxed profits across jurisdictions. Trans-
fer mispricing is one of the most widely used techniques for extractive
companies to transfer profits from host and home country to the com-
pany itself. Around 1/3 of all transactions go through tax havens, hiding
significant amounts of global transactions from public scrutiny. When
tax havens appear to be the world’s largest investment hubs, it has an
effect on society at large.

Third, the problem of increasing inequality is seen as one of the defin-
ing issues of our time. When wealth is increasingly concentrated, this has
implications for society at large, not only in terms of inequality between
countries but also inequality within countries. The equivalent of 10 percent
of the world’s GDP is now held in tax havens globally, this average percent masking a range of a few percent of GDP in Scandinavia to up to 60 percent in Gulf countries and some Latin American countries (Alstadsæter, 2018; Aaberge, 2018). Hence, the accumulation of wealth in tax havens is also key to understanding both global income and wealth inequality.

At the same time, the fragmentation of ownership and control of companies and assets is becoming more complex at a staggering rate. Strozyk: “We need to get used to working on ever more complex stories.”

According to Linn Anker Sørensen, increasing complexity is driven by powerful computer networks that facilitate rapidly shifting financial structures (Sørensen, 2016). At the same time, the center of gravity in the world economy is also shifting. While oil and mining companies, and producers of goods dominated the list of the richest companies in the world up until ten years ago, some the biggest companies in the world today are producers of online content and computer programs (Economist, 2017). Whereas the oil and mining companies were drilling non-renewable and finite resources at a huge environmental cost, today’s tech companies drill consumers’ data at a huge cost in privacy. The most profitable products today are also those that are easiest to move across borders. This poses added problems for authorities as to how to regulate such companies. The Economist also recognized this with a front-page headline reading, “How to tame the Titans?” Sometimes governments, investors, tax authorities, organizations and journalists can be said to be in the same boat regarding access to information.

“I realize that there is not much we can do,” said Strozyk. “The real heroes are the whistleblowers.”

The national mold

A key challenge for journalists working on global stories is to break ‘the national mold’. While finance stories today almost always have
international connections, which need to be explored, journalists may not believe their audience will be as interested in international connections as in more local or national ones. Therefore, investigative methodologies often produce strong national framing of the information. One Norwegian journalist (anonymous) explained:

The volume of information we got was enormous. We began by doing a number of searches for Norwegian names of politicians, business leaders, celebrities and companies in the material. This was the first step. When we encountered information on Norwegians, we investigated further.\(^5\)

To frame is to “select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem, definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (Entman, 1993). In the case of this Norwegian newspaper, we see how the national frame is imposed by the methodology of researching the overwhelming flow of information. The overwhelming flow of information is simplified and systematized by organizing the information according to a perceived national relevance. The methodology is embedded within the national mold.

However, this should not be taken to mean that the Norwegian journalists working on the Panama Papers wanted to publish only stories on Norwegians and Norwegian companies, or were unwilling (or unaware) to see the international dimensions of the phenomena unveiled by the Panama and Paradise papers. On the contrary, an analysis of 300 articles published by *Aftenposten* on the Panama Papers demonstrates a willingness to deal with the global aspects of illicit financial flows. The newspaper ran stories as diverse as revelations of financial flows from Armenia, threats against investigative journalists around the world, and the murky world of finance and tax avoidance in professional football. Many of the stories published in Norway were researched and written by foreign members of the global team investigating the leaks. Still, these international stories were seldom followed up in the same way as stories that

\(^5\) Anonymous 1. Interview, August 2018.
dealt primarily with Norwegians or Norwegian companies implicated in the leaks. The story on DNB, a major Norwegian bank implicated in the leaks, evolved from shorter news items, via interviews with leading politicians and views of the users of the bank, to follow-up stories revealing how the bank promoted the use of tax havens over the years.

There are good reasons why stories with a Norwegian angle generated follow-up stories. First of all these stories typically invited discussion of the legality of the financial flows. At the same time, the stories prompted Norwegian politicians to discuss the practice of using tax havens in general, which again generated op-eds by NGOs and others working on issues related to illicit financial flows and transparency. Finally, the newspaper found it relevant to present opinions of ordinary customers of the bank. All this made the story live on, instigating further journalistic research on how the bank came to be involved in this type of financial flow. The result is that Norwegian stories came to dominate the coverage of the leaks, firmly placing this coverage within the national mold.

Experts needed to define and frame the issues at stake

According to Craig McKune, “It is very hard to explain complex and complicated information to our readers. The first thing we have to do is to understand it ourselves. Clear thinking is clear writing. You have to understand it first.” Still, as Jan Lucas Strozyk reminds us, it is “(s)ometimes hard to understand what we have. I spent a lot of time reading background papers, trying to understand general business procedures. In the beginning, you felt like you were not making any progress at all on the story, only reading background.”

_Aftenposten_ could draw on a network of experts willing to help define and explain the issues arising from working on the leaks.⁶ Among the experts were well-established academics from disciplines such as corporate law, accounting and economics, as well as experts drawn from NGOs working on issues such as transparency and tax justice. Strozyk

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⁶ Anonymous 1. Interview, August 2018.
also underlines the need to make effective use of experts: “We also need real experts – tax lawyers, investigators, and others that have seen from the inside, that have worked in banks, etc. These people are hard to find. However when we find them, they are usually very helpful in the end.” Nevertheless, several sources explain that in certain situations experts will not be able to resolve problems for investigative journalists. As one said, there will be situations when two experts have very different opinions. “The final judgement will have to be made by us, the team of journalists.” These evaluations are difficult to make for journalists, especially when they do not have specialist training in economics or law. The consequences of getting it wrong, another said, are grave and could potentially undermine a newspaper or television company financially.

Anne Koch, Program Director at the Global Investigative Journalism Network and former Director of Transparency International, has discussed partnerships where boundaries between investigative journalists and NGOs are becoming blurred as interests align (Koch, 2018). According to Koch, “(c)operation depends upon mutual independence” and “clear understanding of potential conflicts of interest”. However, the complexity of illicit financial flows is so great that “independence” is becoming an illusion. As informer #1 explained, the issues are so complicated that it is virtually impossible for the journalists to make independent judgements. In these cases, the newspaper has to rely on auditors, economists or experts in law to make the final call on whether or not to publish a story based on the information available. As the informant told us, this raises important questions related to source criticism and the autonomy of journalism, as the journalists are not in control of the final judgements. The informant explained that the team of journalists did discuss these issues and tried to mitigate the potential problems by seeking out more than one expert. Still, the pool of experts was limited, and it was not unusual to use the same experts who in the first place decided if something was newsworthy or not, also as expert sources quoted in the

7 Anonymous 2. Interview, February 2018; Anonymous 3. Interview, February 2018.
8 Anonymous 4. Interview, December 2016; Anonymous 5. Interview, December 2016.
9 Anonymous 1. Interview, August 2018.
article to explain the issues to the audience or interpret the meaning of a particular piece of information.

Based on the findings here, Koch is right to claim that “it would be a mistake to believe that journalists and advocates/activists can remain unchanged by this cooperation” (Koch, 2018).

Learning to understand and explain

Journalism studies scholars have noted that most news media produce too little critical journalism on economics considering the direct importance of the economy for people’s lives. Gans laments the fact that the economy is usually relegated to the business section, thus implying that issues related to the economy are mostly for specialists (Gans, 2004). Interestingly, the journalists we have met and interviewed for this article do not work for business papers or business sections. Instead, they are generalists working on a broad range of issues. If they have a speciality, it would be synthesizing – they are specialists in the fine art of drawing together information from a variety of sources, in order to make a coherent whole and tell a story, which is meaningful and relevant to the reader.

According to Kristine Aghalaryan, journalists do not have to know everything but they need to be able to learn many things. “In order to be a qualified journalist, in order to understand the issues, you need to read a lot of related material. If we don’t understand the material, we go to the experts.”

Craig McKune recommends starting by recognizing how complicated it is:

Just recognize that it is complicated. Pay attention to how others do it. Hunggrily consume other reports by forensic investigators, […] other journalists, by prosecutors. How do they explain it to the courts, what do the judges understand? Look at where they succeed and where they fail, see how the way those stories are explained might help your story that you are trying to unpack. Every story is different, every set of financial flows is different, your audience might be

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10 Aghalaryan, Kristine (2018). Investigative journalism on illicit financial flows: How to explain complicated and complex financial transactions to the public? Conference keynote: Making Transparency Possible. Oslo Metropolitan University.
different – it might be a jury, it might be a judge, it might be a reader if you are a journalist. You have to tailor how you tell the story. If you can compare case studies, you will find lots of lessons that you can pull together.

McKune underscores the importance of learning what conclusions you cannot draw from the evidence. There will always be a degree of interpretation, according to McKune.

[Only] when we understand it ourselves very well, can we then understand what we are trying to explain to our readers. And then, if we can write well, and if we are well practiced at it, then we can do a good job of that.

The work of the journalist is not complete when she understands the information in front of her. She needs to find a way to communicate that knowledge to readers, listeners and viewers.

In the beginning, we did not explain these things very well. Our stories were often too dense. At the time, we were working only for a newspaper [...] so we were restrained on word length. And we would try to unpack a lot of forensic detail, a lot of dry detail, into a very small space.

Journalists such as Strozyk and Aghalaryan use drawings, figures and other forms of visualization only to explain complicated matters to the audience. However, journalists also draw and make figures as part of the process of trying to understand and grasp the meaning of the information at hand.

Strozyk finds it helpful to

Write down the story. If you have painted a whole complex web, it might be wise to describe only the bottom-left corner. It is painful to leave out information you know could have enriched the story. It is very important. In my view, breaking down the story might be the most important aspect of writing the story.

According to Kristine Aghalaryan

It is very difficult to explain complicated documents or reports or figures. [...] We do not only use simple storytelling methods, like short phrases or short sentences, but visual tools like infographics, videos, photos and other graphics.
Now we are using other methods like writing down something or painting something as a picture to use in our stories [...] we draw it and paint it by hand, so our readers can see those pictures. When the story or article is very complicated, we have places for comments, and readers write, “What is this story about?” [...] “We don’t understand.”

Aghalaryan finds it useful to use ‘interactive platforms’ such as Facebook, Twitter and other social media accounts to “respond to questions from readers” and to “improve storytelling methods”. The complexity of the stories led the newspaper Aftenposten to organize a team with varied backgrounds to work on the leaks. This included investigative journalists, some with experience from reporting on the economy and business related topics, and experts on the use of visualization and storytelling skills.

Understanding key concepts of accounting, auditing, corporate law and economics

The journalists interviewed here developed tools, such as visualization and interactive dialogue in order to understand and explain complex issues. In addition, most found it necessary to learn the language and key concepts used in the leaked documents. This meant learning key concepts in international banking, auditing and corporate law. In the process, the team developed an informal ‘dictionary’ defining the most central concepts. The dictionary had to be created in both English and the local language in order to translate correctly.

Three concepts kept surfacing during the interviews with the journalists: intra-group contribution, transfer pricing, and the arm’s length principle. We will not attempt to define these concepts here, but only briefly explain that the arm’s length principle is the “international consensus on transfer pricing, the valuation for tax purposes of cross-border transactions between associated enterprises” (OECS, 2010). The principle is used in contract law to arrange agreements when the parties have shared interests or are too closely related to be seen as independent. The Tax Justice

11 Anonymous 1. Interviewed August 2018.
Network believes transfer pricing to be “the leading edge of what is wrong with international tax”.

Transfer pricing happens whenever two companies that are part of the same multinational group trade with each other (...). Transfer pricing is not, in itself, illegal or necessarily abusive. What is illegal or abusive is transfer mispricing, also known as transfer pricing manipulation or abusive transfer pricing.

The Commission to the Council, the European Parliament and the European Economic and Social Committee explain ‘intra-group loss transfer’ and ‘intra-group contribution’ in the following way:

The term ‘intra-group loss transfer’ covers both ‘group relief’ and the ‘intra-group contribution’. Both of these system types allow a definitive transfer of income between companies in order to relieve losses against profits within a group. Under a ‘group relief’ system a loss from one group member can be transferred (or surrendered) to a profitable group member. Under an ‘intra-group contribution’ system, the profits from one group member can be transferred to a loss-making group member. (Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee, 2006)

Concepts such as ‘intra-group contribution’, ‘transfer pricing’ and the ‘arm’s length principle’ are not easily accessible. They are connected to the increasing complexity of financial flows described above, and are needed to describe and understand financial mechanisms with huge consequences for profits as well as taxes and tax avoidance. As explained above, corporations, ownership and financial flows are growing increasingly both opaque and fragmented. Journalists wanting to investigate illicit financial flows will have to learn the language of global finance, law and accounting in order to analyze and describe leaks such as the Panama Papers and Paradise Papers.

Understanding concepts and language, understanding the difference between structure and substance, connecting the dots and avoiding

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12 Quote attributed to Lee Sheppard, Tax Analysts, August 2012 on Tax Justice Network topics. https://www.taxjustice.net/topics/corporate-tax/transfer-pricing/
mistakes might be important, but will not in themselves lead to good or true stories on illicit financial flows. To tell stories of illicit financial flows journalists must be able to imagine the causes and consequences of financial flows, tax havens and so forth. As any storyteller will tell you, a good story needs to have something at stake (Rabiger, 2016). The storyteller needs to imagine the consequences of illicit financial flows.

The storytellers of Aftenposten, for example, envision how illicit financial flows cause corruption, undermine tax systems, drain local economies of resources, erode democracies, impede public access to hospitals and social services, make it possible for authoritarian leaders to amass wealth being invested in more or less private security forces and in the end destabilize democracies. These and similar ideas of what is at stake are informed by economic theories and theories drawn from the social sciences.

What can journalism education gain from these experiences?

Telling good stories requires some ability to understand and interpret theories of economics and other disciplines outside journalism. This would seem to be a strong argument in favor of the view that journalism education should build on expertise from the established disciplines of economics, social sciences, history, and so forth. As Newton has argued, knowledge-based journalism courses could well be taught by journalism educators along with courses taught by educators from other fields (e.g. business, economics, law, science).13 Some training in economics or business would, in the case of the Panama Papers, Paradise Papers and the like, have placed the investigative journalists in a stronger position to be able to make independent judgements, instead of relying too much on external experts. It is helpful to have some prior knowledge of concepts and theories.

However, there are limitations to what established disciplines like economics can teach investigative journalists. Surprisingly few economists

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13 See Dunn.
conducted critical investigations into illicit financial flows. The majority of economists have traditionally been geared towards larger quantitative studies identifying patterns and structures, and building models. Therefore, the discipline of economics to a large extent depends on investigative journalists and whistleblowers to investigate illicit financial flows. We need not overestimate what the established disciplines can do for journalism education.

Another way of interpreting the experiences of these investigative journalists is to see these team-based investigations as a form of Problem-Based Learning (PBL). Problem-Based Learning is driven by challenging, open-ended problems with no one ‘right’ answer (David, 2014). Problem-Based Learning is becoming increasingly popular in higher education. It is a teaching method that employs real-world problems as vehicles “to promote student learning of concepts and principles, as opposed to direct presentation of facts and concepts.” The philosophy of PBL is that learning can be considered a “constructive, self-directed, collaborative and contextual” activity (Yew, 2016). Thus, students are asked to solve problems in collaborative settings, and develop skills for self-learning through practice and reflection.

As seen above, teams of journalists working on leaks such as the Panama Papers and other similar investigations have been involved in learning by solving problems as they arise. Sometimes problems have been solved by reading or searching online or by interviewing experts. In the Nordic countries, this has been the traditional model for journalists’ learning.

This method of learning has a number of benefits. Some studies indicate that students learn more and better when using PBL (Wood, 2008). For journalists in particular learning about society includes economics, the social sciences and similar topics. Doing journalism by solving practical problems could have the benefit of broadening the student’s horizons.

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14 Professor Kalle Moene, Interview 7.9.2018, and Professor Tina Søreide, interview 7.9.2018.
15 There are of course important exceptions to the rule, for instance Gabriel Zucman and Annette Alstadsæter.
16 The Center for Innovation in Teaching & Learning (CITL), Problem-Based Learning (PBL), http://citl.illinois.edu/citl-101/teaching-learning/resources/teaching-strategies/problem-based-learning-(pbl) accessed 10.9.2019.
of knowledge in multiple relevant areas (Meadows, 1997). As Aghalaryan argues, journalists need to know how to learn many different things. However, as critics of PBL have argued, investigating to solve problems, finding new information and connecting the dots, will not necessarily lead to insight into the theories needed to imagine and understand the causes and consequences of a problem (Boud, 2013).

**Education and interdisciplinarity**

The experiences outlined above invite reflections on interdisciplinarity in journalism education. Interdisciplinary education uses and integrates methods and analytical frameworks from several academic disciplines to investigate a topic. Interdisciplinary learning works best if “professionals from different disciplines work together to serve a common purpose, and to help students make the connections between different disciplines or subject areas” (Appleby, 2018). The teams of journalists put in place in South Africa, Norway and elsewhere comprised journalists with knowledge of and experiences from different fields and disciplines. Furthermore, the teams were enhanced by drawing on experts from various disciplines. In the process, the journalists learned concepts and ideas from economics, law, auditing, accounting and other disciplines, even producing informal dictionaries in the process. These experiences resonate with existing literature on interdisciplinary research processes, and can be reflected in at least two different kinds of collaboration. A report from the Norwegian Research Council highlights the difficulties of doing truly interdisciplinary projects and outlines: “The key to success is a team of researchers each of whom possesses sufficient familiarity with the others’ disciplinary backgrounds” (Snodgrass, 2003). “The greatest challenge for a multidisciplinary team is to find a common language with which to frame the actual concepts and phenomena under investigation.” We have seen that the familiarity with the others’ backgrounds needed to find a common language is not always present. Sometimes journalists have had to leave the evaluation of information in the hands of experts from other disciplines. Outside experts have decided whether or not a piece of information is newsworthy or not, while journalists have focused on digging
up information and telling stories. In such cases, the research resembles more the definition of multidisciplinary research: “research in which several disciplines are used in parallel to elucidate comparable problems” (Norges forskningsråd, 2003).

In other cases, journalists have themselves had to become experts on issues, such as transfer pricing and the arm’s length principle in order to investigate corruption or illicit financial flows. In these cases, “the theory and/or methods of several sciences are integrated into the same study and analysis” and could be seen as models for developing real interdisciplinarity in journalism.

The debate on what journalism education should be, shows us that an almost unlimited number of interest groups and disciplines believe journalism education must dedicate more time to studying particular issues or epistemologies. It is of course impossible for journalism students to live up to all expectations. Concerning finance and economics, however, the journalists investigating illicit financial flows will encounter a particular set of challenges. The models and theories require more than a basic understanding of mathematics. These skills need to be developed gradually, step by step, and it takes years to reach the required level. Very few journalism programs offer in-depth courses in mathematics, statistics or even economics. Without such skills, it is difficult to tell good and true stories about the causes and consequences of corruption or illicit financial flows.

**Conclusion**

The purpose of this study has been to use the experiences of investigative journalists taking part in cross-border cooperation in order to reflect on journalism education. What can journalist educators learn from journalists around the world investigating illicit financial flows? The study is thus set within a broader debate about what journalism education is and should be. On the one hand, we find proponents of a model in which journalism education draws on experts from disciplines such as history, law, economics and social science to teach students a broad range of subjects taken from established disciplines. On the other hand, there is a
model where journalists learn mainly by doing journalism. We have here compared the last model to Problem-Based Learning (PBL).

For all the journalists interviewed here, their investigations have been learning processes. In particular, they have had to learn concepts, language, analytical frameworks and theories from economics, finance and accounting. Most fruitfully then, the study can be used to reflect on the possibility of integrating fields such as economics, finance and accounting into journalism education.

Influenced by studies of interdisciplinarity, we distinguish between (at least) three levels of interdisciplinarity depending on the depth of integration (Shiou, 2014): cross-disciplinarity happens when a team works in a parallel or sequential manner, from a disciplinary-specific basis to address a common problem; interdisciplinary research happens when a team works jointly but from a disciplinary-specific basis to address a common problem; trans-disciplinary research can be said to be when a team works jointly using a shared conceptual framework drawing upon disciplinary specific theories, concepts and approaches to address a common problem, and makes inquiries on the disciplinary integration of creativity.

More than revisiting the debate on practice and theory in journalism education, we wish to contribute to moving the debate forward by asking how journalism education can use critical self-reflection to prepare students for ongoing changes in society, the economy and technology. Moreover, could cross-border cooperation on investigations help journalism break the national mold?

Rather than providing clear-cut answers to these questions, the study has illuminated the challenges and paradoxes educators must consider when designing future curriculums for journalism education. First, considering the growing importance of Problem-Based Learning methods, the journalists interviewed here demonstrate the promise of teams learning together while investigating and solving problems as they arise. However, there are limitations to the usefulness of PBL when it comes to understanding economic or financial theories. It is doubtful that PBL will be a very effective method for learning the mathematics needed to understand economic theories. It would be helpful if journalism education
could include at least basic instruction in economics and finance. When journalists lack an understanding of the theories and concepts of economics and finance, they become dependent on outside experts to make judgments. To uphold the autonomy of journalism, journalists need deeper insight into the concepts, language, methodological frameworks, and theories of economics and finance.

However, there are also limitations to the usefulness of economics and finance for investigative journalists. Few economists conduct investigations of corruption or illicit financial flows of the type investigative journalists have done. Methodologies and analytical frameworks for the critical investigation of possible cases of corruption and illicit financial flows thus cannot merely be imported from other disciplines. In the investigations studied here, it was necessary to develop innovative conceptual frameworks drawing upon disciplinary specific theories, concepts and approaches to address a common problem.

Many journalism courses today emphasize storytelling as particularly important for journalism students. The journalists interviewed here use a variety of techniques from visualization to drawing and making informal dictionaries, in order to make complex information available to the audience. Nevertheless there are limits to what the focus on telling good stories can do. Without proper understanding of the theories underpinning economics and finance, it becomes impossible to imagine what the story is about, and what is at stake. Storytelling techniques will not help journalists tell the right stories if they are not supported by basic insights into theories.

Moving journalism education ahead from the debate on theory and practice means considering these and other limitations to existing disciplines and methodologies for teaching when designing education for journalists that combine critical self-reflection with the ambition to develop trans-disciplinary conceptual frameworks and approaches to investigative journalism.

So, finally, could cross-border cooperation help journalism break the national mold? So far, the evidence would suggest not. Even when journalists work in truly global networks investigating a problem of global reach, and the economic and financial theories and conceptual frameworks are
global, the vast majority of stories seek to bring the problem home by finding national angles. As we have seen here, this is probably not because journalists are blind to the importance of the global aspects of the stories they tell. However, political debates are still firmly placed within the confinement of states. When journalists tell stories that affect ongoing political processes, they spark public debate triggering more stories. When the stories are on international or global issues, however, they are more often about faceless systemic issues. Global capital tends to be faceless, abstract, like ‘an invisible hand’, almost like a natural law. When international stories do have a face, it is most likely the face of some far-away dictator or some distant celebrity. In both cases, there seems little the readers can do to fix the problems described in the articles.

Investigative journalism thrives when journalists can hold power to account. It remains to be seen if journalism or journalism education manages to break the national mold as long as most readers and viewers feel powerless, confronted with the hard realities of global capital.

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