Investigative Journalism Handbook
Table of Contents

Index: ......................................................... 4

Chapter 1:
Introduction ................................................. 6

Chapter 2:
What is investigative journalism? .................. 12

Chapter 3:
Brainstorming ideas .................................... 16

Chapter 4:
Coming up with a hypothesis ...................... 18

Chapter 5:
Planning an investigation ............................. 24

Chapter 6:
Sources ..................................................... 38

Chapter 7:
Proving your hypothesis .......................... 46

Chapter 8:
Investigative journalism in the digital age .... 78

Case study ...................................................... 97
Introduction

Julian Assange once described investigative journalism as the noble art of seizing reality back from the powerful.

The founder of Wikileaks, a site that has exposed the crimes of so many regimes, did not realise that he was himself a pawn in the games of the powerful when he was arrested in February 2020. Assange’s fate has been shared by dozens of other investigative journalists worldwide. Some have been forced to exercise self-censorship, while others have experienced the trials of imprisonment. Still others, like the Maltese journalist Daphne Caruana Galizia, have died under deeply suspicious circumstances.

There are already dozens of handbooks and hundreds of studies on investigative journalism. The reader might reasonably ask what value this handbook adds. We asked ourselves the same question many times while putting it together. We believe that its value comes from the fact that it is aimed, fundamentally, at Arab journalists.
Arab journalists operate in an entirely different environment from their counterparts elsewhere. They face not only censorship from state and society, but also the impossibility of obtaining even basic open source information. The need to present models that speak to all the contradictory aspects of the Arab experience was at the forefront of our minds throughout the writing process.

We do not want to separate investigative journalism from its essential task of holding the powerful to account. Nor do we want to lose its spirit in pernickety detail. But this handbook is less about the theory of investigative journalism and more an introduction intended to help you develop the conscious and considered tools and skills required by this very particular kind of journalism.

In this handbook we are not looking to reduce investigative journalism to a set of strict pedagogical rules. We hope to equip journalists with the skills to do research, to think critically, to fact-check and to make good use of their common sense. By doing so, we hope to contribute – even if only a little – to the process of “seizing reality back” from the powerful.

Al Jazeera Media Institute
Chapter 1: What is investigative journalism?

The various reference works and guidebooks available to investigative journalists differ on how their task should be defined. But they do agree on certain fundamental elements:

First, investigative journalism should uncover new facts about a single particular issue or problem. An investigation should be original and should break new ground for the audience. It should go beyond mere fact-checking and provide “clear, direct and irrefutable evidence with no trace of ambiguity.”

Second, it should aim to serve the public interest, which is “often differentiated from ‘national interest’. [The] latter term is sometimes used by governments to justify illegal, dangerous or unethical acts or to discourage journalists from reporting on a significant problem.”

In journalism, the public interest means uncovering information about issues important to a significant part of the public, in order to protect their lives, health, property and rights, to secure justice and defend the rule of law. This information must be impartial, and the public should be able to access it.

---

1 Lucinda Fleeson, Ten Steps to Investigative Reporting, IGFJ, p 7.
3 Syed Nazakat, How to Become A Mouthpiece for the People
4 BBC Academy, “al-Maslaha al-‘Amma”, https://www.bbc.co.uk/academy/ar/articles/art20130702112134064, accessed on 2020/01/01,
to rely on it when making decisions.  

Third, the revelations of an investigation should be the product of in-depth, systematic research and careful documentation meeting professional and ethical standards.  

Fourth, journalists or their teams should be the ones responsible for uncovering the information and carrying out the investigation. Investigative journalists are researchers, fact-checkers and analysts. They plan and carry out the investigation. They should also play a central role in the writing and editing process and in making difficult editorial decisions.  

We can thus define investigative journalism as uncovering facts about specific new issues and problems, after systematic in-depth investigation and careful documentation by the journalist themselves or by their team, in order to serve the public interest by bringing to light systematic or institutional failings in the various fields of life.  

Investigative journalists do not report on accusations. They do not say that “it is alleged that Khaled stole one hundred dollars”. They go away and investigate for weeks or months before coming back with the facts, documents and evidence they need to be able to say, unequivocally, that Khaled stole the money, how he did it, and why.  

In investigative journalism there should be no ambiguity or possibility of error or misinterpretation. If there is still doubt around the facts that they have gathered together, then a journalist has not gone deep enough. The investigation is not ready to publish.  

---

7 Hunter, ibid.  
8 Forbes, Derek, A watchdog’s guide to investigative reporting, Konrad Adenauer Stiftung Media Programme, 2005, p 4.  
9 Nazakat, ibid.
It is true that a journalist’s job is to hunt down the facts 10. But facts alone do not make an investigation. Events, characters, times and places need to be carefully tied together. For facts to be meaningful, they need to be put in their proper context so that the public can assess them on their merits and then make a difference.

Investigative journalism is often misunderstood. Some are keen to describe any revelation of the murky or unknown or any decent piece of journalism – especially journalism that uncovers corruption – as investigative journalism 11. As a result, it is worth pointing out that the following do not constitute investigative journalism:

- Investigative journalism is not collation of what has already been published. It is not simply rewriting reports issued by civil society organisations, government bodies or research centres 12.

- Investigative journalism is not simply specialised journalism 13. Not every piece that discusses a specific issue – whether economic, political or social – counts as investigative journalism.

- Investigative journalism is not a matter of length. Just because an article runs to 1,500 words or a film is longer than half an hour does not make it investigative journalism. Investigation is not about quantity but quality and originality.

- Not every piece relying on secret cameras or disguises is investigative journalism. These methods can, under the right conditions, be used in investigative journalism – but they are means and not ends, as we will see later.

- Not every piece drawing on leaked documents is investigative journalism. Investigative journalism is not simply an outlet for sources that can provide it with a scoop. Nor is it a vehicle that different parties can use to get their message across or undermine one another. For a journalist, a leaked document is the first clue in an in-depth investigation that will involve careful documentation of facts, marshalling primary sources and confronting those responsible – as well as verifying the documents’ authenticity and establishing the motive for the leak.

---

11 Kaplan, ibid.
12 Hunter, ibid, p. 24.
This is why John Ullmann, the former director of the World Journalism Institute, says that the Pentagon Papers (published by the NYT) did not constitute investigative journalism, while the Watergate investigation – which involved a lot of work on the part of journalists – did 14.

The journalist Yosri Fouda likewise says that he is “not that proud” 15 of his Warning Bells films, which deal with the events of September 11 16, because “I could have turned down Al Qaeda’s invitation, or they could have found another journalist”.

- Investigative journalism is not scandal journalism. Not everything that people want to hide is worth following up 17. Nor are scoops or exclusives necessarily investigative journalism 18. Knowing that a former official drinks alcohol in the privacy of his own home is not in the public interest so long as it has had no effect on his work. Knowing that the same official used public money to bankroll this habit, however, is.

- Investigative journalism is not opposition journalism 19. Although criticising the conduct and mistakes of the authorities by uncovering facts is a distinctive part of investigative journalism, this is not the same as being the mouthpiece of opposition parties. Not every piece that opposes or is critical of the government is investigative journalism.

---

14 Forbes, ibid, p. 5.
15 Yosri Fouda, Fi Tariq al-Adha min Ma’aqil al-Qa’ida ila Hawadin Da’ish, p. 20.
16 Warning Bells, https://www.youtube.com/watch?v=cw3sJ7wwOKg
18 Hunter, ibid, p. 24.
19 Burgh, ibid, p. 11.
NO EXTRADITION
Challenges of the Arab World

Imad Mekki, Journalist and Teacher of Investigative Journalism, University of Berkeley

The Arab public have long been fed rumour and government propaganda, and as a result cannot separate between real investigations from regime fabrications. They tend to look at investigative journalism as “yet more fake news” indistinguishable from other stories in the Arab media.

The most important difference between investigative journalism in the West and in the Arab world is thus the willingness of the public to accept and engage with it.

The second most important difference is that the independent funding that is crucial to investigative journalism is not available in the Arab world in the same way as it is in the West. Major investigative outlets in the West receive their funding directly from the public or from wealthy donors who make endowments for this purpose.

Thirdly, investigative journalism in the Arab world carries great risks because there is no rule of law to protect journalists and no real professional organisations to help promote journalism. Arab unions are regime mouthpieces that provide little support to journalists.

Fourthly, it is thus easier and more worthwhile for Arab journalists to become part of regime media rather than risking life and limb to uncover the truth by specialising in investigative journalism.

As a result, most of the basic ingredients of investigative journalism do not exist in the Arab world, and it remains overall a losing bet despite the pressing need for it. Journalism that does not investigate, that does not uncover hidden facts, is anything but journalism.
Chapter 2: Choosing what to investigate

Investigative journalism focuses on one particular clear angle that can be proven or disproven through in-depth research and careful documentation conducted by the journalist and their team. It focuses not on isolated cases but on systemic failures and recurrent models, in order to establish the underlying causes, win justice for victims, and put an end to violations.

There are several different ways in which investigative journalists can get ideas for stories. The most important are:

1: Intuition

When the American journalist Marty Brown read a report about a priest sexually assaulting a child at a Catholic Church in Boston, something told him that this was not an isolated incident but a systematic cover-up of paedophile priests. This gut feeling led him and his team to conduct a ground-breaking investigation that showed that priests who had preyed on children were being protected by the church.

2: Personal observation

Firas Al Taweel noticed that a Grand Cherokee driven by Fateh’s official spokesman Osama Qawamsi had a registration number beginning with 31, meaning that it had been exempted from import duty. This was the first clue in an investigation that demonstrated the systematic granting of illegal exemptions to prominent public figures, losing the Palestinian treasury huge quantities of tax money.

Powers of observation and quick wits also helped Muhammad Shamma, who happened to hear some women in the street talking about a disabled girl who had had an operation to remove her womb. After introducing himself and asking some questions, he was shocked to discover that the operation had been conducted to protect the girl from rape. His investigation subse-

22 Kaplan, ibid.
23 Personal discussion with Firas Al Taweel.
24 See the full investigation here: https://www.alaraby.co.uk/-الاربعي-ال الجديد- يكشف- إهدار- أموال- الخزينة- فلسطينية- لمشروطين
25 Personal discussion with Muhammad Shamma.
quently uncovered that many government hospitals were consistently conducting medically unnecessary hysterectomies 26.

3: Personal sources

A friend who worked in a Jordanian government orphanage told Majdolin Alan that children resident there were experiencing physical, sexual and verbal abuse 27. She and her colleague Imad Rawashdeh investigated the allegations, and months later were able to demonstrate that orphans were experiencing physical, sexual and emotional abuse both in and after leaving orphanages 28. The government tried to force Alan and Rawashdeh to reveal their sources in the courts 29, leading to a lengthy legal battle lasting many years and ending in their vindication.

When a source provides a journalist with information that may spark an investigation, they must ask for detailed information. How did this happen? Where? When? Why? Who are the main people involved? If the answers given are convincing and logical, there might be an idea there. If not, it is no more than a rumour.

4: Media

(news, incomplete reports, obituaries pages, commercial announcements, social media...)

A “lest we forget” Facebook page dedicated to the memories of Arab migrants who died in a truck found leaking blood on the border between Austria and Hungary provided the initial impetus for the investigation that produced Al Jazeera’s film Death Truck 30. The investigation showed that the victims did not suffocate, as the Austrian authorities claimed, but had been killed. The team’s follow-up led the Hungarian Prosecutor General to reopen the case and ultimately to charge nine people with murder and organised crime 31.

5: Open government sources

Government documents are a treasure trove of information. They include sources as diverse as the official gazette, the company register, parliamentary minutes, stock market announcements, property and land registries, court judgements, tender-

26 See the full investigation here: https://www.albawaba.com/ar/أخبار/لحمايتهن-من-الاغتصابعائلات-تستئصل أرحام-بناتها

27 Personal discussion with Majidolin Alan.

28 See the full investigation at: https://arij.net/investigation/خريجو-دور-رعاية-الأيتام-مشاريع-انتحار-


30 Personal discussion with the director of Shahinat al-Mawt.

ing documents, lists of people who have been granted or stripped of cit-
izenship.

In 2016, a journalist at amman.net surfing the official website of the Jor-
danian Constitutional Court found that the Prime Minister had repeated-
ly responded to court requests after the statutory time limit had expired.
Analysis of all judgements issued by the court showed that he had failed
to submit documents on time in four separate constitutional appeals. It
also demonstrated that the speakers of both the House of Representa-
tives and the Senate had ignored constitutional appeals submitted to the Court,
that two thirds of these appeals failed, and that 81% of the Court’s judg-
ements lacked consensus.

6: Reports by local and international civil soci-
ety organisations

Civil society organisations’ reports and databases provide a wealth of
fresh, unpublished information that can produce excellent results. Such
organisations tend to be very interested in cooperating with the media,
with whom they enjoy a mutually ben-
eficial relationship: the media makes
use of their data, and they benefit
from press coverage of their activi-
ties.

When Amnesty International pub-
lished a statement accusing Camer-
oonian soldiers of killing blindfolded
women and children, BBC Africa’s
investigative unit scrambled to follow
up on the story. Through digital analy-
sis of videos made publicly available,
they were able to establish the time
and place of the killing, the weapons
that were used, and the identity of
the perpetrators, confirming that the
Cameronian army was responsible
despite its repeated denials.

7: Common sense

Common sense helps journalists to
develop high quality ideas for investiga-
tions or stories. In this a journalist’s
approach resembles that of a detec-
tive. Every investigation begins with a
question. When a customs employ-
ee who makes 200 dollars a month
lives in a 10-million-dollar villa in an
upmarket area, something does not
add up. Either he inherited the money,
or it is ill-gotten wealth.

This logic put Huaguoshan Zongshuji on the trail of Chinese officials whose
expensive wristwatches did not match their modest salaries. By com-
paring pictures of these officials, he was able to compile a list of watch-
es and their prices, showing that one
cost the equivalent of six months’
pay. He then demonstrated that these

32 See: https://ammanet.net/نواب-البرزـس/تحقيقات/المحكمة-الدستورية-ترد-ثلثي-الطلعون-المقدمة-الها
34 See: https://twitter.com/BBCAfrica/status/1044186344153583616
35 Nazakat, ibid, 7.
36 A fake name used by the journalist to conceal his identity.
watches had been acquired through corruption. As a result of his investigation, the Health Minister and the Railways Minister were both imprisoned 37.

8: Leaks

HSBC documents leaked in 2015 (the “Swiss Leaks”) allowed Ibrahim Saleh 38 to track money owned by Rami Makhlouf, Bashar al-Assad's cousin through a series of bank accounts. He was able to demonstrate Makhlouf’s close commercial ties with Israeli businessmen, as well as showing how his money had been channelled through a series of Israeli investment companies in order to circumvent EU and US sanctions 39.

“Journalism and Politics

Phil Rees, Director of the Investigative Journalism Unit at Al Jazeera

Investigative journalism in the Arab world is political par excellence. It comes face to face with power in a way that traditional Western journalists cannot understand. Between despotism and its victims there can never be a level playing field. Investigative journalism is thus a form of political opposition, even if journalists themselves do not mean it to be. They end up being part of the story by challenging despotism.


38 A fake name used by the journalist to conceal his identity.

When a journalist gets an idea for an investigation – regardless of its origin – they need to realise that it will not be a walk in the park. It will require months of research, preparation and marshalling sources, as well as a range of skills, an appropriate budget, and an awareness of probable risks.

When a news outlet allows a journalist the time and money to pursue an investigation, they will expect to get back a final product with fairly guaranteed results. They will expect it to make the outlet’s output more competitive by providing a scoop, something that no other newspaper or channel has. As a result, the journalist will need answers to all of the following questions:

- How important is it to people? Does it have relevance to their daily lives – health, education, nutrition, transport, justice, the economy, politics, good governance?
- Are the sources publicly available or not?
- Is the idea risky? If so, how risky? Where does the risk lie?
- Will proving it be difficult and complicated, or will it be easy?
- What kind of budget does it need? How much is it likely to cost, according to your estimates? Is the money available?
- What skills will be needed to pursue the investigation?
- What tools will be needed to pursue the investigation?

• Is the idea clear? Does it have a particular angle?

• Has it been investigated before?

• What is the new angle taken by the investigation? Is it really fresh and genuine?
The journalist needs to make sure that the idea is specific rather than general and that it deals with a single issue. Imagine for example that a journalist notices that there have been many road accidents at one particular point on a motorway. The idea here is not to talk about the effect of road accidents in X country. This is a general idea and would not contribute anything new. We have to think outside the box to get a narrower angle. We need to find out, for example, whether the motorway is up to code, whether there are any engineering problems. Is its design defective? Why? Did the contractor cut corners in order to make a profit? Did the government committee responsible accept that it was fit for purpose when the project was completed? Were they perhaps paid by the contractor to turn a blind eye to structural problems? How many other roads have similar problems? Where are the bodies that are supposed to exercise oversight in these matters? Are they colluding with the contractors? Or are they incompetent, ineffective, or short on expertise?

Brainstorming questions like these can lead us to preliminary research that in turn allows us to develop a specific idea. Let’s imagine for example that defects in the design and construction of motorways in Country X (corners were cut, oversight bodies turned a blind eye) have led to an increase in the number of motorway accidents and deaths between 2015 and 2019.

During preliminary research, the journalist needs to find out whether this story has been covered before. This requires no more than a brief Google search. If the story has already been done, then they rethink the angle or move on to other ideas.

The journalist also needs to work out how interested the public is likely to be in the story: the more people it affects, the more important it is. But we also need to be wary of simple crowd-pleasing journalism. Investigative journalism’s job is to serve the public interest by holding people accountable.

Another important question is that of risk. Investigative journalism is not a walk in the park – especially in a region that is no friend of freedom and democracy. Every idea for an investigation involves some risk, be it legal, physical, or digital, and the journalist needs to be aware of what that risk is and how best to avoid it. If they conclude that they would be risking death by investigating, the best thing is to stay away. No story is worth dying for. We will talk more about how to assess and minimise risk, and about the importance of professionalism in this regard, in later chapters.

If, after asking themselves these questions, a journalist concludes that the idea is fresh and original and of interest to the public, that the sources are not entirely inaccessible, that the budget, skill sets and tools are all available (or can be got hold of), then we move on to stage 2: coming up with questions and answers in order to produce a hypothesis.
Chapter 4: Coming up with a hypothesis

Coming up with hypotheses is one of the investigative journalist’s most important mental and organisational tools.\(^4^0\) The hypothesis is critical to how an investigation proceeds. And because of how critical it is, it cannot simply be cooked up out of nowhere. It must have a solid grounding in carefully acquired facts\(^4^1\) and draw on preliminary research showing that there is a story worth writing.

A hypothesis is made up of facts and assumptions. Facts here means solid, corroborated and carefully documented information, while assumptions means information that is yet to be corroborated, which the journalist works to prove or disprove.

Investigative journalism, like science, is about coming up with hypotheses, testing them, and trying to prove them. The best examples of investigative journalism are rooted in a hypothesis\(^4^2\) that allows them to work out what happened, how it happened, and why it happened.

In investigative journalism, a hypothesis is a proposed explanation that assesses a problem or issue in order to establish the truth of what happened by making connections between the facts – even if those facts are not yet entirely verified. It provides provisional answers on how an event might be connected to an actor (a perpetrator) and its victim and how big the problem might be. These are the basic elements of a hypothesis, as Figure 1 shows:

---

\(^4^0\) John Ullmann, Investigative Reporting: Advanced Methods and Techniques, St Martins, 1995.

\(^4^1\) Dalil al-Bahith fi Kitabat al-Bahth wa-Shaklihi, Jinan University, Lebanon.

\(^4^2\) Ullman, ibid.
Hypotheses are important because:

- They make it easier to collect data, gather and organise new facts and evidence, and analyse it.
- They help us keep control of the investigation and manage it effectively.
- They help test the easiest and best methodology for establishing a hypothesis.
- They help us to focus and be precise and to establish the boundaries and goals of the investigation.
- They help us to more closely understand the issue that we are researching.
- They help us to come up with solutions in the event that problems arise.
- They are the cornerstone of a fully integrated investigation.
- They help us to market the idea to others.\(^{43}\)
- They help us to set budgets and keep a tighter hold on time and resources.\(^{44}\)
- They help us to establish the sources of the investigation.

A hypothesis has the following characteristics:

- It can be tested.
- It is based on established and documented facts as well as uncorroborated information (assumptions).
- It is concise.
- It is coherent and based on facts that the journalist is looking to gather as well as information they already have.\(^{45}\)
- It deals with a single problem.

---

\(^{43}\) Nazakat, ibid, p. 28.

\(^{44}\) Nazakat, ibid, p. 28.

\(^{45}\) [Gijn](https://gijn.org)
Despite the centrality of the hypothesis to the investigative process, it can always be amended if new evidence and facts require. A good journalist should always be open to evidence that contradicts their hypothesis and work just as hard to disprove the hypothesis as to prove it — that is, they should make just as much effort to find evidence contradicting it as they do to find evidence supporting it. The hypothesis is not an end in itself but a means of getting to the truth.

Let’s return to the example of road accidents in Country X. Our journalist has conducted her initial investigation, and is now categorising the data and assumptions she has come up with:

1: Facts

- According to official reports that she has found, ten main roads in Country X – all built between 2015 and 2019 – do not meet technical specifications.
- Technical reports and mapping of seventy different accidents on these roads between 2015 and 2019 show that engineering defects were the main reason in those accidents.
- There are twenty coroners’ reports showing deaths resulting from these accidents.
- There are fifteen medical reports showing injuries resulting from these accidents.

2: Data and information

- All tendering information on the construction of those roads, published in dailies and relevant websites.
- Our journalist has conducted interviews with experts and specialists who confirm that there are roads that do not meet the established technical standards. They say that the oversight committee takes money and gifts from contractors, and give plenty of examples – but no real evidence.
- All the annual reports of Country X’s Traffic Authority issued from 2015 to 2019.
- All the annual reports of the engineering bodies responsible for the construction of those roads during the same period.
- The names of all those responsible at the oversight committee.
- All the names of companies that won road construction tenders and the names of their owners and employees during this period.
- All the news items relevant to the roads, categorised by timeframe and information.
- Technical plans for the roads provided in the tendering documents before construction began.
- Construction and infrastructure legislation.

46 Ullman, ibid.
3: Assumptions

- The oversight committee is colluding with contractors.

- The committee receives money and gifts from contractors. In exchange, they turn a blind eye to problems with the roads.

- The contractors change the plans agreed on in contracts concluded with the government, without any justification, in order to cut costs.

- Contractors cut corners on construction in order to save money.

- The laws that regulate public infrastructure projects include loopholes that allow contracts to be circumvented.

- There are serious shortcomings in government oversight of roads. There is both abuse of office and neglect taking place.

Our journalist then takes all of these points together and formulates the following hypothesis:

“There are injuries and deaths on the motorways in Country X because of construction defects caused by contractors cutting corners. The government committee responsible for oversight is colluding with the contractors.”

This hypothesis is clearly based on the preliminary research and the information and data that it has provided. It is concise, coherent and consists of one or two sentences. It breaks down into a number of central points, and each of these points produces a series of questions, each of

47 Nazakat, ibid, p. 28.
which can be answered by a source or sources (whether human or documentary).

This allows our journalist to produce a clear and specific hypothesis which can be tested and proved or disproved. Note that she has looked at open sources. She has inspected the roads herself by looking at official reports and speaking to experts. She has contacted human sources. The key to all this was generating a series of questions through an organised brainstorming exercise, questions she then tried to find answers for.

The hypothesis shows the links between the event, the agent and the victim. It provides a provisional answer to the problem that our journalist wants to investigate. We can break it down into its central elements as follows:

- Two events. Firstly, contractors are cutting corners when building roads. Secondly, the government committee responsible for oversight is colluding with the contractors.
- Two actors. The contractors and the committee.
- The victim. Those killed and injured and their families. Also, the public purse, which is the common property of everyone.

A hypothesis may involve one or more actors. It may also involve a single main event with several subsequent events. The same applies to victims.
Chapter 5: Planning an investigation

After coming up with a hypothesis, a journalist can work out what information they have already and what information they want to get access to. The best way to do this is to produce a written research plan.

A systematic plan requires systematic thinking. To produce a plan, we think up questions about the facts, sources, opinions and analysis, the background, and anticipated obstacles.

- The facts necessary to produce an investigation.
- The questions that lead us to those facts.
- The sources that answer these questions.
- The methodology.
- Acceptable standards for evidence.

This division helps the journalist to prove the events took place and to gather evidence. Here we can use a schema like the one in Figure 2.

48 Ullman, ibid.
**Hypothesis:** “There are injuries and deaths on the motorways in Country X because of construction defects caused by contractors cutting corners. The government committee responsible for oversight is colluding with the contractors.”

<table>
<thead>
<tr>
<th>Point</th>
<th>Questions</th>
<th>Sources</th>
</tr>
</thead>
</table>
| There are injuries and deaths on the motorways in Country X. | - How many injuries on the roads from 2015 to the end of 2019?  
- What roads did these injuries take place on?  
- What kind of injuries are they? How serious?  
- How many deaths took place from 2015 to the end of 2019?  
- On which roads? | - Traffic Authority reports  
- Court judgements  
- Accident records  
- Municipal authorities and local councils  
- Medical reports  
- Ministry of Health Reports  
- Public statistics office  
- News pieces and relevant data  
- Relevant civil society reports  
- Victims and their families  
- Doctors  
- Experts  
- Eyewitnesses  
- Traffic Authority reports  
- Court judgements  
- Accident records  
- Municipal authorities and local councils  
- Medical reports  
- Ministry of Health Reports  
- Public statistics office  
- News pieces and relevant data |
<table>
<thead>
<tr>
<th>Point</th>
<th>Questions</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- What are these motorways?</td>
<td>- Accident records</td>
</tr>
<tr>
<td></td>
<td>- When were they built?</td>
<td>- Ministry of Public Works annual reports</td>
</tr>
<tr>
<td></td>
<td>- What companies built them?</td>
<td>- Annual reports of the Public Contracts Authority</td>
</tr>
<tr>
<td></td>
<td>- How much did each road cost?</td>
<td>- Contractors and construction companies</td>
</tr>
<tr>
<td></td>
<td>- Who launched the tendering process?</td>
<td>- Road construction contracts</td>
</tr>
<tr>
<td></td>
<td>- Who oversaw its implementation?</td>
<td>- State budgets</td>
</tr>
<tr>
<td></td>
<td>- What are the specifications of each road?</td>
<td>- Newspaper announcements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Media reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Road construction contracts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- State budgets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Individual company bids</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Annual reports of the Public Contracts Authority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Contractors and construction companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Accident reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Families of people</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>- Why did these accidents happen?</td>
<td>- Eyewitnesses</td>
</tr>
<tr>
<td></td>
<td>- Precisely how and why did they happen?</td>
<td>- Families of people killed</td>
</tr>
<tr>
<td></td>
<td>- How many took place between 2015 and the end of 2019?</td>
<td>- Experts</td>
</tr>
<tr>
<td></td>
<td>- How much time passed between the opening of each road and the first accident?</td>
<td>- Court judgements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Criminal investigations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ministry of Public Works annual reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Traffic Authority reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Relevant civil society organisations’ reports</td>
</tr>
<tr>
<td><strong>Contractors are cutting corners.</strong></td>
<td></td>
<td>- Public Contracts Authority</td>
</tr>
<tr>
<td></td>
<td>- Who are these contractors?</td>
<td>- Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td>- What are the names of the companies? When were they founded? How much capital do they have? Who are the owners and the shareholders?</td>
<td>- Tendering announcements in dailies</td>
</tr>
<tr>
<td></td>
<td>- What experience do these companies have? Who runs them?</td>
<td>- Information provided at the site</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Commercial registry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Company’s official website, interview with the CEO or an employee</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>- How many employees do they have?</td>
<td>- Company’s official website, interview with the CEO or an employee</td>
</tr>
<tr>
<td></td>
<td>- What other projects have they been involved in?</td>
<td>- Contractors</td>
</tr>
<tr>
<td></td>
<td>- How are they cutting corners?</td>
<td>- Experts</td>
</tr>
<tr>
<td></td>
<td>- Why are they cutting corners?</td>
<td>- Lab results</td>
</tr>
<tr>
<td></td>
<td>- How many times has this happened?</td>
<td>- Technical plans</td>
</tr>
<tr>
<td></td>
<td>- What are the regulations that they are circumventing?</td>
<td>- Notices of receipt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Technical reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Contractors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Oversight and inspection committees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Bureau of Standards and Metrology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Contract between the company and the Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tendering announcements in dailies</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>There are construction defects.</td>
<td>- What are these defects?</td>
<td>- Personal inspection</td>
</tr>
<tr>
<td></td>
<td>- Where are they?</td>
<td>- People who worked on the project</td>
</tr>
<tr>
<td></td>
<td>- When did they happen?</td>
<td>- Contractors</td>
</tr>
<tr>
<td></td>
<td>- Are they getting worse with time?</td>
<td>- Engineers responsible</td>
</tr>
<tr>
<td></td>
<td>- How dangerous are they?</td>
<td>- Notices of receipt</td>
</tr>
<tr>
<td></td>
<td>- What are the reasons for these defects?</td>
<td>- Technical reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Standards and Metrology Bureau</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Researchers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Court judgements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reports and data from relevant civil society organisations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Technical plans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Technical reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Researchers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Court judgements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- People who worked on the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Project engineers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Contractors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Official government inspector</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td><strong>What implications do these defects have for road safety?</strong></td>
<td>- Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Standards and Metrology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Notice of receipt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Laboratory testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Accident reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Technical reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Traffic and road safety experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Researchers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Standards and Metrology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Notice of receipt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Laboratory testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Independent engineers, independent construction companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reports and data from relevant civil society organisations</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The government committee responsible for oversight is colluding with the contractors.</td>
<td>- What are the committees that are colluding with contractors?</td>
<td>- Independent engineering companies</td>
</tr>
<tr>
<td></td>
<td>- Is the collusion ongoing?</td>
<td>- Contractors</td>
</tr>
<tr>
<td></td>
<td>- Is it constant and regular collusion?</td>
<td>- Reports and data from relevant civil society organisations</td>
</tr>
<tr>
<td></td>
<td>- Have the committees done this more than once? If so, how many times?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ministry of Civil Works data on committees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Information available on site</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Court judgements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reports from the Public Accounting Office, the Treasury, or the Ombudsman</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reports and press releases from the Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Government committees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Contractors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Parliament, the Transport Committee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Experts and researchers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reports from relevant civil society organisations</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td><strong>- How do committees collude with contractors?</strong></td>
<td>- Court judgements</td>
</tr>
<tr>
<td></td>
<td><strong>- Why do they collude with contractors?</strong></td>
<td>- Investigative files</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reports from the Public Accounting Office, the Treasury, or the Ombudsman</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reports and press releases from the Ministry of Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- People who worked or are working on the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Current and former project managers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Former members of committees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Current members of committees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Relevant former government officials</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
|       | - How are oversight committees formed?                                                                                                                                                                    | - Relevant former government officials  
- Government committees  
- Contractors |
|       | - Who makes up these committees?                                                                                                                                                                          | - Relevant laws and regulations  
- The decree forming the committee  
- Report of working hours  
- Salary reports  
- People who worked or are working on the project  
- Current and former project managers |
|       | - How many members do they have?                                                                                                                                                                           | - Former members of committees  
- Current members of committees  
- Relevant former government officials  
- Government committees  
- Contractors |
<p>|       | - How many hours do they work?                                                                                                                                                                           |                                                                                                  |
|       | - How are they paid?                                                                                                                                                                                     |                                                                                                  |
|       | - What sort of salaries do the members receive?                                                                                                                                                          |                                                                                                  |
|       | - What is the legal basis for these committees?                                                                                                                                                           |                                                                                                  |</p>
<table>
<thead>
<tr>
<th>Point</th>
<th>Questions</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>- What are the conditions for membership of a committee?</td>
<td>- Reports from the Public Accounting Office, the Treasury, or the Ombudsman</td>
<td>- Reports from the Ministry of Public Works</td>
</tr>
<tr>
<td>- What sort of oversight is there of the work of the committee itself?</td>
<td>- Relevant legislation</td>
<td>- The Ministry of Public Works</td>
</tr>
<tr>
<td>- Where is this oversight?</td>
<td>- Director of the Oversight Unit</td>
<td>- Reports from the Public Accounting Office, the Complaints Office or the Ombudsman</td>
</tr>
<tr>
<td>- How many committees are there overseeing the committee's work?</td>
<td>- Current and former Oversight Unit employees</td>
<td>- Current and former members of the Parliamentary Transport Committee</td>
</tr>
<tr>
<td>- How do these committees exercise their oversight?</td>
<td>- Oversight Unit annual reports and press releases</td>
<td>- Government committees responsible for roads</td>
</tr>
<tr>
<td>Point</td>
<td>Questions</td>
<td>Sources</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Former and current oversight committee members</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Researchers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Anti-Corruption Committee reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Current and former Anti-Corruption Committee employees of relevance</td>
</tr>
</tbody>
</table>

Figure 2: Investigation schema
This schema will help our journalist to predict the results of the research plan. It will tell her where to start looking, and help her map out prospective and confirmed sources, establish sufficient standards of proof and decide on a methodology, budget and timeline for the investigation.

When producing an investigation plan, we focus on proving that there has been logical, legal and ethical wrongdoing and establishing where this occurred, who is responsible and what their motives were (money, fear, coercion, maintaining the status quo, or neglect and incompetence).

The schema answers the questions raised by the investigation plan 49:

- **What is going on?** Why should the public be interested in this investigation? Who is the target audience? The greater the likely audience interest, the more important it will be to the journalist and the news outlet.

- **What is the mistake or wrongdoing that has taken place?** That is, what is the event that we are focusing on? Is it a legal or an ethical violation? Does it make sense? How did this happen? Why did it happen?

- **Who is the main actor?** Who else participated? How did they do it? Why did they do it? Who benefited?

- **What are the ramifications of this mistake?** What are its effects? What are the likely consequences?

- **Who was harmed directly?** Who was harmed indirectly? Who suffers from this mistake or violation?

- **Who benefits from publishing the investigation?** Who will be hurt by its publication? Will it help enrich the public discussion?

---

After a journalist decides on the questions that they want to answer, they need to work out what source or sources will allow them to come up with those answers. Their ability to build a network of digital, material and human sources for each question will depend on their experience and how deeply they have researched the subject of the investigation.

Reliable sources are the backbone of any investigation. They are the gateway to facts, to background and context. They feed into one another, lending one another credence. A good journalist makes their sources work for one another.

The number of sources is proportional to the strength of an investigation – that is, the more sources an investigation cites, the stronger it is. Diverse and numerous sources make an investigation more balanced and objective.

Open source material is a key resource for investigative journalists. Today there is much information that is no longer secret or exclusive to government bodies. It appears in government websites, in annual reports, in official gazettes, news bulletins, commercial registries, stock markets, tendering procedures, and daily and weekly newspapers. The same applies to public libraries and reports from civil society and international organisations. There are many other kinds of open source material both within and outside individual countries.

A good journalist begins their research with open source materials. They gather, analyse and assess information, perhaps creating a special database to facilitate new discoveries and conclusions that they can then try and corroborate using their own network or any of the other sources available to them.
There are several different kinds of sources: 50

Paper sources:

documents of various kinds that provide strong evidence or a historical or contextual background. They provide an initial source that is entirely reliable so long as it is not forged. They also cannot be modified or refuted in court if the journalist is sued, unlike human sources, whose narrative may change.

Paper sources help to expand the scope of the investigation and may lead to other primary and secondary sources. But they may also be protected by privacy laws. Journalists should refer to the law of the country in which they are active and seek expert legal advice in this regard.

One of the difficulties that journalists face here is the difficulty of accessing paper sources. This requires open source research skills (and this includes subscription databases) and may also involve convincing human sources to help you get your hands on them. It may also involve use of freedom of information laws.

Paper sources sometimes require expert analysis and explanation (budgetary or accounting documents, for example, or court judgements). Some may need translation if the journalist is not good at the language they are written in. For this you need a human source who you can trust to help you out without breaching confidentiality.

50 Nazakat, ibid, p. 30.
Human sources:

These can be both primary and secondary. Primary sources are people directly connected with the event that a journalist is investigating—victims, eyewitnesses, people responsible, people who intervened or participated, etc.

In an attempted murder, for example, the primary sources would include the injured party, eyewitnesses who saw the shooting and the perpetrator opening fire, the driver who brought the would-be killer to the scene, his partner in crime who planned the shooting, the driver who provided the weapon, the person who sheltered the perpetrator after the crime, the doctor who produced the medical report about the incident, the detectives investigating and the prosecutor who inspected the crime scene.

These all have a direct relationship with the event and are thus primary sources in the investigation. It would be inappropriate for the journalist to listen to testimony from sources who were not present—who had heard it on the radio, for example, or from someone else, who heard it from someone else, who heard it from elsewhere.

All of the primary sources listed in the shooting case above will have different stories, despite being closest to the event. Eyewitnesses will have seen the incident from different angles—and of course, every source has their own biases, their own personal, psychological and social makeup that affects their view of events. Some might lie, give unsubstantiated suggestions, exaggerate, miss out things that they do not like or conflate facts, conjectures and assumptions.

Journalists should never be afraid to ask: How do you know? Examining information carefully is our first responsibility.\footnote{Kayfiyyat Bina’ al-Masadir li’l-Sahafa al-Istiqsa’yya: https://ijnet.org/ar/story/كيفية-بناء-المصادر-للصحافة}
The essence of a journalist’s work is to relate an event for which they were not present – which they did not see themselves. Their role requires collating precise and verified information from primary sources in order to get a complete and clear picture of what happened. This is why it is so important to have a wide range of varied sources.

A journalist can interview sources for many different and interconnected reasons – that is, there are all sorts of reasons why they might be newsworthy. They might meet them because they occupy an important post, or because they are investigating something important, like a scientific discovery. They might have won a prize, or be experts in a particular issue. They might know something or someone of relevance to an investigation, have seen something of importance (eyewitnesses to a crime, for example), or have had something happen to them (victims or survivors) 52.

We have to discriminate between sources. There are public figures who have earned the public’s trust and interest and who have worked hard to further the public interest in a particular area (be it big or small). Then there are temporary public figures who become briefly famous because of a particular incident. And then there are private or normal persons. Public figures are used to dealing with the media, to being pursued by cameras or journalists looking for statements. They know that their personal space is delimited by public space and by the right to criticise, unlike a private person who has no experience working with the media and has a right to privacy.

The ideal human source in investigative journalism is the closest person to the story who can be relied upon and trusted, who is willing to stand by their statements publicly and who is easily and safely accessible. Journalists should look for human sources that meet all these criteria at the same time 53.

How feasible it is to get access to sources varies according to person and according to a journalist’s ability to convince them of the importance of being interviewed. Sources that are the object of suspicion or accusation will talk to a journalist when they realise that everyone else involved in the event either has talked or might talk to the journalist 54. And of course, you need to make sure that access to the source is safe – a meeting with a mafioso or a violent organisation may put the journalist’s life in danger.

An investigation may result in a battle of wills between a journalist looking to expose mistakes or wrongdoing and sources close to the event that may want to keep some information under wraps 55. Experts suggest interviewing victims, those hurt by an event or enemies of the parties under investigation first, because they are


53 Biaga, ibid.

54 Hunter, ibid, p. 64.

55 Ullman, ibid.
more likely to want to talk about the thing you are investigating 56.

By communicating with and meeting sources, journalists aim to collect facts and important information and to get access to documents and supporting evidence. They should ask for this directly and clearly: do you have any documents that support your story? The aim of an investigation is to produce a well-substantiated narrative. Sensational claims have no value so long as they are not backed up by convincing evidence.

A meeting should also aim to acquire new sources for the investigation. Journalists should ask their sources to point them towards others who can corroborate their story: who knows about this other than you? Who was with you when it happened? What role did they play? Please give me their names and tell me how to contact them. This is a central part of the process of building a network of sources, and helps make sources feel important, as well as adding many new voices to the investigation 60.

Journalists use human sources to corroborate the information they have gathered and the conclusions they have reached and to test the credibility of other sources. A good journalist knows that sources conflate facts and assumptions, and seeks the help of experts in analysing documents and interpreting events. Experts typically provide unbiased, in-depth and detailed information 61.

A good journalist can also get sources to talk honestly. This requires effort, practice, politeness, and determination. It also requires sticking to your guns when necessary 63. The approach taken when interviewing victims is totally different from the approach used when interviewing those responsible for an incident, and different again from the approach to interviewing experts. What all of them have in common, however, is good preparation, and the greatest possible knowledge of the source and their personality as well as what they are looking to get out of the interview 65.

Some sources will have worries or fears that will mean they say no to

56 Ibid.
57 Biaga, ibid.
58 Ullman, ibid.
59 Hunter, ibid, p. 80.
61 Reuters Handbook of Journalism, Reuters Foundation.
62 Ullman, ibid.
63 Biaga, ibid.
64 Marina Martin, “Fann Ijra’ al-Muqabalat al-Sahafiyya”, https://gijn.org/01/03/2018/%D%81%D-86%9
65 Hunter, ibid, p. 81.
Some may fear for their lives or for their families, particularly in oppressive or authoritarian countries. Others will be afraid of difficult questions, or fear for their professional or social future after publication. Some will be scared of scandal, of being held accountable, or of feeling guilty. Some will lack confidence in your professional ethics or probity and will worry that you will twist their words. And some will simply think they do not know enough about the subject under investigation, and may be embarrassed to talk to the press.

Dealing with these anxieties and setting fears to rest requires journalists to engage in dialogue with their sources, to make multiple attempts, to be gentle and to negotiate. They should emphasise whatever might get them to speak – openness, justice, ambition, anger, exhibitionism or a desire for attention, a desire for authority, serving the public interest, or the opportunity to give their side of the story.

Sources sometimes request anonymity for fear of the consequences of publication, especially when they are providing secret or ultra-sensitive information concerning corruption, organised crime or maladministration. The right of a journalist to keep their sources secret is enshrined in law in Arab countries, but it is also, more importantly, an ethical and professional duty that has become a key part of international human rights law.

Journalists should make every effort to establish why a source is requesting anonymity. They should establish whether they simply mean that they do not want their name or job title to be published, whether they do not want the information itself to be published, or both (off the record).

When sources request protection of this kind, they usually mean not publishing the source of the information – not the information itself. But journalists should be careful to make sure of this. It is the information itself that is important. You should thus ask your sources who else is aware of the information they are providing. If there are several people, you should ask for their names and how to get in contact with them, without divulging your original source. You can then publish the information in your report and note that it has been confirmed by various sources – thereby protecting the original source. But if the source still refuses to allow publication of their name, then you have to respect their wishes.

---

66 Ullman, ibid.

67 Biaga, ibid.

68 Hunter, ibid, p. 77.

69 Hunter, ibid, p. 77.

70 Biaga, ibid.

71 The Jordanian Press Law of 1988 provides journalists with the right to protect their sources.

72 Protecting our sources of information, IFJ.
The right to protect sources is not an absolute right. There are various understandable and justifiable exceptions subject to a three-part test: interest, legitimacy, and legal necessity. This is the same test used for freedom of expression.

Concealing your sources is a practice governed by rules. The use of anonymous sources has discredited many a journalist. Likewise, professional and ethical rules emphasise the necessity of providing your sources when publishing: the public has a right to examine the credibility of the information provided. You should only conceal sources’ identity under rare, exceptional and carefully defined circumstances. The following points should be borne in mind:

- You should only promise not to mention a source’s name with the agreement of your editor or editor-in-chief.
- Anonymous sources should only be used for a clear and justifiable reason.
- Anonymous sources should only be used when there is no other option.

In the Watergate investigation that brought down Nixon, Woodward and Bronstein did not depend on a single source as some have claimed. Deep Throat, the anonymous tipster, served

- An editor must weigh up the advantages and disadvantages of using an anonymous source.
- Sources should be named in the report whenever possible. If you have to use an anonymous source, you should explain why within the report.
- Anonymous sources should only be used with the agreement of all parties: the journalist, the source, and the news outlet.
- If you use an anonymous source, you must confirm the information provided using another source. Mark Hunter says that information should never be attributed to an anonymous source unless it is confirmed by at least four other sources.

Note:

71 Ibid.
74 Ibid, p. 8.
76 Hunter, ibid, p. 23.
only to confirm information and help them avoid major errors 77.

When using child sources, you should always secure the consent of their parent or guardian to conduct an interview 78. It is better not to push them into agreeing. You should also bear in mind the necessity of hiding their identity if the interview will affect their future prospects 79. Journalists should be keen to protect children’s ideal lives and their mental and physical health from any risk created by the interview.

Care should be taken when dealing with children’s testimony. Children are particularly likely to conflate fact and opinion, what they have seen and what they have heard. They are also particularly likely to exaggerate or misrepresent the truth 80. If the child is an eyewitness, you should let them talk spontaneously without pushing them or asking them yes-no questions. You should always rely primarily on sources who are of the legal age of responsibility and fully understand what they are doing 81 in order to obtain precise, verified evidence.

Digital sources:

Government and private databases, websites, video and audio libraries and social media. These constitute a vast archive that, with analysis, can help you get at the facts. Digital sources provide strong and coherent evidence with historical background and context as well as authenticity. But this all depends on whether you are able to obtain the necessary data and information 82.

Digital sources provide rapid, cross-border information. You can easily obtain data from the UN Security Council, the UNHCR or the Library of Congress from the comfort of your own home.

Digital sources produce soulless investigative reporting 83 if they are not supplemented by human sources close to the issue. They also require careful verification, because they are easy to modify and decontextualise.

78 AJM Editorial Guidelines, 2 ed, 2015, p. 46.
79 Ibid, p. 46.
80 Ibid, p. 46.
81 Ibid, p. 87.
82 Ibid, p. 33.
83 Ibid, p. 33.
Chapter 7: Proving your hypothesis

In investigative journalism evidence must be proven beyond all doubt 84, because doubt will be interpreted to the detriment of the hypothesis 85. If an investigation presents possibilities rather than facts, then it is not yet fully ripe 86.

If a journalist is unable to provide proof of the incident and connect the perpetrator to it, it will undermine the hypothesis as a whole. The assumption is that the event did not take place and that the perpetrator did not cause it. Disproving this assumption requires solid, provable evidence collected by the journalist.

An investigation begins with a hypothesis. A hypothesis starts as a suspicion that something has happened and that somebody is responsible. A good journalist works to develop this suspicion or possibility into certainty. If, after exhausting all your options, you still are not certain, then you may have produced decent journalism – but it will not be investigative journalism. Investigative journalism requires conviction, conviction requires certainty, and certainty requires the elimination of any doubt 87. Doubt can only be eliminated by marshalling solid, reliable evidence.

Suspicion is about events. Do the events make sense? Did they really happen as claimed? Is there evidence to support this? Is there evidence to suggest otherwise? What evidence? Are there official documents? Is there a single account or are there several logical accounts that can be woven together? Another kind of reasonable suspicion arises after study and inspection, after weighing up the evidence and deciding which is more solid and precise or free of problems.

A good journalist looks for evidence refuting their hypothesis. This is the best way of avoiding guesswork 88. Contradictory evidence may demonstrate that the event did not happen as suggested in the hypothesis, and that the error was not deliberate – that it occurred because of a third party wanting it to. In this

84 Nazakat, ibid, p. 7.
86 Nazakat, ibid, p. 7.
88 Ibid.
case you should be fair to the person and seek justice and precision. Evidence may prove that the error was the result not of collusion and bad intentions but dereliction of duty or neglect. This is a very different story, even if the ultimate result is the same.

What constitutes perfect evidence? What constitutes substantiated evidence? What makes evidence unusable? An investigative journalist proves their hypothesis using one or more of the following techniques, depending on the subject matter, the nature of the investigation, and the environment in which they are working.
**Intersecting sources and testimony**

Witness testimony is one of the main forms of evidence used by investigative journalists to prove their hypotheses. Testimony must be provided by primary sources directly linked to the event, and should be provided by several different and independent sources who cannot have decided on their story beforehand. They should provide precise and coherent narratives that attest to the fact that the event took place and link the characters to it.

For any piece of information to be acceptable, it requires corroboration by at least two known, independent sources. Several sources may depend on a single original source, and in this case they should all be taken as one and not treated as separate sources for the purposes of corroboration.

An investigative journalist compares and inspects different accounts in order to work out where they intersect. They should test the credibility of each source and their narrative throughout the interview, and ask for evidence that supports their testimony. They should try to establish sources’ motives and weigh up the information acquired accordingly, making sure that it makes logical sense. A sceptical attitude is one of the best defences against being manipulated, and even the most precise source should be treated with caution.

A source should be able to take responsibility for their words and their actions – they should be of sound mind, for example, and ideally an adult. When dealing with traumatised victims, it is preferable to avoid interviewing them in order to extract statements: in such cases the victims may not be fully in control of their actions.

An investigative journalist should work hard to get access to all the primary sources on both sides of the investigation – that is, for and against. They should have recourse to independent, neutral third parties familiar with the facts who can help them assess how accurate and trustworthy a narrative is.

Where anonymous sources are used, you should follow the same steps given above – after making sure that the information is correct and reliable and that there is no other way of sourcing it from elsewhere. Anonymous sources whose names cannot be published are the least useful of all when it comes to proving anything.

---

89 See the investigative manual at: http://www.investigative-manual.org/en/chapters/making-a-plan/-1how-to-plan-an-investigation/-2-1sources/


92 Children’s accounts can only be taken with parental consent.

93 Ibid.

94 Ibid.
Majdolin Alan and Imad Rawashdeh, for example, used several intersecting sources to substantiate their findings when they investigated torture and sexual abuse in Jordanian government orphanages in 2009. They compared the accounts of thirty former and current orphanage residents, as well as testimony given by former and current orphanage employees. All of the testimony was corroborated and signed, in some cases using fingerprints where the witnesses were not literate.

Alan and Rawashdeh’s investigation also drew on leaked documents from the orphanages themselves which supported their sources’ claims. They also made use of governmental and semi-governmental reports and studies that confirmed the existence of the problem. Some orphanage residents were convinced to undergo medical examinations at a civil society organisation, which confirmed that some of them were suffering from psychological, physical or sexual illnesses.

95 Interview with Majdoline Alan.
96 Rawashdeh and Alan, investigation into torture and sexual abuse in orphanages. See: https://arij.net/report/تعذيب-واعتداءات-جنسية-في-دور-الرعاية-ال
In another example, the Al Jazeera film Execution By Transport\(^7\) showed how thirty-seven political prisoners choked or were burned to death in a transport van at Egypt’s Abu Zaabal Prison in August 2013.

The film was able to prove the events by drawing on overlapping eyewitness testimony from bystanders, survivors and Inspector Abdelaziz, a member of the prisoner protection detail. These accounts were bolstered with technical expertise from the coroner and from an engineering report on the transport van, which confirmed that the vehicle was carrying more than three times its capacity and had no ventilation or drinking water under extreme weather conditions. They also drew on meteorological reports, data provided by civil society organisations, and court documents from the official investigation.

The overlapping human and material sources used in this investigation allowed it to develop information into facts: the van did not have sufficient space for 45 prisoners, the prisoners were kept inside for more than eight hours straight, the temperature was above 40 degrees, the van lacked ventilation and no drinking water was provided, and the coroner’s report listed asphyxiation as the cause of death. All of these facts confirmed that there was foul play at work and neglect of political prisoners opposed to the new regime.

\(^7\) I’dam bi’l-Tarhilat. See: https://www.youtube.com/watch?v=AnWLQ8AwH7U
Building and analysing databases

Around 130 countries have adopted laws encouraging the sharing of information 98, and 87 of them have become part of the Open Government Partnership 99. This has improved the flow of data from governments to the media and onto the internet. The same applies to companies and individuals. The world produces vast quantities of data every day estimated at 2.5 quintillion bytes (1 followed by 18 zeros) 100. It is the journalist’s job to sift through this data and confirm its accuracy and analyse and collate it in order to produce high-quality investigations serving the public interest.

Data does not only mean numbers. It means any raw material – numbers, letters, symbols – whether it has been processed or not, even if it is simply individual facts obtained in different contexts 101.

To put together a database that will help produce a quality investigation, you need to be aware of where to find that data, whether it is descriptive or numerical, and how best to get at, develop, and verify it 102.

Much published or available data will fail to totally meet your hopes, requirements and expectations. For this reason, you will need to put together a database tailored to your specific needs. You can do this by using existing databases, collecting the missing data yourself or with the help of others and conducting surveys, interviews and field visits. In the absence of more effective ways of getting at data, this will be your best option, despite the effort and cost involved 103.

In a 2016 investigation published on the Jordanian website Amman.net and overseen by the Arab Investigative Journalism Network (ARIJ) 104, journalists demonstrated that members of the House of Representatives had been taking home millions in illegal and unconstitutional tendering money.

There was no database giving the names of all the members of the 17th House of Representatives who had taken government contracts or the value of those contracts, or showing their voting, oversight and legislative

---

98 AIE and Centre for Law and Democracy, https://www.rti-rating.org/country-data/
99 Open Government Partnership. See: https://www.opengovpartnership.org/about/
100 Mohamed Habash, Lamha’an al-Bayanat al-Dakhma (Big Data), see: https://www.tech-wd.com/ wd/24/07/2013/what-is-big-data/
101 Hunter, ibid, p. 138.
102 Craig Silverman et al, Verification Handbook for Investigations, EJC.
104 See: https://ammannet.net/
behaviours after winning these contracts. Nor did requests for information help the investigative team to get hold of the names of the companies that had won those contracts or find out their financial value. This made the first part of the investigation very difficult.

With some effort, however, the team managed to find a list of all government contracts given to companies on the Government Contracts Office’s website. They also found data on the tenders put out by the Public Procurement Bureau and the Greater Amman Municipality. This formed the kernel of the investigation. The team also drew on an open database of companies and their shareholders as well as the House of Representatives website, which provides members’ names. This allowed them to make sure that they had the right representatives and there had been no mix-ups because of similar names. A leaked list of Civil Status records listing names, spouses and children also provided some clues. Using all this information, the team came up with a spreadsheet format appropriate to the investigation, which they filled in with the names of representatives, their dates of birth, their election dates, the names of the companies in which they held shares, these companies’ purposes and capital, the government contracts they had won, the value and date of those contracts, and other relevant information:
A lot was achieved in this investigation by analysing, collating, indexing, and arranging data extracted from publicly available documents.

This data helped to create a map of companies, people associated with them, and government contracts. This allowed the team to take the first steps towards producing and publishing this information about fifteen days before the next set of elections. The timeframe made this investigation the most important in the country at the time, and revealed a number of headline figures:

- A quarter of a billion JD in government money went to companies belonging to HoR member Hazem Majali and his son
- 128 million went to the siblings of the Atyeh brothers, both HoR members
- 150 million went to companies owned by the brothers of HoR member Atef Tarawneh
- 92 members of the 17th House of Representatives held shares in companies with a combined capital of one and a half billion JD

Nonetheless, data cannot take the place of traditional journalism, and even the best data analysis cannot replace fieldwork and investigation. The team thus submitted some 27 freedom of information requests to various ministries and institutions asking about government contracts that had not been published on the three official websites. They also interviewed experts on the constitutional and legal aspects of the case, on transparency and on companies, and confronted representatives who had violated the constitution and the law.

Verifying data protects journalists from misleading the public. Data is at least as dishonest as people: at the end of the day, it is collected and collated by human beings. As such, data cannot be trusted absolutely, because it is influenced by the biases of those who collect it. You should always make an effort to verify your data and ask questions to those who collected it in order to...

---

105 Silverman, ibid.
106 Silverman, ibid.
Avoid publishing inaccurate observations. We advise journalists to ask government bodies for raw data, because analysis of raw data helps produce a successful investigation. It is also often necessary, however, to access information that the government does not want to reveal. In this case you will have to negotiate with officials, work out how to classify it, digitalise it and enter it into a database. And of course, you will have to sift through it carefully and review it in order to guarantee that it is free of mistakes.

While data provided by government bodies is essential, you should also try and work out how to get access to other additional or supporting data, in order to make sure the investigation is as watertight as possible. You can try following the accounts of people assumed to be close to the issue or influential or who are involved in public affairs, whether because they hold an administrative or legislative office or because of their position in the world of finance and business. Following their posts and the people who interact with them may reveal new information or lines of investigation.

You may also find it useful to look for relevant data by analysing or reviewing old media publications on the subject. This can also give you an insight into public opinion on the issue at hand or on similar issues in the past.

After this, you can sift through the data, in order to get a new angle that will give it an added value not present in traditional analysis.

**Written evidence**

Written and documentary evidence is an important source for any journalist seeking to access and prove facts in order to use them as evidence in their investigation. The official documents used should confirm the incidents and acts that the journalist wants to prove. They should be related to the facts and the characters involved. Documents should not be used simply for decoration.

---

107 Al Iraqi, ibid, p. 35.

108 Ullman, ibid.

109 Fadwa Helmy, “الوثائق في الفيلم الاستقصائي”, al-Sahafa, Al Jazeera Media Institute, see: https://institute.aljazeera.net/ar/ajr/article/441
An investigation produced by the Syrian Investigative Journalism Unit (SIRAJ) 110 showed that five patients had died and a sixth had lost a hand because of negligence and inadequate precautions taken by doctors. Both the doctors and the hospitals that they worked at had escaped being held accountable because of the lack of a medical negligence law in Syria. The investigation used autopsies listing negligence as the cause of death as well as death certificates in order to demonstrate this.

The investigation team made sure to verify that the documents were accurate before incorporating them into the investigation, closely examining the form, the content, the handwriting and the signatures and consulting sources mentioned in the reports.

A similar approach was taken by the Guardian team that analysed the so-called Palestine Papers (documents pertaining to the Palestine-Israel peace negotiations), which were leaked to Al Jazeera and published in partnership with the British newspaper. Before publishing the documents, they consulted independent sources, former participants in talks and various diplomatic and intelligence sources, who all confirmed that they were accurate 111.

---

110 Al-Mabdi’ al-Qatil investigation, see: https://arij.net/deadly_scalpel/

Official documents issued by responsible government bodies are some of the strongest proof you can muster, so long as they do not turn out to be forged. There is a legal principle that an identical copy is as effective as the original unless it can be proven invalid. This principle applies equally to investigative journalism: evidence collected by journalists is no less effective than that collected by detectives, particularly given how often investigations end up in court (either seeking justice for victims or because the journalist is being sued). If the evidence cited is weak, then this can cause you real legal trouble.

Verifying documentary evidence is essential. You should assess the form and content, the dates, the stamps, the handwriting, the signatures, the letterhead, the CCs and BCCs. Documents can be just as imprecise as human sources, and may even have been forged or issued by someone with no right to do so. All this means that they can be misleading. Take care to ensure that they are accurate before using them.

If the document is an official letter, then there will be a sender and a recipient, as well as CCs for reference – each of them giving names and job titles. You can contact these people, present them with the document and ask them to confirm that it is real. Documents that are not covered by secrecy laws may also be

---


113 Under Article 266 of the Jordanian Penal Code, a “falsely ratified document” (musaddaqa kadhiba) is an official document issued by a competent government employee for himself or for others which will result in illegitimate benefit for him or others or cause harm to the interests of another party. Similar provisions are found in the statute books of other Arab countries.
subject to freedom of information requests 114.

When power struggles take place between different elites or factions within the regime itself, many documents will be issued, some entirely valid and some less so. Journalists may find themselves being used as puppets in these conflicts. Be particularly careful in these circumstances: publishing a fake document may end your career.

Leaks that do not come in document form but rather as copy-pasted or encoded text require particular care. Anyone whose name appears in such a leak can easily dispute or deny their involvement, and journalists and their employers may be sued for publishing unsubstantiated information 115. When no original copy is provided, we have no way of knowing whether sentences or particular words have been lost or added, or whether this has been done deliberately, or whether the figures and dates or the spelling of names is correct.

In the case of the Panama Papers, for example, the leaks came in the form of documents, passports, emails, signatures and emails, which helped to confirm their veracity (the public admission by Fonseca that the documents were real and had been linked as the result of a hack also lent the documents great credence) 116. Government institutions also took steps to verify the documents. All this transformed them from documents into solid proof. The same applies to the famous HSBC leaks, whose veracity was confirmed by the bank itself after a former employee shared them with the French Tax Authority 117. But none of this means that journalists are exempted from engaging in their own traditional examination and verification of documents that they want to use in their investigations.

There are several kinds of written evidence. In law, these documents have varying probative value:

- Documents produced by government bodies, which are assumed to be proof of their contents unless they are proven to be forged and can be marshalled as evidence of anything and against anyone 118. These documents include passports, birth certificates, university and school graduation certificates, government contracts, official communications and letters, anything published in the official gazette (so long as it has not subsequently been amended or repealed), and documents originating elsewhere that have been signed or stamped by a competent government official.
- Documents produced and ratified by organisations or companies and


115 Article 45 of the Jordanian Press Law, for example, makes “failure to investigate the accuracy and objectivity” of a document a legally punishable offence.


118 Jordanian Evidences Law (1952/30), as amended.
issued by a competent employee. These can be used as proof against their originating organisations, so long as they are not proven to be forgeries. Documents of this kind include budgets, decisions taken by the board of directors, other administrative decisions, payrolls, etc.

- Documents produced and ratified by natural persons (i.e. signed, stamped or fingerprinted by them). These can be used as proof against their originator, so long as they are not proven to be forgeries, but cannot serve as proof against others. Documents of this kind include personal letters, wills and diaries.

- Documents produced by organisations or natural persons that have not been ratified or signed can also be cited as supporting evidence, i.e. supporting a case already substantiated with other forms of proof.

- Emails can be used as evidence against their sender, so long as they cannot prove that someone else sent the email.

- Government emails, so long as they are not proven to be forged, can always be used as proof.\(^{119}\)

- Final court judgements can be used as proof against anyone with regard to their content and the facts of the case. Non-final judgements and investigation files are not proof because they may include confessions extracted by force, but they can be used as supporting evidence.

\(^{119}\) Jordanian Evidences Law (1952/30), as amended.
The minutes of parliamentary sessions and meetings of municipal councils, local committees, party committees, associations, unions and publicly traded companies can be used as proof of what was said, even if it is defamatory \(^{120}\), as well as any decisions reached and the general progress of the session.

**Personal experience**

By personal experience we mean a journalist undertaking an entirely legal action, without concealing their identity, in order to test compliance to the law by others and uncover mistakes or violations taking place because of the system or its responsible people. For example, you might buy a prepaid sim card and verify that companies calculate the price of a minute correctly as they claim. Or you might go and play a particular sport that requires protective gear, and discover that the relevant authority is not interested in the safety of players and allows them to play in normal clothing.

Personal experience is one of the most important sources of proof, particularly in investigations that involve careful inspection of legal procedures or routine official practice. Eyewitnesses, no matter how good they are at telling you the facts, often do not pay enough attention to the detail of legally and procedurally complex processes to provide you with all the information you need. A journalist, on the other hand, can familiarise themselves with the process through careful research and then test it out themselves. Under these circumstances, they may end up having to conceal their identity.

Majdoline Alan, for example, produced a report on government failures to implement the Jordanian Freedom of Information Law, published in Al Arab Al Yawm in 2010 \(^{121}\). All she had to do was submit FoI requests to the relevant government offices and see whether the procedure was completed as stipulated by law – that is, whether the request was accepted and processed by the deadline imposed by the law and the form and content of the response. She then submitted a complaint to the Information Office, and brought a lawsuit against the Land and Surveys Bureau for failing to respond to a request for information on the sail of government land. By carefully documenting every stage of the process, she was able to demonstrate that the law suffered from loopholes and was not being enforced.

The team behind a 2014 investigation into misleading adverts that tricked girls into working in prostitution \(^{122}\) wanted to find out how adverts of this kind were finding their way into respectable newspapers, and how much effort newspapers put into verifying advertising submissions. They thus submitted misleading and vague adverts offering work for girls to two national newspapers. The newspapers did not request any proof of

---

\(^{120}\) Article 198, Jordanian Penal Code.

\(^{121}\) "Hashashat Qanun al-Husul ala'l-Maalum wa'stihtar al-Hukuma fi'l-Ta'amul ma'ahu\', see: https://arij.net/report/61/60

personal or organisational identity in order to confirm the veracity of the adverts. After the publication of the story, the government introduced legislation obliging newspapers to run checks on advertisers.

You might reasonably ask what the difference is between personal experience and disguise. In the latter case, a journalist changes their identity. They go into a place that would be difficult to enter honestly under false pretences, because without doing so they would be unable to prove their claims, and because if they were discovered, they would not get the information they were looking for. We will discuss disguise in more detail later. Personal experience, meanwhile, does not involve a change of identity. The journalist goes in like any other normal person, exercising their right to do so. Their identity being revealed would have no effect on the operation. Nor would it put them in any danger. In this case they are a service user or customer like any other. Secret operations are more complicated and subject to more conditions.

You should always think carefully before using personal experience and make sure that it is going to be useful and add value to the investigation. It should contribute to uncovering the truth and proving the hypothesis.

When gathering information through personal experience:

- Do not conceal your identity. If asked, you should answer honestly. But you should not volunteer this information without being asked, as it may skew the results.
- Do engage with the system as a normal citizen – as a normal service user or customer – in an entirely legal way, in order to find out how it works and identify problems.
- Do repeat the experience multiple times in order to prove that the problem is systemic and cannot be attributed to bad apples.
- Do conduct in-depth, careful research, in which you familiarise yourself with the relevant regulations and procedures before engaging with them.
- Do be careful to engage with the process like any other person.
- Do be careful not to attract attention.
- Do document everything that you do and everything that takes place. Ask for and hold onto receipts, cards and documents, take photos and record films, or write everything down in detail as soon as you finish.

123 Inas Abu Youssef, Dalil al-Sahafa al-Istiqsā'iyya min Ajl al-Tanmiya, Friedrich-Ebert-Stiftung, 2016, p. 68.
Lab analysis

Journalists use lab analysis to confirm that violations have taken place that cannot be proven by other methods. Lab analysis constitutes very solid evidence, especially if it is produced by a neutral, specialised, recognised party. Although it is costly and time-consuming and requires concentration and precision, it can be exactly what an investigation needs to make it watertight.

Al Jazeera used lab analysis in its famous investigation into the death of Yasser Arafat, in which analysis conducted by a Swiss laboratory uncovered high levels of polonium – a radioactive poison – in the former PLO leader’s belongings. Arafat’s remains were subsequently disinterred and samples taken for testing in France, Russia and Switzerland.

Lab testing is used to investigate deaths, attempted murders and sexual assaults. It can also be used when investigating food safety, water quality, agricultural practices and consumer protection issues, when you need to establish the extent to which roads, power grids or children’s toys (for example) meet industry standards.

Lab testing requires careful and professional study. In its aforementioned investigation into Arafat’s death, the investigation team were helped by the family of the deceased, who had held onto various of his belongings and were able to supply hair and urine samples from his clothes. If journalists had not been able to convince Arafat’s widow Soha to participate, the investigation could not have gone ahead.

A journalist who wants to produce an investigation drawing on lab analysis will need to familiarise themselves with the nature of the analysis required and the types of measurements that it is likely to produce. It is never a bad idea to consult experts on these sorts of questions. Lab analysis also requires a precise and solid methodology in order to rule out any doubt in the results and their credibility. You should always stick to highly respected labs that enjoy technical and scientific accreditation.

Lab analysis results alone do not constitute an investigation. You will also need to establish the background and the context, as well as working out what they mean from a scientific perspective and what effect they have on the victims. You will also need to work out how the results of the analysis are connected to the victims and to the event.

In Al Jazeera’s investigation we had to begin with Arafat’s DNA, making sure that it matched with the hair we found in his hat and the urine samples.
we took from his underwear. We then had to look for poisonous chemicals, and then biological and ultimately radioactive material in order to get results. This was a long and costly process, but it was worth it.

Investigations looking into the safety of food, medicine, water etc require mechanical study. This begins with taking samples correctly. You might want to seek the help of a technical expert in taking the samples. If so, you can record the process on video. You should also record the payment as well as the process of taking samples to the laboratory and handing them over. You will also need to explain the results to the public simply and straightforwardly, emphasising why the results are important for them.

The investigation may require testing multiple samples of the same kind over an extended period of time in order to demonstrate that contamination, for example, is not an isolated case but part of a systematic and ongoing problem. An example of this kind of investigation is provided by journalists at the Jordanian magazine 7iber, who discovered that Jordanians were unwittingly buying genetically modified wheat from traders who were circumventing the law.\(^{125}\)

\(^{125}\) “Tahqiq al-Durra al-Mu’addala Jiniyyan”, see: https://arij.net/corn/
Technical expertise

In many investigations a journalist will not be able to produce convincing proof on their own because of the technical nature of the issue. In this case you will have no option but to turn to an expert.

If you are investigating, for example, the forging of official documents, diplomas or signatures, then you will have to seek the help of a technical expert who can help you analyse and compare them in order to work out whether they have been forged or not. Technical expertise is also useful when working out property pricing or identifying ill-gotten wealth or financial corruption. In this case you might want to take an assessor recognised by the courts or by government bodies to the property and ask them to write an expert report. You should then get another two independent experts to do the same thing and compare the results, so as to ensure that they are neutral and independent.

Expert assistants can also be of use in working out whether infrastructure or buildings meet technical specifications – the thickness and height of walls, for example, or the external shape of a building.

You should always choose the best experts – the ones used by the courts or other official bodies – and make sure that they are credible. When they finish their work, they should write a full report on what they have seen and, if possible, sign and stamp it. A report of this kind can serve as proof in court. If the investigation is going to be broadcast on TV, you should also interview the expert on camera.

Al Jazeera’s Extrajudicial Execution report 126 showed that nine prominent Muslim Brotherhood leaders who died in a flat in 6 October City (Cairo, Egypt) – who the Interior Ministry claimed had been shot during a firefight with the security forces – had actually been executed. The investigation found that there had been no such firefight, and that the nine victims had been shot deliberately at point blank range after being taken into custody.

Proving that no firefight had taken place and that the men had been killed deliberately required forensic expertise. Victims’ entry and exit wounds were examined, allowing experts to establish the range at which they had been shot as well as other details: if an entry wound was on the dead man’s back, for example, then that meant that he could not have been attacking the security forces – who were supposedly firing up from the ground at a flat on a higher floor.

126 Extrajudicial Execution, see: https://www.youtube.com/watch?v=2qkID_ZQdUk
The team behind the investigation thus made use of a group of independent forensic pathologists including Tasneem Koroud, head of forensic pathology at Istanbul University, the Iraqi pathologist Abdul Nasser Kilani, and the security expert Mazen Al Samarrai. These experts were able to totally disprove the security forces’ story using scientific and technical evidence, demonstrating that one of the victims was leaning against a door facing away from his assailants (rather than facing towards them and resting the gun on the door as he would have been if he was attacking).

Just as with lab analysis, technical expertise alone does not produce an investigation. It is part of the process of proof, and must be supported with context, background, source testimony, and, if possible, documentary evidence.
Going undercover

In investigative journalism, going undercover means working secretly without revealing yourself as a journalist. This is a long tradition in journalism: as early as 1887 Elizabeth Cochrane took on an assumed name and pretended to be mentally ill in order to spend ten days in a women’s sanatorium in New York (allowing her to uncover the abuse of patients there). Disguise has been a key part of the arsenal of American investigative journalism ever since. In Europe, Günther Wallraff disguised himself as a factory worker in order to expose the terrible conditions experienced by migrant labourers in Germany. In the Arab world, Hanan Khandagji disguised herself as a trainee in a Jordanian care home for the disabled as part of a joint BBC-ARIJ investigation into the poor treatment of children in these homes. This investigation resulted in royal intervention, with the formation of a special high-level committee to deal with the problem.

In 2012, Mus’ab Al Shawakbeh disguised himself as a secondary school student, registered for private study and took his exams with the other students. He was able to show that the answers to the most important Jordanian national exam were being leaked systematically and that a black market existed for the purchase of questions and answers.

Muhammad Abulghit created fake social media accounts for people looking to buy weapons in Yemen, allowing him to trace the final users of those weapons. His investigation for Deutsche Welle revealed a steady illegal flow of Saudi and Emirati-bought western arms into the hands of groups fighting in Yemen.

None of these examples involved entrapping those involved in the investigation by tricking, bribing or threatening them into making mistakes they would not have made otherwise. If they had, it would compromise the entire investigation. The point is for the journalist to show, precisely and objectively, the existence of a serious and systematic issue.

Although there is a very thin line between going undercover and entrapment, journalism is not about setting people up to fail. By setting up an ambush you are indirectly encouraging them to make a mistake – a mistake that they would not have made if not for the ambush.

Let’s say you are preparing a report on bribes in a government office and, having disguised yourself as

129 “Khalf Jidran al-Samt”, see: https://www.youtube.com/watch?v=SzVgAitXWdl
131 “al-Mustakhdim al-Akhir”, see: https://www.dw.com/ar/وثائقي-المستخدم-الأخير/av46513692-
an applicant, offer a clerk who earns 200 dollars a month a sum of 1,000 dollars to process something small. The clerk takes the money, and you secretly film the exchange – despite the possibility that this may be the first time in their life that they have ever taken a bribe. This is a trap: you have used their humble financial means to incite them to corruption by offering them a sum you know they will almost certainly not be able to resist 133.

Going undercover should be a last resort used only after all other methods have failed you (and you have documented the failure). Undercover work is open to numerous criticisms: it is incompatible with the values of transparency, honesty and protection of the human right to privacy and to choose whether to appear in the media. You should always make it clear to the audience why you have chosen this tool, making sure to always be entirely truthful. There are exceptions to this rule – like telling the truth once you have already established it 134 – but you should always be transparent, especially when the facts are controversial or likely to have far-reaching effects 135.

You should never go undercover on a whim or to excite the audience or give them the impression that you are exposing something big. It should be used only under very specific conditions, in ways that are legal, and ethical and do not risk the professional safety of you and your team. Some investigations are risk-

---

133 Ibid, p. 5.
135 Anas, ibid, p. 11.
ier than others, and sometimes may even put your life in danger. In these cases you can go undercover, but only after thinking about it carefully and making your reasons for doing so clear.

When going undercover, you should bear the following points in mind:

• The information you hope to acquire should be of great importance to the public and serve the public interest. You should weigh up the costs against the benefit to the public – exposing major breaches of law, for example, or systematic mistakes. Going undercover should be used to put an end to ill-treatment, abuse of power and widespread corruption, helping secure justice for the weak and the powerless, guarantee equality of opportunity and the rule of law, and ensure respect for human rights.

• Going undercover should be a final resort to get hold of information. Before turning to undercover work you should have exhausted all of your other options, making sure to document this process carefully.

• Document all your attempts to acquire information by professional and legitimate means. This will play in your favour if you face legal action, and will also help you make your case to your editor, who will have to sign off on you going undercover.

• Do not pretend to have any official position, whether civilian or military, or wear any official uniform that you do not have the right to wear. Impersonating an official is a crime in Arab countries. While investigating a hospital, for example, you cannot impersonate a doctor – but you can pretend to be a patient or accompanying a patient, or a normal visitor.

In one investigation into the exploitation of patients by doctors and hospitals in the private medical sector in Jordan, the journalist pretended to be a taxi driver. This is not illegal, because a taxi driver is not a public official.

• Do not entrap people. Consider your approach carefully, objectively and realistically. Make sure that you are not setting your target up to fail by offering them money or power or by threatening or coercing them.

• Always get your editor’s approval. Make your reasons clear. Editors should consider all aspects of the case carefully before agreeing.

• Always have a back-up plan in place in case you or your team are arrested or put at risk. In this case you should contact the emergency team immediately. You should not lie about your identity – it is safest at this point to be honest. This saved Yosri Fouda after he tried to cross

---

136 Školkay, ibid, p. 10.
137 Article 202 of the Jordanian Penal Code (1960/16). Impersonating an official is also a crime according to Articles 391 and 392 of the Lebanese Penal Code (as amended) and Articles 159-155 of the Egyptian Penal Code. The same applies in Palestine, Syria and Iraq.
138 “Asirra Sawda”, see: http://tinyurl.com/y6ey34w9
from Syria into Iraq illegally after the US invasion and was caught by the Syrian security forces 139.

- When preparing to go undercover, consult a lawyer specialised in media and publication cases and establish any legal problems that might arise after publication. The relevant law varies from country to country. With the help of the lawyer, work out what the damages are likely to be in the event of legal action, and how you can make sure you have the best possible defence 140.

- When producing the story, always make it clear to the public that you went undercover. Be transparent and honest and explain your decision to do so.

- Always give the person or organisation affected by the investigation the chance to respond so that the investigation is fair and just. This may require you to put in place safety precautions or give serious thought to what the best way of doing this is.

139 Fouda, ibid.
140 Anas, ibid, p. 12.
Hidden cameras and recording devices

Using hidden cameras and recording devices is often linked with going undercover, but it is possible to plant such devices without ever disguising your identity. You could also have a third party record what happens, without any intervention on your part. In all cases there are conditions that must be met before recording someone without their knowledge for these recordings to be used as evidence.

In a 2019 BBC Arabic investigation that exposed the illegal buying and selling of domestic servants over apps available in the Google and Apple Stores, two journalists used a hidden camera to record their conversations with 57 app users who wanted to buy maids. They also recorded visits to more than ten people who were offering maids for sale 141.

An Al Jazeera investigation likewise used a hidden camera to document the sale of Caribbean diplomatic passports to wealthy figures and criminals in exchange for bribes, helping the ruling class stay in power and fund their electoral campaigns 142.

In both these reports, journalists had no way of securing solid proof of their hypotheses other than secretly filming activity that on many occasions was illegal. This allowed them to demonstrate the presence of a clear and systematic phenomenon, rather than isolated cases. Using hidden cameras was the last resort after all other approaches had failed.

The use of hidden recording equipment raises the same issues of honesty and transparency that going undercover does. The point is to weigh up the damage caused to individuals or organisations against the benefit to the publish interest.

To use a hidden camera, you will need training and skill, as well as a daring, professional team that works well together and can be discreet. You will need to make sure that you are maintaining professional ethics and that you are not putting sources in danger.

In the investigation into Jordanian care homes mentioned above, journalists blurred the image of one care home worker – despite the fact that she had beaten children, and despite leaving other workers entirely visible. This is because this woman wore hijab outside the care home, but removed it

141 Khadimat li’l-Bay’. See: https://www.bbc.com/arabic/middleeast50127606-
142 Dibilumasiyya li’l-Bay’. See: https://www.youtube.com/watch?v=mH8PksRjn4w
when inside because no men were present. As a result, journalists decided to protect her privacy and her interests and take religious concerns into account.
When using hidden cameras or recording equipment, you should bear the following points in mind:

• The harm that would be caused by allowing the information recorded to remain under wraps should be greater than the harm caused by using hidden cameras.

• You should have exhausted all other means of getting access to the information. If you are investigating a care home, for example – where CCTV is typically available – you should first try to get hold of the CCTV footage through a Freedom of Information request, personal contacts, sources inside the home or by some other professional and legal means. If the wrongdoing has been recorded and has not been deleted, then this footage is of far more value than a recording acquired using hidden cameras.

• The recording should expose major and systematic failings or serious errors by decisionmakers that will allow human rights violations against powerless or marginalized people to continue or undermine the rule of law.

• You should not record in homes or other private spaces protected by law. Arab countries’ constitutions provide for the sanctity of the home as well as the right to a private life. Of course, public figures are different from private persons. You should always weigh up the effect on people’s lives and the effect on their function in the public sphere.

• You and your manager should think carefully about whether to use a hidden camera. What are your reasons? Is this approach justifiable? Is it professional and ethical? The editor-in-chief should sign off on any use of hidden recording equipment.

• You should consult a specialized media and publication lawyer before using hidden cameras in order to establish the legal ramifications of using hidden recording equipment and what you are and are not allowed to do. This is particularly important given the speed of development in this area of law and differences between countries.

• Put in place an emergency plan in case you are arrested or caught.

• Always present the people or institutions who will be affected by the recording with the footage and provide them with a right of reply so long as this is possible and safe. Many journalists may find this a difficult task, but doing so can be a lifesaver if you are sued.

In the Girl Wanted investigation described above, one of the people secretly recorded in the course of the investigation sued the Al Balad channel for slander. The court ruled that the
channel was not responsible and that it had committed no crime punishable by law. It found that the person in question had been given the right of reply and had raised no objection to the video being published, including the parts filmed secretly. It also found that the investigation’s purpose had been to protect the public interest, which in law takes primacy over the interests of individuals.  

146 Decision 2017/3223 of the Amman First Instance Criminal Court.
Surveys

Surveys and questionnaires may be used more in academic studies than in investigative journalism, but this does not rule them out as an investigative tool. In some cases they are crucial because of the precise quantitative data that they provide. Survey results can be very useful to society, the public and decisionmakers looking for solutions to problems and ways to bring about change.

Research is at the heart of a journalist’s work. A survey is a kind of research that involves collecting and collating primary data from a particular community in accordance with a unified methodology, building on a particular hypothesis and set of questions, before analysing this data statistically using established scientific techniques.

Since investigative journalism is a collaborative team activity, a team of journalists and researchers can be used to help a good investigative journalist – which in this case means an excellent researcher – to put together a survey methodology, gather data and analyse them using statistical software like SPSS.

In Bangladesh, journalists sought the help of a research company in order to develop a survey methodology that they hoped would allow them to demonstrate corruption in the health sector. Although they were initially sceptical about mixing investigative journalism and survey techniques, the methodology they came up with involved conducting in-depth interviews and gathering pictures and documents, just like any other investigation. After journalists asked respondents particular questions dictated by the methodology, the data collected was entered into a spreadsheet for analysis. Rather than interviewing anyone willing, the sample was selected randomly, with 400 out of the 7500 cases making up the target population.

The survey ultimately meant that the team was able to expose massive corruption in a social health program dedicated to poor mothers, with the data showing that 96% of service users were receiving support they were not entitled to under the program criteria. They found that government officials were selecting beneficiaries either because of personal connections or because they had been given bribes.

This investigation lasted twelve months and involved eighteen journalists. It produced results that were almost indisputable, forcing the local authorities to take action to reform the program.

In 2012, the Jordanian newspaper Al Ghad published an investigation exposing a vast black market in final year university dissertations run from offices overseen by university profes-

147 Miraj Chowdhury, “How They Did It: Making a Story Too Big to Ignore by Using Surveys”, https://gijn.org/14/05/2019/making-a-story-too-big-to-ignore-by-using-surveys/

148 Ibid.

149 Ibid.
sors. In order to substantiate the investigation, the newspaper conducted a peer-reviewed survey that found that more than 60% of the students responding had submitted dissertations written by someone else.

In both these investigations journalists successfully combined surveys with more conventional investigative techniques. In the second, one journalist went undercover as a student and bought a dissertation from a university professor. Combining techniques bolsters an investigation and makes it more convincing and credible.

Gathering testimony

Some journalists reach out directly to the public for information. In a Boston Globe investigation that revealed sexual harassment in Catholic churches in Boston, a team of journalists followed up the publication of their main investigation by calling for input from their readership and the broader public, in cooperation with local radio stations. This meant that many victims were able to provide further information and documentary evidence to the paper, allowing them to keep the investigation alive for as long as possible.

Thanks to rapid technological development, gathering data in this way is now safer and easier than ever – but it is also more dangerous. Data provided voluntarily by the public needs a great deal of work to verify and corroborate before it is incorporated into the investigation.

Bellingcat was able to use some sixty sources found using social media to track down a suspect who had fled the Dutch police, identifying the locations of photos he had shared on Instagram. Thanks to these efforts, the police were able to find and arrest the suspect and charge him with two murders and the theft of 175,000 euros.

Gathering testimony like this requires a solid relationship with the audience based on trust rooted in the journalist’s independence, professionalism and desire to serve the public interest.

The website Help Me Investigate has also used this technique to produce some very important investigations. We will discuss these investigations in more detail in the next chapter.

---

151 Bellingcat is an independent group of researchers, investigators and citizen journalists that use open source material and social media to produce independent reporting. https://www.bellingcat.com/about/

152 Henk Ess, "A Red Camaro, an Orange Garbage Can and White Magnolias: Crowdsourcing a Convict on Instagram: https://gijn.org/15/05/2019/a-red-camaro-an-orange-garbage-can-and-white-magnolias-crowdsourcing-a-convict-on-instagram/

153 Omar Mustafa, “al-Sahafa al-Istiqsa’iyya fi ’Asr al-Soshiyal Mediya”, AJMI, see: https://institute.aljazeera.net/ar/ajr/article/304
Chapter 8: Investigative journalism in the digital age

Data-driven journalism

How can an investigative journalist benefit from data-driven journalism?

One definition of investigative journalism – as given in UNESCO’s investigative journalism manual – says that it is about exposing the truth about public interest issues, issues whose details are kept under wraps (deliberately or otherwise) by the people involved.

Using this definition, data and the stories extracted from it can constitute a central pillar of investigative journalism. Data constitutes the ‘raw material’ that a journalist uses to cast light into darkness, clear up ambiguities and solve apparent contradictions in their story.

Investigative journalism and data-driven journalism have a big overlap. They both engage in in-depth research and sift through information to exclude any impurities (fake news or misleading data).

Data thus plays an important role in the various stages of an investigation, including how it is presented within the story. You should state the importance of the data clearly within your report. You should also be careful to distinguish data from facts: data does not necessarily mean fact. There may be biases in the way data is collected, and you should always be careful to test your data and establish how it is linked to the incident you are investigating.

When you first start working on an investigation, you should look up the data already available – whether official or unofficial – in order to answer as many of your questions as possible before moving on to posing questions whose answers are unknown and coming up with hypotheses and possibilities.

A story begins with looking up data. You will need to have a way of collecting and presenting data, which is exactly what data-driven journalism provides. Data will help make your story measurable. It will allow you to render your ‘hows’ as measurable ‘how much’s, allowing the reader to more clearly see the scope of the problem alongside the added value of any new information that you obtain from private sources of data or from data not initially included.
Let’s take a look at the different stages involved in data-driven journalism:

**Stage 1: Looking for sources**

First of all, review the available open source data relevant to the investigation, making sure – before doing anything else – that you are familiar with the frequency with which it is made available. You should also review any private, verifiable sources of data that you or your employer might gain access to.

Open source data includes reports from the World Bank, the World Health Organisation (WHO) and the Food and Agriculture Organisation (FAO), annual government statistical reports, and social media websites.

Tools like Gapminder or Google Public Data Explorer allow you to easily collate this data.

Journalists interested in environmental investigations can access data from relevant local and international organisations through sites like that of the US Geological Survey. Data on medical testing is provided by clinicaltrials.gov. The FIFA website may be of interest to journalists investigating sport.
Stage 2: Handling the data

There are several database programs that may be of use in handling data:

- Microsoft Excel (spreadsheets)
- OpenRefine (data refining)
- Fusion Tables (verification)
- MySQL (databases)
- SOLR and Access (databases)

When refining large quantities of data, you can analyse and compare using a particular chronological or geographical filter. This can give your story new dimensions that may not have been immediately clear. If you go deep into the data, you may even find new stories.

There are several new techniques from data-driven journalism that may be of assistance in investigations:

- Analysing data taken from the social media profiles of perpetrators or influential people. This can help you tease out lines of investigation or access information from non-traditional sources (Donald Trump’s tweets about a particular incident, for example, pre-dating his presidency by many years).
- Analysing audience reactions to prominent public issues.
- Accessing historical data relevant to your investigation. For example, working out the dates on which something happened can provide you with new ways of understanding present problems (the date of a famine in a particular country with chronic water supply problems...)
- Working out where something happened (a military operation in a particular country, for example) or a photo or video clip was taken. You can use data that has been deleted using archiving tools like Internet Archive or the Wayback Machine.
Examples:

In 2011 the Guardian was able to establish who was responsible for looting during rioting that had taken place across the UK in August 2011. The Reading the Riots project, conducted in cooperation with LSE, was heavily data-driven.\(^{154}\)

The Panama Papers project drew on more than 11.5 million documents making up 2.6 terabytes of data dating from 1977 to 2015 and concerning about 214,000 corporate entities.\(^{155}\) The International Consortium of Investigative Journalists (ICIJ) incorporated the data into a database that makes sifting through it and searching it much easier.

The Paradise Papers project, which likewise incorporates about 13.4 million documents obtained by the Suddeutsche Zeitung and showing how the world’s super-rich invest their money (ICIJ).

\(^{154}\) Reading the Riots, https://eprints.lse.ac.uk/1/46297/Reading20%the20%riots(published).pdf

\(^{155}\) https://offshoreleaks.icij.org/

\(^{156}\) Ibid.
Stage 3: Analysis

After collating and refining the data, there are several methods you can use to analyse the data:

- Descriptive analysis: answers the questions “what?”, “who?”, “how”, “where” and “when?”
- Diagnostic analysis: answers the question “why?”
- Advanced analysis making predictions about future scenarios.

A successful example is provided by Noun Post’s report Golden Generals 157.

Stage 4: Preparing a data-driven investigation

When putting together your story, there are various tools you can use to present data in a way that is easier to understand:

- Charts and graphs
- Infographics
- Interactive maps

Tools that may be of interest include Tableau Public 158 and Many Eyes 159, which will allow you to present data visually in a range of different ways, and Geocommons 160 and Google Fusion Tables 161, which will allow you to produce maps using coordinates.

The AJMI has produced a guidebook to data-driven journalism that provides detailed instructions on how to go about doing this 162.

Saving data and documents

There are various programs you can use to store data:

**Google Drive:** Google Drive is associated with your personal email. It can be used as a digital memory folder allowing you to save data. You can also work on it directly, whether through the Google Docs interface or through Google Sheet (Excel).

**Xperia Companion:** Download this program to produce backup copies of your data. It allows you to transfer files easily from one device to another and store it safely.

**Dropbox:** Dropbox allows you to keep your files safe in a cloud folder. You can then access them wherever you are in the world.

---

157 Jiniral al-Dhahab. See: http://www.noonpost.com/tag/22582
159 https://boostlabs.com/ibms-many-eyes-online-data-visualization-tool/
160 http://geocommons.com/
161 https://developers.google.com/apps-script/advanced/fusion-tables
Verifying open source material

Traditional methods may seem like a better bet when trying to expose difficult facts, but the development of advanced techniques for gathering news from open source and user-generated content is playing an ever-bigger role in investigative journalism.

In 2018, BBC 163 conducted an investigation in Cameroon which proved that contrary to what many had believed, government forces had been committing war crimes against civilians.

The investigation took months of research and drew on a video clip taken with a mobile phone camera and published on social media showing armed men assaulting and then executing two women and two children.

The video clip was verified and analysed scientifically. The armed men, the place where the incident took place and the type and source of the weapons used were all identified.

By comparing Google Maps with the crime scene, the team were able to prove that not Boko Haram but government forces had carried out the executions, and that they had taken place not in Mali but in Cameroon. We will look at some of the details of the incident, and the digital tools used to analyse it, in more detail later on.

In Sudan, BBC 164 journalists were able to collect and review more than 300 videos shot by activists on the ground, allowing them to reconstruct a scene showing that the Rapid Response Forces had fired live ammunition on protesters in July 2019.

In both of these cases, journalists were able to dispense with traditional methods and with teams on the ground while conducting their investigations. Thousands of videos shared on social media websites, carefully verified, were the deciding factor in the investigation.

Fact-checking began with the investigation of fabricated photos or de-contextualized video clips. But these techniques have got better and their use more sophisticated, creating a space for a new type of open source journalism. These modern techniques can be combined with traditional techniques to produce high-quality investigations.

In the final section of this handbook, we will take a look at the most important digital tools that can help

---

163 Cameroon: Anatomy of a Killing - Documentary - BBC Africa Eye: https://www.youtube.com/watch?v=XbnLkc6r3yc

164 Sudan’s Livestream Massacre - Documentary - BBC Africa Eye: https://www.youtube.com/watch?v=dR56gxm4kHA
you to connect with people, access company data, follow global developments, obtain and verify video clips, use maps in investigations and cull data from social media websites. We will also look at a few tools that will help you guarantee the security of your data and your communications. Many of these tools are discussed in more detail in AJMI’s fake news handbook 165, as well as the Verification Handbook 166.

165 Sam Dubberley, Montaser Marai, and Diana Larrea, Finding the Truth Amongst the Fakes (Doha, Qatar: Al Jazeera Media Institute, 2017).

Digital tools for investigative journalists

Researching people online

**PiPl: https://pipl.com**

A search engine for people. This site’s easily searchable database contains information on more than 3 billion people: just entering the name and website, if available, will get you their data. PiPl provides you with information about the person, data about their website, other connected people and plenty of other information. The database was built by culling and organising data from the internet in order to encompass as many people as possible.

**PeoplefindThor: https://www.peoplefindthor.dk/**

It is easy today to conduct more sophisticated searches of Facebook profiles using the various filters available. This tool makes it even easier to identify, for example, two people who lived in the same city at the same time, or worked together in the same company. What makes it stand out is that it allows you to establish connections between people, making it easier to get hold of new information.
Researching companies online

OpenCorporates: https://opencorporates.com/

Finding data on corporations and their senior employees can be difficult and take a lot of time, particularly with big corporations with multiple offices around the world. This website makes looking for corporate data much easier.

The website’s database includes information about more than 165 million companies and more than 200 million senior employees. You can conduct both general searches and more specific searches focusing on particular countries. Because the website is based on searches with specific filters, it is easier to establish connections between companies or work out which companies are run by the same CEO.
Investigative Dashboard: https://investigativedashboard.org

If you need more specialized help in an investigation, this platform should be your first destination. Alongside its massive database, which contains millions of records of previous investigations, links and public sources, it also makes it easy to contact experts in various fields from around the world. The platform is free and maintained by the Organised Crime and Corruption Reporting Project (OCCRP).

Monitoring services

HRL Lookups: https://www.hlr-lookups.com

This website makes it easier to find mobile phone information. It consists of a global registry of all mobile phones registered with service providers. This network was set up so that service operators could easily work out what network a particular phone was on in order to reroute calls or mobiles, but it is also possible to use it to get access to data about particular mobile phones: the name of the network, whether the number has been moved to a new...
network, whether it uses roaming and other data. The website can also monitor a number of mobile phones at once, and allows you to set an alert if the phone moves from one country to another or if the network is changed. This can prove crucial to an investigation.

**Flightradar24:**
https://www.flightradar24.com

This is one of a number of websites that allow you to monitor flight movements. It uses airport data and data provided by a network of volunteers to show the movement of different flights in real time. You can use this service to get information about flights that have left or arrived at a particular airport, follow the flight path, and get access to planes’ registration information and the companies they belong to, as well as other information.
**traffic.com**

MarineTraffic is the maritime counterpart to FlightRadar24. You can use it to follow the movement of ships around the world, in real time. You can also get up-to-date information about the condition of ships, their location, their heading, the ports they set off from, and details about the type and purpose of different ships. The website provides detailed information for free, and subscribers can get access to even more sophisticated functions.

---

**track-trace:**
https://www.track-trace.com/

Following planes and ships is often very useful, but being able to follow individual shipping containers can provide an even clearer picture. This website allows you to trace the movement of shipping containers around the world by using an ID number carried (in principle) by each container. This will tell you the owner, the destination, and where it is going as well as other information.
Verification tools (video)

YouTube Video Finder
http://youtube.github.io/geo-search-tool/search.html

It may sometimes be difficult to get hold of a video clip from a particular place or time. This tool makes the process easier. You can search for keywords and narrow your search to a particular geographical area or timespan, allowing you to find relevant videos easily.

Amnesty International YouTube Data Viewer:
https://citizenevidence.amnestyusa.org/

The difficulty of verifying potentially fabricated video clips is a reality we all face. Many such videos are produced by splicing together different clips into a single video, with the publishers claiming that it is the original video. It is sometimes difficult to distinguish these videos from real videos. This tool, provided by Amnesty International, makes the process easier: all you need to do is put in the YouTube link. The tool will then cull as much data as possible about the video – like the original production date. More importantly, it will also provide a series of thumbnails that can be entered into Google reverse image search to identify potential original videos.
Social media platforms

**Twlets: http://www.twlets.com**

This simple app allows you to download Twitter data. By simply adding it to your Chrome browser, you will be able to archive any user’s tweets with the click of a button. The free version only allows you to download 3,200 tweets or 50,000 followers, but there are also paid-for options if you want to know more. The app also makes it easy to download other kinds of data from Twitter, from friends to images and lists. All of this data is saved as a spreadsheet or CSV file, making it easier to analyse.
IntelTechniques:
https://inteltechniques.com

A uniquely versatile website for journalists – not a single tool, but several tools used for rapid and effective searches on the internet. The website makes it possible for you to search dozens of sources simultaneously. Rather than searching Facebook, Twitter and LinkedIn separately, you can search them all simultaneously. The site allows you to narrow the scope of a search using various filters: name, location, contact details, etc. It also conducts in-depth searches across the internet, allowing you to get access to sites that a normal search would not have provided.

Maps and satellites

How Many People:

This service has no official name, but it is very useful if you want to find out specific information about a particular area of the world – the number of people who live there, the area of a particular area or other specific information. It consists of a map populated with demographic data. By drawing lines on the map you can get an estimated population of an area as well as its exact size in square kilometres.
MapChecking:
https://www.mapchecking.com

This tool allows you to produce specially drawn maps in order to estimate the number of people that might fit in a particular area. This is very useful if you need to establish, for example, how many people might have taken part in a demonstration or celebration. Although the tool is in French, it is easy to use: using the cursor, you simply delineate the area you are interested in. The sidebar will then tell you how many square kilometres the area is and the approximate number of people that it could hold. You can thus work out how many people are likely to have participated in a particular event.

Terraserver:
https://www.terraserver.com

Satellite photography is occupying an increasingly important place in digital investigative journalism. With the growing number of satellites providing high-quality images, it is easier than ever to track the progress of major events on earth. Terraserver is one of the best tools available for journalists and other interested parties. The service is not free, but the satellite imagery is very high quality and can make a big difference to your journalism.
Privacy and cybersecurity

Given how many ways there are of getting information on others, journalists should be careful to protect themselves from any possible threats or breaches. The following are a few tools that it is worth using to protect your privacy and your data while browsing the internet.

**OnionShare:**
https://onionshare.org

A simple tool for sending data over Tor, a secure network that anonymizes communication. After downloading and installing the tool, you will be able to use it to send important information that has to be kept secret to other people by providing them with a secure link. This link will allow them to download the information using the Tor browser. When the download is finished the link becomes inactive, preventing anyone else from using it.
LastPass:
https://www.lastpass.com

Password management is one of the most important ways you can protect your information on the internet. By using this tool, you can produce passwords that will be very difficult to crack and you will not need to memorise them all. LastPass saves all your passwords, meaning you need only one password to access all your accounts. There are many password management tools, so you might as well try out a few alternatives before deciding which is the best for you.

Signal:
https://signal.org

This is a secure instant messaging app you can use on your computer or mobile. Signal should be a central part of any news outlet’s communication strategy so that the messages exchanged with third parties cannot be hacked or seen by others. The app is easy to use, and is not meaningfully different from other instant messaging apps, but is much more secure.
Outline:
https://www.getoutline.org

Everyone knows – in theory at least – how crucial it is to use a VPN to keep your information secure, whether as an individual or as an organization. But many find it difficult to use these networks consistently. Outline is a VPN client provided by one of Google’s many subsidiaries. It makes it easier to set up a VPN in order to communicate with other journalists, sources or people helping you with your investigation securely. Outline can be used with cloud services like Digital Ocean, meaning that there is no need for a private server.

This chapter has provided a survey of some of the best software available to investigative journalists. But this list is not exhaustive. There are many other tools that may be more useful to one investigation or another.

To see a more detailed list of digital tools, which is regularly updated, you can visit Open Source Intelligence Framework (https://osintframework.com). You might also want to take a look at the Global Investigative Journalist Network page (https://helpdesk.gijn.org/)
Case study

In the BBC film Cameroon: Anatomy of a Killing, Aliaume Leroy and Ben Strick verified a video shared on social media in July 2018, which showed two women and two children being harassed and then shot by a group of armed men said to be Cameroonian soldiers.

Leroy and Strick used digital tools to confirm the place and time of the incident and those responsible for the killing. The picture below shows how they used Digital Globe, which provides precise digital coverage of the earth, to analyse the topography of the scene and match it with the backdrop of the video. This allowed them to show that it took place in north Cameroon.
They used the same technique to compare the buildings visible in the video with buildings in the area:

The team also used digital images that showed how features of the landscape had changed in order to establish the year that the events took place in and the exact timing. The results showed that it took place some time between 20 March and 5 April 2015:
While the Cameroonian authorities denied the claims on the grounds that the uniforms worn by the killers were not Cameroonian military gear, the investigation used Facebook to find pictures of Cameroonian soldiers wearing the same outfits as in the video.