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"This is the real face of Covid-19!": How Refused Knowledge Communities Entered the Pandemic Arena

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8.1 Introduction[1]

The Covid-19 pandemic was an unprecedented global health crisis which promoted a generalised process of knowledge production and storytelling, by both institutional experts and lay people, devoted to finding a way of preventing the virus spreading and understanding what was

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[1] The chapter has been conceived and discussed by all the three authors. In compliance with Italian academic folkways, Barbara Morsello, Federico Neresini and Maria Carmela Agodi acknowledge that the former wrote paragraphs 8.3 and 8.4, Federico Neresini wrote the paragraphs 8.2 and 8.5 and Maria Carmela Agodi wrote paragraphs 8.1 and 8.6.

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happening. Especially during the initial phase of great uncertainty, the health policies adopted by governments fostered public contestation, in which context the RKCs gained a prominent place on the public sphere. Using RKC jargon, these forms of public contestation were designed to uncover the 'real face of the Covid-19 pandemic', i.e. the weakness of the interpretations provided by the public institutions and science along with the potential for alternative explanations, and therefore of different policies to cope with the problematic situation created by the virus.

To increase our understanding of RKC engagement in the public controversy around the pandemic we performed digital ethnography (Hine, 2000; Hine, 2004; Marcus, 1995; Marres & Moats, 2015) during the first months of the Covid-19 outbreak in Italy, with the aim of analysing how the health emergency created the conditions for RKCs to act collectively to oppose the mainstream narratives and policy measures adopted by the public institutions and supported by scientific experts, as well as official media. The data gathered was organised into social world maps (Star, 1989; Star, 2010; Clarke, 2003; Clarke & Star, 2008) designed to analyse (1) the key-actors involved in the RKCs' social worlds and the contestation arena; (2) the relationship networks between key-actors and the evolutions in these; and thus (3) how both the composition of the networks and the connections between key-actors changed over time.

Observing the evolution of RKCs over time provided a valuable perspective with which to understand the mobilisation of refused knowledge within sense-making processes and its implications in reshaping the relationships between RKCs in the pandemic arena. In particular, it enabled us to analyse the pivotal role played by the heterogeneous actors who actively contributed both to facilitating alternative understandings of the pandemic between lay people not fully convinced by the prevailing interpretation and to spawning new social worlds in which diverse RKCs progressively coalesced in the pandemic arena.

These key actors can be grouped into three main categories: non-humans (the virus and the array of new objects the pandemic put in the forefront, such as, e.g., face masks and vaccines), the RKCs' experts, and those of their 'enemies'—namely science and public institutions—who they treated as 'impostors'. The objects which acquired new meanings within the pandemic context can be labelled 'pandemic objects', while 'impostors' (Woolgar et al., 2021) is the definition given by RKCs to

scientific experts, especially those considered part of the 'academic elite' which supported and validated the mainstream interpretation of Covid-19 as a global health risk for the entire population. From the RKCs' perspective these experts—scientists or scientific institutions—were to be considered *impostors* because they legitimised lockdowns and other anti-Covid measures interpreted as beneficial to pharmaceutical companies and/or a state strategy to increase its control over citizens.

In summary, this chapter examines how refused knowledge —i.e. the counter narratives employed by RKCs to dismantle the prevailing Covid-19 pandemic narrative— fostered favourable conditions for the emergence of new alliances between RKCs, leading to their collective engagement in contesting institutionalised health policies.

8.2 Dealing With Competing Narratives and Actors in the Public Covid-19 Pandemic Arena

Competing narratives regarding the outbreak of Covid-19 succeeded one another in the early stages of the emergency. During this period, the stringent policies implemented by the Italian government to contain the virus attracted frequent criticism, both in Italy and, at times, abroad (Viola, 2022).

Various actors including scientific experts, institutions and the mainstream media occupied the public scene but were not always effective in providing clear and convincing explanations of what was going on. At these uncertain early stages, but also throughout the whole Covid-19 pandemic, a key refrain repeated constantly by most institutional leaders was 'follow the science' (Pérez-González, 2020; Stevens, 2020), a claim which made science synonymous with truth, objectivity and evidence-based rationality. 'Follow the science' was thus the Covid-19 mantra (Safford et al., 2021), extensively used by institutional spokespersons and politicians (Crabu et al., 2021). However, an increasing number of people began to see all mainstream information circulated by public institutions and their experts as partisan (Desta & Mulgeta, 2020; Prasad, 2021). These people generally embraced a wide spectrum of refused

knowledge involving both 'doing their own research' (Attwell et al., 2018) on the web and forming relationships in their everyday lives with others who 'think like them'. This process led to a juxtaposition of pandemic discourses in which the science-based evidence and institutional experts were opposed to the so-called conspiracy theories and fake news (Bisiada, 2021). Social media played a pivotal role in polarising public discourse (Zollo et al., 2015) in 'quarantined society' (Aiello et al., 2021) by amplifying the divide between what was considered *refused knowledge* and *science*. Social media also played a fundamental role in organising dissent (Pavan & Felicetti, 2019) around the official interpretation of Covid-19 and counteracting anti-Covid norms by fostering the organisation of the public demonstrations that filled Italy's main squares in 2020 and 2021. These protests, however, were not only an expression of discontent regarding public policies but also an attempt to promote an alternative vision of the pandemic supported, shaped and circulated by RKCs. To increase our understanding of the ways various RKCs connected into new social worlds opposing science and institutions within the pandemic arena, we focused on the discursive practices employed in online interaction settings (from Facebook groups and pages to related blogs and YouTube channels—populated by the main Italian RKCs; see the Introduction to this volume).

In view of the pandemic's evolution in Italy, we organised our online ethnography, during the onset of the emergency in Italy into three main phases (Table 8.1).

The first phase (T1) was characterised by profound uncertainty within RKCs as the outbreak of the virus disrupted any possible interpretative framework, giving rise to concerns and doubts.

Table 8.1 Observation periods related to the outbreak of Covid-19 in RKCs in Italy

Phase	Selected period	Key event	How RKCs coped with pandemic
T1	26 January to 9 March 2020	Arrival of COVID-19	Uncertainty and isolation
T2	10 March to 4 April 2020	Total lockdown in Italy	Latent collective action
T3	5 April to 30 June 2020	Lighter lockdown in Italy	New relationships between RKCs and collective mobilisation

During total lockdown (T2) the public institutional explanations and health recommendations were seen as increasingly less convincing to the RKCs. Concurrently, this set the stage for the building of alternative knowledge and the defining of new action plans. Within these processes, some individuals gained credibility and were progressively recognised by the RKCs as authoritative experts. Moreover, a wide range of non-humans, including the virus and other pandemic-related objects such as face masks, drugs, epidemiological data and tests (hereafter *pandemic objects*) were reinterpreted by RKCs as enemies or allies. For instance, Covid-19 tests were seen by many RKCs as both an instrument of social control serving the interests of the state and the establishment and a necessary travel and work measure or to avoid lockdowns.

Thus, during the third phase (T3) some key-actors played a decisive role in promoting public action. This occurred when the identification of shared experts and adversaries by different RKCs created the conditions for public mobilisation. Consequently, the formerly isolated RKCs generated new social worlds capable of actively engaging in the public sphere to promote 'their truth'.

A consideration of these three phases was then the basis for an analysis of the way Covid-19 and the related pandemic objects opened up new contestation possibilities, with digital ethnography clearly showing that the RKCs dealt with this uncertainty by turning to their own experts as knowledge providers even if this knowledge was strongly refused by the scientific institutions and medical agencies and then scapegoated by the mainstream media. Significantly, pandemic objects were key-actors, especially during the first phase, becoming a matter of mutual concern for RKCs and fostering communications and alliances between them. This favoured the advent of the RKCs' experts as new epistemic resources with a view to making sense of the pandemic and organising RKC 'resistance' against institutional power supported by scientific experts. It was in the wake of this that scientific exponents became *impostors* for RKCs, i.e. common enemies embodying everything the RKCs were opposed to. Framing scientific experts as impostors, moreover, was part of the reciprocity process (see Chap. 1) by which RKCs legitimised their experts as the only sources of knowledge which could be trusted.

In phase two (T2), RKC experts and institutional spokespersons labelled as *impostors* began to play roles that can be analytically denominated 'boundary objects' (Star & Griesemer, 1989) as they were 'plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites' (ivi, p. 393). STS have underlined the importance of boundary objects during emergencies and crises (Tim et al., 2013), as a set of socio-material arrangements existing between social worlds and helping to facilitate communication between them (Bowker et al., 2015; Star & Griesemer, 1989). Once the opposition between RKCs' experts and impostors was established, the refused knowledge interpretation of the pandemic was strengthened and common ground between RKCs by which new social worlds challenged institutional authority was identified (T3). Furthermore, pandemic objects also played a pivotal role in this phase, embodying the narratives employed by the RKCs' experts and facilitating the interactions between different RKCs, thus catalysing dissent in new social worlds, at both national and local levels.

8.3   Pandemic Objects and Their Counter Narrative

During the Covid-19 pandemic many new—or newly framed—objects made their appearance in our everyday lives: masks, vaccines, antigenic and molecular tests and tracing apps, along with web platforms and social media to disseminate information.

The pandemic object discourses that circulated on social media in particular—a favourable vantage space on which to share experiential knowledge (Bory et al., 2021; Van Zoonen, 2012)—were fundamentally important in fostering the emergence of counter narratives regarding Covid-19. Memes, posts, images and instructions on the use of tests, e.g., were common tools employed by RKCs with a view to making sense of Covid-19. As de Saint et al. (2022) have shown, during the pandemic meme production and circulation increased exponentially and this was often associated with hyper-polarisation, online activism and the

distribution of huge amounts of contradictory information, some of which was rejected as fake news by institutional actors. By analysing the memes and posts employed by RKCs in shaping their Covid-19 pandemic narratives, e.g., it can be observed that face masks were seen right from the outset as symbols of the subjugating power of the institutions and thus occupied an important position within RKCs' sense-making processes (see Figs. 8.1 and 8.2).

For example, from the very outset of the pandemic face masks attracted the attention of the Pro-vaccine choice and Stop 5G RKCs as embodiments of social control. Face masks—considered to protect against contagion in the official view—were, for RKCs, symbols of the state's attack on freedom of speech, like a gag over people's mouths. For RKC followers, face masks thus weakened people rather than protecting them. This interpretation was shared by 5BLs and Alkaline Water RKC followers. This latter, moreover, depicted the use of face masks as a serious threat to public health, since people wearing masks breathe in their own carbon dioxide. Some RKCs' experts pointed out this danger for children in particular, thus creating common ground between Alkaline Water and Pro-vaccine choice RKCs always interested in children's health.

Another pandemic object that played a significant role was the contact-tracing app Immuni introduced by the Italian Government as a voluntary Covid-19 infection case tracking measure. The app used Bluetooth technology to alert users exposed to infected people, even if they were asymptomatic. During the lockdown (phase T2) in particular, whilst the app was presented as a possible way out of social confinement, it was reinterpreted by the RKCs' experts as key to a heated public personal data security debate. The RKCs' experts depicted the app—like the face mask—as a controlling strategy wielded by the government to obtain personal information on citizens. During T3, Immuni was thus a crucial issue in many public demonstrations across various RKCs. Hence, after the Immuni app was launched on 1 May 2020, a digital strike[2] promoted by Stop 5G was supported and widely disseminated by the Pro-vaccine choice movement, too, as this post shows:

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[2] The digital strike consisted of 24 hours of disconnection from all digital platforms.

Fig. 8.1 'The business of terror': face masks as symbols of how the financial profits of the Big Pharma is prioritized over people's health, editorial paper published on the Corvelva Association website. (Source: https://www.corvelva.it/en/speciale-corvelva/papers/pandemia-il-business-del-terrore.html)

Fig. 8.2 Face masks as symbols of social control. Reworking by the authors of a meme used on a Pro-vaccine choice RKC's Facebook page on 31 January 2020

> The government will impact on the freedoms and lives of every Italian through 5G, artificial intelligence, digitalisation and robots, undermining even inviolable constitutional rights. The Immuni app, digital schools, smart working, permanent and ubiquitous hyperconnection, the installation of at least one million new telephone antennas and the irradiation of all Italians with risky radio frequencies, non-ionising waves and possible carcinogens will have the same effect. … The best answer? Join the DISCONNECTION DAY, the European digital strike day promoted by the European and Italian Stop 5G Alliance. (23/04/2020 Transcription of a Stop 5G Community re-post on a Pro-vaccine choice Facebook page.)

The post reported above shows that the Immuni app was framed by RKCs as a tool serving the social control role embodied by other pandemic objects including face masks and soon became a shared Stop 5G and Pro-vaccine choice concern. Immuni effectively has been interpreted both as restrictions on people's freedoms and as a health danger: the Stop 5G RKC, in fact, considered Immuni dangerous because it implied

constant use of mobile phones and hence exposure to electromagnetic waves.

The alleged harmfulness of the app thus elicited new alliances between RKCs against the Italian government with supporters refusing to download the app and organising meetings with their experts about the risks associated with using it. Furthermore, the four RKCs also worked together to find ways of staying healthy in a more "natural" way and not getting vaccinated when the vaccine—i.e. the solution most favoured by public institutions as a way out of the pandemic—became available. In this context, Hyperimmune Plasma Therapy (HPT) soon became a sort of RKC Holy Grail. HPT was an experimental therapy introduced during the first stages of the pandemic in Italy based on people with Covid-19 being inoculated with blood samples containing antibodies from people who had recovered from it to counteract the virus. From the RKCs' point of view, this therapy embodied the positive value of "natural healing", as a "people to people cure" contrasting with official medicine and of course the vaccine, both perceived as artificial entities produced mainly for financial profit by pharmaceutical companies. For RKCs, in fact, the distinction between "natural" and "artificial" is what demarcates the boundary between the knowledge they trust and institutional science (Gieryn, 1983; Greenhalgh & Wessely, 2004; Gross et al., 2015). Its "naturalness" makes HPT a more reliable treatment in the RKCs' view, because it reflects the principles of "pure" medicine working for the good of the people, rather than the economic interests of Big Pharma. News, posts and videos regarding the beneficial effects of HPT and its "low cost" for people affected by Covid-19 spread like wildfire among RKC online groups.

Hence, in March 2020 HPT become a new pandemic object and a controversial issue in the public sphere at the centre of an epistemic battle between those who supported its validity—such as certain physicians and Pro-vaccine choice adherents—and those who later denied its efficacy, such as the Health Ministry and medical public institutions. However, this was not a linear process: initially, people recovering from Covid-19 were invited for blood donations even by health institutions for care or

clinical trial purposes.[3] Later, several studies confuted the effectiveness of the therapy[4] but leading RKC experts still explained how the therapy works and why it was to be considered a valid treatment against the virus instead of artificially created vaccines, as this online post shows:

> Friends, today too we have good news: the treatment exists and costs next to nothing. It is called hyperimmune plasma. Prof. Giuseppe De Donno—Head of Pneumology at Carlo Poma Hospital in Mantua—commented on the radio: "At the moment, plasma is the only specific drug against Covid". But instead of congratulating and sharing the excellent news, Burioni, the official voice of the mainstream networks, replied that plasma has limits. Along the lines of, 'let's dampen enthusiasm and, above all, snuff out the hopes of the millions of Italians who have been locked in their homes for two months! Better keep telling them to walk around like zombies in dirty masks and gloves.' [Burioni and his colleagues] are not experts or scientists who insist on their politics of terror. (4/05/2020 Transcription and translation of a Pro-vaccine choice Facebook post)

Meanwhile, RKCs continued to support HPT as a "symbol of democracy", firstly by Pro-vaccine choice supporters, and then by other RKCs as a low-cost solution to the Covid-19 pandemic. Hence, HPT, like face masks and the Immuni app, fostered new connections between RKCs, especially after the suicide of De Donno, the physician who supported the therapy's validity, a highly important development because the doctor-as-martyr-ignored-by-official-science concept is a recurring theme in RKC narratives (see Chap. 4).

During our digital ethnography memes were also of use in increasing our understanding of the impact of pandemic objects for RKCs and in shaping their Covid-19 concerns (see Fig. 8.3).

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[3] There were many calls for blood donation, e.g. the National Center of Blood Donation in Italy: https://www.avis.it/wp-content/uploads/2020/06/Prot.-n.-1296.CNS_.2020_Donazione-di-plasma-da-convalescente-COVID-19.pdf (28 December 2022) or that of the Ministry of Health: https://www.donailsangue.salute.gov.it/donaresangue/dettaglioNotizieCns.jsp?lingua=italiano&area=cnt&menu=newsMedia&sottomenu=news&id=33.

[4] The largest study in Italy was the Tsunami study: https://www.aifa.gov.it/en/-/covid-19-studio-tsunami-il-plasma-non-riduce-il-rischio-di-peggioramento-respiratorio-o-morte.

A popular meme illustrates the idea that these new objects, now part of "quarantined society" everyday life (Aiello et al., 2021; Bisiada, 2021) had configured a new citizen subject to constant control by apps and wearable devices, made obedient by masks and thus perfectly integrated into surveillance society (Fig. 8.3). Pandemic objects thus prefigured not only a specific idea of the future but also new forms of biocitizenship (Petrakaki et al., 2021; Rose & Novas, 2005) which RKCs attempted to defend themselves against. However, whilst all the RKCs analysed pursued a specific idea of alternative care (Crabu et al., 2022) and citizenship
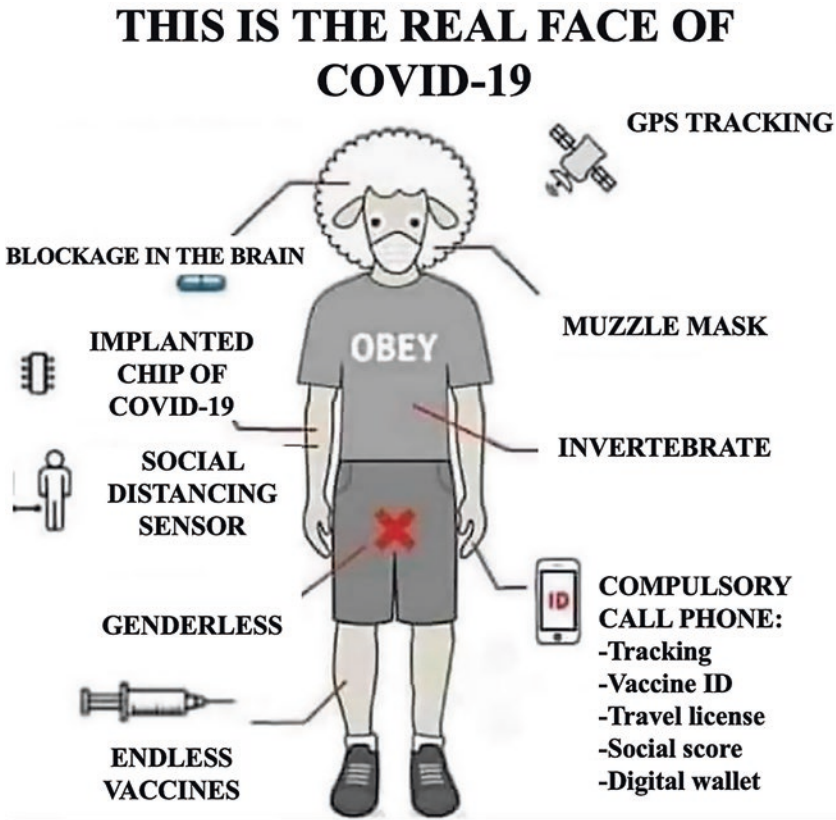

Fig. 8.3 Reworking by the authors of a Pro-vaccine choice RKC's Facebook meme, 26 May 2020

(Morsello & Giardullo, 2022), prior to the pandemic they had focused on the various objects embodying their visions and claims (vaccines, 5G, alkaline water, biological laws). Pandemic objects, on the contrary, provided an opportunity for RKCs to build their own truths regarding Covid-19 and beyond, thereby contributing to mobilising experts and identifying common enemies.

8.4   Building Alliances, Organising Dissent: Experts and Impostors as Boundary Objects

During the health crisis scientific experts were the most reliable and trusted actors in Italy and their advice was taken extremely seriously (Capano, 2020), playing a pivotal role even in policy-making terms (Neresini et al. 2023). However, experts were also the subject of controversy over pandemic management based on the available scientific knowledge (Lavazza & Farina, 2020) and this was the context in which they were framed as impostors by RKCs.

Our online ethnography also showed that the RKCs identified their own experts, of importance not only in providing actionable knowledge coherent with the interpretative frameworks on which RKCs rely, but also fundamentally strategic to demarcating the boundaries between reliable knowledge and partisan information, i.e. that provided by impostors. Two main experts—Professors Stefano Montanari and Luc Montagnier, who played the strategic role of boundary objects as they shaped and promoted a specific interpretation of the Covid-19 pandemic among RKCs—can be identified. The narrative promoted by these experts was flexible enough to adapt to RKCs that were separate social worlds prior to the pandemic and could be used to support their individual claims. The fact that both Montanari and Montagnier possessed academic credentials (such as PhDs or research grants, even a Nobel Prize in Montagnier's case) was considered significant by RKCs in their challenges to the epistemic authority of impostors, capable of simultaneously offering a cohesive version of the pandemic emergency congruent with RKCs' approaches to health and well-being.

It is worth noting, in fact, that expert status is not simply a matter of professional qualifications (Stehr & Grundmann, 2011; Nowotny et al., 2001; Gibbons et al., 1994) but also of attribution processes enabled by people and communities. Those recognised as experts provide useful answers to relevant questions (Collins & Evans, 2007; Martin, 1991; Peters, 2008), thus setting priorities for action (Grundman, 2017) as happened during the Covid-19 pandemic when uncertainty around the virus needed to be responded to.

Stefano Montanari, e.g., is a qualified pharmacist who founded the Nanodiagnostics Lab and his thesis regarding the potential risks of vaccination has made him well-known in Italy despite this having been critiqued by official experts and institutions. During the lockdown in Italy (T2) he described Covid-19 as "a flu virus" with low pathogenicity that would not normally cause death. Montanari further explained that it was extremely infectious but harmless, with no symptoms in the majority of people. He assumed that virus mortality was very low, especially for young and healthy people, attributing the high death rates to wrong classification by official health institutions failing to distinguish between those dying of the virus and those dying of other causes whilst testing positive for the virus. Therefore, some videos circulated online by the various RKCs argued that the institutional pandemic data was intentionally overestimated to justify the government's anti-contagion measures, ranging from lockdowns to social distancing, face masks, tests and apps. These measures were described by Montanari as mere tricks to enhance people's willingness to accept control. Scientific community intervention was required to reject this hypothesis and encourage the public to accept the mainstream explanation of the pandemic. However, it was precisely for this reason that Montanari became a sort of "world human heritage" for RKCs (28/04/2020, to paraphrase an AW Facebook post) because his interpretation contributed to empowering RKC members against vaccination policies.

Another expert mobilised by RKCs in their attempts to offer interpretations of pandemic objects capable of combating the public version was Luc Montagnier, winner of a Nobel Prize for Medicine, ostracised by the scientific community in recent years for his controversial theses on various issues concerning human health. Montagnier proposed an alternative

to vaccinations and quarantine consisting of boosting immune systems with fermented papaya and glutathione and avoiding contact with infected people. These recommendations attracted RKCs' attention through specific YouTube videos and Facebook posts, on the strength of their tendency to look for online health information.

Moreover, regarding the origin of COVID-19, Montagnier mooted the possibility that it may have originated in a laboratory in Wuhan, China, and not in a wet market, as previously described in official reports[5] during T1:

> Even if it is assumed that the virus came out of a military laboratory, it is also true, data in hand, that its mortality is less than a ridiculous seasonal flu. In the last 4 years, the flu has killed over 68,000 people in Italy, but despite these important figures, no one has ever dreamed of blocking entire cities with soldiers and police or closing hospitals and schools for several days. Why did the unthinkable happen this time for a handful of those dead, almost all very old and/or very sick? Do they want to mentally get us used to a police state, testing to what extent we are willing to give up our freedoms? (29/2/2020, Transcription and translation of a video posted in a Pro-vaccine choice online community)

His hypothesis became an integral part of RKCs' narratives during the lockdown (T2) and throughout the reconfiguration of RKC relationships.

Summarising, then, Montanari and Montagnier argued as follows: (a) Covid-19 works like a flu virus and is thus not dangerous for most people; (b) it originated in a Chinese laboratory and the public action taken to prevent it spreading are excuses for state social control; (c) people can overcome the virus through self-care and by keeping informed. This "truth", as it was considered by RKCs, became a useful resource for those challenging the epistemic authority of science (Harambam & Aupers, 2015; Rosenfeld, 2021) and counteracting institutional health policies such as wearing face masks, being vaccinated and social distancing.

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[5] Today official sources are "moderately confident" that the virus may indeed have come from a laboratory: https://www.theguardian.com/world/2023/feb/26/covid-virus-likely-laboratory-leak-us-energy-department (Last access: 02/03/2023).

It thus might be said that pandemic objects triggered RKC experts' action, enhancing the visibility of RKCs' shared interpretations of the pandemic, showing that an alliance was possible. Both Montanari and Montagnier, and their counterpart the impostors, played a leading role in reconfiguring relationships between RKCs because these latter nurtured, shaped and circulated an understanding of the pandemic which RKCs could fight, with a view to disclosing the "real truth" behind the health emergency.

During the transition from the latency phase, during lockdown (T2), to the end of lockdown, when RKCs collectively contested the anti-Covid norms and fought for their truth in the main Italian squares (T3), three main impostors occupied a prominent position, i.e. two health institutions, the World Health Organization (WHO) and Italian Institute of National Health in Italy (INH), and an individual, Professor Roberto Burioni, Italian virologist and immunologist. Burioni, WHO and INH were seen as impostors by RKCs firstly because they were viewed as embodying scientific institutions representing the state and, secondly, as they were a constant presence in the traditional media. In fact RKCs distrust newspapers and television, preferring other information sources such as the web, blogs and self-vindicated independent TV channels such as Byoblu (see below).

Moreover, RKCs maintain that one of the ways impostors influence public opinion is through data manipulation. Thus, in the initial Covid-19 phase (T1), RKCs accused the WHO both of providing false epidemiological data and of describing the virus as a serious threat and a global danger, while in their view it was simply a flu outbreak. Therefore, one of the strategies adopted by RKCs to refute the mainstream interpretation was "revealing" of how data is manipulated by impostors:

> The WHO data did not take into account asymptomatic cases of Covid-19 or cases in which symptoms were minimal. In other words, as there were many mild cases of Covid-19 that went undiagnosed because many people did not go to the hospital to be tested, diagnosed and reported, it was hard to come up with a reasonable estimate of how lethal Covid-19 was when compared to other infections. Experts disagreed with the WHO's death rate, claiming that the true rate was much lower. (23/03/2020, Transcription and translation of a post circulated on a Pro-vaccine choice Facebook page)

The RKCs challenged the epistemic authority of science by formulating alternative accounts of the "real truth" and "what's behind it", resisting the "truth regime" through which science is accorded "the legitimate power to define, describe, and explain domains of reality" (Gieryn, 1999, p. 1). There is nothing accidental about the fact that another strategy to fight those considered impostors is undermining their epistemic authority by comparing various sources or by contesting their research methods:

> Attention: The WHO statements and the consequent decrees issued by the Council of Ministers (DCPM) are not based on scientifically proven facts! We invite you to carefully read this statement by Fabio Franchi, a physician specialising in hygiene, preventive medicine and infectious diseases. (22/04/20, Transcription and translation of a 5LB Facebook post)

The INH was also consistently challenged in these terms by the RKCs for its pandemic data. In particular, the RKCs not only contested how such data was collected but also delegitimised the anti-Covid-19 norms, by reframing the adoption of the face masks as a health risk, as the post below clearly shows:

> The INH has just published a paper on the virus's survival time on various surfaces. It is interesting to note that it survives 4 days inside masks and 7 days in its outer layer. Now they will finally find out that the masks they use and reuse for several days to save money are teeming with bacteria, fungi and other known pathogens. It is no coincidence that there is not a single scientific reference on the WHO website certifying the usefulness of protection from viruses! (24/05/20, Transcription of an AW Facebook post)

Another strategy countering impostors is stigmatising them, as in the case of Burioni. The RKCs even coined the term "Burionismo" for a specific way of thinking defined as populist, anti-scientific and authoritarian—a sort of "(official) medical populism" (26/03/2020, to paraphrase a 5BLs Facebook post):

> *Burionismo* is the greatest harm of the last Italian decade. Years of brainwashing have led us to where we are now. But the scientific community is anything but Burioni-esque. Slowly, in the coming weeks, the real

scientists will poke their heads over the parapet, and I hope there will be a showdown. (12/03/2020, Transcription and translation of a 5LBs Facebook post)

Since then, the name "Burioni" has become a label stigmatising the RKCs' enemies: people perceived as arrogant and socially dangerous, acting corruptly in favour of pharmaceutical companies for personal popularity and profit motives. At the same time, "epistemological suspicion" or "the belief that claims to truth and knowledge are tied to particular social and material interests" (Van Zoonen, 2012, p. 56) were highly prevalent among members of Pro-vaccine choice and Stop 5G, and their visibility increased even further during T3, including in AW and 5BLs. Of course, views on experts and impostors vary from one RKC to another, but this does not limit their chances of being recognised as relevant actors and a shared resource. They can, thus, be considered to be boundary objects.

At the same time, RKCs' experts and impostors acted in reference to non-humans, i.e. first of all the virus and many pandemic objects, which allowed them to set aside their differences and shine the spotlight on their role as a useful asset in RKC strategies to refute the mainstream interpretation of the pandemic and its public social control function. From this perspective it might be said that pandemic objects acted as brokers, i.e. as actors giving RKCs the chance to form new relationships and collectively fight the state.

8.5   The Rise of New Refused Knowledge Social Worlds in the Pandemic Arena

After the Covid-19 lockdown, Italy's main squares crowded with public demonstrations in which the new RKC alliance's demands for the end of the "state of emergency" (from lockdown T2 to the softening of anti-contagion laws T3, see Fig. 8.4) played out. These protests were promoted first by the so-called no-mask movement and then by the "no-green
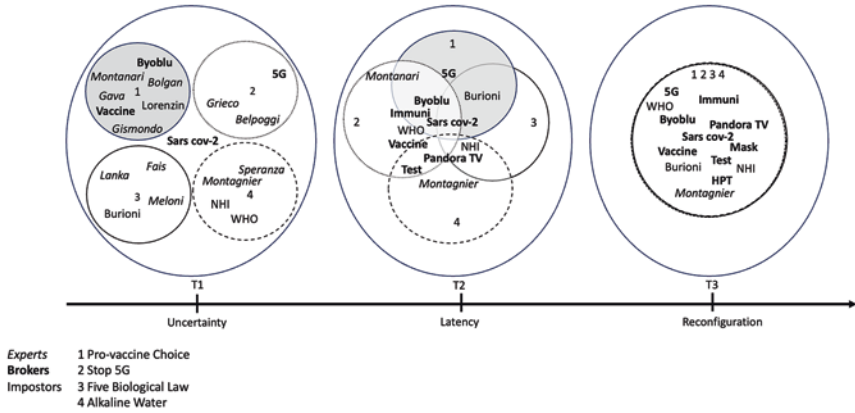
Fig. 8.4 From separate RKCs to a new social world within the pandemic arena

pass[6]" movement, resulting from a process which reconfigured relationships between RKCs and spawned new social worlds such as R2020 (T3). As we have seen above, in fact, pandemic objects, experts and impostors played a pivotal role in building a new alliance between RKCs to counteract the official version of the Covid-19 pandemic and organising dissent. These heterogeneous actors played a central role in contesting mainstream narratives and the health policy measures adopted by the government, thus fostering new opportunities for collaboration between RKCs.

Burt's (2004) "brokers" and "structural holes" concepts are of use in increasing our understanding of this reconfiguration process. Structural holes are "voids" between relational clusters (i.e. RKCs in our case), whereas brokers are defined as nodes establishing new ties between these clusters, building new connections and consolidating existing relationships.

Indeed, what we observed is that initially distinct RKCs (T1) began to draw closer together when the SARS CoV-2 virus and pandemic objects such as masks, Immuni, vaccines and tests progressively occupied the

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[6] "Green pass" refers to the COVID-19 green certification—EU digital COVID certificate—proposed by the European Commission to facilitate the safe free movement of citizens within the European Union during the Covid-19 pandemic.

relational gaps between these social words (T2), opening up new windows of opportunity for both experts and impostors to enter into dialogue, even with previously unknown RKCs (Fig. 8.4). Using the broker concept to describe how pandemic objects contributed to the development of new relationships between RKCs and that of boundary objects to analyse the role played by their experts allows us to highlight the relevance of mutual entanglement between human and non-human actors within the processes that create, maintain and transform the social worlds concerned.

Therefore, on one hand, pandemic objects constituted a strategic opportunity to engage experts and impostors in responding to RKC members' needs and, on the other, they enabled various voices to be heard in public debates. In this way RKCs acquired greater visibility in the public sphere during the pandemic by reconfiguring themselves into new social worlds (T3) made up of alliances between previously distinct RKCs. The vaccine, e.g., was a powerful broker soliciting both RKC experts and impostors and triggering shared action, such as public demonstrations, online meetings and petitions, as in the following case:

> A beautiful and colossal European petition for freedom of choice on vaccines, promoted by the European Forum for Vaccine Vigilance. It is very appropriate today to look at the mass of politicians in the throes of authoritarian hysteria. And if we talk about flu vaccination, anyone deciding to refuse is totally safe because there is strong scientific evidence of its ineffectiveness. (24/04/2020, Transcription and translation of a 5BLs Facebook post)

Web-platforms were also key brokers, giving great visibility to the new social worlds configured as an alliance between RKCs and their claims. While STS have highlighted the significant role played by web-platforms during public health crises (Tim et al., 2013), we also noted that they acted as brokers, both providing RKCs with alternative information during the first period of pandemic and spreading the refused knowledge supported by their experts.

Byoblu is an example of these web platforms, as an independent information channel with 511,000 subscribers until 30 March 2021, when

the channel was banned from YouTube after public accusations that it was spreading fake Covid-19 news. Byoblu's importance during the Covid-19 controversy is also demonstrated by its increasing follower numbers. On 22 January 2020, when the Italian state of emergency was declared, Byoblu had only 7683 Instagram followers, a figure which doubled during T3 to 16,653 followers by the end of June 2020 and 518,000 on YouTube.[7] Meanwhile, Pandora TV, another independent information channel founded in 2014 by Giulietto Chiesa, a politician and journalist, served as a refused knowledge lab with more than 100,000 subscribers. These two channels supported and disseminated the ideas of RKC experts, thereby increasing their prominence during the health emergency. For instance, Pandora TV gave the Montagnier interview on the origin of the virus that aired on 28 February 2020 great visibility, with more than 37,000 views.

Hence, Byoblu and Pandora TV gave the experts recruited by RKCs a stage, allowing them to act as facilitators or "connectors" (Cook, 2004; Latour, 1987), i.e. acting as boundary objects fostering opportunities for collaboration between RKCs. In this way, not only did experts mobilised by the virus and pandemic objects provide interpretative resources used by RKCs to reduce initial pandemic uncertainties, but they were also shared actors linking RKCs which previously acted as separate entities. Thus the combined action of pandemic objects as brokers and experts as boundary objects allowed Pro-vaccine choice, Stop 5G, AW and 5BLs to interact even more frequently and share pandemic narratives by the end of lockdown (T3).

Figure 8.5 shows the reconfiguration process which occurred after lockdown and the role played by experts, impostors and pandemic objects in greater detail. During T3 the four RKCs merged into a new social world in the pandemic arena—as an assemblage of interests and narratives—through the work of experts, pandemic objects and impostors visibly favouring coalescence between different RKCs. This new configuration can be considered an example of various processes in emerging social

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[7] One year later, on 30 March 2021, YouTube decided to close the Byoblu channel after 14 years of activity due to policy violations. Since then, Byoblu has raised more than 300,000 Euros to buy a national TV channel.
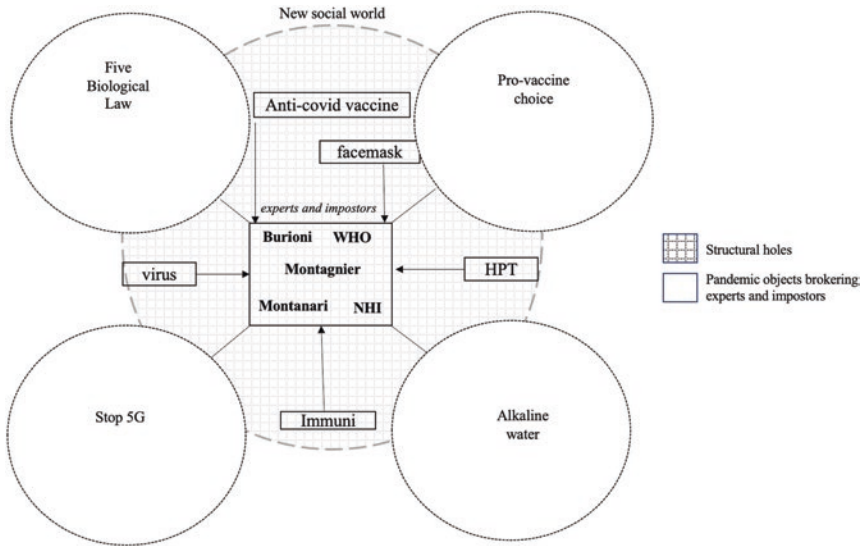
Fig. 8.5 An example of how pandemic objects trigger experts and impostors, acting as boundary objects and fostering collaboration between RKCs

worlds during Covid-19, involving the RKCs, as the case of the R2020 network shows. R2020 was founded by Sara Cunial, an Italian MP, and Davide Barillari, a regional councillor, both well-known supporters of the Pro-vaccine choice movement. There is nothing random about the fact that they called R2020 a "network of networks"[8] supporting heterogeneous goals going far beyond free vaccination choice, such as alternative visions of health, with a strong emphasis on individual agency in health-related decision-making processes, home-schooling and an "awareness" lifestyle.

Collaboration between RKCs trying to establish a new "regime of truth" with which to understand the pandemic crisis was made possible by mobilising their members against perceived common enemies—mainly the government and scientific institutions—thus opposing their anti-contagion strategy by supporting alternative forms of techno-scientific assemblages (Van Loon, 2002).

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[8] https://r2020.info, (accessed: 22/05/2020).

Public demonstrations involving different RKCs were organised by R2020, including after T3, until November 2020. The main purpose of these initiatives was to oppose the Italian government's pandemic policy based on scientific experts' advice and framing the situation as a global health emergency. By contrast they demanded:

> The immediate suspension of the Coronavirus state of emergency, the restoration of the Constitution and respect for our rights. We propose concrete and immediately actionable policies putting citizens' health, people's wellbeing and respect for life above all other interests. (22/05/2020, Transcription and translation from the official R2020 website: www.r2020.info)

From 30 June to 1 July 2020, R2020 organised a national event in Rome designed to recruit people and communities interested in various vaccination choice and 5G themes and refused knowledge about health in general. Several other events can be regarded as concrete expressions of the RKC reconfiguration process, such as the 20 June and 10 October "no-mask" events held in Florence and Rome, respectively. These were organised in the form of public demonstrations against the mandatory use of face masks as a danger to democracy and health (see Sect. 8.3) which were also covered by the mainstream media. Other similar local events were held in many other Italian cities—e.g. Como, Varese, Udine, Padua and Trento—occupying squares and breaking anti-contagion rules with large mask-free crowds, in the name of public rebellion. Later, new protests mobilised by pandemic objects proliferated, such as those against the green pass, which again brought together previously separate RKCs. On all these occasions a number of pandemic objects—face masks, epidemiological data and tests—acted as brokers for the sharing of interpretations elicited by RKC experts, with impostors as their counterparts.

In addition to R2020, a prominent role within the new shared RKC social world was played by the Italian Organisation for Health (OIS), founded in October 2021 with its own website and a Facebook page used by more than 10,000 people. This new social world encompasses members of Pro-vaccine choice associations together with people concerned

about 5G and/or followers of the Five Biological Laws as well as consumers of alkaline water.

New online communities challenging the mainstream view of the pandemic mushroomed. Many of these are also based on the sharing of experiential knowledge (Crabu et al., 2022; Van Zoonen, 2012), like the Telegram groups made up of individuals belonging to different RKCs and designed to monitor the side effects of vaccinations with images and descriptions of personal experiences of side-effects witnessed or heard about. Masks, Covid-19, vaccines and tests therefore provided many opportunities for RKCs to share their experts and create common lifestyle and health languages and knowledge claims consistent with alternative ideas of citizenship.

8.6   Following Pandemic Objects and Discovering New Social Worlds

Pandemic Objects, an editorial project reflecting on the objects that acquired new meanings during the pandemic, was born at London's Victoria & Albert Museum. The aim was to show how positive tests became symbols of public panic and thermometers instruments of social control, hospitals were made into convention centres, parks became contested public assets and handwritten signs began to appear in store windows around the world to explain closures or new rules, such as social distancing regulations. This project underlined the importance of objects to pandemic narratives, in both novel meanings and new uses.

What emerges from our web-ethnography during the early months of the pandemic is that some objects played a crucial role in the emergence of new social worlds within which contesting institutional knowledge has become increasingly complex: starting from a demand for alternative public health management related to Covid-19 to claiming new models of care, well-being and citizenship based on refused knowledge in pandemic times. RKCs thus coalesced into new assemblages of allies and enemies and knowledge claims combating the mainstream interpretation of the pandemic.

In fact RKCs questioned the management of the pandemic by national and supranational agencies such as the Ministry of Health, the National Institute of Health and the WHO, but also the Covid-19 knowledge promulgated by these institutions and the scientists dominating the mainstream media. Some RKC experts such as Montanari and Montagnier and other institutional experts considered impostors, such as Burioni, were mobilised in a relationship with pandemic objects acting as boundary objects shared by previously separate RKCs. Re-interpretation of the virus and certain objects such as face masks, tests and apps fostered a reconfiguration of relationships between these social worlds. Separate contestations and claims became more complex, giving rise to new shared refused knowledge and public demonstrations during the early stages of the pandemic.

Although each RKC had its own set of experts, and targeted specific impostors in a critical way, the pandemic triggered new socio-technical assemblages within which such experts and impostors acted as common resources and promoted a shared language (Carlile, 2002) laying the foundations for the consolidation of new social worlds opposing science, the state, the media and corporations within the pandemic arena. Non-humans—such as the virus and certain pandemic objects—played a pivotal role in all of this not only because they became the focus of public discourse, but also because they invoked the interpretations of RKC experts together with those of impostors. From this perspective it might be said that these non-humans mobilised both experts and impostors to fill the relational gaps between RKCs which had never previously shared common goals.

Pandemic objects and the virus itself can therefore be seen as brokers capable of laying the foundations for common public demonstrations as happened in Italy, e.g., with R2020 or the "no-mask" and "no-green pass" movements which challenged the potential for herd immunity through health policy measures based on testing, face masks, green passes, apps and vaccination. New social worlds like R2020 and others, moreover, continued their work in the post-pandemic period, also extending their claims to cover multiple issues such as the global food crisis and

overbuilding.[9] In this way the agency of pandemic objects and their role as brokers providing shared interpretative resources generated by RKCs' experts and impostors, in particular, is further highlighted within refused-knowledge-based social worlds.

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[9] See: https://r2020.info (last access 6 February 2023).

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