

INVESTIGATING MEDICAL DRAMA TV SERIES

APPROACHES AND PERSPECTIVES

EDITED BY

STEFANIA ANTONIONI MARTA ROCCHI









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PREFACE

Why Medical Drama?

An Interdisciplinary Study of Narrative Layers and Societal Impact

Guglielmo Pescatore

In recent years, the academic and critical examination of medical drama has emerged as a relevant area of inquiry, owing to its enduring and widespread cultural influence. Medical drama is a narrative genre that has been one of the most popular products on free-to-air generalist television, not just in the United States, but across Europe and more recently in Asian production (Comelles and Brigidi 2014, Khiun 2011, Lai 2018, Leonzi et al. 2020, Lo and Huang 2021, McAnea 2001, Piscarac 2016, Rocchi 2019, Turow 2010). The critical engagement with medical dramas from a media studies perspective offers a fertile ground for unpacking complex interrelations of narrative, audience, and societal implications. As a genre that consistently appeals to a wide range of viewers, medical drama deserves to be examined not only for its entertainment value, but for its interweaving of elements that reflect, amplify, and sometimes question our understanding of medicine, social structures, and human relationships. This popularity positions the genre as a powerful mediator between the realms of professional healthcare and public understanding, a responsibility that underscores the need for analytical attention. But why does this particular form of storytelling have such wide appeal and why does it deserve scholarly attention?

Narrative Formulas and World-Building in Hospital Microcosms

Medical drama serves as a significant touchstone for understanding complex social relations and systems. The hospital setting, often used as the primary backdrop, functions as a microcosm that echoes and represents the macro-

cosm of life itself, a contained world where life's complexities are played out in compressed form. The importance of this setting cannot be overstated. Within the corridors and operating rooms, viewers encounter a spectrum of narrative situations that offer insights into social organization - hospital work, hierarchies, power dynamics, and ethical dilemmas. These running plot arcs (Innocenti and Pescatore 2018), which span several episodes or even seasons, act as a mirror reflecting forms of social life at large. The genre then delves into the intimate sphere of personal relationships. Romantic liaisons, friendships, and familial bonds are explored in a medical environment, adding a unique texture to these interactions. Long-running narrative arcs often focus on sentimental plots, encapsulating these deeply human connections and conflicts within a setting that is universally relatable, as healthcare concerns us all. This narrative strategy not only engages viewers but also provides a framework for understanding the dynamics of personal relationships in high-stakes environments. Finally, medical dramas shine a spotlight on the concept of contingency, the unpredictable nature of life events. Through episodic medical cases, each unique yet strangely familiar, the genre encapsulates the unpredictability and vulnerability inherent to human life. Illness, often depicted with heightened emotional intensity, represents a universally understood form of contingency, owing to its unpredictability and the fear it induces. These anthology plots usually last for a single episode but are critical in sustaining viewer interest by continually infusing the narrative with new elements. These narrative isotopies (Pescatore 2002, Pescatore and Rocchi 2019) - the professional plot, the sentimental plot, and the medical cases plot - are the building blocks that give medical drama its enduring appeal. Each show may employ these elements in varying ratios, but their core functions remain consistent across the genre (Albuquerque and Meimaridis 2016, Rocchi and Pescatore 2022).

Surprisingly, medical dramas have not fully embraced the transmedia storytelling models frequently seen in other genres, although their fan engagement is undeniably high, as evidenced by the multitude of tweets and fan discourses (Antonioni and Holdaway 2023, Hoffman et al. 2018a). Nonetheless, the genre excels in the realm of world-building and narrative ecosysitem construction (Boni 2017, De Pascalis and Pescatore 2018). These dramas are typically self-contained: hospitals in medical dramas often become expansive, self-sufficient worlds, sometimes giving rise to spin-offs or integrating into larger media franchises. This peculiar narrative organization leads to some unique characteristics that make it a subject ripe for

interdisciplinary study. From a medical standpoint, these dramas often depict an idealized version of healthcare, where outcomes are largely positive often portraying an inflated success rate in medical interventions compared to real-world statistics (Bitter et al. 2021, Colwill et al. 2018, McFadden 2020, Portanova 2015, Ramirez 2021, Wary 2020). However, this isn't merely a flaw; it's a narrative choice. This narrative choice speaks to the genre's broader purpose: to offer an optimistic lens through which viewers can engage with existential uncertainties. Medical dramas aim to establish long-term relationships with viewers, offering not just entertainment but also a form of emotional support, subtly disseminating an optimistic worldview. Additionally, the genre's "endogamic" nature - where personal and sentimental relationships are confined within the hospital setting - often criticized as exaggerated or soap-like (Branes and Guguianu 2013), supports the narrative world-building, maintaining the hospital as a self-contained microcosm representing broader social systems. Straying outside this world could disrupt its ability to symbolize broader life experiences authentically. Furthermore, medical dramas employ traditional storytelling models, particularly in the way medical cases are constructed. Each episode typically follows the quest for a solution to a medical problem, adhering to a framework that permits both the unpredictability of human life and the control mechanisms in place to manage it, emphasizing medicine's ostensible control over contingency – even when outcomes are grim. While medical cases offer a semblance of closure, it is in the running plots that true contingency manifests, often leading to unexpected narrative pathways, instigated by either internal developments within the narrative or external factors like changing audience preferences and broader sociopolitical contexts. This layer makes medical dramas not just reflections of societal structures and medical practices, but also dynamic entities in themselves - constantly evolving and responding to a myriad of influences.

Narrative Power: How Medical Dramas Shape Social Discourse

The genre of medical drama serves as a particularly illuminating lens through which to scrutinize the intersectionality of social, cultural, and institutional forces at play in contemporary society. What sets medical dramas apart from other forms of entertainment or storytelling is their marked permeability to

the social context in which they are produced. This genre is uniquely situated to incorporate both social discursiveness – what is being talked about in society – and social change. Consequently, medical dramas often become fertile ground for discussing complex societal issues such as gender violence, systemic racism, abortion, and the opioid crisis, among others (Burkhead and Robson 2008, Warner 2015). The resonance of topical events in medical drama can be explicitly illustrated by how they incorporate real-world occurrences; for instance, the Supreme Court's Roe vs. Wade ruling reversal finds narrative weight in episodes of shows like *New Amsterdam* (NBC, 2018-2023), aired just months after the real-world judicial ruling.

This responsiveness to social realities can be attributed to three core factors. First, the typical production mode of broadcast TV inherently allows for this permeability. Episodes are often produced in real-time as the season progresses, enabling the integration of contemporary discourses and events within a short period. The lag time between a societal event and its appearance in a medical drama is surprisingly brief, often a matter of mere months. This quick turnaround enables the genre to remain not just relevant but also deeply engaged with the sociopolitical debates of its time. Second, the thematic focus on medicine and healthcare naturally opens doors to a multitude of social issues. Healthcare is not an isolated institution but a fundamental pillar of societal organization and individual lives. It is inextricably linked to questions of social justice, equality, and human rights, among other issues. Diseases do not exist in a vacuum; they are often directly influenced by social determinants such as income, access to healthcare, education, and the conditions in which people are born, grow, and live. Medical dramas, thus, cannot help but address these intertwining complexities, rendering them a major resource for understanding not only medical but also social ecosystems. Third, the medical drama, often set within the microcosm of a hospital, serves as a symbolic representation of the broader macrocosm of life and society. The hospital is more than a place for medical treatment; it's a nexus where personal dramas, ethical dilemmas, institutional protocols, and social inequalities converge. This space must, therefore, accommodate the various phenomena, tendencies, and events that ripple through society at large. Failing this, the genre would be reduced to mere narratives of medical plots. This insertion of social themes into the narrative architecture enables these dramas to transform societal issues into the very lifeblood of the story. They are not mere background context but instead serve as the engine propelling the serial narrative forward (Pescatore and Rocchi 2019).

Social discourses find their way into the narrative through a direct embedding in the characters, either as cases-of-the-week that encapsulate wider social trends or as ongoing plotlines involving the main characters (Innocenti and Pescatore 2018). Through this weaving of character and context, social issues transition from being abstract or external matters to becoming integral, lived experiences that contribute to the storytelling and, by extension, the audience's emotional and intellectual engagement. This unique narrative embedding affords medical dramas an historically progressive role in society. By exploring socially complex issues through the lived experiences of its characters, the genre often promotes an advanced, open-minded view of these matters. Whether intentionally or organically, the stories disseminated through medical dramas play a not insignificant role in shaping public sentiment and perception. These narratives offer a lens through which viewers can reevaluate and potentially modify their attitudes toward divisive or controversial topics. In this way, medical dramas do not merely reflect societal debates but also stimulate viewers to adopt positions aligned with social progress. This dual function further underscores the genre's unique position at the intersection of media studies and social discourse, reaffirming its multifaceted relevance.

Shaping Societal Awareness and Health Perceptions

Adding to the narrative's transformative impact on social discourse, medical dramas have also wielded considerable influence on public perceptions of medicine, health, and illness (Burzyńska et al. 2015, Cappi 2015, Hoffman et al. 2017, Stinson and Heischmidt 2012). The genre serves as an alternative public health communication tool, achieving levels of awareness that traditional information and promotional campaigns often find elusive (Bavin and Owens 2018, Hoffman et al. 2018b, Hursting and Comello 2021). While it's true that these dramas sometimes exhibit a thematic bias, often favoring surgical procedures or rare and complex syndromes over more prevalent health issues like cardiovascular diseases, they undeniably raise awareness about a plethora of medical conditions and treatments. The spread of such awareness ranges from isolated but significant anecdotes – individual patients who have navigated critical health situations informed by medical dramas (Dahms et al. 2014, Eisenman et al. 2005) – to broader

shifts in societal attitudes toward diseases like cancer, which have historically been burdened by social stigmas and misconceptions (Chung 2014, Hether et al. 2008, Hoffman et al. 2017, Kim and Hmielowski 2017, Rosenthal et al. 2018).

The role of medical drama in reshaping public attitudes towards health and illness is twofold. First, it renders visible the oft-invisible realms of medical treatment and disease management. If cancer is now seen less as a taboo subject and more as a medical condition with varied outcomes - ranging from remission to enduring chemotherapy – it is not only the result of public health campaigns but also owes much to the dramatized depictions of the disease. Medical dramas have the unique advantage of not just informing us but showing us, making abstract or feared conditions palpable, visible, and therefore more understandable. Second, these narratives influence our collective social imagination far beyond the immediate impact of any public health campaign. By humanizing illness, depicting it as a challenge that can be confronted and managed rather than an uncontrollable fate, medical dramas contribute to a lasting shift in how society perceives health challenges. This has a lingering effect, enabling viewers to regard illness as an aspect of the human condition rather than a tragic anomaly. In doing so, the genre not only educates but also culturally recalibrates, making a long-term impact on societal attitudes towards health and medicine. This enduring influence further cements the genre's role as an essential subject of interdisciplinary study, blending the domains of media studies, social discourse, and public health in a singular narrative construction.

In sum, medical dramas manifest as complex narrative ecosystems that not only captivate audiences but also offer critical windows into societal perceptions of medicine, relationships, and life's uncertainties. Their layered narrative structures, genre-specific formulas (Jovanović 2021, Rocchi and Pescatore 2022), and the socio-cultural discourse they generate make them invaluable subjects for interdisciplinary inquiry. It is precisely this weave of narrative and thematic elements that motivated our PRIN research project, Narrative Ecosystem Analysis and Development Framework (NEAD Framework). A Systemic Approach to Contemporary Serial Product. The Medical Drama Case. Building on the vital insights and methodologies shared at the 14th Media Mutations Conference Investigating Medical Drama TV Series: Approaches and Perspectives, this publication underscores the project's ongoing commitment to advancing the scientific understanding of the genre. Our project adopts a multi-methodological and transdis-

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ciplinary approach, aligning with the analytical perspectives discussed in this volume, to explore these narrative ecosystems in depth. Just as medical dramas offer fertile ground for scholarly investigation through semiotic tools, quantitative analysis, and emerging AI methodologies, our project aims to make substantial contributions to the scientific understanding of contemporary television seriality, including how such narratives might be shaped by significant external factors like the Covid-19 pandemic that has possibly interfered in the narrative, production and consumption spheres of audiovisual production of the medical genre.

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WHY MEDICAL DRAMA? AN INTERDISCIPLINARY STUDY OF NARRATIVE LAYERS AND SOCIETAL IMPACT



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1. Much More than a Narrative Genre

Theoretical and Research Perspectives on Medical Drama

Stefania Antonioni and Marta Rocchi

Since its inception in the 1960s, medical drama has become one of the most relevant genres on the television scene and derives its name, on one hand, from the context in which events take place, usually in a hospital; on the other, it comes from the narrative development of medical cases, professional dynamics and sentimental relationships (Rocchi and Pescatore 2019, 2022). The widespread diffusion and success of the genre are consistently bolstered by the ongoing production and global circulation of medical TV series. For example, *Grey's Anatomy* (ABC, 2005-) is one of the longest-running scripted prime-time television series in the United States, and it is noteworthy that when *ER* (NBC, 1994-2009), after being off the air for nearly a decade, made its streaming debut in January 2018, it swiftly claimed the title of the most-watched television series on Hulu (Harnick 2018).

Almost entirely due to television, the medical genre has attracted the attention not only of critics and researchers in the field of media studies, but also of providers of medical devices and more generally of medical professionals (Rocchi 2019). Kipke and colleagues (2023) identify *Grey's Anatomy* as one of the ten popular TV shows engaged in a collaboration with the entertainment industry to foster trust in science and research by incorporating clinical research storylines. Hoffman and colleagues (2023a), in their analysis of the impact of health storylines in fictional television programmes on viewers, emphasize that even if health content is common in other genres (i.e., primetime programmes, crime dramas, primetime comedies), medical TV series such as *ER* and *Grey's Anatomy* were among the most studied within the scientific literature.

Audiovisual products from the U.S. hold significant relevance in the realm of medical genre literature, primarily due to the influential role played by the American cultural industry in shaping global television trends.

U.S. TV programmes have become reference models for other countries and "several features of contemporary American medical dramas can be identified in their Korean counterparts" (Pişcărac 2016). Moreover, these types of productions and dynamics are reflected in the emergent interest in non-Western medical dramas. For instance, Sarı (2023) recently conducted a cross-cultural analysis examining the most popular K-Drama of recent years both at national and global level, *Dr. Romantic* (SBS TV, 2016-2023), and the Turkish remake *Kasaba Doktoru* (*Town Doctor*, TRT1, 2022).

The aim of this chapter is not to conduct a literature review on the topic, as all the relevant references can be found within the contributions to this volume. Instead, it is intended to underscore the sustained interest in these research subjects and the vibrancy of the approaches and methodologies employed. Considering only the research published in 2023, it is clear that medical drama TV series continue to stimulate the curiosity of researchers from multi- and interdisciplinary perspectives. Among the most recently employed methods for analysing the topic, content analysis stands out. It has been employed to analyse trends and variations in organ donation portrayals (Quick et al. 2023) as well as to investigate the representation of neurological and neurosurgical diseases (Ismail and Salama 2023) in Grey's Anatomy. In addition, Ambler and colleagues (2023) studied the demographics of patients represented and their respective health outcomes in both Grey's Anatomy and Chicago Med (NBC, 2015-). Qualitative and quantitative content analysis has also been employed to investigate social discourses and reactions to the narrative inclusion of e-cigarette, or vaping, product-use associated lung injury (EVALI) storylines in three prominent primetime medical dramas (Hoffman et al. 2023b, 2023c). Considering online discourses, through a data-driven approach Antonioni and Holdaway (2023) investigated the reception practices and discourses on social media of Doc - Nelle tue mani (Rai1, 2020-).

Considering the aforementioned substantial influence of the U.S.'s audiovisual industry on global television content, Meimaridis (2023) has highlighted the importance of examining the fictionalization of U.S. institutions. Specifically, the author has concentrated on the portrayal of the medical institution in *Grey's Anatomy* and argued that it fosters "unrealistic expectations towards real-world institutions, their members, and their roles in society", perpetuating and reinforcing several myths.

The recent Covid-19 pandemic has further motivated researchers to investigate how the public health crisis has been incorporated into the narra-

tives of fictional audiovisual productions within the medical genre, and how such portrayals can provide benefits to the audience. For example, Cambra-Badii and colleagues (2023) focused on the use of medical dramas as an educational tool to teach health sciences and humanities students about bioethical issues related to the Covid-19 pandemic and they assessed the effectiveness of employing cinemeducation methodology for this specific purpose. Additionally, Alahmari (2023) conducted a study that affirmed the interest of medical students in medical TV series and elucidated how these programmes can serve as effective tools for imparting knowledge about the ethical dimensions of practicing medicine. Rauhaus (2023) used New Amsterdam (NBC, 2018-2023) as a case study to teach public administration theory and link it to practice for master's of public administration (MPA) students. On the other side, at the 17th World Congress on Public Health, Zago and colleagues (2023) analysed how public health issues are depicted in two highly popular medical dramas: Grey's Anatomy and House M.D. (Fox, 2004-2012). They underscored that topic concerning "healthy lifestyles (i.e., smoking abstinence) or vaccination were addressed only superficially, and the use of PPE (personal protective equipment) was also partially presented before the pandemic" (Zago et al. 2023: 469). Tian and colleagues (2023), measuring several factors (exposure to medical dramas; parasocial relationships with physicians in medical dramas; and trust in physicians in real life), concluded that enhancing audience engagement and psychological connections with media characters or figures can potentially reduce psychological reactance and enhance the effectiveness of educational and campaign programmes.

Therefore, taking into account the social and cultural value of medical drama, for the imagery and expectations it manages to spread about doctors and medicine in its broader sense, for the educational value it has for professionals and future professionals in the field, for the trust it can manage to create in medicine and science in general, further research is needed on the specific nature of this genre, which on the one hand has to take into account social environment changes and on the other a series of productive and narrative changes. Using an ecosystemic approach (Pescatore 2018) to the genre, we cannot fail to consider that medical drama, like other television genres, is "constantly in flux" (Mittel 2004) and somehow everchanging, "with its boundaries, investments and representations shifting to reflect cultural and industrial contexts and the tastes of its audiences" (Bignell and Woods 2023: 136).

If a genre's developments depend on internal and external logics and motivations, we can, however, consider that their hybridisation is one of the specific characteristics of television programming (Akass and McCabe 2007) and this hybridisation also takes on new forms and declinations today in the light of a media-savvy audience. For instance, the crime-medical drama is perhaps the longest-running form of hybridisation, as it brings into dialogue two of the most popular genres of television drama (Ridgman 2012); the medical teen drama is another interesting example of coalescence between genres to mention, given the success of *Polseres Vermelles* (TV3, 2011-2013) and its European adaptations *Braccialetti rossi* (Rai1, 2014-2016), *Club der roten bänden* (VOX, 2015-2017), *Les bracelets rouges* (TF1, 2018-) and the American *Red Band Society* (FOX 2014-2015).

Another example of mixed genres is the period medical drama, i.e. a medical show set in the distant past, for example *The Knick* (Cinemax, 2014-2015), or in a most recent past, as in *Call the Midwife* (BBC One, 2014-) and *Cuori* (Rai1, 2021-), to name just a few. In this case, of course, the historical setting makes it possible not only to follow the advances in medicine and the medical profession, but also to gain an insight into the society and culture of the period in which the series is set.

Among the most up-to-date hybridisations of the medical genre, we could mention the one that recounts, in a fictionalised and serialised form, real-life medical stories or events, often connected with extreme cases of medical malpractice, such as *Doctor Death* (Peacock, 2021-) and *The Nurse* (Netflix, 2023), or connected with disasters, as in *Five Days at Memorial* (AppleTV+, 2022), dedicated to the days of isolation experienced by the Memorial Medical Center in New Orleans immediately after Hurricane Katrina. Another hybrid takes the shape of an action version of the medical drama, as explored, for example, by the Canadian series *SkyMed* (CBC, 2022-), whose protagonists are nurses, physicians and pilots working for an air ambulance service in the Manitoba region.

The aforementioned examples are only a few of the possible variations of contemporary medical drama, which, in this continuous work of mixological renewal, demonstrates on the one hand that it is a genre capable of evolving to meet the public's interest, even though it is one of the long-est-lived on television, and on the other hand that it succeeds in capturing a number of problematic issues of contemporary society and turning them into part of its narrative.

As we have observed in this non-exhaustive survey, research on medi-

cal drama TV series encompasses various methods and approaches, offering a wide range of perspectives into which we can delve more rigorously, thanks to the contributions gathered in this volume. Below, we offer a concise overview of all these multi-perspective approaches, presented during the Media Mutations Conference, titled *Investigating Medical Drama TV Series: Approaches and Perspectives*, which was held in Bologna on May 18th and 19th, 2023. The conference was organised in collaboration with the nationally funded PRIN research project: *Narrative Ecosystem Analysis and Development Framework (NEAD Framework)*. A Systemic Approach to Contemporary Serial Product. The Medical Drama Case to bring these different and varied approaches and methods into dialogue with each other and to sustain the principles at the basis of the narrative ecosystem approach and its multi-methodological core.

One of the research methodologies widely applied is qualitative, which can use both the classic tool of interviews with key informants and textual analysis to bring forth the imaginaries underlying the relevant narratives. In the first case, Daniela Cardini and Fabrizia Malgieri examine an extremely important topic: the views and perceptions of physicians on medical drama. Through a series of in-depth interviews, the authors investigate how physicians, as viewers, judge the accuracy of various aspects staged by medical series, focusing in particular on the case of *Doc – Nelle tue mani*. Their research is complemented by a further interview with the medical consultant for this series, a pivotal figure in the writing, directing and staging of the medical series.

In the second case, Natalia Riva and Matteo Tarantino analyse six Chinese medical drama TV series to investigate how they incorporate medical imagery to reflect evolving ideological constructs that mirror contemporary China's political orientation. They show how Chinese medical TV series dramatize various critical social relationships and change contributing to shaping the politics of fictional medicine.

Another research approach favours quantitative methods, which are very versatile. For instance, Paola Dalla Torre and colleagues focus on the significance of dialogue in TV series for character development, emotional engagement in the narrative and series' stylistic signature. The research analyses dialogue patterns in the medical drama TV series *House*, *M.D.*, finding a predominant star structure.

Alice Fedotova and Alberto Barrón-Cedeño use computational methods, specifically transformer-based models, to automatically classify segments

from the TV series *Grey's Anatomy* into three typical medical drama isotopies. The research employs both unimodal and multimodal approaches to examine the feasibility and effectiveness of automating content analysis for audiovisual media.

Greta Iapalucci utilizes Natural Language Processing (NLP) techniques, including topic modelling and sentiment analysis, to analyse audience reception on Twitter in relation to *The Good Doctor*. The findings reveal positive audience reactions to the show's portrayal of Autism Spectrum Disorder (ASD) and discussions mainly related to narrative and viewer-related topics, especially during the show's airing.

Giorgio Avezzù explores medical TV series consumption patterns in Italy by analysing viewing data from Rai and Mediaset. The chapter reveals how medical dramas exhibit remarkable consistency in consumption across Italy due to their neutral settings and delocalized narratives. The author underlines how this geographical homogeneity reflects the genre's effectiveness and contributes to Italy's cultural cohesion in television consumption.

Among the various research objects that can be explored within the medical drama, central are health-related issues and how they are represented. For example, the representation of mental health, particularly among teenagers, is the core of two different contributions. Chiara Checcaglini focuses on three Italian TV series – *Oltre la soglia*, *Mental* and *Tutto chiede salvezza* – which attempt to give a more accurate representation of mental health problems, significantly choosing teenagers and young adults as protagonists. The author analyses whether and to what extent these series adhere to the medical drama genre and how different distribution choices have decreed their success or not.

On the other hand, Nicola Crippa and Mattia Galli, through quantitative content analysis, try to show how far the differences in representation of illness among young people are related to different production and distribution contexts. The Italian series examined (*Tutto chiede salvezza*, *Mental*, *Lea - Un nuovo giorno*, *Fino all'ultimo battito*) are variously aired on broadcast TV, on an OTT platform, and on the streaming platform of the Italian public broadcasting service.

Elisabetta Locatelli's article also focuses on mental health issues and introduces a case study of *TV Therapy* which can be considered to sit at the intersection of psychological therapy, social media, TV series and health communication more generally. The TV Therapy project began as a group therapy that used TV series as a trigger to initiate discussion on selected top-

ics and evolved with the Instagram profile of its creator and the production of a podcast of the same title. The grounded approach used by the author allowed her to make some remarkable reflections on health communications and its evolution.

Susanna Bandi and Federica Villa, using a medical humanities approach, explore the representation of autism and autistic individuals, asking whether and what stereotypes are employed and how they are used. They examine a corpus of various medical TV series, focusing in particular on the case study of *The Good Doctor*, whose protagonist is a doctor with autistic spectrum disorder. Significantly, the authors find that although this representation may be useful in making autism spectrum disorders part of the public discussion, *The Good Doctor* is a kind of 'missed opportunity' because the series reinforces one of the most widely used representations of autism, namely that of the autistic genius with 'superpowers'.

Two studies explore how medical drama TV series incorporate the Covid-19 topic. Eszter Nádasi delves into five U.S. medical TV series (*Chicago Med, Grey's Anatomy, New Amsterdam, The Good Doctor*, and *The Resident*) and their Covid-19 storylines during the 2020-2021 and 2021-2022 seasons. She examines the portrayal of the pandemic, including its stages and common plot elements, while emphasizing the shows' support for scientific approaches and safety protocols.

Allegra Sonego investigates the embedding of the Covid-19 theme and sub-themes using a quantitative content analysis. She assesses the prominence of the Covid-19 theme and its connection to central narrative elements, including sentiment plot, professional plot, and medical cases plot.

Medical drama and its representations can also be investigated using a gender studies approach, as proposed by Rosa Barotsi and colleagues, who investigate how gender medicine has enhanced our comprehension of gender inequalities in healthcare. The chapter delves into the analyses of scenes pertaining to women's cardiac events and eating disorders to assess the capacity of medical dramas, along with other genres and formats, in portraying the complexity of health and illness.

Marie Moreau focuses her study on the portrayal of gender stereotypes within the medical drama. Her interest is on male and fatherhood representation within the hospital context and how these have changed over time since the first TV series that could be considered as a turning point: *ER*. The other television series proceeding along this less stereotypical evolutionary path are *Grey's Anatomy* and *New Amsterdam*, although the author

questions to what extent these may give rise to a new stereotype: the doctor father-hero.

As we have previously mentioned, issues, methodologies and approaches to the medical drama differ widely. Alice Cati and Deborah Toschi, for example, compare two different genres set in a medical settings environment, scripted products and docuseries, and consider their differences in terms of the representation of illness and its treatment. Their focus is on biomedical images, their use and their status in these different types of stories. On the one hand, in fictional products they reinforce the medical discourse; on the other hand, in docuseries they are part of the practices and modes of action faced by patients, who are the real protagonists of this kind of narrative.

Andrea Bernardelli's chapter examines the figure of the anti-hero and tries to understand how this figure comes to life in medical drama. Specifically, in medical drama the antagonist is illness, so in this genre the anti-hero protagonist is the sick doctor. The author uses two TV series as case studies, *House M.D.* and *The Good Doctor*, to prove his thesis.

Elisa Farinacci and Emiliano Rossi, using a production studies approach, analyse an unusual case for Italian medical seriality, the TV series *Cuori*, which can be labelled as a period medical drama. Through fieldwork, conducted on the set of the second season using various methodologies (direct observation, in-depth interviews with actors and other professional figures, analysis of promotional materials, etc.), the authors suggest that the accuracy in the reconstruction of historical details (pertaining to the medical/scientifical domain, but also socio-cultural, the set design, etc.) is part of the public broadcasting service strategy to appeal to different and wider audiences.

Finally, Adeline Terry utilizes the Metaphor Identification Procedure (MIP) to analyse the initial two seasons of *House*, *M.D.*, identifying and categorizing 118 metaphorical expressions based on the Conceptual Metaphor Theory. These metaphors fulfil multiple functions, including simplifying medical concepts for the audience, employing euphemisms or dysphemisms to discuss diseases, injecting humour, and contributing to character development within the series.

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MUCH MORE THAN A NARRATIVE GENRE. THEORETICAL AND RESEARCH PERSPECTIVES ON MEDICAL DRAMA



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2. "Television Can Damage your Health?"

Italian Doctors and Medical Drama: A Qualitative Approach¹

Daniela Cardini and Fabrizia Malgieri

■ ABSTRACT

The relationship between medical dramas and medical professionals is an interesting and controversial topic to be investigated, both through the approach of production studies and of qualitative analysis of consumption. Professionals are involved in this serial genre in at least two ways: from a production point of view, through their contribution to the scripts as consultants for screenwriting, and from a reception point of view, through their qualified – but often very critical – opinion about medical dramas as spectators.

Both these sides of professionals' involvement have been investigated through the years, especially as far as American serials are concerned, while less attention has been paid to this topic by Italian television studies. Our chapter will focus on Italian professionals' opinions about the genre of medical drama and, namely, on a popular recent Italian tv series, *Doc – nelle tue mani* (Rai1, 2020-). Our hypothesis is that – especially in the professional viewers' opinion – a persistent strong cultural prejudice towards television prevents them from appreciating national medical dramas and their capacity to depict the Italian medical system in a realistic way.

In our research we approach the relationship between medical dramas and medical professionals through qualitative interviews to physicians, in the theoretical framework provided by production studies.

KEYWORDS

Medical drama; tv series; production studies; qualitative interviews.

¹ The research has been conducted by both Authors. The contents of the present chapter have been shared and discussed by them both. In detail: Daniela Cardini wrote the first and the third paragraphs; Fabrizia Malgieri wrote the second paragraph.

Doctors and Medical Drama: A Controversial Relationship

Doctors are involved in medical dramas in three different roles: as an inspiration for the main characters in the series; as television viewers; as consultants for the screenwriting, playing a crucial role in the production routines. These three aspects of doctors' involvement in the medical drama have been investigated through the years, especially as far as American serials are concerned, while less attention has been paid to this topic by Italian television studies.

In the US studies, some scholars contend that these television shows can be useful in reinforcing the principles of medical ethics, professionalism (i.e., communications skills, patient confidentiality, and bedside manner, including sensitivity and empathy), history taking, and clinical examination especially for medical students and junior doctors and that they could even replace lecture-based modules (Lim and Seet 2008). Some even argue that the medical drama is a narrative genre that may foster better emotional engagement with a patient, and moral imagination resulting in a more ethically and sensitive attitude in medical students (Arawi 2010). Some authors think that they may have an impact on the public in that they might be disseminating fundamental principles of medicine in the context of entertainment (Elkamel 1995).

The aim of our work is to discuss the first results of ten semi-structured interviews to Italian doctors as TV viewers, who watched medical dramas on TV, and one in-depth interview to Dr. Raffaele Landolfi, the scientific consultant of the successful Italian series *DOC-Nelle tue mani* (Rai1, 2020-) who cooperates in the screenwriting and follows the production process.

This first exploratory phase of our research project has several purposes: first of all, to collect the doctors' opinions about the genre, in order to identify any prejudices towards television and, specifically, towards medical dramas.

Secondly, we want to identify the strengths and weaknesses of this specific genre in doctors' opinion, mainly concerning such issues as the plausibility of the medical representation, the healthcare environment, the doctor-patient relationship, etc. Finally, we intend to investigate the role and functions of doctors as scientific consultants in medical dramas.

The methodology follows two main research directions: a qualitative approach, through in-depth interviews with professionals, and the theoretical approach of production studies, through the investigation and analysis of the productive routines of one of the most significant Italian medical dramas through the experience of its scientific consultant, with the aim to identify opportunities and risks in the representation of the medical profession in a TV series.

The qualitative interviews were conducted on ten Italian medical professionals in Milan and Rome. The interviewees are specialists in several fields, such as oncology, haematology, breast medicine, ultrasound diagnostics, occupational medicine, etc. who occupy important academic and medical positions. The semi-structured interviews (40-45 minutes each) were conducted online from April 10th to May 5th, 2023.

From the productive point of view, the contribution of Professor Raffaele Landolfi, the scientific consultant for the Italian medical drama $DOC-Nelle\ tue\ mani$, was crucial both for dealing with the relationship between reality and fiction in drafting a screenplay about a medical theme, and because it helped us to understand some fundamental steps in the production process, in particular the relationship between the scientific consultant and the artistic and technical cast, mainly with the actors and the screenwriters in the 'making of' process of each scene.

The Qualitative Interviews: Structure and Main Topics

In this explorative phase, our intention was to bring out as spontaneously as possible any experience, memory or opinion linked to medical drama as a television genre. As a consequence, no medical TV dramas were deliberately suggested by the researchers, in order not to affect respondents' memories, perceptions and opinions.

Many interesting topics emerged spontaneously during the interviews; the most relevant can be listed as follows:

- the interviewees' television experience: spontaneous memories and opinions about the medical drama genre;
- how much doctors' fictional representation can be considered as serious and authentic in TV medical dramas;
- how much medical settings (hospitals, clinics, wards, operating theatres, patient rooms, common areas, etc.) are credible and realistic in TV dramas;
- how much (and if) the timings related to diagnoses and treatments on patients are reliable;
- how (and if) the aspects of the doctor-patient relationship are represented in the best-known medical dramas.

In particular, respondents spontaneously expressed different opinions about US medical dramas and Italian ones. It is quite an interesting attitude, which describes the obvious need to be more attentive and critical towards a recognizable setting and attitudes, but at the same time it can show an unexpected appreciation towards the emotional side of medical characters and situations, their weaknesses and difficulties in dealing with problematic and emotionally demanding situations.

Spontaneous Memories of the Medical Drama, Experiences, and Opinions

All respondents were overall interested in watching television and they spontaneously cited several medical dramas aired on Italian TV and platforms, such as *Grey's Anatomy* (ABC, 2015-), *House, M.D.* (Fox, 2004-2012), *The Good Doctor* (ABC, 2017-), *ER* (NBC, 1994-2009), and some Italian productions, such as *Braccialetti Rossi* (Rai1, 2014-2016), *Cuori* (Rai1, 2021-), *La linea verticale* (RaiPlay, Rai3, 2018) and the already mentioned *Doc – Nelle tue mani*.

The good thing in Grey's Anatomy was that it really shows you the problems in the emergency room of a city where the traumas that arrived in that hospital were almost all 'social' traumas, such as stabbings, shootings, accident, etc. (Int. 3).

For example, what I really liked in ER it's the fact that, fortunately or not, many things don't go well. Many people died, and that's something that does not exist in many television productions. In TV everything is perfect, you never die. (Int. 1).

A few years ago, there was that TV series, named ER, which I liked because it seemed to me it had good pace; and, of course, Grey's Anatomy too, even though it

maybe has a slower rhythm and a little more sentimental plot. Ah, and of course, I liked DOC – Nelle tue mani very much, you know, that TV series which was aired on Rai 1, I liked it very much (Int. 4)

House, M.D., La Linea Verticale and The Good Doctor were cited by all respondents but seemed to be less appreciated in comparison with the previously cited medical dramas:

I didn't like La Linea Verticale at all. It doesn't fit with the empathic doctor-patient relationship as I mean it; there were situations that I totally understand, of course, which involve the personal story of the main character – and director of the show – who then died of a cancer. But the story and the tone of voice are not my cup of tea (Int. 7)

The example of *Braccialetti Rossi* was cited by only one respondent, an oncologist. She admitted she does not like medical dramas that deal with children's illness, as it happens in that particular show – an adaptation of the Spanish tv series *Polseres Vermelles* (TV3, 2011-2013) focused on the harsh and dramatic stories of a group of teenagers recovered in an Italian hospital:

I have never been able to watch Braccialetti Rossi, because I have always had a difficult relationship with children's illness. I know that TV series had a huge success, but I really find it hard to understand how people can be fascinated by a subject like this (Int. 9).

The Doctors' Representation in Medical Dramas

According to our respondents, in general the medical drama genre offers an unrealistic representation of doctors' professional life, which is quite different from the real routines in Italian hospitals.

There is an interesting difference in the opinions about American and Italian medical dramas. In the first case, opinions are more critical: for instance, some respondents notice how often fictional doctors are described in US TV series as deeply human, empathetic and almost heroic; in the respondents' opinion, there is a serious risk of overpromising which can affect real patients' (viewers') expectations.

In this show [Grey's Anatomy] TV doctors are depicted as extremely human, both as persons and as practitioners, always helpful and caring about patients' requests and needs, which unfortunately is not common in real life, in daily routines in hospitals, at least in Italy (Int. 5).

Medical characters in American TV dramas are unrealistic; it seems that they are only interested in solving their own personal problems, they are only involved in their own lives (Int. 1)

In my opinion, that stuff [House, M.D.] is boring in the long run, if you insist too much on that thing, in terms of credibility, huh? The main character's emotions are always the core of the story, but that's not real life in hospitals (Int. 4).

When it comes to Italian medical dramas, on the contrary, the respondents' attitude seems to be more nuanced and polarized: on the one hand, the lack of realism is even more criticized than in relation to US series; on the other hand, the emotional side of medical practitioners is appreciated, together with the stories that show their empathy and sensitivity towards patients and caregivers.

In Italian medical dramas some characters are portrayed as heroes and full of emotions and sentimental issues, they have no doubts... it can be unrealistic, of course, especially if the characters are also incredibly handsome... but in some cases it is not bad to show that even doctors have emotions and cope with ethical issues and things like that, we are not robots... (Int. 4)

The Credibility of the Medical Settings

According to our respondents, locations are a peculiar aspect in medical dramas that can show unreal features, especially in US series, where the hospital facilities are too perfect:

There are these beautiful hospitals where everything works perfectly, where you ask for a CT scan and they do it in real time and you see it on your computer in real time, you ask for a blood test and you don't even have time to ask for the report that it already arrives on your desk. But above all the settings are unreal: they have all those incredibly beautiful and clean and glossy hospitals which I have seen in a very few occasions in the real world. From an architectural point of view, above all, I have to say that over the years in Italy we've improved that too, but still all that technology and all that architectural beauty I don't think it's common, and it's the most important criticism I usually move towards US medical dramas (Int. 6)

In some cases, our respondents are less critical about US locations and settings probably because they are perceived as a sort of exotic background which cannot be compared with the Italian real situation, especially in Southern regions. In fact, when it comes to those Italian medical dramas whose settings are too perfect and modern, the criticism is particularly harsh because they are considered totally unreal.

But come on, when and where you can happen to see such a clean, perfect, glamorous hospital as the one in DOC-Nelle tue mani? Come on, it's unrealistic! (Int. 3)

Diagnoses and Interventions on Patients

According to our respondents, the scheduling of medical tests and surgeries and the always quick and accurate diagnoses are perhaps the less credible aspects in medical dramas, that depict a rather unreal relationship with patients and with medical infrastructures. In particular, the professionals criticize the fact that such aspirational situations raise excessive expectations towards real daily medical routines not only by patients, but most of all by caregivers, which become more demanding and more critical towards the real health system:

Such perfect fictional situations result in creating false expectations not only among patients, but above all among caregivers. In my daily experience with oncology patients, the relationship can be quite satisfactory if you have even a little empathy: they listen to your explanations, you listen to their needs and you can take them by your side quite easily. The very problem is represented by the caregivers, who either because of ignorance or of excessive knowledge or of excessive studies on Google or on television series, well, they expect immediate results from you. (Int. 1)

I wish I could have real-time test results with a radiologist or pathologist at my disposal every time I need... But I must say that I am often forced to ask for personal favours in order to get quicker answers [...] It's definitely quite different from the movies. I understand all the scheduling and scenic needs, but in real life I'm sorry but no, it's not that simple (Int. 5)

These fictional and handsome doctors can make very complicated diagnoses in just one episode. And there I'm not criticizing the actors who just play a part, but can the best doctor in the world make such a complex diagnosis in so little time? We do multidisciplinary meetings every day, and every single day I have complex cases to cope with, because oncology has now become a very complex field (Int. 6).

So, in DOC, for example, but also in House, M,D., complex diagnoses are made in 10 minutes... Well, that's a serious issue in that series and in medical dramas in general, as it seems that every complication turns out to be very simple in the end.

So what happens? It happens that patients arrive with incoherent files, but they expect you, in a 20-minute visit, to give them the answer they want, but when you tell them: "Look, we need to do some other tests. I need them to better understand your situation", their answer is: "How comes that you don't give me my therapy today?" (Int. 7).

So, I'm seriously worried about this sort of transfer. I also notice it in patients who, when talking about medical topics, since they watch medical dramas, they think they have the right to give medical opinions. This is an excess of information... Anyway, I don't think it is only up to medical dramas, because we know that there are hundreds of daily medical programs on radio and television; in the media by now, unfortunately in medical information, there are too many opinion makers (Int. 8).

The Doctor-Patient Relationship

In general, the opinion about the relationship between doctors and patients in medical dramas (both in US series and in Italian ones) is positive: it is often described as an empathetic one and it helps in reaching a more human and sensitive representation of the medical professionals, making them more reliable and closer to common people:

Medical dramas help inform the patient and make the patient feel that there might be some humanity in the medical field (Int. 2).

If we try to tell a little something, well, about reality, about the problematic nature of reality, certainly, maintaining a narrative with an interest for the audience, in my opinion medical dramas can be useful in that sense (Int. 5).

If fictional physicians are represented as fragile and emotional, it can help in creating empathy in the audience, respondents say. Fragility is also appreciated when it helps to create empathy in the audience. The gaps in the communication training of real doctors, that are highlighted by practically all the respondents, could even be filled or to some extent replaced by medical dramas; on the contrary, the lack of accuracy in all the scientific aspects (illnesses, symptoms, therapies, etc.) cannot be forgiven in any way.

It is interesting to notice that none of the respondents is amazed or disturbed by the doctors' personal or sentimental stories, that are often crucial in medical dramas, but they are by far more reactive towards any inaccuracies on the professional side.

Love stories can be accepted, no problem, they can happen also to doctors... but mistakes in diagnoses or bad description of symptoms and diseases can be dangerous to our professional reputation (Int. 8).

The Insight: DOC - Nelle tue mani

The case of *DOC – Nelle tue mani* is particularly relevant while analyzing the relevance of the medical drama in the perception of Italian doctors, on both on the reception side and on the participation in the production routines.

The first season of *Doc – Nelle tue mani* (*Doc – In your hands*) was aired on Rai 1 since February 2020. It is written by Francesco Arlanch and Viola Rispoli and produced by Rai Fiction and Lux Vide. The second season was aired in 2022; each season is composed by 16 episodes of 50-60 minutes each. The third season will be aired in 2024.

The series has already been distributed and broadcast in Spain, Portugal, France, Canada, Latin America, Slovenia and UK. Since April 2022, it is available in Germany and Austria on the streaming platforms Sony Channel and Canal Plus. In October 2022 it was broadcast on the Japanese public television network NHK General.

The story of *Doc – Nelle tue mani* is inspired by the true experience of Dr. Pierdante Piccioni, former head of the Emergency Department in a hospital in Lombardy, who, as a consequence of a road accident, forgot the last twelve years of his life. The fiction is set in the fictitious Policlinico Ambrosiano hospital in Milan, and is focused on the events which involve the health personnel working in the internal medicine department.

The main character, Andrea Fanti, has a complex personal story, marked by a dramatic turning point: the father of a young patient shot him in the head, holding him responsible for his son's death, and put him in a coma, causing him to lose his memories of the previous ten years. After his recovery, Fanti is no longer the cold and distant doctor he was before the accident; he has become more empathetic and fragile, more attentive to his patients' emotions, more willing to listen to them, and extremely acute and quick in diagnosing. The relationship with his colleagues has also changed after his accident: his empathy is not always appreciated by the hospital managers, but on the contrary his new personal qualities and attitudes turn him into a role model for young trainees.

The series has achieved a huge success in Italy. All the features that represent the core of medical drama as a genre are explored and dealt with: for

instance, all the emotional nuances and complexity of the character of a doctor are represented, as well as the empathy and warmth of the doctor-patient relationship, and, above all, great attention is paid by the storylines to the emotional consequences of medical mistakes in diagnoses and treatments. The second season was set and shot during the Covid-19 pandemic: all the terrible aspects of that dramatic moment were told from a medical perspective, the storylines paid a lot of attention on depicting the real effects of the virus in patients' and physicians' daily life (and death). The TV series' choice to underline the reality and the dramatic and violent characteristics of the pandemic was greatly appreciated by the television audience.

Due to the importance of this series in the Italian television and in the story of the Italian medical drama, our research focused on the answers of our interviewees on *Doc-Nelle tue mani*, and we also interviewed the supervisor and medical consultant who is responsible for the scientific accuracy of the scripts.

The Qualitative Interviews

The issues that spontaneously emerged in our interviews in relation to *Doc-Nelle tue mani* are very similar to the answers relating to medical drama in general, both for Italian and US production; they mainly relate to credibility in the representation of doctors and locations, in the timing of therapies and of diagnoses and in the description of doctor-patient relationships.

So, let's say that he [the main character, played by Italian actor Luca Argentero] is the doctor that everyone would like to have at home. But since people no longer have a doctor who goes home, because let's face it, this is also a fact, in the sense that people and we can talk as much as we want about digitisation, teleconsultation, meeting the doctor every day. It's not true, it's not like that, because the patient today finds it more and more difficult to meet the doctor in person and also regarding the family doctor. [...] In short, that's the doctor that everyone would like, that's the doctor who, so to speak, gets emotional, that's the doctor you want because, having been hit, he too felt on himself the fact of being patient. This, I think, is what people liked, that he is vulnerable, he is fragile. I believe this is the case and therefore they are reflected in the fragility of this person who made him more human and closer to people. (int. 9)

However, a new issue emerged in relation to *Doc-Nelle tue mani*, namely the representation and narrativization of medical mistakes. It is a very serious topic which affected all our respondents, in relation to the need of coping

with the narrativization of the harsh and recent experience of the pandemic. All respondents were very sensitive about this issue:

It's all, let's say, 'too told' in comparison with what happens in real life. In reality, there is a mechanism of individual awareness that is more internal than the mistake itself, that is less shared. In the real world, all the medical actions are more obvious and certain steps in detecting and admitting mistakes are evidently deeply affected by bureaucracy. But, of course, spectacularization has its rules, otherwise TV viewers would get bored. (int. 5)

The Production Phase

Due to its success and its meaning in the Italian medical drama genre, our research considered the production side as well, through an in-depth interview with Professor Raffaele Landolfi, the scientific consultant of the series. Prof. Landolfi is internal medicine specialist at the Gemelli hospital in Rome and full professor of internal medicine at the University of the Sacred Heart. His contribution to the writing phase of the series is particularly relevant. In the first steps of the scripts, the scientific consultant tells real case histories to the screenwriters, who write a first draft of the clinical cases in each episode; then the scripts undergo two subsequent reviews by the scientific consultant and the screenwriters; the last step is the scientific check after watching the filmed episode.

The medical department where Professor Landolfi works was chosen by the production after an accurate study of the structure of Gemelli Hospital, that highlighted the relevance of the internal medicine department as the most interesting one, because of the continuous need to listen carefully to patients in order to understand their symptoms, stories and experiences.

Professor Landolfi said:

I told him [the director] how internal medicine works. And that is probably the hospital department where there is the greatest variety of pathologies, where there is a certain number of patients who do not have a diagnosis. We have to listen carefully to them in order to understand what their pathologies can be. At that point the director rose abruptly from the chair and told me 'Yes, this is what I need!' (...). He asked me: 'Can you introduce us to some of your collaborators who could help us in writing scripts?'. And I said, ok, I would like to be the one to collaborate with you because I am passionate about this topic, I used to teach it in internal medicine graduate school. So, in the end they had a message to give, and I had one message to tell, and we hit it off.

The collaboration with the screenwriters is marked by a continuous compromises, Prof. Landolfi says, because the production needs (timing, speed, entertainment) must coexist with the consultant's need for scientific precision:

Well, it's true that screenwriters have needs for timing, speed and entertainment, but I have needs for adherence to reality.

For example, the balance between television needs and scientific truth is clearly shown by how the conversations between doctors and patients take place in reality and how they are described in medical dramas: "It's very good to have a friendly attitude toward your patients, but in a real hospital you never, never sit on a patient's bed", he said.

Dialogues are a key issue in the work of a scientific consultant: Professor Landolfi explains both to the actors and to the screenwriters how the tone and the wordings of the conversations between doctor and patient must be in order to get the most from a patient's experience. For example, a good doctor must always ask open-ended questions:

A few days ago, I had a chat with three new residents — I mean, three new actors who are currently training at the Gemelli Hospital, they are gaining their experience in the daily routines of the hospital ward. I tried to tell them how they have to talk to the patients, and above all how is the best and more effective way to ask questions: what are the best ways to ask questions, you must always ask open-ended questions in order not to influence your patient's answer, they must be free to answer what they feel like about their symptoms. A doctor must be careful to listen, to interpret his/her patients' symptoms, it is important to be always able to interpret their suggestions, even the least signal.

The contribution of the scientific consultant continues during the post-production phase, for example by paying a great attention to the accuracy in the visual representation of medical technologies. Professor Landolfi said:

In the first season this aspect was not so relevant for the screenwriters, but now (the third season) greater attention is paid to being as accurate as possible in the representation of all technical appliances. For instance, it does not happen anymore that the pressure gauge and the electrocardiogram tracing are not correctly aligned, as it happened in some occasions in the first episodes.

Besides collaborating with the screenwriters, the scientific consultant works closely with the actors, who undergo a real training in the operating rooms of the Gemelli Hospital. They are asked to observe and sometimes support

real doctors during some surgical operations – obviously very simple ones, such as the surgeries which can be conducted under local anesthesia. In those occasions, actors can learn, for example, how to handle a scalpel, how to dress correctly in an operating room, how to sterilize surgical instruments, and so on. In other words, the actors are accurately trained in order to be aware of what can and cannot be done in an operating room, so that the surgery scenes can be as reliable as possible.

The need to stick to real medical and surgical routines is a key point of *Doc-Nelle tue mani* since the series' very beginning. As a consequence, there have been no controversies so far, either from medical institutions or from patient associations.

In Professor Landolfi's opinion, the most difficult aspect in his experience as a scientific consultant for a medical drama is the dramatization of medical mistakes. It is quite a delicate topic to deal with in medical dramas, because it can involve risks for the reputation of the medical profession. For this reason, Professor Landolfi worked extensively side by side with the screenwriters, trying to cope with such a complex issue and always keeping in mind the needs of televisual narration. In this direction, Professor Landolfi underlines the relevance of introducing the practice of simulation, not only in television but also (and maybe above all) in real hospitals:

This year they followed me in my suggestion to pass the message that simulation is an excellent way to do medical training and medical education, because simulation in a real hospital allows medical mistakes to be prevented and fixed. Common mistakes, even serious mistakes are an everyday story, unfortunately. Basically, according to many statistics, medical mistakes are roughly the fourth or fifth cause of death in the world; nonetheless, we prefer not to talk about it, there is a tendency not to underline medical mistakes; but this attitude prevents doctors from learning. I have been the director of the simulation center at Gemelli Hospital, I really care about this issue; that is, I wish all hospitals could have a simulation center, because it is in the simulation center that one really can learn how to cope with medical mistakes. And I asked for this topic to be described and discussed in the TV series I collaborate with, and the screenwriters accepted it.

The need to create a simulation center in every hospital is a concrete objective that the scientific consultant would like to achieve through the huge visibility of the series. In this case, the informative and educational value of medical drama as a TV genre is quite clear, not only because of its effects on the television audience, but also as a real possibility to improve the medical profession itself.

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"TELEVISION CAN DAMAGE YOUR HEALTH?" ITALIAN DOCTORS AND MEDICAL DRAMA: A QUALITATIVE APPROACH



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3. The Politics of Fictional Medicine

Entertainment, Propaganda, and Education in Chinese Medical Dramas in the Xi Era¹

Natalia Riva and Matteo Tarantino

ABSTRACT

Based on the analysis of six TV series, this paper explores how Chinese medical drama embeds medical imagery with evolving ideological constructs representing the political orientation of contemporary China. A brief examination of the characteristics of Chinese medical drama genre, the healthcare system in the People's Republic of China, and the regulatory framework of C-drama will provide the background for the analysis of the representation of national and international politics in the corpus selected. The findings will show how Chinese medical TV series dramatize various key social relationships (e.g., doctor/patient, patient/family, family/society, society/nation, traditional/modern, national/international) and social changes (e.g., ethics, morality, wealth gaps, reforms) with the purpose of both problematizing the current issues China is facing and instructing the audiences on the path to be taken under the leadership of Xi Jinping.

KEYWORDS

Chinese medical drama; core values; Covid-19; PRC healthcare; TCM.

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Research Background and Design

The article explores how different strands of ideological constructs and value systems are incorporated in a sample of contemporary Chinese TV series belonging to the medical drama genre. Current literature suggests that televised procedures and prognoses affect the viewers' health knowledge and behaviors (Kim and Kim 2019, Pilz et al. 2020, Bitter et al. 2021). In addition, through dramatization of key relationships in societies (i.e., Self/body, patient/doctor, physician/healthcare system), medical TV series influence the audiences' perceptions of hospitals, as well as the patients' trust in doctors (Chen 2019, Kohler et al. 2019, Tian and Yoo 2020). Studies mainly focus on popular American productions, with a subset devoted to analyses of series from other cultural and social contexts; notably scarce are analyses of the Chinese market (with exceptions such as He et al. 2018, Chen 2019, 2020, Li 2022).

Yet, 21st-century China is a prolific producer of TV series, able to compete, quantitatively and for audience size if not for outreach power, with other global players (Cai 2017), also with a growing production of indigenous medical drama. At the same time, the Chinese Party-State tightly controls audiovisual popular culture through regulation and supervision (Zhu 2022). Ideological and political considerations make medical drama fall within China's highly codified and increasingly explicit propagandistic and pedagogic mandate for TV entertainment (Cai 2016, Zou 2023). Moreover, medical figures have long enjoyed a privileged status in Chinese post-war culture; as Cai (2017: 45) writes: "in Maoist China, doctors were promoted as exemplary citizens who not only saved lives and helped the sick but also had many noble merits such as their complete and selfless devotion and sacrifice to their career and country".

Against this background, this paper investigates how entertainment, propaganda, and education intertwine in Chinese-produced medical TV

dramas in the era of Xi Jinping, the incumbent General Secretary of the Chinese Communist Party (CCP) and President of the People's Republic of China (PRC). After providing an introduction to Chinese medical TV drama, the Chinese healthcare system, and the regulatory scaffolding of C-drama, the study focuses on six series from Mainland China: Angel Heart (Xinshu 心术, Dragon TV, 2012), ER Doctors (Jizhen ke visheng 急诊科医 生, Dragon TV, 2017), Doctor of Traditional Chinese Medicine (Lao Zhongyi 老中医, CCTV, 2018), With You (or Together, Zai yiqi 在一起, CCTV, 2020), Ebola Fighters (Daguo dandang zhi Aibola qianxian 大国担当之埃 博拉前线, BTV & Online platforms, 2021), and Dr. Tang (Guanyu Tang yisheng de yiqie 关于唐医生的一切, iQiyi, 2022). The corpus has been selected based on the diachronic distribution across Xi's mandates (2012-2013 to today) and the relevance of these shows in terms of characteristics and popularity. To this sample we applied the tools of qualitative thematic analysis through collaborative coding, based on the work of Rocchi and Pescatore (2022), identifying recurring themes and topics. Two main foci will be discussed: fictional medicine and national politics and fictional medicine and international politics. Furthermore, to reflect on the impact of the Covid-19 crisis on Chinese medical drama, some considerations will be dedicated to "fictional pandemic politics". The findings aim to contribute to the scholarship on the depiction in the entertainment media of various cultural, social, and political tensions by introducing case studies pertaining to non-Western contexts.

The genre of Chinese medical TV drama has been defined as "TV series with hospitals as the background and medical staff as the main characters, mainly depicting the work and life of healthcare workers and showcasing their daily treatment of patients" (Li Z. 2020: 61). Li Zunyi references real-life plots, a visual focus on medical procedures, and a narrative focus on doctor-patient relationships and the "psychological journey of the medical staff" as the lynchpins of the genre, which "trigger the audience not only to think deeply about real life, but also reflect on human choices, sense of morality, and social problems" (ibid.). Similarly, Lü Weiwei (2014, cited in Zhang 2021: 81) grounds medical drama in the depiction of social contradictions and conflicts, professional ethics and individual dilemmas, and discussions around the value of life.

Building on the codes of its Western counterpart, Chinese medical drama has developed its own characteristics both in terms of structure and content, becoming strongly allegorical of the social tensions and political orientation of contemporary China. Since the first TV series featuring medical elements - Doctor Xin and Doctor Chen (Xin daifu he Chen yisheng 辛大夫和陈医生, CCTV, 1959) – there have been three stages in the localization of the genre: the origins (between 1959 and 1999); the development stage (from 1999 to 2010); and maturity (from 2010 to today) (An 2020, Li M. 2020, Nie and Chi 2021, Zhang 2021, Zhou 2019). Early dramas featured the medical component purely as a narrative element (Zhang 2021), but with The Pediatrician (Er ke yisheng 儿科医生, Da Yue Film, 1999), the genre began to pursue medical professionalism, embracing "the two Ps" - Professional & Personal – of the narrative mode of American medical dramas – while focusing on shaping the image of the medical staff (Zhou 2019). Progressively shedding the American and Japanese influence, maturity was reached with the success of The Doctors (Yi zhe er xin 医者仁心, CCTV, 2010), the first domestic medical TV series to fully reflect the doctors' professional life and practical issues, followed by Angel Heart, which established the mix of genres as a defining characteristic of Chinese medical TV drama (ibid.).

Chinese experts and government policies agree in assigning medical drama important pedagogic responsibilities but how successful the genre is in fulfilling them depends on the product: for instance, commentators have recognized the effectiveness of Angel Heart in positively reshaping the doctor-patient relationship and emphasizing the virtues of model doctors and nurses with the aim of soothing the tension between the healthcare system and the patients - on the background of the wider political strategic goal of building a "harmonious society" pursued by Hu Jintao's administration (2002-2012) (Cai 2017). At the same time, the genre has also been criticized for using such topics only superficially to attract audiences, often just "scratching the surface" of social issues (Zhang 2021). For instance, Zhou (2019: 76) argues that Chinese medical drama generally takes the medical aspect as complementary and the emotional one as substance: in fact, in ER *Doctors*, the various sentimental storylines portrayed have been found to disregard medical treatments and, although constituting important dramatic components, possibly weaken the discussion around the medical profession. The same can be said for the "love triangle" depicted in Angel Heart, with the clarification that, in this case, the plot serves the purpose of shedding light on the phenomenon of the so-called "leftover women": urban, mature, and financially independent professional single women who, having missed their best chance to get married, suffer a social stigma in contemporary China (Cai 2017: 51-53).

To better understand core elements of Chinese medical drama, it is im-

portant to provide some background on how healthcare is provided in the PRC. The marketization reforms after 1978 saw a shrinking of the role of the State in healthcare financing (reduced to 15% in 2000) and a total collapse of rural communal health providers, generating a system in which patients across China paid directly for healthcare, and healthcare provision was dramatically fragmented and disintegrated, with quality varying substantially and the patients' experience being highly stressful (Millicent 2018). In absence of mature insurance schemes, throughout the 1980s and 1990s, the quota of out-of-pocket expenditure on the total of the national healthcare costs increased from 20% in 1980 to 60% in 2000, when "the Ministry of Health warned that 25% of new cases of poverty could be attributed to medical expenses" (Daemmrich 2013: 4). Moreover, hospitals could now draw profits from markups to medication and operations, leading to incentives to overprescribe and further increase expenditure (Fang 2021). In 2009, an ambitious reform plan attempted to address some of these issues, with initiatives including "increasing government health inputs, expanding health insurance, and reforming public hospitals and the pharmaceutical sector" aiming to "build a health system that would be accessible and affordable to all Chinese citizens by 2020" (Qian 2022: 167). Notably, in introducing the reforms, the State Council explicitly acknowledged the rising social tensions in relation to healthcare. Correspondingly, around the same time, Chinese popular culture started including in its storytelling issues of medical malpractice, social vulnerability tied to healthcare costs, and doctor-patient conflicts. A notable example is the 2010 best-selling novel Angel Heart by well-established novelist Liu Liu (pseudonym of Zhang Xin), which would later be adapted into the eponymous medical drama in our sample (co-written by Liu herself). The 2009 reforms are largely seen as successful in boosting the availability of health resources (Chen et al. 2021), bringing basic social insurance to 95% of the population and decreasing the total of out-of-pocket expenses to 27.7% of the total; yet, from a social standpoint, the core challenge of affordability and access have remained serious, alongside the corresponding social tensions (Qian 2022). Since 2018, under Xi, another round of reforms (with a new target of 2030) has been rolled out, further expanding public and private insurance schemes, promoting integration across the system, and boosting resilience to public health emergencies (on the heels of the dramatic experience of the Covid-19 pandemic of 2019-2021) (ibid.).

Last but not least, a further element relevant for our analysis is Traditional Chinese Medicine (TCM, Zhongyi 中医), the broad set of indigenous medical knowledge and practices which has resisted assimilation into global medical frameworks (Liu 2019), remaining a distinct field of China's medical practice. TCM understands disease as unbalance between various principles and/or blockage of "vital energy" (qi = 1) flowing through "meridians" in the body (jingluo 经络); adopts a functional understanding of body structure related to natural forces (zangfu 脏腑); conceptualizes diagnosis as individualized; and privileges apprenticeship over theoretical study. TCM has been widely criticized as pseudoscience both inside and outside of China; its effectiveness, when measured through randomized control trials, remains a controversial matter (Zhou et al. 2013). At the same time, it has been upheld since the Maoist era as vital to the health of rural and disadvantaged communities. To this day, it is practiced throughout Asia: the Chinese healthcare system includes TCM clinics and hospitals, as well as TCM universities training practitioners. TCM accepts the efficacy of modern medicine (MM) and frames itself as complementary. The clash and integration of MM - often referred to in China as Western medicine (xiyi 西医) - and TCM have been recurring motifs in Chinese literature and popular culture (Fang 2019), reflecting the cultural and ideological impact of the introduction of Western medical science to China (Liu 2023).

The Regulatory Framework of C-Drama

The process of commercialization of television in the early 2000s led to a sharp increase in the production of Chinese TV drama, with claims that it had achieved, by 2007, the first spot in the world's ranking for production, broadcast, and audience size (Wu 2017: 25), while continuing being subject to thigh control by the authorities (Chin 2017). The constant negotiation between producers and regulators (Wu 2017) is at the heart of the activities of the National Radio and Television Administration (NRTA), the department which manages the content, quality, and quantity of radio, television, and online audiovisual programs. Numerous policies dictate how TV series should follow the "correct orientation" in regard to politics, public opinion, aesthetics, values, and position towards the people. In 2010, for instance, article 4 of the TV Drama Content Management Regulations decreed that:

Television drama content creation and dissemination shall persist in the orientation of serving the people and serving socialism and the policy of letting a hundred flowers bloom and a hundred schools contend,² persist in being close to reality, being close to life and being close to the masses,³ persist in the principles of social interest first and the integration of social interest and economic interest, guaranteeing correct artistic orientation (SARFT 2010).

In February 2022, the NRTA's Chinese TV Drama Development Plan, targeting the development of TV drama in accordance with the PRC most recent plan for national economic and social development (the 14th Five-Year Plan), equaled the production of high-quality TV series featuring the right topics and telling good stories⁴ to a political responsibility and a cultural mission in the New (i.e., Xi's) era (NRTA 2022a). Accordingly, audiovisual programs, including radio, television, and online programs as well as their process of production and operators involved, should adhere to and promote the fundamental principles of contemporary Chinese socialism, or what are known as "core socialist values" (shehuizhuyi hexin jiazhiguan 社会 主义核心价值观): wealth and power (fugiang 富强), democracy (minzhu 民主), civility (wenming 文明), and harmony (hexie 和谐) at the national level; freedom (ziyou 自由), equality (pingdeng 平等), justice (gongzheng 公 正), and the rule of law (fazhi 法治) at the social level; patriotism (aiguo 爱国), dedication to work (jingye 敬业), integrity (chengxin 诚信), and friendship (youshan 友善) at the individual level. In September 2022, the NRTA General Office carried out a selection of one hundred "excellent" online shows to be extensively promoted as "exemplary" on the basis of their (a) promotion of core socialist values and (b) contribution to what Xi, in 2012, had conceptualized as the "Chinese Dream" (Zhongguo meng 中国

² This is a reference to the 1956-1957 Maoist "Double-Hundred Policy" (*shuang bai fangzhen* 双百方针), known in the West as the "Hundred Flowers Campaign", with which the CCP promoted open criticism and debate in science and culture (Cheek 2016).

³ This is an explicit reference to then-CCP secretary Hu Jintao's concept of the "three closes" (san tiejin 三贴近) regarding the position of media in society, formulated in 2003 to solve the problem of the media being disconnected from the masses and life (Zhonghua chuanmei wang 2006).

⁴ This recalls the strategy, formally put forth by Xi Jinping at the beginning of his administration, to "tell the stories of China well, spread the voices of China well, and explain Chinese characteristics well" as a way to enhance China's cultural soft power and discourse power (Renmin Ribao 2014).

梦) (NRTA 2022b). The concept of the Chinese Dream represents one of the cores of Xi's ideological framework, known as "Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era" (Peters 2017), and builds on the idea of a collective national rejuvenation – a common goal of Chinese leaders after the chaos and upheaval of the "century of humiliation" between 1839 and 1949 (Kaufman 2010) – while recognizing individual aspirations and aiming for China to be a "moderately prosperous" civilization-state with strong international influence and military (Callahan 2016). As well, the Chinese Dream relies on a nostalgic reappraisal of China's past, its civilization, and its traditions as a site of resistance against cultural colonization (Carrai 2020), a point which is very relevant for our analysis.

Chinese Fictional Medicine and National Politics: Providing Guidance, Soothing Conflict

All the shows selected for this analysis, in particular *ER Doctors* and *With You*, have been explicitly approved and commended by CCP-affiliated newspapers, which have defined them as "realistic works" loved by the Chinese audience precisely because of their rootedness in real life, incarnation of the trend of the times, reflection of people's concerns, embodiment of people's aspirations, and depiction of the "hope and dreams ahead" (Renmin Ribao 2020, 2022; Guangming Ribao 2022), the latter an evident reference to Xi's Chinese Dream. Realism here refers to the representation of topics that are generally cause of concern for the viewers (e.g., medical and old-age care, the doctor-patient relationship, employment, education) but also the capacity to showcase the human nature of doctors and nurses as well as the strong social responsibility that works with true-to-life themes have to give voice to the people's growing happiness (ibid.).

Hence, it appears that to fully reach their intended purpose, Chinese medical TV dramas must resonate with the audience on multiple levels: cognitive, sentimental, and moral. On a moral level, *Angel Heart* and *ER Doctors* attempt to rebuild the doctor's image as an "angel in white" after various scandals in the healthcare sector (Song 2018), showing how doctors and nurses can act as heroes who uphold strong ethics. Examples of bad behaviors and mistakes are shown to emphasize the superiority of a moral conduct. For instance, *Angel Heart* (episode 1) opens with Dr. Gu's storyline: Gu Chaohua is a highly-skilled surgeon about to be promoted when his career takes an

opposite turn: trying to save a victim of a car accident, he performs surgery on the patient in the emergency room without his family's consent. Due to an unknown underlying heart condition, the man dies, a tragedy resulting in his family suing both Dr. Gu and the hospital. The latter, rather than defending his employee, admits that the operation was conducted without written consent and lets Dr. Gu take the blame, forcing him to resign.

To the moral level, an explicit pedagogic function can be identified. ER Doctors, for instance, features short medical lessons delivered by characters at the end of each episode, embodying the didactic purpose of the show and boosting its professionalism and credibility. Similarly, With You, which is set during the Covid-19 outbreak in Wuhan, offers practical information on what one should or should not do during the pandemic. Consisting of a total of ten narrative units or independent stories divided into two parts, With You is indicative of the fine line between fiction and realism in Chinese medical TV drama. Indeed, the show is defined as a docudrama or, as reported by the NRTA Television Drama Department (2020), an "era reportage" dramatizing actual events and chronicling the struggles of doctors and nurses as well as other frontliners and ordinary people during the pandemic. Each two-episode story revolves around specific characters representing and celebrating every individual who fought the "people's war" (Gallelli 2020) against the virus. Nevertheless, With You does not refrain from showing conflict: a young woman throwing a tantrum while being treated, an elderly woman resisting isolation in the hospital, a couple trying to escape the lockdown by jumping over a wall, an older man refusing to wear a mask, among other examples. Shortcomings are however promptly addressed by the hospital staff or community workers and counterbalanced by many inspiring cases, such as that of delivery driver Gu Yong, who delivers food and masks and transports healthcare workers, or that of young laboratory doctor Rong Yi, who wanting to join the frontline leaves her family during the holidays and embarks on a journey to Wuhan by bike and on foot. The series shows the ultimate triumph of China and the Chinese people over Covid-19 – a victory the PRC official media were quick to declare, fitting into the CCP's narrative of the crisis. Within this frame, the stories of ordinary people becoming heroes serve the purpose of showing the audience how everyone, not only doctors and nurses, have the potential to become extraordinary citizens and contribute to building a better China.

This is where the aforementioned core socialist values come into play. The doctors and nurses are portrayed as highly-trained (see next section)

professionals who make life-or-death decisions; but they are also people facing challenging ethical dilemmas when being involved in situations exemplifying social issues. As such, they counterbalance uncivilized behaviors of "immoral" members of society. When dealing with the phenomenon of "healthcare disturbance" (yinao 医闹), that is a general mistrust towards hospitals and medical staff which can become violent, their actions show the benefits of adhering to socialist core values as well as ethics derived from Confucianism. For instance, the aforementioned storyline regarding Dr. Gu stresses how family members should be consulted prior, during, and after every medical procedure, and the course of action – including financial considerations - must be decided taking into consideration the needs of both patient and family, harkening to Confucian ethics extending the notion of "patient" and that of "doctor-patient communication" to the family (Chen 2019). At the same time, fictional doctors and nurses may foot the bill (e.g., Angel Heart episode 29: Dr. Huo inspires the team to collectively cover the fee of a young indigent patient suffering from a congenital disease) or provide shelter to the homeless (same episode: nurse Mei lets the patient's father live in her house). Hamalainen et al. (2019: 227) stress how "traditionally, the Chinese family (and wider social and political) life is founded on duty-based ethical thinking in which family (and wider social and political) relationships are determined by sense of duty, obligations, and rules". Confucian family values thus extend to relationships outside of the household to include friendship networks, the collective, and, ultimately, the nation. Correspondingly, doctors and nurses in Chinese medical dramas are moved by what can be perceived as a "sense of higher belonging" or an understanding of the country and the family as a coherent whole: "a combination of the well-being of the country and that of Chinese individuals and families, whose aspirations are intertwined with those of their country" (Zhang 2016: 135). The patriotic feeling that derives from this type of family-state relationships is part of the Chinese Dream and helps the ordinary Chinese people face several issues, including healthcare reform (ibid.).

Medical dramas tend to show hospitals as well-functioning communities, epitomizing a wider harmonious society built on the basis of every individual's moral conduct. Social responsibility and duty come before family, and certainly before the single individual, while the community and the nation surpass the nuclear family and incorporate family values (Ma 2021, Varriano 2022). In this "big family" the Party and the government take on a metaphorical parental role. For instance, in *ER Doctors* (episode

12), a volunteer, raised as an orphan, explains that her surname is "dang 党" because in the orphanage "Party" was the surname attributed to girls, while boys were surnamed "guo 国" (Country). With the Party-State anthropomorphized as mother and father, social tensions, such as the economic issue of medical fees mentioned above, are reversed: in the dark times of the pandemic, financial support for Covid-19 patients and their families is covered by the Chinese government. "Our country will pay for our treatment",5 cheerfully says a patient in With You (episode 2).

Needless to say, the Party and the State are "watch words" or "watch signs" (Schneider 2019) for patriotism, national pride, and a sense of community, as are references to well-known communist heroes, such as Lei Feng. "What a living Lei Feng",6 comments a nurse when meeting the newly-appointed US-trained emergency physician Dr. Jiang Xiaoqi in the first episode of ER Doctors, after she offers to take care of the medical fees of a young thief who had collapsed while stealing her belongings. Lei Feng (1940-1962) was a soldier in the People's Liberation Army who died prematurely in an accident and, in the history of the PRC, has been glorified, through various propaganda campaigns, as the archetypal "good soldier", a role model incarnating the values of dedication, humility, sacrifice, altruism, and other virtues (Colville 2020). The most recent of these campaigns saw Wuhan doctors and nurses being praised by the official media as "living Lei Fengs" (huo Lei Feng 活雷锋) (ibid.). References to patriotic symbols feature extensively in the corpus analyzed. Taking the abovementioned storyline of the volunteer in ER Doctors as an example, her name is Dang Zhenni (Jenny), she was adopted by an American family and after studying TCM – which, as we will see in the next section, plays an important role as a repository of meaning in Xi's China - she returned to the PRC to join the hospital. Throughout various episodes, she proves to be resourceful: when praised by her colleagues for knowing what to do in a typical Chinese occurrence of medical disturbance (episode 9), she happily defines herself as Chinese, even lovingly mocking the Beijing accent. As will be further discussed, this also implies the relevance of taking a "Chinese" approach to medical issues, both at a practical and a value level, a view which can even be applied to the appropriateness of the Chinese containment model during the Covid-19 outbreak publicized by With You.

^{5 &}quot;Guojia tao gei zanmen zhibing 国家掏钱给咱们治病".

⁶ "Jintian zhenshi jiandao huo Lei Feng le 今天真是见到活雷锋了".

Since Chinese medical dramas are required to fictionalize real issues, adding a moral and pedagogic value to entertainment, fictional doctors and nurses are both represented as ordinary people - with their own personal qualities and flaws - and, because of the skills required in their jobs, as heroes who care for their patients, each other, and society as whole, work hard and with integrity, respect the law, and advocate justice and equality. Through good deeds and a moral behavior, even during times of crisis, they show the audience how to aspire to a higher status, elevating themselves from the condition of ordinary people. Thus, healthcare workers take on the function of role models, first and foremost to both their peers and subordinates in the medical environment. However, as their place of work is in itself a family, a community, and an allegorical representation of society as a whole, they are role models for the rest of the Chinese people as well. In this sense, the political, propagandistic undertone appears in the alignment of the moral fiber of every individual with that of the Chinese nation: with every individual equipped with core socialist values, the Dream of a stronger, more prosperous, and harmonious China is achievable.

Chinese Fictional Medicine and International Politics: Reframing and Legitimizing Medical Identify

We identify two main intertwined strands in the way global dynamics are incorporated into Chinese medical drama in our sample. The first is epistemic, and regards the field of medical knowledge and the processes of its construction and legitimation; the second is more political, and relates to China's position in a post-colonial world.

Defining what counts as "legitimate" medicine on the global scene has historically represented an important site of contention in terms of cultural politics. TCM has gone through cycles of legitimation and delegitimation, which have been reflected in medical drama: the tension between TCM and MM was already at the heart of the 1959 series *Doctor Xin and Doctor Chen*, humorously contrasting strict, modern medicine-trained Dr. Chen against human and understanding Dr. Yin, master of acupuncture. The Xi era stresses a re-evaluation of Chinese traditions, including TCM. Xi Jinping himself has underlined on numerous occasions the need to promote TCM to the same level of MM (Li and Zhou 2020): in an instruction published in 2018 he emphasized the need to "place the same importance" on Chinese

and Western medicine and on their complementarity in the project of building a "healthy China" (Xinhua 2018). This has been reflected in medical drama productions in which TCM is presented as a staple of Chinese culture facing various threats of extinction, giving rise to a sub-genre concerned with the preservation of TCM. Some of these series are set in the past and incorporate elements of the Chinese historical drama genre, which mostly deals with distant past and the struggle for independence. A case in our sample is Doctor of Traditional Chinese Medicine, set in early 20th-century Shanghai, which portrays the struggles of a TCM practitioner in Qing China on the backdrop of the anti-Japanese war of resistance (to which the protagonist contributes), ending with the protagonist migrating to the US and spreading TCM there. The nationalistic undertones of TCM reappraisal have come to also involve medical dramas set in contemporary times. For instance, the 2023 series Gen Z (Houlang 后浪 or "waves") tells the story of a TCM University and its students under the guidance of Professor Ren. TCM is presented as besieged by obtuse forces refusing to see its merits because of a lack of Chinese perspective. In episode 1, defending the need for funding an apprenticeship program, Professor Ren states: "If we teach our students the mindset of Western medicine, they will use that mindset to solve problems. What is [the mindset of] our TCM?".7

The same nationalistic undertones can be seen in the second dimension of the knowledge politics incorporated into contemporary Chinese medical drama, which regards the value of a global medical education in the Chinese medical system. Sending "overseas doctors" (haiwai yisheng 海外上生) abroad was strongly incentivized throughout the reform era. This was reflected in the few medical dramas produced before 2010, with foreign education presented as a mark of distinction for doctor characters. This is still present today: for instance, the core tension in the 2022 series Dr Tang is due to foreign-educated Dr. Jia being appointed as director of a struggling Chinese cardiac clinic and being perceived as an intruder. However, at the same time, medical drama in the Xi era appears to mark a shift in the value of American medical education for Chinese medical personnel. For instance, in episode 4 of the series ER Doctors, US-trained Dr. Jiang is scolded by her mentor because she prioritized saving a patient's organ rather than his

[&]quot;"Women yong xiyi de siwei moshi lai jiao xuesheng, xuesheng yong zheyang de siwei lai jiejue wenti. Women zhongyi shi shenme 我们用西医的思维模式来教学生,学生用这样的思维来解决问题。我们中医是什么?".

(and his family's) overall well-being, ending up with complications. "It is time to Sinicize your American thinking", the mentor says. This echoes the *tilyong* (体用, "*Essence/Function*") dynamic as framed by neoconfucian reformers of late 1800s-early 1900s. Within that framework, the reformers could promote the modernization of China through the incorporation of western knowledge and technology, which they saw as urgently needed after the catastrophic losses of the Opium Wars (Kwon and Woo 2019). The movement prescribed incorporating western advancements at the level of "function", leaving the fundamental "essence" of society steadily Confucian. Similarly, in medical dramas, western medical skills and knowledge must be incorporated into an understanding of the purpose and ultimate goal of medicine, which must remain Chinese.

Overall, at the epistemic level we can identify an explicit thematization of the need to develop a distinctly "Chinese" approach to medicine and a rejection of an alleged "global" medical knowledge applicable indistinctly across the world. The recovery of doctor's privileged status as an exemplary citizen appears based on an explicit "Sinicization" of medical thinking – a process which looks at TCM as a repository of meanings, while avoiding addressing issues of its efficacy explicitly.

Within this patriotic and nationalistic reframing of medical identity, knowledge, and values, the explicit staging of geopolitical dynamics is, at least in our sample, peripheral. This is not necessarily limited to Chinese medical drama: as the conflicts staged are primarily confined at the micro-level, medical drama generally avoids referring to conflicts between nation-states. However, this appears to be changing: one of the most evident cases is *Ebola Fighters* (2022), which dramatizes the 2014 Chinese aid campaign against the Ebola epidemic (Wang 2018). The series shows China respond to the WHO call for an international effort to combat the Ebola outbreak in the fictional African country of Cabalia and "stand with the African people",9 as a university dean states in episode 2. This is presented as the continuation of a long-standing contribution by China towards global health: in episode 5, an entire three-minute scene (from minutes 3:03 to 6:04) is devoted to illustrating this endeavor through a speech given by the same dean, dating and quantifying the Chinese commitment.

^{* &}quot;Ba ni na Meiguo siwei ye gai Zhongguohua yixie le 把你那美国思维也该中国化一些了".

^{9 &}quot;Zhongguo jiang he Feizhou renmin zhan zai yiqi 中国将和非洲人民站在一起".

This "international effort" is then jeopardized by the lack of international cooperation: the British, Cabalia's former colonists, are shown as detached from the frontlines; the multinational task force employed by the Cabalia's Ministry of Health is shown as initially distrusting the Chinese medical personnel; the only true ally in the fight against Ebola is NGO Doctors Without Borders. China's loneliness is intensified by evil external forces represented as a multinational crew of arms and diamond smugglers, aided by corrupt double-agents inside Cabalia's society, engaged in exploiting the country's resources and perpetuating its state of civil war. Conversely, the Chinese presence is characterized as friendly, long-standing, and fruitful (as epitomized by the enlightened female vice-president of the country being fluent in Mandarin). "Africa is our good brother through thick and thin", 10 a People Liberation Army's officer states in episode 7. Ebola Fighters shares similarities with 2017's Chinese action movie blockbuster Wolf Warrior 2 (Zhan Lang 2 战狼2) in the way it frames the Sino-African relationship as friendly and beneficial for the latter partner (Shi and Liu 2020) and fueled by the commitment of China towards a fair international order (pursued through defensive military means in Wolf Warrior 2 and medical and journalistic tools in Ebola Fighters). A mark of the political-medical-historical imaginary depicted so far can be found in the figure of the leader of the rebel separatist army in Ebola Fighters. This character turns from villain to hero, accepting to help in the fight against Ebola, because his own biography (in a flashback, his mother is shown as having been previously cured by Chinese doctors) convinces him of the trustworthiness of the Chinese (eps. 18-20).

These geopolitical imaginaries also extend to the epistemic level discussed above. On the one hand, TCM is applied by the protagonists, shown as effective in providing palliative treatments for chronic pain, and confirmed more effective than indigenous traditional medicine (in one scene, TCM solves a painful urinary block which indigenous medicine could not heal). On the other hand, the series shows elite African doctors possessing prized foreign medical expertise acquired not in Europe or the United States, but in China. A notable example is the figure of a doctor (episode 1) who dies from Ebola before fulfilling his "dream" of going back to China to "see his old classmates again" (later in the series, his daughter decides to study medicine in China and continue in her father's footsteps).

¹⁰ "Feizhou shi women fengyutongzhou de hao xiongdi 非洲是我┌雨同舟的好兄弟".

Ebola Fighters is also notable for staging the most explicit – albeit still metaphorical - references to the geopolitical dimension of the Covid-19 pandemic in our sample. China was repeatedly accused of being the origin of the pandemic and opaque in data-sharing; the country defended its actions multiple times in public arenas (Yu 2022, Papageorgiu and De Melo 2022). Therefore, omission of this dimension from medical drama appears striking: self-victimization in the face of perceived unjust accusations is absent across our entire sample. At the same time, Ebola Fighters stages a China not only sincerely committed to multipolar global health efforts (including the transparency dimension), but also willing and able to take the lead in crisis situations. The lack of global acknowledgment of this role for China seems to be taken for granted at this stage; the title of the drama could even be seen as an ironic reference to TIME Magazine cover of December 10, 2014, which declared "Ebola Fighters" as the "Persons of the Year" - without referencing, in the corresponding articles, the Chinese effort (Gibbs 2014, Von Dhrele 2014).

Conclusions

Our analysis has begun to explore how contemporary Chinese medical drama incorporates several complex ideological constructs which are strongly aligned with the political framework of Xi Jinping's mandate. Firstly, medical identity appears as a repository of meanings, both nationally and internationally, harkening back to an idealized role of healthcare professionals, which was also frequent in Maoist China. While neither plotlines nor characters emerge as stock propaganda items, with the latter being built as complex and multi-dimensional as in any of the best international productions, this lockstep between national discourse and popular culture is to be expected. Secondly, at the international level, Chinese medicine emerges as an allegory of desired geopolitical orders, at both the epistemic (with TCM) and political (with post-colonialism) dimensions. Thirdly, we identified a lack of the self-victimization discourse in Chinese medical dramas regarding the global spread of Covid-19 alongside a strong emphasis on the effectiveness of the Chinese response to the crisis. Fourthly, we observed how Chinese medical series do not eschew tackling critical challenges of the Chinese healthcare system, particularly in reference to social vulnerability. This should not be read as contradictory but as a normal component of the

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centralization/decentralization dynamics of China, where the "center" puts pressure on the "periphery" (also through storytelling) to follow through with necessary reforms, in this case, the recovery of an increased role of the public sector (Qian 2022), in coherence with the overall politics of Xi, and a participation of society as a whole in the construction of an even better future China. As the Chinese healthcare system is in transition, medical drama is playing a role in justifying some of the reforms, while explaining them to the audiences through its prominent educational and didactic component.

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THE POLITICS OF FICTIONAL MEDICINE: ENTERTAINMENT, PROPAGANDA, AND EDUCATION IN CHINESE MEDICAL DRAMAS IN THE XI ERA



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4. Analysing the Inner Structure of Episodes in House, M.D. through Network Analysis

Paola Dalla Torre, Paolo Fantozzi and Maurizio Naldi

■ ABSTRACT

Dialogues in TV series are crucial as they drive the narrative, revealing character motivations and relationships while enhancing the emotional depth of the story, keeping viewers engaged and invested in the unfolding plot. Their structure (i.e., the network resulting from the interaction of characters) may reveal some stylistic signature of the series. In this chapter, we investigate the presence of regularities in the patterns observed in dialogue structures. For that purpose, we consider the series *House*, *M.D.* which is one of the most widely followed medical drama TV series. The results show a large prevalence of the star structure, where a character acts as the main speaker and, in turn, talks to one of the other speakers involved in the scene.

KEYWORDS

TV series; medical dramas; *House*, *M.D.*; episode structure; network analysis.

Introduction

Dialogues have a long story in culture. Aristotle, in his Poetics, which is first extant philosophical treatise to focus on literary theory, states that the structure of classical tragedy was based on dialogues from Aeschylus on, since Aeschylus introduced a second actor into a dialogue with the narrator (see volume 1, part 2 of the work by Easterling and Knox, 1985). A further innovation was introduced by Sophocles, who introduced a third actor, which became the standard structure, where one of the three actor predominates over the other two, as reconstructed by Else (1945).

Dialogues are also the main form employed by Plato to describe Socrate's method, where the philosopher activated the dialogue with his students to receive a response in a two-way dialogue, where the dialogue was always between him and a single student, no matter how many were present (Seeskin 1987).

Many linguists have investigated dialogues in TV series. A major example is Bednarek (2018), who introduced the concept of expressive character identity for relevant character traits. A wide range of linguistic features can contribute to what can be expressed through dialogues, e.g. conversational structure, affective language, lexical richness/diversity, terms of address, syntactic structure, accent/dialect, impoliteness strategies, and (non-)adherence to conversational maxims. She defined speech by the number of involved speakers, distinguishing among monologues, asides, voice-over narration (where just one speaker is involved), dyadic interactions (between two speakers), and multiparty interactions.

The distinction made by Bednarek (2018) gives rise to a finer classification, where we can also investigate the different ways in which characters interact by dialogues. For example, in a dialogue involving three characters, we could have one speaker talking to the other two, who remain silent, or we could have speaker A talking to speaker B, who talks to speaker C. The

identification of such dialogue configurations may shed light on the kind of narration that the series adopts.

In this chapter, we aim to investigate the structure of dialogues in TV series. In particular, we wish to classify dialogues in TV series according to their structure and detect if recurrent patterns emerge, building a taxonomy of dialogue structures. For that purpose, we resort to the tools of graph theory, employing graphs to represent the dialogue and extract that taxonomy. It is important to note that we do not examine the content of dialogues, which have been subject to linguistic analyses and could shed a different perspective on the relationship between characters. We consider just the general structure of dialogues, i.e. how many speakers are involved and how they interact with one another.

The research questions we formulate are the following:

- RQ1 Is there a preferred size of dialogues?
- RQ2 Are all speakers equally involved in the dialogue?

We focus on a specific medical drama, i.e. *House, M.D.* (Fox, 2004-2012), given the importance of medical dramas and the particular relevance of dialogues in that series. In fact, dialogues, often conflicting ones, are the main tool through which the main character (Dr. House) achieves the correct diagnosis. In addition, *House, M.D.* is a major example of the instrument of stabilizing selection, where the selection of characters is narrowed to focus on the main character, i.e. Dr. Gregory House, as shown by Pescatore and others (2014).

The organization of the chapter is as follows. In the second section, we review the genre of medical dramas and focus on *House, M.D.*, explaining the peculiarities of that series and the reasons for its choice. Next, we describe the use of graph theory to represent dialogues and the potential richness of dialogue structures in the third section. The dataset we employ for our analysis is described in the fourth section. Finally, we show some early results in the fifth section.

Medical Dramas and House, M.D.

Medical dramas are a genre of television shows that revolve around the medical field, providing viewers with an opportunity to experience the intense and emotionally charged environment of healthcare settings. These dramas combine elements of realism, medical accuracy, and human drama to captivate audiences while contributing to public awareness of medical practices and healthcare challenges.

The history of medical dramas dates back to the early days of television, with landmark shows like *Dr. Kildare* (NBC, 1961-1966) and *Marcus Welby, M.D.* (ABC, 1969-1976) popularizing the genre. However, it was in the 1990s that medical dramas experienced a surge in popularity with the success of *ER* (NBC, 1994-2009) and *Grey's Anatomy* (ABC, 2005-present), among others.

Typically, medical dramas follow a serial format with individual episodes featuring standalone medical cases intertwined with the personal lives of the main characters. The characters, often medical professionals like doctors, nurses, and sometimes administrative staff, are developed to have complex personalities and emotional arcs that create compelling storylines.

The importance of medical dramas in the landscape of TV series can be related to several factors. Here, we mention just the three most relevant.

First, medical dramas can be seen as the starting point of quality TV. For some scholars, the release of *ER* in 1994 marks the beginning of the second golden age of American TV (see Thompson 1997), later to be dubbed complex TV by Mittell (2015). Plots get more and more complex in *ER*, adopting a multistrand narration, as highlighted by Innocenti and Pescatore (2018) and a more realistic setting. In contrast to previous productions, we start seeing doctors who may err, get scared, and show low empathy. Doctors show their human nature, their frailties, and their private life that influences their performance on the job.

Second, their continued success warrants their being a subject of study. They have a long history, see the accounts by McAnea (2001) and Rocchi (2019), accompanied by significant audience results. Their success derives from widespread interest in health issues as highlighted by Branea and Guguianu (2013) and their capability to heighten the emotional strain of dramas with life, disease, and death issues (see Rocchi 2019). Their excellent ratings are the reason for their long duration over the years, creating a perfect example of a complex narrative ecosystem (Innocenti and Pescatore 2014).

Third and final, medical dramas exhibit a social and cultural roles that other genres cannot boast. Their topics (diseases, diagnoses, death) are very sensitive and urge to be treated with exactness and responsibility. That's a major reason for the recruitment of medical staff as consultants to guarantee correctness and realism, as described by McGann (2015).

Among medical dramas, we decided to focus on *House*. The series was created by David Shore and was aired on the Fox network from November 2004 to May 2022, for a total of eight seasons and 177 episodes. It ob-

tained great success, both among critics and the general public. It ranked among the ten most viewed TV shows in the U.S.A. and the most viewed TV show in the world in its second and fourth season, as well as in 2008. It also won several awards, including two Golden Globes and three Emmy awards. *House*, *M.D.* centers on the life and medical cases handled by Dr. Gregory House, an exceptional but contentious diagnostician at Princeton-Plainsboro Teaching Hospital.

Dr. House heads a group of young doctors, who assist him in the task of discovering the diseases affecting their patients, using an unconventional detective-like approach. In most cases, the symptoms exhibited by patients appear mysterious and House turns out being the only one who succeeds in delivering the right diagnosis and the right cure.

As in all medical dramas, each episode is based on a different case, following the vertical plot of multi-strand narration (see the studies by Halvatzis 2011, and Braga 2016, on the multi-strand structure). At the same time, all episodes within a season are linked by a horizontal plot that marks the development of the narrative arc for each character. House is not the only fixed character in the series, whose evolution we follow through the episodes; we have, e.g. his friend Dr. James Wilson, and his boss Dr. Lisa Cuddy.

The series distinguishes itself by presenting medical mysteries that challenge traditional diagnostic methods. Dr. House employs an unconventional approach, emphasizing the importance of thorough patient histories, scrutiny of minute details, and relentless questioning of colleagues. This distinctive diagnostic style often involves various differential diagnoses and encourages viewers to engage in medical problem-solving processes.

The series has been studied from several viewpoints.

A major viewpoint is that of ethical dilemmas and medical decision-making. Dr. House often faces tough decisions, balancing the pursuit of accurate diagnoses with potential risks to patients. The portrayal of informed consent, experimental treatments, and confidentiality issues offers a lens into the ethical complexities faced by medical professionals. And the behavior of both Dr. House and his group may be prone to criticism from an ethical viewpoint, raising the question of whether they can be considered as a reference from would-be doctors, as investigated by Wicclair (2008).

The psychological exploration of Dr. House is also of interest, since his character is depicted as an irascible and emotionally complex individual with a leg injury causing chronic pain, leading to addiction issues. His misanthropic tendencies and strained interpersonal relationships are also

moulded by his personal challenges and affect his diagnostic acumen and decision-making.

His approach to diagnosis is probably the most striking among the panorama of medical dramas. The series distinguishes itself by presenting medical mysteries that challenge traditional diagnostic methods. What Dr. House thinking approach in the quest for the right diagnosis? Certainly, the importance of thorough patient histories, and the scrutiny of minute details are stressed, but, most importantly, Dr. House proceeds by relentless questioning of his colleagues. Bernardelli and others (2007) places Dr. House in Popper's philosophical footsteps, since his approach exploits conflicts. House is continuously looking for an opinion conflict with his team, trying to arrive at the right diagnosis through trial and error. The reasoning behind the search for the right diagnosis is the core of each episode. Once the right diagnosis is found, the actual cure application receives scanty attention.

Dialogues and Network Representation

In this chapter, we use graphs to represent dialogues and classify them. In this section, we describe how we carry out that representation.

Graphs are mathematical structures made of nodes and edges. In this context, we use nodes to represent characters, while edges represent the presence of a dialogue between characters. We use directed graphs, where edges have a direction indicated by an arrow, so an edge directed from node (character) A to node (character) B means A has talked to B. An example is shown in Figure 1, which has been extracted from Fronzetti Colladon and Naldi (2020). Here, the numbers above the edges represent the number of lines that a character has spoken. In the following, since we are interested in the structure of dialogues rather than frequency, we will not include that information.

Graphs have been employed in the literature to represent the relationship between characters. For example, Beveridge and Shan (2016) have used graphs to describe interactions between characters in *Game of Thrones* (HBO, 2011-2019), while Bonato and others (2016) use graphs to represent character networks in novels, with an edge being drawn between two nodes when the corresponding character names occur a certain number of words apart from each other. Those representations are different from ours, where an edge is drawn just if a character talks to another.

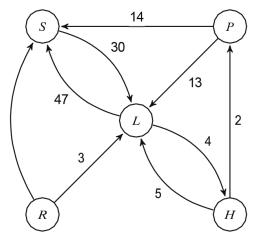


FIGURE 1 Example of dialogue graph (Episode 1 of Season 1 of *The Big Bang Theory*, CBS 2008-2019).

L =Leonard P=Penny H=Howard S=Sheldon R=Receptionist

In describing dialogues through graphs, we have to define the time horizon over which the presence of dialogues is observed. For example, Fronzetti Colladon and Naldi (2020) considered a whole episode as the observation interval, so the presence of an edge between A and B meant that A had talked to B at least once during the episode. In this chapter, we have opted to consider scenes as the observation interval. The size of the graph will be accordingly given by the number of characters present in a single scene. We expect then to obtain graphs of small size.

As hinted in the Introduction, we are not interested here in examining who talks to whom, but rather in the general structure of dialogues, so the two graphs shown in Figure 2, though representing two different dialogues, exhibit the same structure.

In the language of graph theory, two graphs exhibiting the same structure are said to be isomorph. Two graphs are isomorph when we can find a

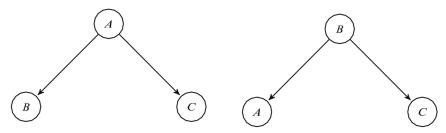


FIGURE 2
Graphs of identical structure.

mapping between the nodes of the two graphs so that their adjacencies are the same. Detecting if two graphs are isomorph to each other is called the graph isomorphism problem and is a classical algorithmic problem that is solvable in quasi-polynomial time, as shown in the survey by Grohe and Schweitzer (2020).

Since we focus on the structure of the graph, neglecting the actual label representing the character, we are interested in directed unlabelled graphs. In directed graphs (as opposed to undirected ones), the edges between nodes are associated with a direction from a node to the node at the other end of the edge. Focusing on directed graphs means that we are taking into account who is talking to whom, not just that the characters are involved in a dialogue (which is what we would represent with an undirected graph). In unlabelled graphs, we do not associate a node with a specific character. If we go back to Figure 2, we see that putting labels on nodes makes us see the two graphs as different from each other, while we wish to take into account their connectivity pattern only and consider them identical. Their structural identity comes from the possibility of mapping one into the other simply by swapping labels, i.e. recognizing that the two graphs are isomorph to each other.

An important issue is understanding how many different structures we can have for a scene involving n speaking characters, or, to say it in graph theory language, how many non-isomorph connected directed unlabelled graphs we can have for a graph of n nodes. It turns out that the problem can be decomposed into finding all oriented graphs (where an oriented graph is a directed graph having no symmetric pair of directed edges), all connected graphs with bidirectional edges, which is equal to the number of undirected connected graphs, and the mixed configurations (where some edges are unidirectional and some are bidirectional). A pictorial representation of the undirected configurations (i.e., those where dialogues are not reciprocated) for $n \le 3$ is shown in Figure 3. In Figure 4, we can instead see the simplest configurations (n = 2, 3) when dialogues are not reciprocated (i.e., for any two characters, either they don't talk to each other or one talks, and the other listens).

The number of graphs for unreciprocated dialogues can be found in Demirci and others (2021) and is labelled as sequence A086345 in the On-

¹ See the webpage https://mathworld.wolfram.com/OrientedGraph.html (last accessed 22-08-2023).

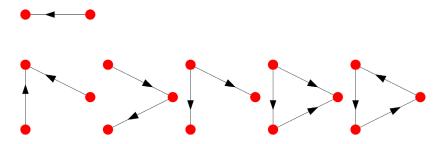


FIGURE 3 Dialogue graph configurations for unreciprocated dialogues n = 2, 3.

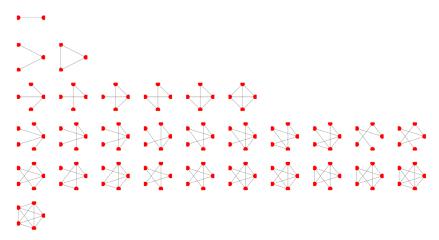


Figure 4 Dialogue graph configurations for reciprocated dialogues ($n \le 5$).

Line Encyclopedia of Integer Sequences.² Instead, the number of graphs for reciprocated dialogues is reported by Harary (1957) and can be found as sequence A001349 in the On-Line Encyclopedia of Integer Sequences.³

Even if we neglect the mixed cases (where some dialogues are reciprocated and some are not), we can see in Figure 5 that the number of possible configurations grows very quickly, faster than exponentially, exceeding 2 million when we have 7 characters.

² https://oeis.org/A086345 (last accessed 22-08-2023).

³ https://oeis.org/A001349 (last accessed 22-08-2023).

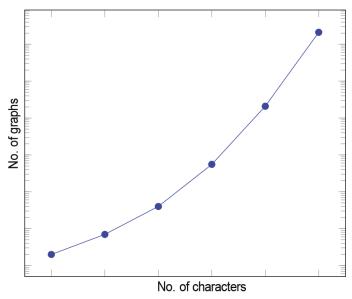


FIGURE 5 Characters and potential dialogue graphs (excluding the mixed configurations).

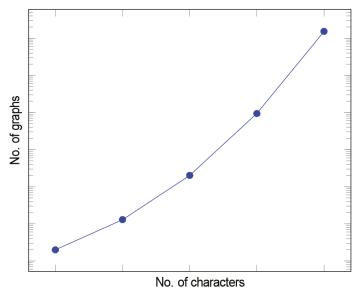


FIGURE 6 Characters and potential dialogue graphs.

Alternatively, we can obtain the overall number of graphs from the website https://users.cecs.anu.edu.au/~bdm/data/digraphs.html, where they have been generated, after removing those that are not connected. The resulting number is shown in Figure 6. As can be seen, the growth is even more staggering, reaching over 1.5 million graphs when we have six characters, instead of 20960 when we neglect mixed configurations. As can be seen, the number of mixed configurations, where there is a mixture of monologues and two-way interactions, is largely dominant.

The Dataset

As justified in the second section, we have chosen *House, M.D.* as the medical drama to focus on. Since we are interested in dialogues, we relied on the dialogues as extracted from subtitles. We retrieved the subtitles (which included the speaker for each line) and have them annotated. Each episode was annotated by at least two annotators, who separately viewed the episode, checked the correspondence between speaker and line as reported in the subtitles, and took note of the direction of each dialogue. We retrieved and annotated dialogues for all seasons and all episodes, for a total of eight seasons and 177 episodes.

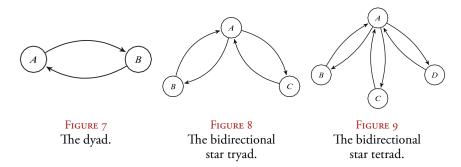
Results

In this section, we report the results of our classification work on all episodes of *House*.

For the time being, we have limited ourselves to carrying out a preliminary classification of dialogue structures by the number of speaking characters involved. As highlighted in the third section, there are many different structures possible for each choice of the number of speaking characters. For

No. of speaking characters	Frequency [%]
0/1	21.7
2	32.5
3	18.2
4	14.2
5+	13.5

Table 1 Frequency of graph sizes.



example, even for three characters, we have no less than seven possibilities. In Table 1, we report the relative presence of each structure size. The raw where the number of speaking characters is 0/1 refers to those cases where either no character is speaking or we observe a monologue. Though they cannot be considered as dialogues (which are conversations between two or more people), we report the figure for completeness.

We see that the most recurring pattern is the dyadic structure shown in Figure 7. In that picture, labels are shown on the nodes but they have to be considered as generic, not representing any specific character, following the choice of considering unlabeled graphs to deal with archetypal structures. It is to be noted that that dyad is the only dialogic structure possible when we have two characters. It represent nearly one third of all structures employed in *House, M.D.*, with its weight growing to 41% when we remove silent scenes and monologues from the count.

When we come to tryads, i.e. the structures where three characters talk, the number of structures shows some variety, though not all possible structures are present. Here we highlight the most frequent one, which is the bidirectional star network shown in Figure 8, where a leading character establishes reciprocated talks with the other two, who do not talk to each other. In the language of graphs, the leading character acts as the hub here.

The bidirectional star structure is also the most frequent one when we consider tetrads, i.e. the structure made of four talking characters, as shown in Figure 9, where, again, we find a leading character (the hub), who talks (reciprocated) to all the other characters, which, on the other hand, do not talk to each other.

Conclusions

We have extracted the network structure of dialogues for all episodes of the well-known medical series *House*. We can now answer the two research questions we posed at the beginning of this chapter.

As to RQ1, we have observed that there are some preferred sizes of dialogue. Nearly one-third are dyadic, while the dialogues with two, three, or four characters represent 65% of the total. The dyadic form has ancient origins. Greek tragic theatre, in fact, is built according to a dialogic structure and the special case of a dialogue between two characters is called stichomythia. It is a long and tight procedure, constructed with symmetrical interventions (Ercolani 2016). As with every form of dramatic expression in Greek tragedy, sticomythia determines the character of the characters who utter them (Baldry 1971). Sticomythia prevails when action and interaction between human beings prevail, human relationships are the focus of attention. Sticomythic dialogues are informative, but they also allow conflicts and contrasts between two characters to emerge (Guidorizzi 2004). In addition to being informative, stichomythia is also expressive, thus stabilizing the understanding and appreciation of the narrative universe. Perhaps this is why it is also the most frequently used structure in *House* scripts, which, as highlighted by other studies, has a stabilizing ecosystem structure (Pescatore et al. 2014). The references to Greek theatre and, more generally, to the drama and narrative structures of antiquity are not peregrine but are justified by the fact that precisely most American screenwriting manuals rely on those forms and texts to build a screenplay and always start from the Aristotelian model, as highlighted, e.g. by Truby (2008), McKee (1997), Bang (2022), and Snyder (2005).

On the other hand, triadic and tetradic structures, which are runners-up to the prevailing stichomythic dialogue, have a key feature: only the character who is at the top of the structure speaks and listens to the others who interact with him and him alone (not with each other). This leads us to answer our RQ2. Whereas in the stichomythic structure, a balance prevails between the two characters involved who both speak and listen, in triads and tetrads speakers are not all equally involved in the dialogues, and a hub prevails who coordinates and manages all the talk. There is thus a multiplication of discourses, stabilized by having a single point of reference that listens and responds. Here, too, a structure is created that, while more complex than the simple dual structure, nevertheless has its own balance, its

own stabilizing function. It would seem, then, that even from the analysis of the dialogic structure of the narrative universe of *House*, *M.D.* we arrive at that idea of the contemporary TV series as a narrative ecosystem that nevertheless tends to- ward balance, whatever the system for achieving it. Balance means consistency, and that makes it possible for the ecosystem to survive over time (Pescatore et al. 2014).

We must add that our analysis is based, for now, on a medical drama with a particular structure. House, M.D., in fact, is a character-driven medical drama and almost always involves its protagonist, either speaking or listening. A protagonist who uses the dialogic method with his team of helpers to solve cases. So, logically, in most cases, Dr. House works as the hub of the tetrads and triads structures. Another final consideration relates back to Rocchi and Pescatore (2022) who focused on medical series. For the two authors, medical dramas can be modelled along three narrative lines that characterize them: sentimental plot, professional plot, and medical case plot. And these isotopies then define four different profiles of medical drama: the soap opera formula, the anthology formula, the doctor and patient formula, and the social formula. Our analysis (which would certainly have to be broadened to include the datasets of other medical series to really get a definitive picture) might suggest that medical series can also be characterized by some dialogic forms, which serve to stabilize their narrative universe. One could therefore speak of dialogic isotopies that shape the narrative ecosystem. This appears to be the case for *House*, M.D. where dialogic isotopies exhibit discursive flows that tend toward balance, comprehensibility, and expressiveness.

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ANALYSING THE INNER STRUCTURE OF EPISODES IN HOUSE

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ANALYSING THE INNER STRUCTURE OF EPISODES IN HOUSE, M.D. THROUGH NETWORK ANALYSIS



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5. Toward the Automatic Identification of Isotopies

Alice Fedotova and Alberto Barrón-Cedeño

■ ABSTRACT

The rise in processing power, combined with advancements in machine learning, has resulted in an increase in the use of computational methods for automated content analysis. Although human coding is more effective for handling complex variables at the core of media studies, audiovisual content is often understudied because analyzing it is difficult and time-consuming. The present work sets out to address this issue by experimenting with unimodal and multimodal transformer-based models in an attempt to automatically classify segments from the popular medical TV drama Grey's Anatomy (ABC, 2005-) into three isotopies that are typical of the medical drama genre. To approach the task, this study explores two different classification approaches: the first approach is to employ a single multiclass classifier, while the second involves using the one-vs-the-rest approach to decompose the multiclass task with a series of binary classifiers. We investigate both these approaches in unimodal and multimodal settings, with the aim of identifying the most effective combination of the two. The results of the experiments can be considered promising, as the multiclass multimodal approach results in an F1 score of 0.723, a noticeable improvement over the F1 of 0.686 obtained by the one-vs-the-rest unimodal approach based on text.

KEYWORDS

Multimodal content analysis; deep learning; transformers; multimodality; medical dramas.

Introduction

In the field of media studies, content analysis is an established methodology for the study of audiovisual products. A central aspect of content analysis is coding, which consists in assigning units of analysis to categories for the purpose of describing and quantifying phenomena of interest (Krippendorff 1980: 84-5). Previous research has identified three fundamental categories or "isotopies" that characterize the medical drama genre: the professional plot, the sentimental plot, and the medical cases plot. In the context of medical dramas, content analysis can be conducted by assigning isotopies to segments, i.e. portions of video "characterized both by space-time-action continuity and invariance in the thematic-narrative elements" (Rocchi and Pescatore 2022: 3). This poses a challenge for automated approaches, as modern segmentation algorithms are not effective in identifying units that are relevant for the three isotopies. Additionally, coding requires trained annotators with a significant degree of expert knowledge and a good understanding of content analysis. Recognizing the complexity of the task and the need for more effective strategies, we experiment with unimodal and multimodal transformer-based models to evaluate the possibility of streamlining the content analysis process for medical dramas. With this objective, we formulate the following research questions:

- Research Question 1: Is it better to approach the task with a single multiclass model or a one-vs-the-rest approach?
- Research Question 2: Which modality is more informative for the task of predicting the isotopies?
- Research Question 3: Does the inclusion of keyframes in addition to the subtitles result in higher performance as compared to only using the subtitles?

To answer our research questions, we first create a multimodal corpus by combining subtitles and keyframes extracted from 17 seasons of *Grey's*

Anatomy (ABC, 2005-), one of the longest-running medical drama series. Three deep learning models, namely CLIP, BERT, and MMBT, are trained using this corpus to explore the impact of different modalities on the identification of the isotopies. Additionally, we investigate two different approaches to the classification problem: a multiclass approach, which considers all isotopies simultaneously, and a one-vs-the-rest approach, which identifies one isotopy at the time. The results of the experiments are promising, with the multiclass multimodal approach obtaining an F1 score of 0.723. Furthermore, our findings suggest a relationship between the two approaches and the modalities involved, as well as differences in terms of the contribution of the individual modalities.

Related Work

With its ability to engage several human faculties at once, audiovisual content can convey information in a more multifaceted way compared to static images or text. However, the addition of the time element through shots and scenes makes the task of understanding the content of a video complex. One of the biggest challenges in the fields of natural language processing and computer vision is developing the ability for machines to analyze and summarize audiovisual products, making them more searchable and accessible (Tapaswi 2016: 3). As multimodal data often represents an object from different viewpoints, which can be complementary in contents, it can potentially be more informative than unimodal data. However, there are also instances where the modalities end up competing with each other, causing multimodal models to underperform compared to the unimodal ones (Huang et al. 2021: 10944).

Compared to visual and auditory information, textual features are less explored for video understanding (Weng et al. 2021: 4843). In the broader context of movies and TV shows, speech may sometimes be correlated with the action (e.g., "Raise your glasses to..."), but it is more frequent for it to be completely uncorrelated (Nagrani et al. 2020: 10318). In the field of sentiment analysis, related work has been conducted on the TV show *Friends* (NBC, 1994-2004). Zahiri and Choi (2017: 6-7) employ a CNN

¹ The scripts used for the experiments are available at https://github.com/TinfFoil/isotopy-identification/.

architecture with word2vec embeddings for the purpose of detecting emotions from written dialogue, obtaining accuracies of 37.9% and 54% for fine- and coarse-grained emotions respectively. They observe that emotions are not necessarily conveyed in the text, and that disfluencies, metaphors, and humor make the task particularly challenging.

Vision-and-language approaches to video understanding can be divided into two types: one based on using a single frame, and another based on extracting multiple frames (Sun et al. 2019, Zhu and Yang 2020). In the context of video, the second approach is more common, as it is reasonable to assume that training an effective video-and-language model requires lots of samples from the video channel (Lei et al. 2022: 11). As demonstrated by Li et al. (2021: 7), leveraging both video and subtitles achieves the best performance on the VALUE benchmark (Li et al. 2021), which includes 11 video understanding tasks from a variety of datasets and video genres. A similar result is reported by Liu et al. (2020: 10906) on the task of video-and-language inference, which consists in analyzing a video clip paired with a natural language hypothesis and determining whether the hypothesis is supported or contradicted by the information conveyed in the video.

However, it is actually an open question whether training a model using multiple frames is beneficial for downstream tasks, and if so, whether the gains in performance justify the significant increase in computational costs (Lei et al. 2022: 11). Despite the fact that most video-and-language models are typically trained using multiple video frames, some studies suggest that strong performance on challenging benchmarks can be achieved using just a single frame (Lei et al. 2022, Buch et al. 2022). Furthermore, the difficulty of making recognition decisions is intrinsically linked to the type of category being classified. For instance, recognizing static subjects like dogs and cats, or sceneries such as forests or seas, may only require a single frame. However, distinguishing more complex actions, such as "walking" versus "running", often requires more frames (Wu et al. 2019: 1284).

To the best of our knowledge, this is the first work on narrative classification for the medical drama genre. In the context of cinema, a similar work is the Movie Narrative Dataset (MND), introduced by Liu et al. (2023). MND consists of 6,448 annotated scenes from 45 movies, manually labeled by multiple annotators into 15 key story elements. To benchmark the task of classifying scenes based on their narrative function, the authors of MND utilized an XGBoost classifier trained on temporal features and character co-occurrence patterns. The classifier obtained an F1 score of 0.31, which,

while still leaving room for improvement, is statistically significant and outperforms a static baseline classifier. Unlike Liu et al. (2023), we adopt a single-frame vision-and-language approach. This choice is motivated by the previously mentioned studies showing the potential of using only a single frame (Lei et al. 2022, Buch et al. 2022). Additionally, the decision to consider a single frame is influenced by the substantial increase in computational costs associated with analyzing multiple frames (Lei et al. 2022: 11), which presents significant challenges in terms of resource requirements and processing time.

Dataset

The present work builds upon the Medical Dramas Dataset introduced by Rocchi and Pescatore (2022: 2-3). For the purpose of the experiments, we extracted 17 seasons of annotated data from the TV show *Grey's Anatomy* (2005-), for a total of 367 episodes and 244 hours of video.² Isotopy assignment, also referred to as 'coding', was conducted according to a three-step content analysis protocol. First, three isotopies underlying the medical drama genre were identified: the medical cases plot, the professional plot, and the sentimental plot. According to Pescatore and Rocchi (2019: 111-112), the isotopies can be defined as follows:

The medical cases plot (MC) is related to the storylines that usually change between each episode, introducing new narrative elements and a variety of characters into the hospital setting.

The professional plot (PP) deals with the relationships and dynamics within the hospital among doctors and other medical staff.

The sentimental plot (SP) comprises the emotional and personal relationships between the main characters throughout the series. It covers a wide sphere of emotions such as friendship, love, empathy, and conflict.

The second step involved breaking down each episode into segments. For each segment, start and end times were marked. This aspect is especially important, as it allowed the subsequent alignment with the text of the subtitles. The third phase, i.e. the actual coding phase, followed the identification of the segments. During this step, the appropriate isotopies were assigned to

² The data was mainly obtained from https://doi.org/10.17605/OSF.IO/24TUS, with the addition of 5 seasons of unpublished data provided by the authors.

each previously identified segment, taking into account their development over time, and not treating them as independent segments. A weight from 0 to 6 was assigned to each of the plots. If a segment could only be attributed to a single plot, a weight of 6 was assigned to that plot and a weight of 0 to the other two. When there were overlaps between narrative lines, a weight was assigned to each of the co-occurring narratives according to their relevance in the segment. In some cases, segments were not attributable to either of the isotopies and all three were marked as "NA" (Rocchi and Pescatore 2022: 3).

Data Extraction

The availability of start times and end times for each segment allowed for the alignment of the dataset with another source of data tagged with temporal information: the subtitle track of the episodes. Each subtitle has four parts in a SubRip Subtitle (SRT) file:³ a counter indicating the number of the subtitle; start and end timestamps; one or more lines of text; and an empty line indicating the end of the subtitle. By relying on these features, the SRT files were processed to extract the timestamps and the text of the subtitles.

For the purpose of aligning the subtitles with the data obtained from the Medical Dramas Dataset, a method for assigning each of the subtitles to the corresponding segment was then identified. Inspired by Tapaswi et al. (2015: 5), in which subtitles appearing at video shot boundaries were attributed to the shot which has a majority portion of the subtitle, the mean of each subtitle's timespan was used as the criterion for the alignment. For example, given a subtitle that starts at 00:00:00.804 and ends at 00:00:02.701, the mean is 00:00:01.752. If a segment starts at 00:00:00.000 and ends at 00:00:07.000, then the subtitle is part of that segment. By doing so, a subtitle that overlaps with two different segments is assigned to the one where it appears on the screen for the longest amount of time.

In addition to aligning the subtitles, keyframes were also extracted from each of the episodes. A script based on OpenCV (Bradski 2000), an open-source computer vision library, was developed to accomplish this task. For each video, the midpoint of each segment was calculated based on the start and end times of the segment. The corresponding keyframe is then extracted

³ https://docs.fileformat.com/video/srt/ (last accessed 16-07-2023).

and stored as a JPG file. Table 1 illustrates a few examples from the corpus, consisting of different segments and their timestamps, as well as the text obtained from the subtitles, the filenames of the keyframes and the assigned isotopies. Segments up to 00:00:49 are missing in this case because they were labeled as NA. An example of a keyframe is also shown in Figure 1.

id	segm_start	segm_end	рр	sp	mc	img_name		
S13E01_0	00:00:49	00:02:18	0	6	0	S13E01_0.jpg		
Meredith: Don't you wish you could just take it back That thing you said, that thing you did. [] We can't undo the past. `Cause the future keeps coming at us.								
id	segm_start	segm_end	рр	sp	mc	img_name		
S13E01_1	00:02:18	00:02:36	0	2	4	S13E01_1.jpg		
[Siren wails] Isaac: What do we got? We got a male, mid 20s. [] We'll need a CT. All right, let's get him to Trauma One. Let's go. Page Avery!								
id	segm_start	segm_end	рр	sp	mc	img_name		
S13E01_2	00:02:36	00:03:18	0	6	0	S13E01_2.jpg		
Two champagnes. You got it. I thought you were dancing with Maggie. [] Take a breath. What happened to DeLuca?								

TABLE I
Some instances from the resulting corpus. The text obtained from the subtitles has been shortened for displaying purposes.



Figure 1 Keyframe 13x01.

Data Preprocessing and Description

The preprocessing of the corpus involved several steps designed to refine and improve the quality of the data and was mainly conducted using the NLTK library (Bird et al. 2009). Most importantly, segments containing nine subtitles or less in which stopwords and consecutive repeated words constituted more than 65% of the total tokens, were removed. In addition to this, other preprocessing steps included removing song lyrics (e.g., "\$\int I\ don't want to wait...\int\$"); song names (e.g., "[Lorde's 'Team' playing]"); subtitle author's names (e.g., "Telescript by Raceman, Subtitles/Sync by Bemused"); italics tags (e.g., "<i>" and "</i>" in "Im <i>really</i> sorry"); hesitations (e.g., "-he" in "He-he doesn't... He doesn't mean that"); hyphens indicating dialogue between different characters (e.g., "-Is he talking? -Yeah."); and segments containing only sounds (e.g., "[Whistles]").

Labels were also preprocessed as part of the data preparation, with the original range of [0, 6] discretized into binary values of {0, 1}. Values in the interval [0, 2] were mapped to 0 and values in the interval [4, 6] were mapped to 1; as a result, segments with label combinations 330, 303, and 033 were removed as they could not be discretized into the required binary representation. This is because segments having combinations such as PP=3, SP=3, MC=0 are characterized by two different isotopies having the same weight. The counts of the instances per class before and after discretization are illustrated in Table 2. Although some of the granularity in the original data is lost, the main advantage of this approach is that it simplifies the classification task by reducing the number of classes, which enables the model to focus on identifying those segments where there is a complete or mostly complete correspondence to one of the isotopies.

	Before dis	cretization			After disc	retization	
Values	PP	SP	MC	Values	PP	SP	MC
0 1 2	13,668 321 667	8,718 310 751	11,641 245 621	0	13,690	8,907	11,381
4 5 6	368 156 2,775	445 297 7,340	394 233 4,981	1	3,299	8,082	5,608

Table 2
Corpus label distribution before and after discretization.

The resulting corpus contains 276,357 subtitles, which are grouped into 16,989 labeled segments. The corpus has a total of 2,260,655 tokens (38,629) types) and the mean length of a subtitle is 8.430 ± 3.921 tokens. Each segment consists of 1 to 74 subtitles, and about 95.7% of the segments (16,272) contains up to 37 subtitles. The dataset is imbalanced, with the sentimental plot class being the most represented out of the three (8,082) positive instances). The least represented class is the professional plot, with 3,299 positive instances, while the medical cases class has a total of 5,608 positive instances.

Experiments

To address our research questions, we explore two different classification approaches to determine which one is better suited for the problem at hand: the first approach is to employ a single multiclass classifier, while the second involves using the one-vs-the-rest approach. Although neural networks can handle the multiclass problem by directly predicting one of the three possible target classes, using the one-vs-the-rest (OvR) strategy may be beneficial in certain situations. This approach, also known as one-vs-all (OvA), consists in decomposing the task into *n* binary classifiers, each trained to distinguish between one class and the rest. The final prediction is made by selecting the class associated with the classifier that outputs the highest probability (Aly 2005: 1-4). We investigate the multiclass and one-vs-the-rest approaches for both unimodal and multimodal settings. For the multiclass approach, we first fine-tune and evaluate a unimodal textual and a unimodal visual model, and then a multimodal one. For the one-vs-the-rest approach, we do the same for each unimodal binary sub-problem, and then repeat the problem decomposition approach in the multimodal setting as well.

For the unimodal textual setting, we use the bert-base-uncased implementation of BERT from the HuggingFace library (Devlin et al. 2018). The model is fine-tuned exploring epochs ∈ [1, 2, 3] with a batch size of 16, one of the batch sizes recommended by the authors of BERT (Devlin et al. 2018). For optimization, we employ the AdamW optimizer (Loshchilov and Hutter 2017) with a learning rate of 1e-5 and an epsilon value of 1e-8. We encode the training, validation, and test datasets with BertTokenizer⁴

⁴ https://huggingface.co/transformers/v3.0.2/model_doc/bert.html#berttokenizer (last accessed 16-07-2023).

and pad the sequences to a maximum length of 512. To adapt the unimodal model for the two approaches, we modify the num_labels parameter of BERT, setting it to 3 for multiclass classification and 1 for binary classification. For multiclass, we use the default Cross Entropy loss function that is computed by BERT when num_labels > 1 (Devlin et al. 2018). For binary classification in the one-vs-the-rest scenario, we use the Binary Cross Entropy with Logits loss from PyTorch.⁵

For the multimodal setting, we use the Multimodal Bitransformer (MMBT) model. Introduced by Kiela et al. (2019), MMBT incorporates the strengths of the transformer architecture and adapts it for processing both textual and visual inputs. To further enhance the capabilities of MMBT, we follow Muti et al. (2022) in using OpenAI's CLIP (Radford et al. 2021) as the visual encoder instead of the default ResNet-152 architecture used by MMBT. As for preprocessing, we use the Pillow library (Clark 2015) to prepare 288x288 pixel versions of all frames by rescaling and padding, while also maintaining the original aspect ratio of the frames (Neskorozhenyi 2021). We then slice the frames into three equal parts to obtain four vectors: a vector for each of the parts that encode spatial information and one for the whole frame. The visual feature extractor of CLIP is RN50x4, a modified version of ResNet-50 which has been shown to be particularly effective for vision-and-language tasks (Shen et al. 2021: 5-8).

As for the textual encoder, we again use bert-base-uncased so as to be able to compare the performance of MMBT and BERT. We fine-tune the MMBT architecture by exploring epochs ∈ [1, 2, 3] with a batch size of 8 and a gradient accumulation of 20 steps to reduce memory usage. For optimization, we employ the MADGRAD optimizer (Defazio and Jelassi 2022) with a learning rate of 2e-4. As for BERT, we adhere to the preprocessing and parameters used in the unimodal textual setting. Given that MMBT is largely based on BERT's architecture, the num_labels parameter and the loss functions are also configured in the same way as BERT. We maintain these choices for the unimodal visual model based on CLIP, with the exception that we do not use the textual encoder. As for the CLIP-based model, we leave RN50x4 as the feature extractor and we follow Wei et al. (2022) in using a batch size of 16.

https://pytorch.org/docs/stable/generated/torch.nn.BCEWithLogitsLoss (last accessed 16-07-2023).

Models are evaluated using the F1-measure, a metric combining precision, which measures the accuracy of positive predictions, and recall, which measures the model's ability to identify all positive instances (Géron 2017: 84-87). Macro-averaging the F1 scores for each class gives equal weight to each class regardless of the number of instances. The models which obtained the most promising results during 10-fold cross-validation are illustrated in Table 3. A final evaluation of these models is then carried out on an independent test set that was not used during training to assess the models' performance on unseen data: in the case of the multiclass approach, the model which obtained the highest macro-averaged F1-measure on the validation set is evaluated on the test set; in the case of the one-vs-the-rest approach, the best-performing individual binary classifiers based on validation F1 score are ensembled to obtain the final prediction on the test set. Table 4 reports the results of this final evaluation.

		Multiclass	One-vs-the-rest						
Model	(e)	All	(e)	PP	(e)	SP	(e)	MC	All
CLIP	(3)	0.553	(3)	0.444	(2)	0.710	(3)	0.593	0.582
BERT	(3)	0.716	(2)	0.619	(2)	0.815	(2)	0.711	0.712
MMBT	(3)	0.736	(3)	0.580	(3)	0.825	(3)	0.741	0.715

Table 3
Validation F1 scores of the best models. (e) refers to the number of epochs.

		Multiclass	One-vs-the-rest						
Model	(e)	All	(e)	PP	(e)	SP	(e)	MC	All
CLIP	(3)	0.536	(3)	0.443	(2)	0.696	(3)	0.559	0.566
BERT	(3)	0.672	(2)	0.563	(2)	0.788	(2)	0.706	0.686
MMBT	(3)	0.723	(3)	0.592	(3)	0.818	(3)	0.728	0.713

Table 4

Test F1 scores of the best models. (e) refers to the number of epochs.

Discussion

As for RQ1, the answer is not straightforward. The approach which resulted in the best-performing model is the direct multiclass approach. Specifically, multiclass MMBT trained over 3 epochs achieved the highest macro-averaged F1 score on the test set: 0.723. This result could be attributed to the ability of the multiclass MMBT approach to better handle correlations between different classes, a feature not captured by the one-vs-the-rest approach, which treats each class independently. It is possible that the added visual information allows MMBT to disambiguate instances more effectively than the multiclass BERT model, resulting in one-vs-the-rest being more effective for BERT: F1 0.686 for one-vs-the-rest compared to 0.672 for multiclass. CLIP also benefits from the one-vs-the-rest approach. This could be due to the fact that one-vs-the-rest is more suitable for unimodal models, as a similar trend also arises when it comes to multiclass BERT compared to one-vs-the-rest BERT.

However, it should be noted that the one-vs-the-rest approach results in a noticeable increase in computational cost compared to training a single multiclass model. On two NVIDIA Quadro P4000 8GB GPUs, 10-fold cross-validation with MMBT required 8 hours for the multiclass model and 24 hours for the three binary models in the one-vs-the-rest approach. This is in part due to the smaller batch size of 8, which was chosen due to hardware limitations, although the difference is also noticeable in the case of BERT, which required 5 hours for multiclass and 16 for one-vs-the-rest with a batch size of 16. Approaches based on CLIP took about the same time. Furthermore, when considering BERT, the difference between multiclass and one-vs-the-rest is fairly small on the validation set, although one-vs-the-rest performed noticeably better on the test set. As the best approach to the task depends on both the modalities involved and the computational resources that are available, we will answer RQ2 and RQ3 by considering both settings.

In order to address RQ2, we compare the results obtained by the two unimodal approaches to determine which modality is more informative for the task of predicting the isotopies. On the test set, one-vs-the-rest BERT achieved an F1 score of 0.686, while one-vs-the-rest CLIP obtained a significantly lower F1 score of 0.566 (cf. Table 4). The difference between the two modalities is also evident in the multiclass setting, where BERT obtained an F1 score of 0.672 compared to CLIP's 0.536. As for RQ2, we can con-

clude that BERT performs better than CLIP, which suggests that the text might be more informative than the keyframes for the task of predicting the isotopies. It should be noted, however, that the models based on CLIP were limited by the fact that only a single keyframe was considered for each segment. Given the average length of the texts available to BERT, it is clear that the textual models not only had access to more information but could also analyze dialogue at different points in time, unlike CLIP which looks exclusively at the midframe of a segment. To overcome this limitation, an approach that takes into consideration multiple frames or a more systematically-chosen single frame could be developed.

Moving on to RQ3, we proceed to assess whether the combination of keyframes and subtitles resulted in higher performance by comparing the F1 scores of MMBT and BERT. As shown in Table 4, the best-performing MMBT model, i.e. multiclass MMBT, obtained an F1 score of 0.723, which is noticeably higher than multiclass BERT's F1 score of 0.672. The same is true in the one-vs-the-rest setting. Although not as effective for MMBT as it was for BERT, one-vs-the rest MMBT resulted in an F1 score of 0.713, which is still significantly better than one-vs-the-rest BERT's improved F1 of 0.686. Overall, multiclass MMBT's F1 score of 0.723 is the highest across all models and configurations. Considering RQ3, we can conclude that using a multimodal approach can result in a noticeable improvement over the text-only BERT model. Given the limitations presented in RQ2, we can consider this result to be promising, as it suggests that integrating more information from the visual channel can improve the performance of the model regardless of the approach that is being used, although the improvement is noticeably more pronounced in the multiclass setting compared to one-vs-the-rest.

In summary, one-vs-the-rest appears to be more effective for unimodal models, while textual features proved to be more informative than key-frames for predicting the isotopies. Overall, the improvement obtained by MMBT over BERT shows that the information from the visual channel complements the one that is contained in the dialogues. However, although one-vs-the-rest CLIP and BERT resulted in better generalization, the problem decomposition approaches would still require a longer training time compared to the best-performing model-approach combination, multiclass MMBT. Hence, addressing the task using a single multiclass MMBT model would still be recommended over one-vs-the-rest BERT. The second-best option would be to train a multiclass BERT model, which would be less

computationally expensive but also less effective than MMBT. Regardless of the approach, exploring more parameters, such as different batch sizes or learning rates, would be the most immediate next step.

In the broader context, automated content analysis for isotopy identification, a domain which has been previously unexplored, can greatly benefit from multimodal approaches. Despite some limitations, these results also indicate the potential of single-frame approaches for the task of multimodal video classification.

Conclusions

This study examined three research questions to evaluate various methods for automatic isotopy identification in the context of TV medical dramas. The first research question focused on comparing, for all models, the performance of a direct multiclass approach versus a one-vs-the-rest approach. The second research question aimed to determine the most informative modality for the classification task. The third research question involved investigating whether the inclusion of keyframes in addition to subtitles resulted in better performance compared to just using the subtitles. In order to answer these research questions, we created a multimodal corpus by expanding on the Medical Dramas Dataset introduced in Rocchi and Pescatore (2022: 2-3). 17 seasons of annotated data were extracted from the TV show *Grey's Anatomy* (2005-), for a total of 367 episodes and 244 hours of video. Textual features were extracted by temporally aligning the subtitles with the segments, while visual features were obtained by extracting a frame, referred to as a keyframe.

The findings from this work are promising, indicating that it is indeed possible to leverage deep learning models to automatically identify the distinctive isotopies of the medical drama genre in the context of *Grey's Anatomy* (2005-). We observed that the multimodal MMBT model performed significantly better compared to the text-only BERT model and the image-only CLIP model. More specifically, MMBT achieved the top F1 score of 0.723, compared to BERT's highest F1 score of 0.686, thus shedding light on the potential benefit of incorporating visual information alongside textual data. We have also examined different approaches to the problem, observing that the one-vs-the-rest approach appears to be more beneficial in the case of unimodal models. It is possible that the added visual

information allows MMBT to disambiguate instances more effectively than multiclass BERT, which could explain why this is the only setting in which multiclass worked better than one-vs-rest. The textual information proved to be more informative than the visual data, highlighting the importance of dialogue for isotopy identification.

The potential for future work is vast, as there are many aspects that could be further improved to enhance the performance of the models. For example, future research could delve into a more systematic methodology for frame selection, which in this study was limited to only the midframes of the segments. Apart from investigating more systematic approaches for frame selection, additional avenues for further research might include the adoption of a dual-stream model as an alternative to the single-stream architecture of MMBT. Existing research suggests that dual-stream models can obtain better results thanks to their co-attention mechanism, which enables them to handle complex relationships between the modalities (Du et al. 2022: 5437). Moreover, cross-lingual transfer could be explored by experimenting with multilingual transformer-based models like mBERT (Devlin et al. 2018) or XLM-RoBERTa (Conneau et al. 2020). Given the availability of subtitles in other languages, this approach could also lead to improvements and open up the possibility of analyzing other shows pertaining to the medical drama genre.

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TOWARD THE AUTOMATIC IDENTIFICATION OF ISOTOPIES



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6. The Genre and the Nation

Italian Medical TV Series and the Geography of their Consumption

Giorgio Avezzù

■ ABSTRACT

This study examines the geographies of audiovisual consumption in Italy, with a specific focus on medical TV series and their consumption patterns across the country. The research aims to investigate the extent of geographical heterogeneity in television viewing within Italy, thus exploring the existence of a shared national audiovisual culture. The analysis utilizes viewing data from free-to-air broadcasters, Rai and Mediaset, which provide valuable and reliable insights into consumption patterns. The study reveals that although there is typically some variation in the popularity of TV series across different regions of Italy, medical drama series demonstrate a relatively high level of consumption homogeneity. The popularity of medical series is evenly distributed throughout the country, which is unusual compared to other genres and the typical geographic heterogeneity of TV series viewing in Italy. This can be attributed to the genre's ability to engage a nationwide audience by using neutral settings and delocalized narratives, which effectively appeal to viewers across different regions. Most importantly, the study suggests that the exceptional geographical homogeneity in the consumption of medical series indicates the vitality and effectiveness of that genre, which - for its part - contributes to the resilience of a shared national audiovisual culture in Italy.

KEYWORDS

Geography of consumption; TV Series; Italian TV; medical drama series; media geography.

Introduction Mapping Consumption and National Media Culture

A study on the geographies of audiovisual consumption in Italy serves, among other purposes, to explore the degree of geographical heterogeneity in film and television viewing within the country, thereby verifying the presence of a genuinely shared national audiovisual culture. While it may be intuitively assumed, empirical research based on viewing data across the entire Italian territory is essential to confirm its concrete existence.

A national audiovisual culture can only be claimed when there is real homogeneity in consumption patterns across the country (see Higson 1989, Sorlin 1996). This doesn't seem to exist, for example, when it comes to cinema consumption in theaters in the first two decades of the new millennium, at least. Indeed, an extensive analysis of several hundred films has revealed that the regional popularity of domestic cinema varies greatly, even among the most successful titles, regardless of how the films are distributed across different regions of Italy - the distribution pattern, for that matter, doesn't vary substantially from one title to another (Avezzù 2022). A comparable heterogeneity in consumption applies to all scripted content, encompassing not only the performance of domestic cinema in theaters, but also the consumption of original TV series on free-to-air broadcasters, namely Rai and Mediaset. These operators, given the large audiences they attract, provide valuable data that is both relevant and reliable for understanding consumption patterns. In contrast, original series on pay TV, such as those aired on Sky channels, exhibit significantly lower audience ratings, with audience data holding limited significance for the subscription-based business model. Free-to-air television audience data, especially for the most successful channels, are more valuable and trustworthy, even from a statistical standpoint.

Focusing on the most-watched content in the country also allows us to verify whether a higher level of success corresponds to greater viewing homogeneity across different regions of the country, as one might expect. However, on closer inspection, this is not always the case for cinema or television, as consumption homogeneity is neither a sufficient nor a necessary condition for success. When discussing domestically produced free-to-air TV series in Italy, we are referring to a type of audiovisual content that has achieved remarkable fortune and has become a genuinely popular phenomenon. Italian free-to-air series have a notably higher penetration in Italy compared to cable TV in the United States, which is expected, but they also outperform series aired by American networks, if this comparison in meaningful. However, despite the immense success of domestic television series in Italy, it cannot be assumed that every title, even the most widely watched ones, achieves equal success throughout the country, from Lombardy to Sicily.

It is true that the level of regional fragmentation in television consumption is lower than that observed in theatrical cinema consumption. This is primarily because television is a more widely embraced medium than cinema, with a larger viewership, and thus its success tends to be better diluted across the territory. Nevertheless, there are still significant differences in the popularity of individual titles across the North, Center, and South of Italy, as well as in different regions. These differences are also influenced by the presence of certain factors in each series capable of attracting local consumption. These factors are identical to those that appeal to local audiences when they watch films in theaters or when they are broadcasted on television. Primarily, they revolve around textual elements that relate to audiovisual content, such as setting, location, or the presence of specific actors. One of the most intriguing aspects to explore in research is precisely attempting to link the variances in consumption to content factors that can either attract or deter audiences. Depending on their geographical location, people exhibit preferences for specific content over others.

Given that this is the general framework of the issue, I would like to focus specifically on the role that free-to-air medical drama series play in this scenario and gain a deeper understanding of it. Medical drama series seem to be particularly interesting content because, in their own way, they are distinctive, for the reasons we will examine more closely. In fact, they appear to differ from other series in terms of how they are viewed across the national territory. And their distinctiveness in viewing patterns is likely due to *the way they function* – that is, how effectively they engage with the audience – which is influenced by their unique textual and morphological characteristics.

Popularity: The Metrics

Any reflection on the geographical heterogeneity of television consumption necessitates a preliminary elucidation of the metrics involved. To put it simply, when discussing theatrical cinema, the metrics are straightforward and quite self-evident. We refer to box office or attendance figures, which ultimately measure the number of individuals who pay for a ticket to watch a film from start to finish. However, when analyzing TV audience, the metrics become more complex and less immediately clear, as small screen consumption involves a substantial amount of viewer traffic in and out of a single TV program. The standard metric of "average minute rating" or AMR (which is more prevalent in the Italian context and referred to as ascolto medio) might give the impression that we are dealing with data similar to that of theatrical cinema. For example, a successful series like Màkari (Rai 1, 2021) may have 6.3 million viewers (see Table 1). However, this actually indicates the average number of viewers present in front of the television set during each minute of the program's duration. It is worth noting that this metric combines and obscures two distinct aspects of TV consumption: a quantitative aspect, which pertains to the number of unique viewers who watched the program for at least one minute (referred to as the "reach"), and a qualitative aspect, which relates to the average time that each viewer spent watching the program (referred to as the "loyalty index", or ATS%) (Casetti and di Chio 1997). Building upon previous research, one thing we know is that certain textual factors, such as the setting, possess the power to attract local audiences (thus influencing the reach in a specific region) and engage viewers (impacting the loyalty index in the same region). For instance, Màkari, a series set in Sicily, attracts a larger number of Sicilian viewers and keeps them engaged in front of the TV screen for longer durations than usual.

Territory	AMR (x1000)	ATS %	Share %	Popularity Index
ITALY	6,308	57.69	26.72	1
Lombardy	844	54.98	21.19	0.79
Sicily	879	64.15	41.86	1.57

Table 1
Màkari (Rai 1, 2021).

Average minute rating, average time spent, share data (Auditel) and popularity index (derived by the author) throughout Italy, in Lombardy and Sicily of a series taken as an example.

Another commonly used metric in the Italian television context is the "share" figure, which measures the average audience over the entire TV viewership, known as the "TV total", within the same time interval. The share figure, as is well known, serves to normalize consumption in relation to fluctuations in the television audience, which can be influenced by factors such as the season, day of the week, or time of day. Also when looking at the share data, similar to the case with average minute rating from which it derives, we are actually considering and thus conflating both the quantitative (attraction) and qualitative (engagement) aspects of consumption – yet, at the same time, we are normalizing the consumption based on the TV total of the given time interval. It is the share metric that will be particularly relevant for our subsequent analysis. Audience attraction and engagement are, ultimately, distinct aspects of television consumption. However, since it is impracticable to systematically separate one from the other, when discussing the local popularity of a specific content broadcast, we will address them together.

In the following analysis, all first-run domestically produced TV series broadcasted in prime time on Rai and Mediaset between 2016 and the first half of 2022 were considered, comprising a total of 181 titles (seasons). There is no point in going very far back in time because the share figure of the free-to-air channels was significantly higher in the years before the advent of multichannel and digital transmission, potentially confounding the analysis. Digital terrestrial television broadcasting, in fact, spread the viewership across a larger number of channels. On the other hand, the time period under consideration exhibits a relatively stable audience in terms of numerical measures (including share, total audience, and average minute rating).

For each title, the share figures, both at the national and regional levels, were taken into account, and a "regional popularity" index was calculated by dividing the share of each region by the national share. This allows for the comparison of titles regardless of their level of success. For instance, in the case of *Màkari*, Sicily has a share 1.57 times higher than the national average (or +57%) (see Table 1). This figure reflects a combination of high

¹ Auditel data referring to the total number of individuals across all platforms were used – data was accessed through the Strategic Marketing Department of RTI-Mediaset during the research conducted there. I especially thank Federico di Chio, who heads that department, and Stefano Gnasso.

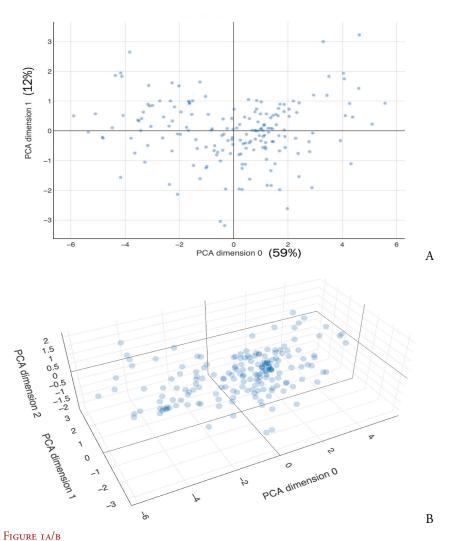
reach and loyalty index. To devise this metric, I took inspiration from those used by John Sedgwick to measure box office success and local popularity in movie consumption (especially RelPOP) (see Sedgwick, Miskell and Nicoli 2019, Sedgwick 2022).

However, in order to obtain a more accurate understanding of the true values of regional popularity for each title, additional variables need to be considered. For instance, it is important to take into account that, in general, television and TV series tend to have a wider viewership as you travel further south in Italy. Thus, it is true that Sicily consistently shows a higher share compared to the national average. To account for regional differences in TV consumption habits, regional popularity data have been normalized in the following analyses. By normalizing this popularity value with z-scores, it was possible to create a chart illustrating the overall heterogeneity of consumption for all the series considered.

Geographical Heterogeneity of Italian Series Consumption: An Overview

To visualize and explore the consumption patterns of the 181 TV series, a dimensionality reduction technique called Principal Component Analysis (PCA) was employed. PCA transformed the nine dimensions that correspond to the popularity of each title in the nine major Italian regions (Lombardy, Lazio, Campania, Veneto, Sicily, Emilia-Romagna, Piedmont, Apulia, Tuscany) into three dimensions that summarize them to some degree. Specifically, PCA 0 accounts for 59 percent of the total variance, PCA 1 for 12 percent, and PCA 2 for 7 percent (the latter is visible in the three-dimensional graph, Figure 1B). Each dot on the resulting scatter plot represents a TV series, and broadly speaking, the closer two dots are to each other, the more similar those two TV series are in terms of their geographic distribution of audiences across the country. Conversely, the further a TV series is from the core of the cloud of dots, the more its consumption has been dislocated somewhere in Italy (Figure 1A).

Most of the variance in consumption patterns is captured by the horizontal axis, as previously mentioned. When examining the "correlation circle", which visualizes the degree of correlation between the original variables and the principal components, it becomes evident that this horizontal dimension represents the disparity in viewership between the North and South of



Geographical heterogeneity of the popularity of Italian free-to-air TV series (2016-2022). Principal Component Analysis refers to the popularity index data of the series that are part of the sample, in each of the nine major regions of Italy.

Italy (Figure 2). In fact, the disparity in affinity and divergence in tastes for Italian fiction between the North and South seems to be very pronounced, and incidentally, it appears to be even more pronounced than the difference observed in theatrical film viewing preferences. This can be clearly observed in the correlation matrix as well (Figure 3).

This very fact prompts further investigation to highlight the relevance of an important variable that we have not yet considered, namely the broadcasting channel. As it turns out, one of the challenges when analyzing the heterogeneity of Italian television consumption is precisely the impact of regional affinity for specific broadcasters. In fact, regional preferences for particular channels strongly influence consumption patterns, consistently shaping them, irrespective of the characteristics of each individual title taken separately. When we color the dots in the scatter plot based on the broadcasting channel, we can observe that Rai 1 and Canale 5 tend to form almost perfectly distinct "clusters" (Figures 4A-B). While there may be variations between different titles, the series broadcasted on Canale 5 consistently appeal to a significantly less northern viewership compared to those aired on Rai 1. On the other hand, the series on Rai 2 and Rai 3 tend to attract a demographic that is predominantly concentrated in northern Italy, except for a few titles that are clearly associated with the South, such

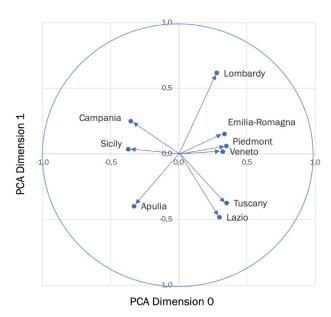
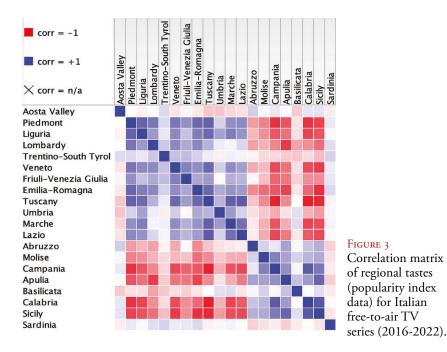


FIGURE 2
Principal Component

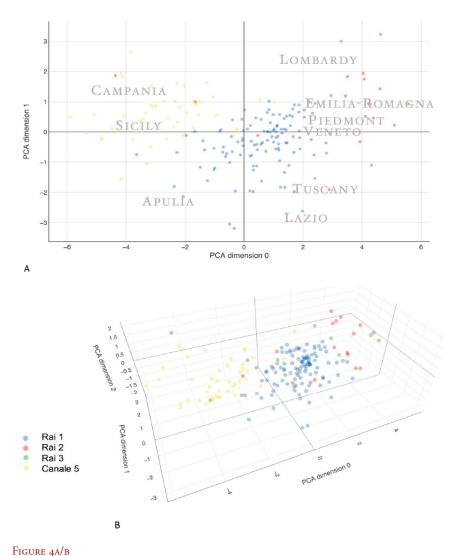
Analysis "correlation circle".

The graph displays the degree of correlation between the principal components and the original variables (i.e., the popularity index data of the sample series in each of the nine major regions of Italy).



as *Mare fuori* (2020-), set in Naples, and *Il cacciatore* (2018-2021), set in Sicily, in the case of Rai 2. Incidentally, the regional variation in preferences for different broadcasting networks is precisely one of those elements that, when observed over an excessively wide time frame, is prone to altering its relevance and thus complicating the analysis. For instance, just ten years ago, Canale 5's primetime had a much higher share figure in Lombardy than it does now, and a much lower share figure in Campania. However, from 2016 onwards, as clearly seen from the graph, its original TV series (as indeed its entire schedule) have become more popular in the Southern and Insular regions of Italy.

The imbalance in the popularity of each title must therefore be related to the imbalance in viewership that traditionally characterizes the channel that broadcasts it, or else we risk attributing variations in popularity to content features, while they are actually due to the broadcasting itself. When taking this factor into account, we can quickly confirm that the textual factors that attract consumption are consistently the same as those previously mentioned, such as the setting or location, and the cast – aside from the local inertia of viewing habits for each channel (Figure 5). The most appreciated



Geographical heterogeneity of the popularity of Italian free-to-air TV series (2016-2022), with broadcasting channel. The labels (regions) of the "correlation circle" vectors have been added.

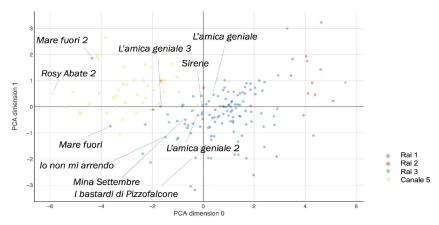


FIGURE 5
Geographic heterogeneity of the consumption of some series set in Campania.

titles in the South among those broadcasted by Canale 5 are positioned on the leftmost side of the graph because they are also the ones that in absolute terms are the most successful in the southern regions of Italy. On the other hand, the most popular titles in the South among those aired by Rai 1 – which are all set in the southern regions – are positioned roughly in the middle of the graph, but they actually belong to the leftmost part of the cloud of points representing Rai 1 series.

Medical Series and their Regional Popularity

Now, we must establish where medical drama series fit into this larger picture. There are 12 of them among the 181 series in the sample we are considering. Rai 1 has aired three seasons of *L'allieva* (2016, 2018, 2020), two of *Doc – Nelle tue mani* (2020, 2022), one of *Braccialetti rossi* (2016, the third season), *Cuori* (2021), *Fino all'ultimo battito* (2021), and *Lea* (2022). Canale 5 has aired *Dottoressa Giò* (2019) and *Oltre la soglia* (2019). Rai 3 aired *La linea verticale* (2018). We can leave aside the latter, *La linea verticale*, as it is a title that was not broadcasted by a flagship channel and therefore had an audience not comparable in size to the others. Thus, we are left with 11 titles broadcasted by Rai 1 and Canale 5. Although the sample is not large enough to draw indisputable conclusions, it appears that these titles have a relatively *low level of geographic heterogeneity* in terms of their popu-

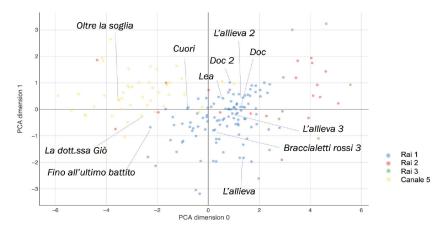


Figure 6
Geographic heterogeneity of consumption of medical drama series.

larity. In fact, the points representing the medical series usually do not seem to be located in the most peripheral areas of the graph (Figure 6).

However, it is true that while our chart is useful for visually mapping the geographical heterogeneity of consumption patterns of Italian series, it does not effectively describe the imbalances in viewership based on channels and their "typical" target audiences. To account for the geographic dissimilarity of the typical audience for each channel, considering the different regional viewing habits across networks, I normalized the popularity value of each title, which I derived in the way I described earlier (not yet normalized with z-scores), to the median value of each region *for each channel*. This approach allows us to assess the popularity imbalances resulting from content – their textual factors - while canceling out the influence of the channel-related noise. I calculated the coefficient of variation for this data, focusing solely on the nine major regions of Italy. This coefficient describes the extent to which the popularity of each title varies across different regions, or conversely, if it is uniform (in which case, a title would have a coefficient of 0). Interestingly, the majority of the 11 medical series show a relatively low degree of variation. Additionally, I calculated a "maximum popularity coefficient", which measures how pronounced the deviation of each title's popularity is, in the region where that title is most popular, compared to its average popularity in all the nine regions considered. This coefficient, too, for the medical se-

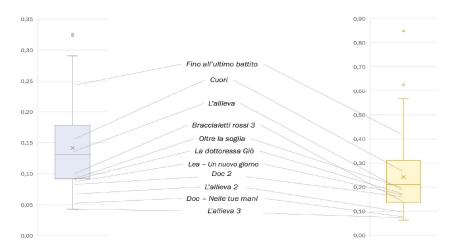


Figure 7

Variation and concentration of regional popularity of medical TV series. The box plot on the left indicates the coefficient of variation (among the 9 major Italian regions), while the one on the right visualizes the "coefficient of maximum deviation" (i.e., the positive deviation in popularity in the region of maximum popularity compared to the average popularity of each title among the 9 magior regions).

ries, appears to be relatively low. Eight series out of eleven rank below, even far below, the average values according to these two indicators (Figure 7).

Two series alone stand out noticeably above "normal" values: *Cuori* and *Fino all'ultimo battito*. In the case of *Cuori*, the deviation is not really that significant, and more importantly, it does not appear to be related to the setting, which is the factor from which we would expect such deviations. *Cuori* is set in Turin, reconstructing the Molinette Hospital in the late 1960s, while the popularity deviation occurs in Campania. On the other hand, Piedmont's popularity aligns perfectly with what is expected from that region. The only notable popularity imbalance for a medical series is observed in the case of *Fino all'ultimo battito*. Interestingly, this imbalance occurs precisely in Apulia, the region where the series is set. In all other cases, medical genre series seem to have a popularity that is evenly distributed across the various regions of Italy, apart from the differences in popularity attributed to Rai 1 and Canale 5 between Northern and Southern Italy.

Another graphical representation effectively captures the same phenomenon, providing a comparison of the regional popularity (normalized as described above) of all series in the sample across the nine major regions

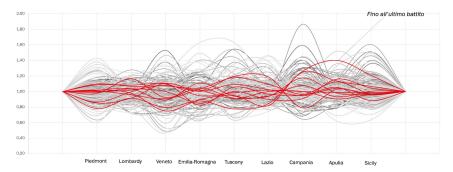


FIGURE 8
Regional popularity of Italian free-to-air TV series (2016-2022). Medical drama series in red.

(Figure 8). As clearly depicted, the local popularity of medical series (in red) usually does not exhibit significant peaks or very low points of unpopularity: the trajectories of the red lines remain fairly centered on the chart, with the sole exception of *Fino all'ultimo battuto*.

Homogeneous Consumption as a Sign of a Healthy Genre

Comparing the medical genre with other genres could be insightful, but it may be challenging to find other genres with a similar number of titles. Detective titles, for instance, are much more numerous and, as one might expect, their distribution across the country in terms of setting and consumption is quite varied. The historical-period genre may be a better point of comparison, as it has a similar number of series. However, it exhibits considerably more heterogeneous consumption patterns than the medical genre. On the other hand, within the historical-period genre, which is itself difficult to define due to the wide range of storylines it covers, there are several titles that have a clear local connotation. For example, *L'amica geniale* (Rai 1, HBO, 2018-) set in Campania or *Di padre in figlia* (Rai 1, 2017) set in Veneto. Such a marked local connotation weakens the iconographic coherence, so to speak, of this genre, and consequently leads to a significant regional imbalance in consumption.

The exceptional homogeneity in the geographical distribution of consumption of original medical series by Italian broadcasters can be attribut-

ed, in part, to the absence of local connotations of this kind, and to the neutral, "aseptic", and uncharacterized settings often portrayed in the genre. The interiors of hospitals are typically depicted in a modern and anonymous style, while exterior shots, even when featuring specific hospitals, do not usually display universally recognizable landmarks. As a result, medical series attract a nationwide audience without alienating viewers who may perceive the story as culturally distant (on media consumption and cultural proximity, see Straubhaar 1991).

This is in contrast to the geographical heterogeneity of consumption that is typical of other audiovisual content distributed in Italy, where some content is usually highly viewed in certain regions but much less viewed in others. Medical series manage to level out consumption, making it similar across the country. As we mentioned before, this is partly due to the fact that the genre focuses on a large number of indoor scenes and doesn't give great visibility to specific settings, landscapes, or locations, unlike many other series in different genres. In recent years, for example, Rai has pursued an editorial strategy aimed at mapping the entire Italian territory with its own original productions, significantly expanding the geographical "field of visibility" on the small screen (Rai Fiction 2014). However, there is likely something more to it than just that. It is also probably a sign of the power of a genre, which has to operate a process of anonymization, or delocalization (alocalization) of its stories, and it succeeds in doing this very well, even when admittedly there is no absence of local references. It is true that in our sample there are titles such as Oltre la soglia of Canale 5, set in Rome, which hardly ever represents the capital city in any recognizable way, at least in the first episodes. But other series cannot be said to hide the places where they are set to the same degree. Take, for instance, *Doc - Nelle tue mani*, which unequivocally reveals its significant filming in Milan and prominently features many well-known monuments, locations, and typical views of the Lombard capital. The protagonist's amnesia, which causes him to forget the past twelve years of his life, offers an opportunity to showcase his wanderings through the city, where he marvels, albeit somewhat disoriented, at the recent urban and architectural developments, including the Bosco Verticale, Piazza Gae Aulenti with the UniCredit Tower, and the Three Towers of the CityLife complex.

While providing good visibility to the city of Milan, *Doc* does not seem to attract or engage the Lombard audience any more than the rest of the country; in fact, it manages to be one of the most homogeneously viewed

titles of all 181 in our sample. This significant geographic homogeneity in the consumption of domestic medical series should be interpreted as a proof of the genre's vitality and its ability to counter – thanks to its typical plots, characters and iconography - the "monstrative" and attractional force that characterizes the use of settings and locations of most Italian TV fiction production, which is usually followed by a geographic imbalance in consumption. I intend the term "monstration" in the sense of Gaudreault 2009, as something that has to do with the pre-narrative and mere exhibition power of images. In other words, titles belonging to this genre usually enjoy widespread popularity across the country because the genre itself works effectively, and each individual title is not reduced to being merely a vehicle for locally connoted images. The weakening of the location's attraction power towards local consumption is indeed a testimony to the efficacy and health of the genre. It is not coincidental that it is difficult to identify other genres that are as well-defined narratively, in terms of storytelling and its spaces, as well as iconographically.

To be clear, the fact that the corpus of medical titles shows a certain coherence, and that the medical genre can possibly be considered "more of a genre" than others, does not mean that all the titles in our sample are purely medical – if one can ever speak of "pure" genres (see Staiger 2012). Some titles are likely "less" medical than others, more hybridized with other genres, or place greater emphasis on outdoor filming. The only real exception in our sample, Fino all'ultimo battito, which exhibits a significant regional imbalance in popularity, is certainly a somewhat anomalous medical title. It is heavily intertwined with the crime genre and, even on cursory analysis, clearly features fewer indoor scenes and a considerable amount of outdoor filming, with lots of Apulian landscapes. The regional imbalance in viewership for that title can be explained by the fact that Apulia, where the series is set, is not an ordinary region. Among the nine major regions, Apulia stands out as the most avid consumer of original domestic primetime seriality, both in general and specifically for Rai 1 series. Interestingly, Apulia is not a region with significant television visibility in recent times; on the contrary, it can be said that it is underrepresented during the period covered by our sample, with only a few titles set there. The combination of Apulia's fascination with TV fiction and its relatively limited representation has likely played a role in the popularity of Fino all'ultimo battito among its audience. In this case, the series has become more about Apulia itself than a typical medical drama series for that specific audience. This phenomenon

appears to be consistent with what occurs in many series produced in Italy during this period: they are not so much series of this or that genre, but rather series that represent or thematize a specific region. This is why they are usually so heterogeneously watched, geographically.

But apart from this single case, which also shows how the same content can be considered differently in relation to, so to speak, contextual factors, it seems to be safe to say that in general the medical genre succeeds in the operation of unifying the country's audiences, which is very rare in the Italian audiovisual scene, and perhaps indicative of a vitality, as mentioned above, and an exceptionality of this genre itself, at least in contemporary Italy. Genre, as is well known, derives from the encounter between the instances of those who produce and distribute a cultural (audiovisual) product – following a certain production formula, adopting a certain textual structure, labeling it accordingly (Altman 1999) - and the expectations of those who have to consume it and must first of all recognize its distinctive features and the specific promises of entertainment it embodies. The "contract" between production instances and viewers, also mediated by the textual characteristics of the content itself, can be more or less successful, and more or less solid. The geographic transversality of the audiences of Italian medical drama series can perhaps tell us something precisely about the effectiveness of this contract and about the "good functioning" of that genre - which, although it should not be understood in a static and monolithic way (see Rocchi 2019, Pescatore and Rocchi 2019, 2022), is still a genre with several well-codified characteristics - just insofar as it manages to counteract the power of audience attraction and engagement that is typical of local settings and actors. In a sense, such effectiveness of the medical drama genre can be seen as a testimony - one of the few - to the existence of a shared national audiovisual culture in Italy. Which may be paradoxical because, at the same time, such a homogeneous reception in the country might also testify to the fundamentally "exogenous" nature of this genre.

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THE GENRE AND THE NATION: ITALIAN MEDICAL TV SERIES AND THE GEOGRAPHY OF THEIR CONSUMPTION



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7. Adopting NLP Techniques to Analyze Twitter Social Discourses around *The Good Doctor*

Greta Iapalucci

■ ABSTRACT

The Good Doctor (ABC, 2017-) is a US medical drama centered upon the life of Shaun Murphy, a surgeon with Autism Spectrum Disorder (ASD) and savant syndrome. While the serial product has been widely investigated from a linguistic and a medical humanities approach, little has been said about its reception. Based on this lack of research and considering the ability of medical dramas to promote information about health issues, the aim of this chapter is twofold: first, to analyze Twitter social discourses around The Good Doctor with a focus on the representation of ASD and, second, to explore the potential of Natural Language Processing (NLP) techniques to investigate the reception of TV series on Twitter. Two different methodologies were implemented to analyze the tweets: a topic modeling technique to detect the main topics, carried out using BERTopic, and a sentiment analysis approach to mine the audience's opinion on a subset of tweets related to ASD, conducted using RoBERTa. Findings have shown that that The Good Doctor's audience mostly discuss narrative and fruition-related topics, specifically throughout its airing time period, and have mainly positively received the representation of ASD contained in it.

KEYWORDS

Medical drama; social discourses; ASD; topic modeling; sentiment analysis.

Introduction

The Good Doctor (ABC, 2017-) is a US medical drama created by David Shore and based on Good Doctor (KBS2, 2013), a South Korean series. It is centered upon the sentimental and professional life of the main character Shaun Murphy, played by Freddie Highmore, a young surgeon with Autism Spectrum Disorder (ASD) and savant syndrome.

As will be more thoroughly explained the second paragraph, the audiovisual serial product has been mainly investigated so far from linguistic (e.g., Aulia et el. 2022, Putra et al. 2019) and medical humanities (e.g., Moore 2019, Hilsabeck 2022) lenses, especially regarding the conditions of the protagonist. However, to the best of our knowledge, only one study has focused on its reception (Stern and Barnes 2019), yet limiting it to the ASD representation within the drama.

Based on this lack of research and taking as a starting point the ability of medical dramas to promote information about health issues and to raise awareness on sensitive topics (Abseek Brusse et al. 2015, Hether 2008), the aim of this chapter is twofold: first, to analyze Twitter social discourses around *The Good Doctor* with a close attention to the representation of ASD within it and, second, to explore the potential of quantitative data analysis tools, specifically Natural Language Processing (NLP) techniques, for the study of audiovisual products' reception.

More in detail, the first aim of this chapter can be broken down into two research questions (RQs), namely:

- RQ1: Which are the main topics around *The Good Doctor* discussed by the audience and how do they evolve over time?
- RQ2: What is the sentiment of the audience towards the representation of ASD within *The Good Doctor*?

The analysis was undertaken on Twitter, in line with much previous research that has focused on the reception of TV series (e.g., Andy et al. 2022,

Molteni and De Léon 2016). The remainder of the chapter is organized as follows: first, we will review previous works that have investigated *The Good Doctor*; second, we will focus on the data collection and on the methodology used to undertake the research; third, we will present the main results of the research, and, lastly, we will discuss them and outline future possible research lines.

The Good Doctor: Research Perspectives

So far, *The Good Doctor* has been primarily investigated from two research perspectives, namely linguistic and medical humanities.

On the one hand, beginning by reviewing the research articles that have taken a linguistic perspective, Koh (2018) adopted a corpus linguistic approach to put forward a comparison between the Korean original drama *Good Doctor* and the US adaptation, discovering that the latter one shows a higher lexical density than the former. This suggests that US screenwriters employ a wider vocabulary, with fewer repetitions, compared to the Korean ones.

Elaborating on the kind of vocabulary adopted in the TV series, Aulia et al. (2022) conducted a study to investigate medical terminology through semi-structured interviews and an open-ended questionnaire to 31 participants: an English teacher and 30 Indonesian-speaking medical students. The research highlighted not only that students feel the necessity to learn medical vocabulary-specific terms in English, but also that audiovisual objects which have a wide lexical variety like The Good Doctor could be useful teaching media in English for Specific Purposes (ESP) classes. The lexical variety of the medical drama under investigation has been further stressed by Tyasrinestu and Ardi (2020), who have focused on idiomatic expressions with the double goal of identifying the ones contained in *The Good Doctor* through a content analysis of the subtitles and studying the translation strategies of the above-mentioned expressions into the Indonesian translation of the drama. Findings revealed that many types of idiomatic expressions are present in The Good Doctor and acknowledged equivalence as the most frequent translation strategy.

Further linguistic research on *The Good Doctor* has adopted a pragmatic approach: Putra et al. (2019), for instance, have classified subtitles into

speech acts, finding that expressive speech acts are the most represented category due to the high presence of feelings and emotion within the dialogues, while Mahdi Mosin (2021), instead, focused on evidentiality in doctors' talk to express credibility and reliability, observing that they mainly use objective terms to carry out patients' diagnoses.

Enriching the study of the TV series from a linguistic perspective, three works have dealt specifically with the language disorder representation of a person with ASD through the character of Shaun Murphy, adopting either a pragmatic (Larasati 2019, Rokhim 2022) or a psycholinguistic approach (Dwiyanti 2022). In detail, Rokhim (2022)'s research contemplated 12 utterances elicited by Shaun and found out mainly examples of stuttering, followed in frequency by phonological disorder, difficulty in understanding the concept and in following the direction. Moreover, all kinds of language impairments found in his speech were experienced in strong psychological contexts for the character. Larasati (2019) broadens the scope of the aforementioned analysis by considering more dialogues and by investigating Shaun's both verbal and non-verbal language, observing many cases of verbal language disorder in his discourse (e.g., violation of the maxims of conversation, turn-taking violation, echolalia etc.) but also of non-verbal language disorder (e.g., limited use of gesture, inappropriate facial expression, stiff gaze etc.). The researcher also justified the linguistic impairments based on the social impairments of the character, namely lack of comprehension, difficulty at adjusting the tone of voice and lack of mind-reading skills. Dwiyanti (2022) focused on the language disorder of the character as well, but referring to the types of existing language disorders, i.e. expressive and receptive, and the kinds of ASD responses given. Through a descriptive qualitative research, findings showed that Shaun presented both types of language disorders, but the dominant one was receptive, while the most frequent ASD response given by Shaun was classified as cognitively-relevant.

On the other hand, many studies have focused on *The Good Doctor* from a medical humanities viewpoint. To begin with, two papers (Cambra-Badii and Baños 2018, Cambra-Badii et al. 2021) published within the field of bioethics should be acknowledged. Both contributions begin the analysis from the description of the representation of ASD and savant syndrome within the medical drama, in order to understand whether its presence could be useful to teach bioethics and consequently the doctor-patient communication to medical students. While the first contribution (Cambra-Badii

and Baños 2018) focuses more on the description of the representation of ASD within the TV series, the second (Cambra-Badii et al. 2021) draws from these premises to detect the situations in which a bioethical principle was involved through a content analysis. Because the analysis has identified many of these situations in the medical drama, the authors argue for its usefulness in bioethical and health education.

The representation of ASD within the series has been further investigated within academia. While Stark (2020)'s approach draws both from Foucauldian discourse analysis and an autoethnographic reflection and concludes that the medical drama is ambiguous because of its decision to represent only the controlled features of ASD, the majority of the studies were more critical. For instance, Kluke (2020) explores the high social competence of the character and argues about its inaccuracy, which can lead to create false expectations towards people with ASD among the audience.

Furthermore, Moore (2019) and Hilsabeck (2022) focus on the character's savant syndrome. The first work harshly criticizes the function of the savant syndrome within the TV series, because it is exploited as a means to enrich and reinforce the lives of neurotypical characters by acclaiming their behaviors and relationships and thus making people with ASD feel "not fully human" (Moore 2019: 300). The second work, instead, stresses that what makes Shaun a "good doctor" is precisely his savant syndrome, because it adds to the human side of his behavior a "machine" component, which contributes in emphasizing his qualities but also in outdistancing him from his colleagues (Hilsabeck 2022: 80).

If the representation of ASD and, accordingly, of the savant syndrome in *The Good Doctor* has been mainly criticized within academia, little has been said about the reception of the audiovisual product, either in general nor in particular about the representation of the two related conditions. To the best of our knowledge, the only exception is Stern and Barnes (2019)'s work. In their study, the authors compared the effects of the exposure to one episode of the drama to those of one lecture about ASD through a survey submitted to 144 undergraduate students. They found out that the reception of the audiovisual product was widely more positive than the lecture: it led to a more accurate knowledge of ASD and simultaneously to a higher desire to know more about it.

Data and Methodology

As many previous studies that have investigated social discourses and TV series (e.g., Andy et al. 2022, Molteni and De Léon 2016), Twitter has been chosen as the source of all the datasets for this research on the account of its primarily textual component compared to other social networks. The data collection and pre-processing stages were all carried out using R. In detail, tweets were collected through academictwitteR, a R package to access Twitter API. A hashtag-based query was undertaken using #thegooddoctor, the hashtag both promoted by the official account of the TV series on social networks and the most used by Twitter users. The query was limited to the airing time period that spans from the day of the first aired episode of the first season (that is, September 25, 2017) to a week after the conclusion of the last ended season at the time of undertaking this research, i.e. season 5 (that is, May 23, 2022). The collected dataset is composed of 385,826 tweets, which will be referred to hereafter as Original TGD1 dataset. In order to have a homogeneous corpus and to reduce noise, only English tweets were used in this research. Accordingly, a new dataset was created, named English TGD dataset and composed of 276,079 tweets.

Two different methods were implemented to analyze social discourses: BERTopic for RQ1 and RoBERTa, a Robustly Optimized BERT Pretraining Approach, for RQ2. Both tools are based on BERT, Bidirectional Encoder Representations from Transformers (Devlin et al. 2019), a language model based on Transformers² that has become in few years a baseline in NLP. The whole analysis was conducted by means of Python.

Topic Modeling: BERTopic

In order to address RQ1, a topic modeling approach was performed, which automatically analyzes large collections of textual information by detecting the latent topics contained in them. BERTopic (Grootendorst 2022) was preferred over more popular topic models such as Latent Dirichlet Allocation (LDA) and Non-negative Matrix Factorization (NMF) based on

¹ The Good Doctor.

² Transformers are neural network architectures proposed by Vaswani et al. (2017) that have highly outperformed other models in machine learning and in NLP since their introduction. To know more about the adoption of Transformer in NLP, please see: Tunstall et al. (2022).

previous works that have proven that this transformer-based model that takes BERT as an embedder achieves greater state-of-the-art results on microblogging texts like tweets (Egger and Yu 2022).

To create the BERTopic model, a minor textual pre-processing stage of the *English TGD dataset* was needed. In detail, URLs (identified by the *http* beginning), mentions (beginning with the @ symbol), hashtags (beginning with the # symbol) were removed and only alphabetical letters were maintained, aimed to remove not only numbers and punctuation but also emojis. No further preprocessing action was made given that BERTopic has been shown to perform best on slightly preprocessed datasets (Grootendorst 2022: 6).

Short tweets were dropped out in order to minimize the presence of empty or noisy tweets. Hence, tweets that contained less than 30 characters were removed. A new dataset composed only of long tweets was created, the *Long English TGD dataset*, amounting to 198,997 tweets.

In order to fit the BERTopic model on the *Long English TGD dataset*, 5 hyperparameters need to be tuned, corresponding to the 5 preliminary steps to create the topic model, namely:

- 1. Generating embeddings: this step consists in the transformation of the input documents³ into numerical representations. The default BERTopic pre-trained embedding model was kept to perform this task, which is *sentence-transformer-MiniLM-L6-v2*, an English language model trained for semantic similarity tasks.
- 2. Reducing dimensionality: after having created the numerical representations of the documents, it is crucial to reduce their dimensions, given that the cluster models of the third step perform better on low-dimensional data. While the default dimensionality reduction algorithm in BERTopic is UMAP (Uniform Manifold Approximation & Projection), for the present study PCA (Principle Component Analysis) was adopted, on the account of its ability to better reduce the dimensions. Additionally, the output dimension, that is the dimension of the data to be passed to the clustering mode, was set to 5, to maximize the reduction of the dimensions.
- 3. Clustering the reduced embeddings: BERTopic default algorithm for embedding clustering was used, i.e. HDBSCAN (Hierarchical

³ In this case, the *Long English TGD dataset* tweets.

⁴ As a reference, please visit: https://grabngoinfo.com/hyperparameter-tuning-for-bertopic-model-in-python/ (last accessed 01-07-23).

Density-Based Spatial Clustering of Applications with Noise). The reason for keeping it is twofold: first, it automatically identifies the clusters, without setting an a priori number, and, second, it creates a separate cluster for outliers (labeled as -1), thus reducing noise within the main clusters. The hyperparameter of a minimum cluster size was given to the model, which is the minimum number of documents that a cluster can contain, and it was set to 50 to reduce the resulting number of clusters yet at the same time preserving interpretability. As a consequence of the embedding clustering, documents are clustered into semantically similar clusters.

- 4. Tokenizing the topics and removing stopwords: the default vectorizer model, namely CountVectorizer, was kept to both tokenize the clusters and to load the English stopwords from.
- 5. Extracting topic representation: the default model, i.e. the c-TF-IDF (class-based Term Frequency-Inverse Document Frequency) was maintained: this model's task is to convert the formed clusters into a single document and to extract the term frequency of words from the specific cluster, altogether computing the importance of each term within a class. This process defines the most representative words per each topic.

The BERTopic model tuned with these hyperparameters yielded 42 topics and 179,876 tweets as outliers (90.4% of the whole *Long English TGD dataset*).

To reduce the number of outliers, BERTopic default function was selected, which calculates the c-TF-IDF representations of outlier documents and re-assigns them to the best fitting representation of the topics. As a result, the redistribution of the outlier tweets led to a new BERTopic model with 211 tweets classified as outliers (0.01%) and the rest of the *Long English TGD dataset* assigned to topics (198,786 tweets, 99.9%).

To reduce the number of topics, instead, three steps were carried out. First, an automatic reduction was called, which is performed by automatically merging the topics that were close to each other based on HDBSCAN results. This function generated a model of 26 topics. Second, two visualization functions, i.e. topic hierarchy and topic similarity, were called on the new updated model, in order to figure out how topics were related to one another and, eventually, whether a further reduction on the topics could be undertaken. The results of the two functions are visualized respectively in Figures 1 and 2. The topic hierarchy function is able to visualize the group-

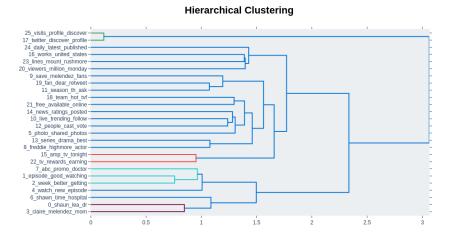


FIGURE 1
Dendrogram showing the hierarchical clustering of the topics.

ing of topics into a hierarchical structure displayed through a dendrogram and based on the distance matrix of the c-TF-IDF representation for each topic (Figure 1). Based on this hierarchy, a calculation of the topic representation at each merged step is carried out and the closer the merge between two topics is to 0, the less distant and thus more similar the topics are. Conversely, the farther their node is from 0, the more different the topics are. Topic similarity, instead, displays a heatmap of the similarity between topics (Figure 2). It first calculates cosine similarities between the created topic embeddings, whose range goes from 0 to 1, i.e., from no similarity to perfect similarity between topics, and then visualizes it through a heatmap, in which the darker the blue square resulting from the overlapping of two topics is, the more similar the topics.

Third, a manual merge of the topics was undertaken based on the results of these two visualization functions, taking as thresholds topics whose clustering node in the hierarchy was below 1 and that altogether had a similarity score higher than 0.70. This merge yielded to a further reduction of the model to 21 topics.

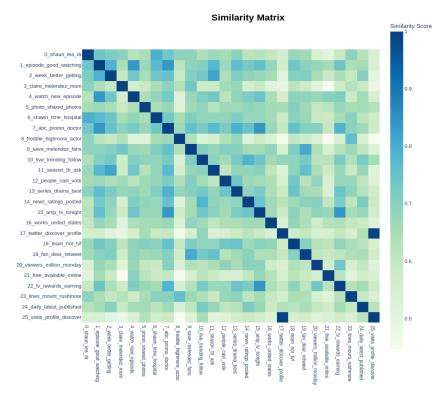


FIGURE 2
Heatmap showing similarity between topics.

Sentiment Analysis: RoBERTa

RQ2 was addressed through a sentiment analysis approach, which is the NLP task that classifies texts by extracting subjective information, that is the sentiment, and tagging it as either positive, negative or neutral. RoBERTa (Liu et al. 2019) was selected for this research, which is a language model based on BERT, yet optimized pertaining to the hyperparameters and training steps. The pre-trained twitter-RoBERTa-base model for sentiment analysis was adopted,⁵ trained on more than 124 million tweets and fine-tuned according to the TweetEval benchmark (Barbieri et al. 2020).

⁵ The code of the model is available at https://huggingface.co/cardiffnlp/twitter-roberta -base-sentiment-latest (last accessed 01-07-23).

Aimed at mining the audience's sentiment towards the depiction of ASD within *The Good Doctor*, a subset from the *English TGD dataset* was created containing only tweets related to this specific topic, filtered through the use of hashtags by Twitter users. The *English TGD dataset* was first pre-processed by lowercasing the words, by standardizing the characters and accents and by leaving out punctuation markers: these steps were carried out in order to guarantee that similar hashtags but with differences in lowercase or uppercase letters (e.g., "#thegooddoctor" vs "#TheGoodDoctor"), in characters (e.g., "#thegooddoctor" vs "#thégòòddoctor") or in punctuation (e.g., "#thegooddoctor" vs "#thegoodcotor") could not account for multiple hashtags.

Once having pre-processed the tweets, a list of all the hashtags comprised in the corpus was generated. In order to create a subset only of tweets that discussed ASD within *The Good Doctor*, the list of hashtags was closely scrolled down to identify hashtags related to ASD that occurred at least 10 times in the *English TGD dataset*. The resulting ASD-related hashtags are reported in Table 1.

ASD-related hashtags
#autism
#autismawareness
#autistic
#asd
#autismacceptance
#actuallyautistic
#autismawarenessmonth
#pmfautism
#aspergers
#autismmom
#worldautismawarenessday
#autismacceptancemonth
#autismspeaks
#savantsyndrome
#autismeducation
#autismawarenessday
#autismspectrum
#autismrocks
#autismo ⁶

Table 1
List of ASD-related hashtags that occurred more than 10 times in the *English TGD dataset*.

⁶ "Although the list of hashtags was extracted from the English TGD dataset, autismo is a not an English word. Therefore, tweets with this particular hashtag were manually

A new dataset was created with all the tweets that contained at least one of the hashtags present in Table 1 and was named the *ASD dataset*. Its size is 1,360 tweets. Before applying the RoBERTa sentiment analysis model to the *ASD dataset*, it is necessary to tokenize the tweets. To do so, the Hugging Face Transformers library provides AutoTokenizer, a class that can load a tokenizer from a pretrained model, twitter-RoBERTa-base-sentiment-latest in this case.

Once the model, the *ASD dataset*, the labels (i.e., positive, neutral and negative) and the tokenizer were provided, a function was created to apply the model to the *ASD dataset* in which the input is the tokenized text and the output required is one of the three pre-defined labels attached to every tweet, with a specific score from 0 to 1 for every label, identifying the probability distribution of the sentiment of every tweet over the three labels. Accordingly, the higher the score attributed to a tweet, the more confident the model is in the attribution of that label.

An overview of all the datasets used in this research and their respective size is reported in Table 2.

Dataset	Size
Original TGD dataset	385,826
English TGD dataset	276,079
Long English TGD dataset	198,997
ASD dataset	1,360

Table 2
Size of datasets.

checked to assess whether they were written in English. It was shown that the tweets were either in both English and Spanish or they did not contain any text but only several hashtags."

Topic Modeling Results

Frequency and Category of Topics

As a result of the methodology outlined in 3.1 and applied to the *Long English TGD Dataset*, the BERTopic model generated 21 topics. In order to analyze these topics, the most important words and the most representative tweet per each topic were displayed. Table 3 shows an overview of the yielded topics.

Table 3
List of topics with their topic ID and their frequency, the top 4 describing words and the most representative tweet per topic, in a decreasing order.

Topic ID	Count	Most describing words	Most representative tweet
-1	211	Fitzgerald, Larry, cowboys, Jerry	/
0	86,307	Shaun, Claire, Lea, dr	Lea took all that time to make pancakes for Shaun and he just goes and leaves like that?? #TheGoodDoctor
1	60,580	episode, good, doctor, season	I can't with this!! First episode and already crying! #thegooddoctor
2	9,372	watch, new, episode, tonight	I'm about to watch the new episode of #TheGoodDoctor.
3	6,624	photo, shared, photos, app	Shared from Photos app 1 photo @seale15eastcoast Giving it a try #FreddieHighmore #TheGoodDoctor #TGDsquad https://t.co/dlxpLP5lcy
4	6,074	Shawn, time, hospital, wonder	I have just watched episode 8 of Season 5 of The Good Doctor. I wonder what will be happening with Shawn Murphy, at the hospital next time. #TheGoodDoctor
5	4,469	Freddie, Highmore, actor, amazing	Wow, Freddie Highmore is an unbelievably amazing actor. #TheGoodDoctor @GoodDoctorABC
6	4,135	save, Melendez, fans, sign	The Good doctor fans: Save Melendez! #bringbackmelendez #TheGoodDoctor - Sign the Petition! https://t.co/MfWG7aOE45 via @UKChange

GRETA IAPALUCCI

Topic ID	Count	Most describing words	Most representative tweet
7	3,259	live, trending, follow, rt	Currently trending scripted: 6. #SaveProdigalSon ðŸ"a 7. #BetterCallSaul 8. #WynonnaEarp 🠩 9. #TWD 10. #TheGoodDoctor like, RT & follow https://t.co/23JilGU6Yb
8	3,178	season, th, ask, finale	We are fans of #TheGoodDoctor and we ask for the renewal of the show for one more season. Please @ABC_Publicity and @ ABCNetwork renew @GoodDoctorABC for a 5th season #TheGoodDoctorSeason5 https://t.co/miVzSe5EYS
9	2,478	people, cast, vote, choice	I voted for #FreddieHighmore for #TheMaleTvStar of 2018 Cast your vote for the E! People's Choice Awards at #pcas! #TheGoodDoctor
10	2,099	TV, amp, tonight, listings	PIsRT @hillharper #TheGoodDoctor tonight on ABC. Free TV Listings @ https://t.co/BM9zp9GCSF &
11	1,853	series, drama, best, lead	For your #Emmys2021 consideration Outstanding Best Lead Actor in Drama Series #freddiehighmore #thegooddoctor #emmynominations #emmys @TheEmmys @GoodDoctorABC
12	1,726	news, ratings, posted, followed	Watch #TheGoodDoctor tonight at 10 on #WFTV followed by Eyewitness News at 11. https://t.co/OmtBzUasJi
13	1,401	Twitter, discover, profile, visits	Discover who visits your Twitter profile in the last 24h #ILikeBeer #TheBachelor #LHHMIA #DescribeYourselfBadly #TheGoodDoctor https://t.co/E2XHsWfyTo
14	1,153	works, United, States, seconds	Only works for the United States #TheBachelor #LHHMIA #DescribeYourselfBadly #ToddFrazier #TheGoodDoctor #LadyDoritos #PumpRules https://t.co/FwYSU6vfCF

Topic ID	Count	Most describing words	Most representative tweet
15	1,011	team, hot, TVF, online	HOT FROM TEAM TVF: Watch #TheGoodDoctor Online: Season 2 Episode 18 https://t.co/PTGo5yyvIT via @ pauldailly1992
16	742	fan, dear, retweet, fans	CHAIN FAN PETITION!! Dear fans: copy the petition below and retweet "We are fans of #TheGoodDoctor and we ask for the renewal of the show for one more season. Please @ABC_Publicity and @ABCNetwork renew @GoodDoctorABC for a 5th season #TheGoodDoctorSeason5 antimetric in https://t.co/BVzFeTgYwl
17	675	viewers, million, Monday, ratings	Monday Ratings: #TheGoodDoctor = 5.6 million viewers; #AllAmerican = 772,000 viewers;#BlackLightning = 627,000 viewers; #911LoneStar = 5.5 million viewers and #Manifest = 3.8 million viewers.
18	662	free, available, online, watch	The Good Doctor is available to watch online for FREE! #TheGoodDoctor Watch now: https://t.co/1QKqKWBQfH https://t.co/vZNNz5L5p9
19	603	lines, Mount, Rushmore, freddiehighmore	#TheGoodDoctor 1x02 - Mount Rushmore - 5 Funniest Lines! https://t.co/CqnNtEZleN via @YouTube
20	385	daily, latest, published. dahlinke	The Dahlinke2306 Daily has been published https://t.co/28EGpRj9tW Vielen Dank an @davidhogg111 @maewald @DanRather #yr #thegooddoctor
TOTAL	198,997	1	1

Based on Table 3, a classification of the topics into 4 categories was carried out and is reported in Table 4.

As can be seen from Table 4, the narrative category is formed by only one topic, namely topic ID = 0, yet it constitutes the most frequent category among the four, representing the 43.4% of the tweets classified by the topic model. In detail, within the 4 most representing words, one can notice the names of three characters: Shaun, the protagonist, Claire, part of the main cast for the first four seasons, and Lea, the protagonist's first love interest

	Category of topics	Topic IDs	Count
1	Narrative	0	86,307 (43.4%)
2	Fruition	1, 2, 4, 7, 10, 12, 15, 17, 18, 19	86,061 (43.2%)
3	Fandom	5, 6, 8, 9, 11, 16	16,855 (8.5%)
4	Noise	3, 13, 14, 20	9,563 (4.8%)
	Outliers	-1	211 (0.1%)
	TOTAL	1	198,997 (100.0%)

Table 4
Classification of topics into 4 categories, ordered by the count of tweets belonging to each category.

and then fiancée. The most representative tweet of the topic focuses on the sentimental storyline between Shaun and Lea. The other most representative tweets, not reported here for space reasons, confirm the focus of this topic on the narration by recalling Shaun's ASD, or empathizing with him in an argument with dr. Lim, or Claire's patience. Other characters and respective storylines are cited, such as dr. Reznick and dr. Melendez.

The second most frequent category discusses the fruition of the TV series: it is composed of 10 topics, namely IDs = 1, 2, 4, 7, 10, 12, 15, 17, 18 and 19, and amounts to the 43.2% of the total, almost equaling the first category in frequency. Within this category, three sub-categories of topics can be identified, namely: topics related to the fruition of the TV series in general (IDs = 1, 2 and 4), topics connected to its synchronous fruition (IDs = 7, 10, 12 and 17) and topics related to its asynchronous fruition (IDs = 15, 18 and 19). Considering first the three topics related to the general fruition of the TV series, while in topic ID = 2 *The Good Doctor* spectators limit themselves to tweet that they are about to start a new episode of the TV series, the other two topics go deeper: in topic ID = 1, spectators express their impressions and perceptions about what they have just watched and in topic ID = 4 they speculate on the upcoming events in the narrative line. Turning to the topics related to the synchronous fruition, topic ID = 7 highlights that the hashtag used for the data collection trended during the airing time of the show along with other hashtags, implying that live-tweeting is a common practice among the fans of the series; topic IDs = 10 and 12 discuss the TV show schedules for the evenings in which the show airs and, lastly, topic ID = 17 publishes the most rated shows of the previous evening, in which The Good Doctor had resulted to be the most watched, suggesting that most spectators enjoy watching it live. With regard to topics related to the asynchronous fruition, topic IDs = 15 and 18 both share one streaming platform through which Twitter users can watch the latest episode or the whole TV series. In topic ID = 19, the focus is on the sharing of YouTube videos made up of some lines collected from episodes of the show, in order to allow fans to watch (or re-watch) only scenes deemed salient.

The third most frequent category is formed by 6 topics that revolve around the fandoms of this drama, namely topic IDs = 5, 6, 8, 9, 11 and 16, totaling the 8.5% of the tweets. Among these, three topics aim the attention to Freddie Highmore's performance in playing Shaun, namely IDs = 5, 9 and 11: if topic ID = 5 gathers tweets that praise him and his acting skills, topic IDs = 9 and 11 make emerge fans' engagement to indicate respectively their vote for him for the *People's Choice Awards* and to encourage other fans to do the same or their request for his nomination for the *Emmy Awards* in the category *Outstanding Best Lead Actor in Drama Series*. The other three fandom-related topics, i.e. IDs = 6, 8 and 16, outline petitions that fans submit: in topic ID = 6, the petition is directed towards the preservation of the presence of dr. Melendez' character in *The Good Doctor*, who dies at the end of season 3, while in topic IDs = 8 and 16, fans solicit for the renewal of the TV series for a new season.

In the fourth and last category, 4 topics that were considered noisy because they were not directly linked to *The Good Doctor* despite containing the hashtag #thegooddoctor were included, namely topic IDs = 3, 13, 14 and 20, amounting to the 4.8% of the tweets classified. In detail, topic IDs = 13, 14 and 20 exploit the popularity of the hashtag used for data collection, sometimes also combined with other trending hashtags, to promote respectively: a website that allows Twitter users to discover who has visited their profiles, a website that works only in the United States and a blog called *The Dahlinke2306 Daily*. Topic ID = 3 is slightly different from the others: this topic revolves around Twitter users explicitly indicating that they are sharing photos, but a close look at the shared photos yielded that they were not all related to the TV series. Additionally, the topic was classified as noisy because some other representative tweets were not directly interpretable or linked to the activity of sharing promotional contents connected to *The Good Doctor*.

Time Trends of Topics

Topics were also analyzed with regard to their evolution over time. Three time trends and respective features of the topics were hypothesized: con-

tinuous, discontinuous and peaking. Topics whose difference between the highest and the lowest point in the curve was lower than 0.3 in normalized frequency were credited as continuous; topics whose difference between the highest and the second-highest point was lower than 0.3 in normalized frequency were ascribed to the discontinuous trend, while topics whose difference between the highest and the second-highest point was higher than 0.3 in normalized frequency were considered to have a peak.

The time trends and their respective topics are reported in Table 5.

There are no topics that had a continuous time trend. Figure 3A and 3B display the evolution over time of the discontinuous and peaking topics respectively.

Considering the 13 topics that have a discontinuous evolution, what emerges by looking at Figure 3a is that the majority of their peaks and

Time trend	Topic IDs	Total
Continuous	/	0
Discontinuous	0, 3, 4, 7, 8, 9, 11, 12, 15, 16, 17, 18, 20	13
Peaking	1, 2, 5, 6, 10, 13, 14, 19	8
TOTAL	1	21

Table 5
Time trends of topics.

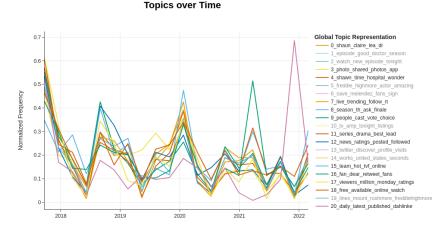


FIGURE 3A
Time trend of the discontinuous topics, in normalized frequencies.

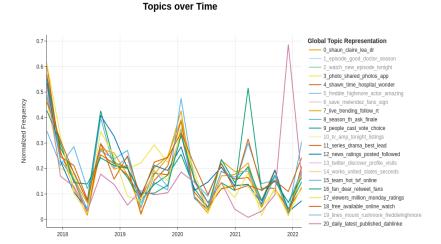


FIGURE 3B
Time trend of the peaking topics, in normalized frequencies.

Season	Airing period	Christmas Hiatus	Peaks	Drops
1	September 25, 2017- March 26, 2018	December 4, 2017 – January 8, 2018	Last months, 2017	Approximately half 2018
2	September 24, 2018 – March 11, 2019	December 3, 2018 – January 14, 2019	Last months, 2018	Approximately half 2019
3	September 23, 2019 – March 30, 2020	December 2, 2019 – January 13, 2020	Approximately beginning 2020	Approximately half 2020
4	November 2, 2020 –	November 30,	Last months, 2020	Between 2020 and 2021
4	June 7, 2021	2020 – January 11, 2021	First months, 2021	Approximately half 2021
5	September 27,	November 22,	Last months, 2021	Right before the end 2021
3	5 2021 – May 16, 2021 – February 28, 2022		First months, 2022	/

TABLE 6

Seasons, airing periods and Christmas hiatuses of The Good Doctor, in parallel with peaks and drops of the discontinuous topics.

drops are somehow synchronized, the only two exceptions being the two noisy topic IDs = 3 and 20, respectively in yellow and purple. Accordingly, 7 common peaks and 6 consequent drops can be identified, which are reported in Table 6, in parallel with the corresponding airing season, airing period and Christmas hiatus for each one. By looking at Table 6, one can notice that the 7 peaks of the discontinuous topics occur approximately at the beginning of a new season of the TV series, in all the 5 seasons (5 peaks) and at the beginning of the TV series airing after the Christmas hiatus for the last 2 seasons (2 peaks). As a result, the 6 drops of these topics take place when the TV series is not airing, namely around the half of every year (4 drops) or during the last two Christmas hiatuses (2 drops).

Focusing on the 8 peaking topics displayed in Figure 3b, 5 of them show their peak during the last months of 2017, at the beginning of the airing time of *The Good Doctor*, namely IDs = 1, 2, 5, 10 and 19. Moreover, two topics peak little time afterwards, that is right before the end of 2017, i.e. IDs = 13 and 14. Only one topic peaks later in time, at the beginning of 2020: ID = 6. This can be explained because the topic is about the petition to save dr. Melendez and the character dies in S03E20, aired on March 20, 2020.

Sentiment Analysis Results

The results of the application of the RoBERTa sentiment analysis model on the *ASD dataset* are reported in Table 7. The number of tweets that were classified as positive is by far higher compared to those classified as neutral or negative, with the respective percentages being 59.5%, 29.3% and 11.2%.

In order to interpret these results, and to understand the main aspects towards which the sentiment of the tweets is addressed, we considered the 3 tweets with the highest score for each sentiment tag and their respective score (Table 8) and analyzed them qualitatively.

Considering the 3 positive tweets reported in Table 8, 2 tweets praise *The Good Doctor* directly for the representation of ASD (n. 1 and 3), and a

Sentiment	Number of tweets	Percentage
Positive	809	59.5%
Neutral	398	29.3%
Negative	153	11.2%
TOTAL	1,360	100.0%

Table 7
Sentiment analysis results.

personal experience with the condition is emphasized in both, either direct (n. 1) or familiar (n. 3), implying a reflection in Shaun's character by the audience. The positive sentiment of tweet n. 2, instead, is directed towards the show in general, even though the presence of one hashtag related to ASD draws the focus of the acclaim to the representation of this condition.

N.	Tweet	Sentiment tag and score
1	Omg Yes I'm #ActuallyAutistic and love this show can't wait to see season 5 in Australia so excited for Season 6 now @ #TheGoodDoctor #series #TVShow #Autism #Neurodiversity #Australia https://t.co/Rldjbnq1F2	positive, 0.9896799
2	I am super excited for The Good Doctor to return September 24! #thegooddoctor #tvseries #doctor #show #autism #awesome #entertainment https://t.co/fk1ahMnxLG	positive, 0.9902643
3	Just watched #TheGoodDoctor and I love it! My son with #Autism also enjoyed it! Can't wait to see what's next!	positive, 0.990613
4	I had uploaded my 3rd "#Autistics in Fiction" video this time talking about Shaun Murphy from #TheGoodDoctor and #BenAffleck #autistic lead role in "The Accountant". ASPIE WITH ATTITUDE "Autistics In Fiction #3" E157 https://t.co/j7f1yprvET via @YouTube	neutral, 0.9157699
5	#TheGoodDoctor 1x12 "Islands Part Two" Promotional Photos & Synopsis https://t.co/Vj2EhlfPlt #FreddieHighmore #ShaunMurphy #Autism #GoodDoctor	neutral, 0.91611546
6	#TheGoodDoctor 1x07 "22 Steps" Promotional Photos, BTS & Synopsis https://t.co/yfsatSGu12 #FreddieHighmore #ShaunMurphy #Autism #GoodDoctor	neutral, 0.9311321
7	Found out recently #TheGoodDoctor got picked up for a 3rd season. *head-desk* Why?! This show is such a mockery of #ActuallyAutistic people. Makes me sick! https://t.co/Eu3V4USsvq	negative, 0.9443284
8	Asshole Doc needs to be FIRED. I'm sick of his arrogance and wrong judgment calls just be he doesn't like Dr. Murphy #autism #thegooddoctor	negative, 0.9513848
9	#cancelthegooddoctor #TheGoodDoctor #ActuallyAutistic I have been waiting for fucking years for these assholes to apologize for working with autism speaks and putting on a stereotypical voice. You are hurting us.	negative, 0.9549853

TABLE S

The 3 most representative tweets for each sentiment tag, their tag and their respective score.

As far as the 3 neutral tweets are concerned, 2 tweets do not address ASD directly, given that they are focused on the promotion of one episode of the medical drama (n. 4 and 5). Conversely, tweet n. 8 promotes the user's video from their YouTube channel in which they review ASD characters within audiovisual products.

Turning to negative tweets, if tweet n. 8 harshly criticizes a doctor's behavior towards Shaun, probably dr. Melendez or dr. Andrews, tweets n. 7 and 9 condemn how the condition is represented within the drama: tweet n. 7 defines *The Good Doctor* "a mockery of actually autistic people", while tweet n. 9 mainly blames the TV series for the display of stereotypes on ASD and for having collaborated with Autism Speaks, a non-profit autism-awareness organization that has been severely criticized by people with ASD, mainly because it considers the disorder as a disease to be cured. Moreover, the author of the tweet asks for the cancellation of the drama through the hashtag #cancelthegooddoctor and wishes for an apology to people with ASD.

The fact that the sentiment of the ASD dataset is not consistently directed towards the representation of ASD within *The Good Doctor* must be considered a limitation of this research and could be overcome in future studies through an aspect-based sentiment analysis approach.⁸

Conclusions and Future Perspectives

This research aimed to investigate Twitter social discourses around *The Good Doctor* produced on Twitter, while simultaneously testing the adopted approach, based on NLP techniques. Pertaining to RQ1, whose purpose was to detect the main topics discussed around *The Good Doctor* by the audience and their evolution over time, the BERTopic topic modeling has showed that social discourses mainly revolve around the narrative lines of this medical drama and, more specifically, the storylines between the main characters. This finding validates previous research such as Castro-Mariño (2017)'s work, which observed, by coding social networks' posts on Spanish fiction programs, that the 62.6% of the comments were related to the narra-

For a detailed explanation of the controversy, please visit https://www.themarysue.com/the-autism-speaks-controversy-explained/ (last accessed 01-07-23).

⁸ An aspect-based sentiment analysis approach allows not only to extract the sentiment of a text, but also to determine towards which aspect (or category) the sentiment of the text is directed.

tion (Castro-Mariño 2017: 96). Almost as frequently as on narration, social discourses also focus on the fruition of this TV series: while some topics did not provide indications on the time, others suggested that the audience enjoys both watching the TV series live and live-tweeting to "[...] feel connected to a large online viewing audience" (Schirra et al. 2014: 2450) and on streaming platforms to follow one's own pattern of viewing. In fewer tweets, users have also demonstrated a high engagement as fans of the TV series, actively using social platforms to orient the accolades (topic IDs = 9 and 11) or submitting petitions to influence the narrative (ID = 6) or productive (IDs = 8 and 16) decisions around *The Good Doctor*.

The topics discussed by the audience were also displayed to have two main time trends: discontinuous and peaking. The majority of topics was discontinuous and followed the airing time of the TV series, whereas fewer topics presented a peak in the contemplated timespan, almost all during the first few months of airing. These findings suggest not only that the social discourses generated around *The Good Doctor* are strictly limited to the broadcast of the TV series and does not expand further in time, but also that they peaked above all at the beginning of its airing time.

As regards RQ2, aimed at detecting the sentiment of the audience towards the representation of ASD within *The Good Doctor* through the RoBERTa model, it has been shown that most tweets had a positive sentiment. This indicates that the representation of ASD within *The Good Doctor* has mostly been acclaimed, corroborating Stern and Barnes (2019)'s research, in which the authors observed that the representation of the disorder was positively received and judged as accurate by the surveyed people. The qualitative analysis of the *ASD dataset* has revealed, however, that the sentiment contained in the tweets was not consistently directed towards the representation of ASD and that a unanimous reception is far from being reached, neither among the general audience, nor among people with ASD, validating the ambiguity that had emerged from the literature (Hilsabeck 2022, Kluke 2020, Moore 2019, Stark 2020).

Methodologically, this first exploratory analysis has proved that NLP tools can be efficiently integrated into the field of reception studies of audiovisual serial products along with more traditional approaches. As a future perspective, we intend to expand the scope of this research by reproducing this fine-tuned techniques to investigate the reception of other US contemporary medical drama TV series, as well as shedding more in-depth light into the representation of ASD on specialized blogs using alternative methodologies.

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ADOPTING NLP TECHNIQUES TO ANALYZE TWITTER SOCIAL DISCOURSES AROUND THE GOOD DOCTOR



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8. When Medical Drama Meets Teen Drama

Youth and Mental Health in Italian TV Series

Chiara Checcaglini

■ ABSTRACT

One issue that the pandemic has helped publicly reveal as particularly pressing is mental health, which has progressively occupied more space in a variety of audiovisual narratives in recent years.

Some Italian TV series are trying to overcome stereotypical and inaccurate representation of mental health and counterpose more nuanced storyline to stereotypical and stigmatizing depiction of mental illness, through some structural and narrative recurring features: first, the Italian way to address mental health with more care and thoughtfulness is making it the main subject of the series; second, this intention is achieved by setting the stories in psychiatric hospitals; third, the preferred protagonists for this kind of stories so far are young boys and girls.

This article will focus on three Italian TV series, Mediaset *Oltre la soglia*, Rai teen series *Mental* and Netflix drama *Tutto chiede salvezza*, to reach two purposes. On the one hand, to highlight the distinguishing traits of these TV shows with respect of the three recurring features mentioned above. On the other hand, to investigate the relationship of these series to medical drama: what is consistent with the genre, and what instead is distancing these series from it, such as the unbalanced focus on patients over doctors.

KEYWORDS

Medical drama; teen drama; mental health; teenagers; TV series.

Introduction

The topic of mental health has gradually taken space in the attention of TV series creators and audiences. Over the past decade American TV shows have started incorporating mental health issues and mental disorders into different genres and different types of narratives: a relevant example is musical comedy *Crazy Ex-Girlfriend* (The CW, 2015-2019), but we find dramatic and emotional storylines also in the animated sitcoms *BoJack Horseman* (Netflix, 2014-2020) and *Big Mouth* (Netflix, 2017-), and teen dramas *Thirteen Reasons Why* (Netflix, 2017-2020) and *Euphoria* (HBO, 2019-); mental disorder and trauma is also central in the characterization of some female protagonists, like superheroes Jessica Jones (*Jessica Jones*, Netflix, 2015-2019) and Wanda (*WandaVision*, Disney+, 2021), and Carrie Mathison from the spy-thriller *Homeland* (Showtime, 2011-2020).

Unlike American TV shows, Italian series that deal with mental health as a main narrative core usually share two features: first, the mental health topic is developed within the frame of the hospital drama, or, as we will see, some variations of it; second, the characters that deals with mental disorders in serial narratives are mostly young people.

This chapter stems from two research topics combined: first, my collaboration with the University of Urbino's research unit of the Italian State-funded PRIN project (NEAD) Narrative Ecosystem Analysis and Development Framework: A Systemic Approach to Contemporary Serial Products. The Medical Drama Case, a macro-level analysis of the medical drama genre focused on the geographical areas of China, the U.S., Italy; and second, my interest in teenagers' representation in Italian teen series, specifically girls. This chapter will investigate the intersection between medical dramas and teen dramas,

¹ With some exceptions, like teen drama *SKAM Italia*'s storyline involving Niccolò's disorders.

where we find the narrativization and representation of mental health issues, recurringly associated with Italian adolescence and youth. Moreover, the hospital frame allows to reflect on the formal and content boundaries of the genre of medical drama.

I will focus on three Italian TV series that share youth's mental health as their main subject, although they differ in format, tone and, of course, plots. The TV series are: *Oltre la soglia* (Canale 5, 2019), *Mental* (RaiPlay, 2020) and *Tutto chiede salvezza* (Netflix, 2022-).

Oltre la soglia revolves around a child psychiatry Emergency Room, supervised by Doctor Tosca Navarro (Gabriella Pession), who practices an effective though unconventional approach to the care of her underage patients. Each episode features a new young patient, while also delving into the group dynamics of the ward. *Mental* follows four teenagers who are hospitalized in the same psychiatric facility: Nico (Greta Esposito), Michele (Romano Reggiani), Emma (Federica Pagliaroli) and Daniel (Cosimo Longo), all experiencing different mental health issues. *Tutto chiede salvezza* is centered on the period of forced hospitalization and compulsory medical treatment (known as TSO – Trattamento Sanitario Obbligatorio) of a young man, Daniele, after a violent outburst of rage directed at his parents.

While *Oltre la soglia* is a medical case-based drama, *Tutto chiede salvezza* is the adaptation of Daniele Mencarelli's autobiographical novel of the same name; *Mental* is the one among the three that meets the most the definition of teen drama.

The aim of this analysis is to underline recurring traits and differences in Italian series about mental health issues, stressing how the youth angle gives a specific tone to the storytelling and the development of the characters' path.

Doctors and Teen Patients

Pescatore and Rocchi (Pescatore and Rocchi 2019, Rocchi 2019) argue that medical drama, as a genre, is marked by formal and content characteristics. Formal characteristics include the environment of the hospital, that works as a microcosm, and an ensemble cast "where different characters face various situations and have to make complex choices (both on a professional and sentimental level)" (Pescatore and Rocchi 2019: 108), in a way that is similar to that of other ensemble, workplace-based genres, such as legal dramas. The environment of the hospital can be a broad,

complex setting with various sectors, or it can be limited to a specific, single hospital ward. The hospital is "a microcosm that replicates bigger social organizational systems" (Pescatore and Rocchi 2019: 108), with its own hierarchies, roles and forms of power; it also has the ability to immediately define the characterization of its protagonists: doctors, nurses, residents, patients (Rocchi 2019).

As for the content characteristics developed by the storytelling, they can be categorized based on the prevalence of medical, professional or romantic relationships in the plotlines: the medical cases plot, the professional plot and the sentimental plot (Pescatore and Rocchi 2019). This structure leaves room for variations in terms of rhythm, character development, relation to reality, as well as for the elaboration of social issues and fragments of current events through the filter of specific illnesses and conditions in patients. This description is particularly suitable for American medical dramas, that follow a structured production-distribution schedule and are often able to incorporate into the episodes relevant events happening in the present; however, some Italian medical dramas follow this model too: for instance, *Medicina generale* (Rai1, Rai3, 2007-2010), an Italian response to the *ER* model, or the recent *Doc – Nelle tue mani* (Rai1, 2020-).

Like for other televisual genres, the multiplication of serial products, and the subsequent push to diversify, produced some attempts to try to complicate narrative aspects, like the link with reality or the aim of authenticity on a narrative level. This happens in Doc - Nelle tue mani with its storylines about Covid-19 pandemic, but also the three series I mentioned all fit into this trend: indeed, a crucial aspect that may explain the recurring correlation between mental health stories and young characters in TV series is the alarming deterioration of young people's mental health in recent years (Bidoli 2023). This state of events has worsened with the pandemic, a period of which much accurate data is still lacking, but studies were already signaling this worrying trend prior to 2020 (Da Rold 2022).

The representation of mental disorders in fiction is a topic that has been discussed and researched in both the field of communication (Pirkis et al. 2006) and the field of psychiatry (Benbow 2007). Researches demonstrate the influence of media in the negative perception of mental disorders and mental health professionals in the public opinion. Specifically, these studies underline how the generally stereotypical and negative depiction of the categories of characters with mental illness and of characters-psychiatrists, have contributed to foster damaging stigmas around people with mental

disorders. Schneider (1977, 1987) developed a categorization of on-screen mental health professionals that has since been referred to in many articles on the same topics. Often the problem is the recurring presence of stereotypes and simplifications for narrative and filmic purposes: Pirikis et al. argue that "various 'framing' techniques are used to indicate that characters with a mental illness are different from other characters" (2006: 528), such as strategies to signify the "difference" of these characters from the others, whether in negative terms - such as aggressiveness, dangerousness, self-obsession and lack of control as associated with mental illness - or positive terms - the tropes of the exceptional genius or the eccentric free spirit. In any case these characters are framed as 'other' from the 'regular' people, as separated from the social order. Another example of oversimplification in audiovisual media is the portrayal of treatments: traditionally, psychotherapy is the type of therapy that is represented the most in film and TV series, while drug therapy and medications have been traditionally invisible in fiction or associated with problematic behaviours.

Contemporary series seem to actively distance themselves from such overgeneralized representations to give a more authentic and accurate depiction of the experiences of the symptoms, the diagnostic process and the medical procedures, as well as the relationship between doctors and patients, and therapy. Medical treatments are much more present, discussed and problematized in Italian series too: both *Mental* and *Oltre la soglia* involve storylines about the use of psychotropic drugs as an essential part of the treatment, and about the dangers of suddenly quitting it.

The three TV series in question share an aspiration for authenticity, that has a concrete, practical consequence in the employment of consultants: Doctor Stefano Vicari, head of Child Neuropsychiatry at Ospedale Bambin Gesù in Rome, served as a consultant for *Oltre la soglia*; the Ospedale Bambin Gesù is also the set of *Mental*, written with scientific advice from resident psychiatrist Doctor Paola De Rose; Doctor Peppe Dell'Acqua, who collaborated with Franco Basaglia in drafting 1978 Law 180, worked with *Tutto chiede salvezza*'s writers.

Regarding the presence of teenage characters in these series, *Oltre la soglia* screenwriter Laura Ippoliti provides a starting explanation in an interview by Fabio Guarnaccia. Ippoliti argues that adolescence is a liminal moment, where girls and boys are still in time to prevent the disease from becoming chronic: "la mente è ancora in formazione, fluida, puoi confondere i

sintomi, alcune cose partono in un modo e diventano altro"² (Guarnaccia 2019). Ippoliti also mentions "protection factors" or "risk factors" that may influence the deterioration of a young person's mental state: "una malattia mentale può non scatenarsi mai se viviamo in un ambiente sano, ricco di reti sociali che funzionano. Viceversa, ci sono ambienti che sin dall'infanzia traumatizzano, e l'assenza di assistenza affettiva e sociale può rendere manifesta la malattia nascosta"³ (Guarnaccia 2019). From Ippoliti's words we see that, at least in the intentions of the writer, the connection between symptoms, social context, and disease development is quite clear.

Adolescence is also a challenging age: teenage life has been recurringly exploited for narrative purposes. It is a critical moment and a window where identity is still in the making, an age that traditionally provides many narrative possibilities in the form of the coming-of-age story.

As Catherine Driscoll points out, teen film as a genre is "popularly understood as a checklist in which few components are absolutely required but others are very common indeed" (2011: 65). It is filled with recurring tropes, like high-school setting, popular music, parties, peer groups, sexual or romantic interests, and features recurring categories of conflict and problems, such as struggle with parents, drug use, sex and virginity. The teen genre is easily contaminated with other genres, especially in serial narratives, and vice versa. In teen hybridisations with other genres some teen tropes may be maintained, others may be dropped, others may be rearticulated and repurposed.

Oltre la soglia, Mental and Tutto chiede salvezza include storylines and conversations about romance and sexuality; the high school environment is often addressed, although indirectly, as a tangle of social anxieties that trigger the mental distress of the characters: Mental's Nico experiences several crisis that are revealed to be intertwined with the trauma of a sexual assault at a party with her schoolmates (01x06, Risvegli); Oltre la soglia's Silvia explodes with rage that turns out to be a consequence of constant bullying and harassment at school, orchestrated by an "evil schoolmate" that will soon end up in the same psychiatric E.R. (01x03, Silvia).

² "The mind is still in formation, fluid, you may confuse the symptoms, some things start one way and become another" (my translation).

³ "A mental illness may never be triggered if we live in a healthy environment, full of functioning social networks. Conversely, there are traumatizing environments from childhood, and the absence of emotional and social support can make the concealed illness manifest" (my translation).

The pressures and expectations from family, and from adults in general, in the life of these teenagers are also explored in various cases in *Oltre la soglia*. Some psychotic episodes at the center of the medical case plots are found to be the result of symptoms' denial, often self-imposed, or to be triggered by the need to hide them in fear of the parents' reaction (01x02, *Dora*; 01x08, *Adila*). The connection between the adult world and the teenage world is often fractured, nonlinear, and marked by the adults' absence or incompetence. In *Mental*, for instance, the adults seem particularly distant and unaffectionate: Emma's unsympathetic mother (Milena Mancini) constantly minimize her daughter's troubles and blame her for them; Michele's reckless, immature father (Marco Cocci) is a liar and an irresponsible parent; but even the psychiatrist, Doctor Giulia (Anna Bellato) is distracted by her own mourning and personal problems. Driscoll also stresses the trope of crucial events as rites of passage in teen life:

The rite of passage operates in two ways for teen film. The first is as a ritual marking passage between different social states, like graduation ceremonies, or indicating an immanent change of this kind, like 'the prom'. And the second does not depend on any literal 'rite' and might be more properly called an 'experience of limits' (2011: 66).

On the one hand, passage in the age of adolescence is conceived as a sort of codified, institutional door from a state to another; on the other hand, passage is an area that deals with limits, boundaries, and their crossing.

Both versions of rites of passage are meaningful for these TV series. For the characters who experience a crisis that bring them to become patients, the rite of passage between social states corresponds to the passage from a state of uncertainty and danger – because there is no diagnosis yet – to one of confinement – because of the actual harm and pain the characters may suffer, or cause; again, a passage occurs from a state of constraint and rebuttal, to one of acceptance of their unique mental condition and multilayered identity, with the essential help of the surrounding characters, both doctors and other patients.

The passage as experience of limits also adequately describes one of the core themes of these series, that is the effort to stretch the boundaries between these young characters and an outside world that has a different conception of what is acceptable, functional, and what is not. Emphasis is indeed placed on the teaching-learning part of the relationship between doctors, caregivers, and patients: one of the characters' aims in all the three

series is to learn some strategies to function in a social system that is clearly not built to accommodate citizens with mental disorders.

As Timothy Shary argued about the cinematic image of young people in "youth films" of the 90s, also quoted by Driscoll (2011) and O'Rawe (2020), "the imaging of contemporary youth has become indicative of our deepest social and personal concerns" (Shary 2002: 1). Social and personal concerns resurface in the inner and external conflicts of the young protagonists of Oltre la soglia, Mental and especially Tutto chiede salvezza: all three series deal with exclusion from society, stigmatization, the difficulties in building social relations, but they also try to narrate from a sympathetic perspective what it means to live lateral, divergent emotional experiences, although with different ambitions and outcomes. Particularly Tutto chiede salvezza stands out as an in-depth exploration of the sudden extraction from a society in which the protagonist thought to be a functioning subject, and the story subsequently plays on the fear attached to the loss of control and tries to deconstruct it.

I will now examine in more detail the three series *Oltre la soglia*, *Mental* and *Tutto chiede salvezza* to highlight the specifics of each, as well as recurring patterns and differences.

Oltre la soglia: Blurring the Line Between Doctor and Patients

Produced by Paypermoon Italia, created by Laura Ippoliti and directed by Monica Vullo and Riccardo Mosca, *Oltre la soglia* is set in the fictional hospital Riccardo Cervi in Rome. It features an ensemble cast but the main character is Dr Tosca Navarro: besides being a capable psychiatrist with unconventional methods, Tosca suffers from schizophrenia, a detail she keeps hidden from her colleagues, apart from his friend and psychiatrist Dr. Alessandro Agosti (Paolo Briguglia). In the series, her condition is represented quite didactically by a psychotic projection of her fifteen-year-old self (played by Arianna Becheroni). The presence of Tosca's teenage version provides a further connection point with her young patients: like them, Tosca discovered her mental disorder during adolescence, and the series suggests that Tosca is able to better understand them because she experienced the same struggles with ordinary life and social relationships. However, while her patients undergo a positive path of acknowledgment

and therapy, fifteen-year-old Tosca drives adult Tosca to erratic and dangerous behaviour.

The teenage patients are equally protagonists: depending on the length of their hospitalization, some patients recur in many episodes, while others' storylines are resolved in just one episode. This configuration provides time to develop different relationships and emotional connection in the viewers.

Of the three series examined here, Oltre la soglia is the one that most incorporates formal and narrative structures from the medical drama. Each episode begins with a teaser introducing the medical case: screen time is dedicated to the investigation of the symptoms and the formulation of a diagnosis, with Tosca Navarro and the other doctors frequently brainstorming, writing the symptoms of the newly admitted young patients on an iconic, omnipresent investigative tool: the board. Indeed, screenwriter Laura Ippoliti confirms that the character of Dr. Gregory House, played by Hugh Laurie (House M.D., Fox, 2004-2012), has been quite influential in the writing of Tosca (Guarnaccia 2019). This link is even more significant because of the reversal of some gender conventions and the reestablishment of others. Tosca is a woman who embodies some characteristics usually attributed to men, like toughness and harshness; however, contrary to House, even though Tosca is a no-nonsense character, tough and direct, she is also absolutely capable of instant empathy towards her young, damaged patients. Moreover, House experiences his own issues with addiction and the deterioration of his mental state. Not surprisingly, in the same interview Ippoliti also mentions Carrie Mathison, played by Claire Danes (Homeland), as another source of inspiration. In Homeland Carrie suffers from bipolar disorder while working as a Homeland security agent. Both Homeland and Oltre la soglia require a suspension of disbelief towards the implausible circumstance that Carrie and Tosca are able to work sensitive jobs hiding their mental conditions. This is played out as a source of inner conflict within the two series, which ask viewers to sympathize with two very skilled "difficult women" in roles of leadership, threatened by their own mental state, because their neurodivergence is incompatible with their line of work

⁴ As opposed to the "difficult men" investigated by Martin (2013).

Mental: Teenagers on the Edge

As mentioned before, of the three TV series, *Mental* is the one that leans more toward teen drama than medical drama, if we consider its narrative frame and the centrality of the four main teen characters. Produced by Rai Fiction and Stand By Me, directed by Michele Vannucci and written by Laura Grimaldi and Pietro Seghetti, *Mental* is based on the Finnish format *Sekasin* (Yle Areena, Yle TV2, 2016), thus joining other Italian teen dramas adaptations from Scandinavian products, such as *SKAM Italia* (TIMVision, Netflix, 2018-) and *Nudes* (RaiPlay, 2021).

Compared to Oltre la soglia and Tutto chiede salvezza, Mental is less ambitious in narrative terms. The episodes are shorter (25 minutes) and it is mainly set in one place, the psychiatric facility where the four protagonists are hospitalized, each one experiencing different symptoms and disorders: Nico often suffers from hallucinations and from panic attacks; Emma suffers from eating disorders and has a complicated relation with her body image and sexuality; Michele has symptoms of borderline personality disorder and is addicted to narcotics; Daniele is bipolar and has obsessive-compulsive disorder.

Mental is completely centered on the four teenage characters, with the exception of a nurse and a doctor, the latter slightly more multifaceted and provided with a hint of backstory (although her personal trauma is not particularly explored). This central core is reflected in the formal style of the series, constructed around close-ups and visual effects, as well as the use of a very mobile camera to enhance the feeling and the visualisation of obsessive thoughts and psychotic behaviours. The result is a series of episodes that are fast-paced and seemingly designed for binge watching – in fact Mental was released all at once on RaiPlay. If we consider Mental plot turns and situations, realism does not seem to be a priority for the authors, compared to emotional and visual incitements: the adults are kept out of the picture or described as particularly irresponsible and unable to care for their children; the four girls and boys are constantly plotting and manage to escape more than once, as if there were no control systems - while in Oltre la soglia, for instance, monitoring systems and rules are often shown or referred to. The characters' intertwined storylines evolve following a linear cause-effect progression, from past trauma to psychotic episode, to treatment: this structure better highlights the series' focus on emotions and reactions, but it leaves out the possibility of a systemic discourse about institutional and social failures of the healthcare system.

Tutto Chiede Salvezza: The Experience of Entrapment

In *Tutto chiede salvezza* the day-to-day difficulties of healthcare workers are often referenced, along with the main storyline involving Daniele's treatment. Produced by Picomedia, *Tutto chiede salvezza* shows some distinguishing traits compared to the other two series: the author of the book that provided the source material, Daniele Mencarelli, was also involved in the writing of the series, along with Francesco Bruni, known for his film *Scialla!* (stai sereno) (2011) and for his work as screenwriter for Paolo Virzi's films; moreover, the main character, Daniele, is older than the teen patients of *Mental* and *Oltre la soglia*: being twentysomething, he is put in a different social position within the process of growing up, as well as within society, as evident at the beginning of the series.

Tutto chiede salvezza departs from medical drama characteristics both in contents and form, although it involves also doctors and nurses as secondary, and yet relevant, characters. First, the series has a definite structure composed by one episode for each of the seven days of Daniele's compulsory permanence in the psychiatric facility; second, the series focuses on Daniele's journey and his emotional bonding with the other patients, with little screentime dedicated to doctors and medical diagnosis others than Daniele's. More screentime is dedicated to therapy sessions, and to a romantic storyline that involves Daniele and a girl admitted to the women's ward of the same facility, Nina (Fotinì Peluso).

Tutto chiede salvezza's storyworld develops almost entirely in the room where Daniele is confined, and from that room to a space of imagination where he and the other patients can evade their physical reality. Daniele shares the room with five other patients of various ages: Mario (Andrea Pennacchi), Gianluca (Vincenzo Crea), Madonnina (Vincenzo Nemolato), Giorgio (Lorenzo Renzi) and Alessandro (Alessandro Pacioni). The details about their diagnosis are scattered along the episodes and, deliberately, not always exhaustive: for instance, we know little about Madonnina's story. However, the thematic core is Daniele's relationship with the other patients and, consequently, with himself: Daniele's confinement starts with a furious distancing from his roommates, because Daniele's traumatic awakening triggers a violent denial, as he keeps repeating "I'm not like them"; over the course of the episodes, he proceeds to bond more and more with them as the story delves into every one's fragility and personal trauma.

Of the three series *Tutto chiede salvezza* is the one that presents more elements that are in line with the "quality drama" category: a structure that develops mostly horizontally; a crude depiction of the less visible and shocking aspects of the experience of TSO (compulsory treatment); some distinct visual and narrative concepts, like the use of lights and colors and the visionary segment "la nave dei pazzi" ("ship of the crazy", in episode 01x04, *Mercoledi*). In parallel, the series also tries to give some insight into the structural problems of psychiatric wards: the lack of resources, the exhausting routines of doctors and nurses, the risks of such a controversial measure as TSO. About TSO, a review in a specialized website celebrated the series, but also underlined that it fails to depict the long-term trauma of the compulsory treatment, which does not end after a few days, when the patient settles in, nor with the end of the restriction; on the contrary, it stays with the patients much longer (Femia 2023).

Conclusions

The formula that joins mental health, medical drama and teen/youth narratives provide a frame for well-defined stories that encompass emotional and educational purposes, rather than the long-term involvement of purer forms of medical dramas: specifically, the aim to substitute a stereotypical, damaging audiovisual representation of mental disorders with a sympathetic, accurate one, that even if not always codifiable as realistic, it is certainly believable.

Mental health area is used as a filter to address teenage issues and social issues: peer pressure, bullying, expectations projected by adult authorities (usually parents who are not particularly sensitive to the emotional world of their children); but also the sense of belonging in a new community of peers, after being excluded and, in some cases, attacked and abused by the external world. Among the three series we analysed, *Tutto chiede salvezza* is also an in-depth exploration of the sudden extraction from society and how to re-enter it after the cure.

In conclusion, it is worth asking whether this formula works and whether it resonates with the audience.

Oltre la soglia had a complicated release process on Canale 5, with changes in programming slots and days caused by its declining ratings. The episodes were aired two at a time, as is the custom on Italian generalist television: the first episode (01x01, *Jacopo/Dora*) gained 2,3 million viewers and

11.3% share; by episode 01x04 (*Diego/Adila*) viewers had dropped to 1,8 million. But the series was already deemed a failure, as demonstrated by the decision to move it from Wednesday prime time to Sunday prime time (01x05, *Emma/Marica*), leading to even air the last episode (01x06, *Lea/Valeria*) in the late-night slot, a choice that further doomed the visibility of the series (Anon. 2019). On December 14, 2019 lead actor Gabriella Pession commented with bitterness the shift in programming, underlining in a Facebook post the disappointing change of schedule and supporting once again the series' brave efforts (Pession 2019).

As for Raiplay *Mental* and Netflix *Tutto chiede salvezza*, it is difficult to have access to actual numbers, but we can derive some observations from other sources. On Instagram for instance, neither series has a dedicated profile (contrary to *Oltre la soglia*), but they are referenced in RaiPlay and Netflix profiles respectively. RaiPlay Instagram profile shared an image gallery to launch *Mental*, but it had very few likes, and the attached social media campaign around the hashtags #davicinonessunoènormale #èoknonessereok, #fuoridime and #mental doesn't seem to have taken root: in fact, we find #davicinonessunoènormale also attached to *Tutto chiede salvezza* contents, probably because the famous Franco Basaglia quote "Da vicino nessuno è normale" easily adapts to all the products that exhibit a sensitive approach to mental health and psychiatry.

As for *Mental*, it was awarded with a Special Mention in the Web Fiction category at the 73rd edition of Prix Italia, as well as with a prize assigned by a jury of students (Anon. 2021). From my own on-field experience with focus groups in high schools, about teenagers' reception of Italian teen dramas, it appears that *Mental* has been mostly ignored by young viewers (even though certainly not exhaustive), who appear to not even consider RaiPlay in their viewing habits.⁵

Tutto chiede salvezza seems to have been more successful, and able to insert in the public discourse, as demonstrated by a more consistent press coverage; this is confirmed by the recent surprise announce of a second season for a series that was originally conceived as a miniseries (@netflixit 2023).

The unsatisfactory results of the Rai and Mediaset series can possibly be attributed to poor distribution and promotional decisions: in the first case, a lack of confidence in a product that differs from the more traditional mélo

⁵ These findings will be further explored in future publications.

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characteristics of other Mediaset programs, that is also manifested in the rescheduling of a series that, in all, with double episodes, engaged only six evenings; in the second case, a lack of commitment in exploiting the product's strengths, like its formal and distribution specificities, and its placement on the free online platform RaiPlay. While *Tutto chiede salvezza* probably benefited from the Netflix showcase and from the success of *SKAM Italia*, that made Federico Cesari a star, the cases of Rai *Mental* and Mediaset *Oltre la soglia* demonstrate an apparent top-down inability to exploit marketable elements like novelty and differentiation. Therefore, some reasons for the different outcomes for the three series can probably be traced to marketing choices, different social media strategies and decision-making processes that differ in complexity and priorities, between established broadcasting company Rai and Mediaset, and a platform-based company like Netflix.

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WHEN MEDICAL DRAMA MEETS TEEN DRAMA: YOUTH AND MENTAL HEALTH IN ITALIAN TV SERIES



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9. A Lost Generation

Youth and Its Illnesses in Italian Medical Drama¹

Nicola Crippa and Mattia Galli

■ ABSTRACT

With few significant exceptions, medical drama turns out to be quite an uncommon genre in the Italian scripted production. Nevertheless, there have been significant examples of TV series that have integrated medical storylines within their narratives or, vice versa, of medical series contaminated with tropes from other genres. Among the most distinctive hybridizations is the one with teen drama or, more generally, with stories specifically centered around children or teen characters. In the 2020-2022 timeframe, at least four titles - Mental (RaiPlay, 2020), Fino all'ultimo battito (Rai1, 2021), Everything Calls for Salvation (Netflix, 2022), Lea – Un nuovo giorno (Rai1, 2022-) - attempted to address the relationship with youth from different angles. After a diachronic review of the evolution of medical-related series in Italy (Gisotti and Savini 2010) and their relevance on the overall scripted production of the last three years (Scaglioni 2021, 2022), the chapter will question, through a content analysis (Ye and Ward 2010) the frame representations that the four TV series offer of the new generations. The goal of the analysis is to verify any variation between the tones and depictions adopted by broadcast TV and digital platforms in narrating medical stories.

KEYWORDS

Children; medical frames; Italy; teen; young adult.

¹ The contribution was conceived and developed jointly by the two authors: Introduction and the second, third and fourth paragraphs are written by Mattia Galli; the fifht and sixth paragraphs, together with Conclusions are written by Nicola Crippa.

Introduction

Medical drama has traditionally been considered one of the cornerstones of television scripted production, especially in the US prime time television, where the genre has been playing a key role in networks' schedules since the very beginning of the age of broadcast (Grasso and Penati 2016). While being a highly popular scripted genre that has circulated all over the world in its sixty-year history, local core medical dramas are quite unusual in Italian linear broadcasters' schedules and very few shows could be compared to the like of *ER* (NBC, 1994-2009) or *House, M.D.* (Fox, 2004-2012). Hospital settings, storylines centered around doctor patient-relationships, anthology plots on medical cases and other formal and narrative features usually associated with medical dramas (Grignaffini 2016) are spread across a wide array of scripted genres, from thriller and crime to family or teen drama. To this regard, it is interesting to notice how Italian medical-related narratives have developed a peculiar view of younger generations and their illnesses over the years, giving much exposure and screen time to clinical cases of children and teenagers.

The chapter focuses on the representation of youth within medical-related series, drawing its results from a corpus of shows produced in the last TV seasons (2020-2022). Starting from a diachronic perspective, the contribution will first provide an outlook of the history and evolution of medical-themed TV series in Italian broadcasting, the current trends within their narratives and an insight over the last three years, a timeframe that carried some new and potentially innovative titles. The analysis of the historical development of the genre in Italy will make it possible to identify a peculiar trait of local production in the close relationship between medicine and younger generations, as well as, from a formal point of view, the hybridization process occurring with other genres.

Once established some background knowledge on the topic, the contribution aims to investigate two different but closely related dimensions:

the on-screen role of medicine and a typology of diseases and disorders children, teens and young adults suffer from most frequently and the way in which younger generations are represented within these narratives. The first dimension of analysis is preparatory to the second that will try to establish how Italian medical-related TV series depict younger generations and what frames are used to describe them.

The results here discussed are drawn from a corpus of series selected among those produced over the last three years: *Mental* (RaiPlay, 2020), *Fino all'ultimo battito* (Rai1, 2021), *Lea – Un nuovo giorno* (Rai1, 2022 -, hereafter *Lea*), *Everything Calls for Salvation* (Netflix, 2022 -, hereafter *ECFS*). The discussion over the results collected from the corpus will make it possible to verify whether, as the distribution and broadcasting process vary, the onscreen pathologies and the ways in which youth is framed are also modified.

Caught Between Thugs and Family: a Short History of Medical Drama in Italy

American medical dramas have often been televised by Italian broadcasters in prestigious slots such as the prime time of major free-to-air channels and the local audience has become accustomed to the genre and its narrative codes. Medical drama, however, does not appear as a genre in which national television producers and broadcasters have chosen to focus on in their original productions. From 1954 to our days, a total of 66 TV seasons and movies (Tables 1a and 1b) dealing directly with medical themes were counted, with an increase from the beginning of the 21st century (Gisotti and Savini 2010, Grasso 2019).

Years	Number of seasons/TV movies		
1954-1989	4		
1990-1999	11		
2000-2009	25		
2010-2019	18		
2020-2022	8		
TOTAL	66		

TABLE 1A
Number of Italian TV seasons and TV movies with medical themes (1954-2022).

Broadcasters and OTT platforms	Number of seasons/TV movies
Rai	47
Mediaset	15
Sky	3
Netflix	1
TOTAL	66

Table 1B
Italian TV seasons and TV movies (1954-2022) broken down by Broadcaster/Platform.

The analysis of the current scenario (Scaglioni 2021, 2022) shows how the medical genre is still, at least from a quantitative point of view, an insignificant presence within broadcasters' schedules or platforms' catalogues: just 5.1% of the seasons produced in the 2020-2022 timeframe can be labelled as "medical", 8 seasons contributing to 7 series overall and a total of 81 first-run hours between linear channels and streaming services. The marginality of the genre in the national market is also confirmed by its production budget: a grand total of 63.6 million euros to produce the 8 seasons, which account for just 4.3% of the of the total production cost of scripted series in the timeframe analyzed and a cost-per-minute of around 13,000 euros, well below the national average of 24,000.² Data suggest how the medical genre is quite uncommon in Italian broadcasters' schedules and a low-budget product if compared, for example, to crime series.

If the scope of the analysis is expanded from the current scenario to a diachronic perspective, however, it is possible to notice how medical narratives have been through a long development process which has brought doctors, hospitals and medical cases within the pattern of many different scripted genres. The inclusion of themes and storylines dealing directly with medical issues goes back to the very first months of TV broadcasting in Italy: the lead character of one of the first scripted TV shows, the period drama *Il Dottor Antonio* (Programma Nazionale, 1954) was indeed a physician whose medical cases were intertwined with romances set in the 19th century (Gisotti and Savini 2010).

² All the data here reported are the results of an elaboration carried out by CeRTA, Research Center on Television and Audiovisual Media of Università Cattolica del Sacro Cuore, on the data made available by the Ministry of Culture through Direzione Generale Cinema e Audiovisivo (https://cinema.cultura.gov.it/database-opere/).

Apart from some isolated experimentations with the genre during the '60s and the '70s and the first attempt to hybridize the medical setting with the narrative tropes of the crime fiction, as in the case of *Diagnosi* (Rai1, 1975), it was not until the '90s that medical-related series started getting more screen time in broadcasters' schedules. In 1992, *Amico Mio* (1992-1998), a family drama set in a pediatric ward, was first broadcast on Rai 2, thus giving start to the long-standing relationship between the medical setting, family and youth issues, although the latter are still far from being the focus of storytelling.

While family-oriented dramas set in hospitals or with physicians as characters would soon become a recognizable feature of Rai 1's scripted production, as exemplified by the success achieved by *Un medico in famiglia* (1998-2016), commercial broadcaster Mediaset too attempted to give space in its schedules to local medical series such as *La Dottoressa Giò* (Rete 4, Canale 5, 1997-1998; 2019), where pediatric cases were joined by a focus on gynecological disorders and treatments.

The beginning of the new century marked an increase in the production of medical series (at least one title per season between 2000 and 2009) and, although the first slate of 'core' medical dramas produced in Italy, such as *Medicina Generale* (Rai1, Rai3, 2007-2009) or *Terapia d'urgenza* (Rai2, 2008), ultimately failed to reach any significant results during their short screen lives, returning series of the like of *Un medico in famiglia* or the soap opera *Incantesimo* (Rai2, Rai1, 1998-2007) helped in keeping doctors in national broadcasters' schedules, even though medicine was clearly not the main focus of their narratives.

The market entry of Sky Italia in the production of original scripted content led the way to a change in storytelling practices, production and distribution models (Scaglioni and Barra 2013, Barra and Scaglioni 2021), although the contribution of pay TV to the medical genre is limited to *In Treatment* (HBO, 2013-2017). The drama is the adaptation of the successful Israeli format *BeTipul* (Hot 3, 2005-2008) and, as well as building its plot points around psychological issues, the series also introduces one teenage patient in every season, thus directly tackling the mental discomfort of younger generations.

The adaptation of another scripted format, the Spanish *Polseres Vermelles* (TV3, 2011-2013) remade for the Italian market as *Braccialetti Rossi* (Rai1, 2014-2016), mixed the hospital settings and storylines with the tropes usually associated with teen dramas, as the characters are all hospitalized teen patients that face a profound personal growth while receiving treatments

for their pathologies. This coexistence of genres is reprised by *Oltre la soglia* (2019), a prime-time drama broadcast by Canale 5, that addresses youth and teen issues from the angle of psychiatric disorders, which make their appearance also on free-to-air television.

The very last few years have seen, after several unsuccessful attempts, the affirmation of what could possibly be considered one of the few properly called Italian medical dramas, that is Doc - Nelle tue mani (Rai1, 2020-). For the purposes of the analysis, however, it is interesting to notice the persistence of the family drama as a genre in which medical storylines are developed (Lea) or are mixed with tropes coming from thriller and crime ($Fino \, all'ultimo \, battito$). The intersection between teens and psychiatric disorders is the most distinctive feature of some of the original local productions commissioned by the PSM AVOD service RaiPlay such as Mental, or by global streaming giants of the like of Netflix for ECFS.

The overlapping of genre narratives and themes should now be clearly recognized as one of the peculiar traits of Italian medical-related production. The evolution of medical series in Italy has shown how illnesses are usually perceived through the lenses of family drama, thus engaging children as patients, or, more recently, through the ones of teen drama, consequently focusing on how younger patients can (or cannot) overcome their pathologies as part of their growth process.

Corpus Description and Methodology

The corpus of contents selected for the analysis is made up of four TV series broadcast or distributed between 2020 and 2022.

Fino all'ultimo battito is a family drama produced by Eliseo Cinema with Rai Fiction and broadcast on Rai 1 between September and October 2021. The lead character is Diego Mancini, a cardiac surgeon who, to save his son suffering from a severe congenital heart disease, steals a heart intended for a pre-teen on a waiting list for the transplant. Blackmailed by a mafia boss, the protagonist will try to keep his family united and his professional integrity undamaged by saving the life of the pre-teen girl. Clinical cases and the hospital setting are mixed with the features usually associated with thriller and family drama.

Lea is a medical drama broadcast by Rai 1 between February and March 2022 and produced by Banijay Studios Italy. The head character is Lea

Castelli, a pediatric nurse who returns to work after a hiatus due to the loss of the child she was carrying. The show can be categorized as a family drama and the medical cases are tackled from the angle of a nurse who tries to soothe the suffering of the young patients she is supposed to take care of as an attempt to overcome the trauma of the past that still haunts her.

Mental is a teen drama developed exclusively by Stand By Me for RaiPlay and it is based on the Finnish scripted format *Sekasin* (Yle Areena, Yle TV2, 2016-2021). A group of teenagers suffering from various psychological illnesses and disorders is hospitalized and subjected to group and individual therapies and, amid the treatment, they fight, fall in love, experience delusion and abandonment. In this case, it is clear how the medical side of storytelling is counterbalanced by the formal and narrative elements of teen drama.

ECFS is produced by Picomedia for Netflix, which distributed the series globally, and is based on Daniele Mencarelli's novel that goes with the same name. After a violent fit of rage, young adult Daniele Cenni undergoes a one-week compulsory medical treatment in a psychiatric ward. There he meets several other patients suffering from various diseases that will help him become aware of his condition and soon become a sort of second family for him.

For the purposes of the analysis here presented, all the episodes of the series quoted were taken into consideration. The corpus, then, is made by a total of 36 episodes (*Fino all'ultimo battito*: 12; *Lea*: 8; *Mental*: 8; *ECFS*: 8). To effectively query the corpus and draw useful evidence to answer the research questions, the theoretical framework of content analysis, a tool already successfully applied by existing scholarship on US medical dramas (see, for example, Makoul and Peer 2004, Ye and Ward 2010, Meyer and Yermal 2020) was employed, albeit adapting its scopes to the needs of the research.

The first step was to catalog the patients represented on-screen. Along with patients undergoing regular treatments in hospitals, characters that receive medical aid outside of conventional health facilities (such as, for example, a prison infirmary) or are treated by a recognized doctor or nurse were considered patients as well. This preliminary categorization refers to different items that helped create a dataset able to provide some first-level evidence. Along with information about the patient's name, the number of the episode he/she first appears, gender and age (when not made explicit during the series, the age was hypothesized starting from contextual information, e.g. the class a character is attending), the number of episodes they appear in as patients and are therefore involved in medical-related sto-

rylines was counted, thus establishing an opposition between "recurring patients" or "single cases". This distinction is essential to adequately measure the on-screen relevance of characters and, therefore, to properly estimate the importance of representations of medicine or youth provided. Another classification that helps completing the first slate of information is what was labelled as "Generational category", as four groups were identified within the corpus: children (aged between 0 and 12), teens (13-19), young adults (20-25) and adults (over 25).

The dataset is completed by some medical information about the onscreen patients. Along with the name of the illness, pathology or disorder suffered by characters and made explicit by doctors, the items used by Ye and Ward (2010) were reprised and on-screen diseases were coded under 14 categories together with diagnostic methods.

Patients and Pathologies in a Four-Series Corpus

After a close analysis of the 36 episodes that make up the corpus, a total of 30 patients undergoing medical treatments in hospitals or other health facilities were surveyed. As already specified, characters' relevance was weighed

Diagnostic Category (Ye and Ward 2010)	Units	осс	Percentage
Psychiatric	2	77	54.6
Cardiovascular	2	36	25.5
Injury	3	8	5.7
Oncologic	1	8	5.7
Kidney	1	4	2.8
Women's health	2	3	2.1
Others	2	5	3.5
TOTAL	13	141	100

Table 2
Diagnostic categories in the four-series corpus.

The diagnostic categories of the corpus are here broken down by units (number of diseases, illnesses and injuries) and occurrences (OCC, number of units multiplied by the number of episodes in which they appear), also expressed as a percentage.

according to their occurrences (OCC, n = 136), that is, the number of episodes in which they are featured as patients.

Some interesting findings can be drawn even at this preliminary stage: the most on-screen represented age group is the teen one (38.2%), followed by adults (27.2%), young adults (20.6%) and children (14%). The most represented age group (72.8%) is thus the 0-25 one.

As for the disease representations, due to the nature itself of the series analyzed, they are clearly unbalanced towards certain areas of medicine. Still, there is some evidence worth mentioning: the most represented disease out of all patients are psychiatric disorders (54.6%), followed by cardiovascular diseases (25.5%), while the other diseases have much lower percentages (Table 2).

Matching the age-group representation with diseases, it is possible to find some further data that reinforce the relationship between medical drama and younger generations and, above all, their correlation with mental illnesses: psychiatric disorders, indeed, are most common among teens (60.4%) and young adults (92.9%). Lastly, it is interesting to notice how only children suffer from oncological diseases and cardiovascular diseases are quite common also among the younger age groups (42.9% for children and 24.5% for teens).

A breakdown series by series can help pointing out some peculiar features of each title and provide a deeper description of the composition of the sample analyzed. Based on the on-screen relevance, *Lea* is clearly unbalanced towards children (52.4%) and teens (33.3%), while young adults (4.8%) and adults (9.5%) are only featured in short-term storylines. From the point of view of the illnesses represented, Banijay Studios' series is the most varied among those featured in the corpus and shows, in its eight episodes, pathologies ranging from tachycardia to pregnancy conditions. Reprising the diagnostic categorization, oncologic (33.3%) and kidney disorders (16.7%) are the most represented, since the only two recurring patients are a child and teen suffering, respectively, from sarcoma and kidney failure. All the other patients are featured in just one episode and the most represented diagnostic categories are cardiovascular diseases (12.5%), in which conditions such as heart failure and tachycardia can be categorized, and injuries (12.5%).

Fino all'ultimo battito is the only series of the corpus in which the most represented age group is the adult one (42.1%), as one adult patient is featured in all 12 episodes. The figure, however, should not overshadow the fact that children (21.1%) and teens (34.2%) are well represented and are key characters in medical storylines. As for the on-screen pathologies, the

series is clearly unbalanced towards cardiovascular diseases (84.6%), a figure that must be considered under the light of the professional role of the lead character (a heart surgeon).

In ECFS, children and teens are completely absent, as the only age groups featured on screen are young adults (57.8%) and adults (42.2%). Once again, the latter figure should not mislead the reading, since it can be traced back to the presence of the adult Mario, a sort of father figure for the group of patients. Apart from a negligible percentage of injury-related conditions (2.2%), all the patients shown on screen suffer from psychiatric disorders. While for two characters, Daniele and Gianluca, a vague diagnosis is provided by the doctors (depression with psychotic episodes and bipolar disorder, respectively), for the other patients the pathologies they suffer from are never really specified.

Mental is the most uniform series among those featured in the corpus, both in terms of age group and pathology representation, since all the four main characters are teens, and they all suffer from various psychiatric disorders. On this point, the series shows a greater diagnostic detail than *ECFS* and each patient embodies a specific disorder: schizophrenia (Nicoletta), anorexia (Emma), borderline personality (Michele) and bipolar disorder (Daniel).

To summarize, younger age groups (children, teens and young adults) are heavily featured in all the series analyzed. *Lea* and *Fino all'ultimo battito*, the two free-to-air TV series, show young patients suffering from life-threatening conditions such as cancer or heart diseases as they are surrounded by their families. *ECFS* and *Mental*, on the contrary, are focused almost exclusively on teens and young adults and establish a clear connection between these age groups and psychological illnesses. This is a first macro-difference within the corpus, a gap between the series that will be clearer after the reconstruction and the analysis of the frames used to describe youth.

Investigating On-Screen Young Patients with Two Analytical Frameworks

Sample and Theoretical Framework

To properly address the portrayal that the four TV series provide of young patients, the 21 youngest characters (aged between 0 and 25) were isolated. The sample includes 24 illnesses and young patients are spread across the four TV series as follows: 9 in *Lea*, 4 in *Fino all'ultimo battito*, 4 in *Mental*

and 4 in *ECFS*. The estimated average age is 15, specifically 10.9 in *Lea*, 15.8 in *Fino all'ultimo battito*, 16.8 in *Mental* and 21.5 in *ECFS*.

Two groups of frames were chosen for this corpus analysis, rooted in the idea that medical dramas, as part of entertainment-education programs, can have a persuasive intent (Moyer-Gusé 2008, Ye and Ward 2010, Pluta and Siuda 2022) and that the messages they convey and the values they represent can therefore be addressed with recourse to media frame theory (Gitlin 1980, Entman 1993, Benford and Snow 2000). Regardless of its actual persuasive effects (Shen and Han 2014), medical drama undoubtably remains one of the genres – from the dawn of television (Grasso and Penati 2016) to the present day – most capable of emotionally and cognitively engaging the viewers, transfiguring their anxieties and concerns into narratives centered around the doctor-patient relationship (Gauthier 1999). Medical narratives, then, turn out to be a privileged field for the investigation of the fears and urges of the social body at a given historical moment.

To map the different representations provided by this TV genre, it is useful to refer to the concept of "frame", a theory reprised from the social science field (Gitlin 1980, Benford and Snow 2000). For Entman, framing is the selection, which can occur both at an individual level and, as in this case, at a media one, of "some aspects of a perceived reality" to make them "more salient in a communication text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and or treatment recommendations" (1993: 52).

Health Media Frames

In studying medical dramas, Ye and Ward (2010), drawing from the existing scholarship (Clarke 2004, Clarke and Binns 2006, Koren and Bisesi 1995, Lemyre et al. 2006), suggested 5 different frames through which health and illnesses are represented on screen. Each of them "associates health and illnesses with certain kinds of problems and particular sorts of solutions" (Clarke and Binns 2006: 40), while obviously hiding others.

Below (Table 3a) are listed the five frames examined by the researchers along with their occurrences (OCC, the number of episodes in which each disease and its associated frame appear) in the young patients' corpus. In this way, recurring characters' illnesses gain more relevance in frame representation. It is also worth noting that every disease is here associated with one frame only, considered to be the dominant in the patient's clinical

course: a research limitation made necessary for computational purposes. In case of multiple diseases affecting the same character throughout the story, the patient is listed multiple times in the dataset to differentiate the frame OCC of each of his or her illnesses.

The illnesses are linked to their respective frame based on other sub-indicators outlined by Ye and Ward (2010), such as the diagnostic categories,

Frame	Description (Ye and Ward 2010)	Units	Frame OCC	Percentage
F1.1	Medical frame: problems are considered results of malfunction in the individual's body and suffering is caused by inner biological determinants.	12	68	66.7
F1.2	Socio-structural frame: disease is associated with factors outside of the individual such as social, economic, political causes or social inequities.	6	17	16.7
F1.3	Lifestyle frame: disease is dependent on individual lifestyle choices such as diet, physical activity, alcohol consumption, smoking, sexual practice, and stress.	4	15	14.7
F1.4	Environmental frame: disease is caused by environmental hazards such as air, water, or food contamination; toxic chemicals; radioactive waste; mold; rodents and insects; and noise in different environments	1	1	1
F1.5	Therapeutic frame: disease is caused by the diagnosis, manner or treatment given by health care providers (e.g., medication error, treatment adverse effect).	1	1	1
TOTAL		24	102	100

TABLE 3A

Distribution of the health media frames in the four series.

The health media frames reported above are provided with the number of medical cases (units) and their occurrences (OCC, units multiplied by number of episodes in which they appear), also expressed as a percentage.

the explained cause of the disorder, the method used to diagnose it, the type of provided treatment, and the possible mention of a prevention. For each of these variables it was considered whether one frame or another prevailed and, at the end, only one frame was chosen for each illness.

As in the cases analyzed by Ye and Ward, also in the Italian series the bio-organic medical frame was found to be predominant (66.7%) in the illness narratives (Table 3b), with the only notable exception being *ECFS*. Given the prevalence of the medical frame (F1.1) over the others, the other four health media frames (F1.2, F1.3, F1.4 and F1.5) were grouped into a single "non-medical" macro-frame (hereafter "MF2"), to be compared with the medical/bio-organic one (hereafter "MF1"). In fact, if in the medical frame (MF1) patient sufferings are caused by inner biological determinants (MF1 = F1.1), in the MF2 – comprising socio-structural (F1.2), lifestyle (F1.3), environmental (F1.4), and therapeutic frames (F1.5) – the disease is, on the contrary, viewed to be mainly caused by external or non-biological triggers.

Macro-frame	Included frames	Units	Frame OCC	Percentage
MF1 (medical)	Medical frame (F1.1)	12	68	66.7
MF2 (non-medical)	Socio-structural frame (F1.2), Lifestyle frame (F1.3), Environmental frame (F1.4), Therapeutic frame (F1.5)	12	34	33.3
TOTAL		24	119	100

TABLE 3B

Distribution of the two health media macro-frames in the four series.

The two health media macro-frames (MF1 and MF2) reported above are provided with the number of medical cases (units) and their occurrences (OCC, units multiplied by number of episodes in which they appear), also expressed as a percentage

Youth Media Frames

Alongside the application of these categories, a second survey was carried out and matched with the former. After reviewing all the young characters' storylines, the hypothesis is that, in parallel with those related to medical practices, four other media frames exist in the context of the four series. These deal specifically with the representation of youth and its relationship with older generations. The additional analytical categories derive from the identification of at least two cross-cutting traits in these four medical narratives:

- 1. the young patients, at some point, find themselves morally lost or physically weakened;
- 2. parents often play a pivotal role either positive or detrimental in influencing their children's emotional state or healing process, even if they might not be the main cause of distress.

Depending on the patients' stories, the concept of 'lostness' hence acquires different meanings, which can be grouped into the following "youth media frames" (F2).

In the abandonment frame (F2.1), patient's hospital stay is caused or aggravated by parental physical abandonment. The abandonment is often resolved with adoption or the creation of a new family unit.

In the generational conflict frame (F2.2), on the contrary, patients have troubling relationships with at least one of their parents or caregivers, who are often single and unable to live up to their role. Conflict resolution is either the reconciliation with the parental figures or, vice versa, the child's integration into a new community.

These first two frames (F2.1 and F2.2) can in turn be grouped into a third macro-frame, in which young patients find themselves lost *because* of their parents' negative actions (MF3).

On the other hand, in the strictly intended lostness frame (F2.3), the hospital stay is caused or aggravated by the individual's own actions or attitudes (for instance, antisocial behaviors or drug consumption), for which family is not seen as directly responsible. The conflict is caused by the youth conduct within a positive or neutral family context and resolution lies in returning to the 'straight and narrow.'

Finally, the care frame (F2.4) involves fragile patients – often young children suffering from life-threatening conditions – in need of family protecting them. Their illness is not caused by adults – which, on the contrary, act as guidance – but by misfortune.

These latter two frames (F2.3 and F2.4) can also be grouped in a macro-frame (MF4), which comprises all the young patients who would be lost *without* parents' or adults' support.

Since the definition of these narratives is derived from the four series' review, the youth media frames are spread relatively equally across the contents, with each frame including at least four patients (Table 4). The unit of measurement in the case of youth media frames is not the single illness but the character experiencing it (n = 21).

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Frame	Description	Units	Frame OCC	Percentage
F2.1	Abandonment frame: hospital stay is caused or aggravated by parental physical abandonment.	4	25	26
F2.2	Generational conflict frame: illness is caused or aggravated by a troubling relationship with one or both parents	6	17	17.7
F2.3	Lostness frame: hospital stay is caused or aggravated by the individual's going astray from society or family, such as through antisocial behaviors	4	24	25
F2.4	Care frame: frail and life-threatening patients who are cared for and protected by family	7	30	31.3
TOTAL		21	96	100

Table 4A

Distribution of the youth media frames in the four series.

Above are reported all the youth media frames, with the number of patients (units) and their occurrences (units multiplied by number of episodes in which they appear), also expressed as a percentage.

Macro-frame	Comprised frames	Units	Macro-Frame OCC	Percentage
MF3 ('lost' because of their parents)	Abandonment frame (F2.1), generational conflict frame (F2.2)	10	42	43.8
MF4 (would be 'lost' without their parents or adults)	Lostness frame (F2.3), Care frame (F2.4)	11	54	56.3
TOTAL		21	96	100

Table 4B

Distribution of the two youth media macro-frames in the four series.

The two youth media macro-frames (MF3 and MF4) reported above are provided with the number of medical cases (units) and their occurrences (OCC, units multiplied by number of episodes in which they appear), also expressed as a percentage.

Frame Distribution in the Four Series

Below are provided the results – both in terms of health and youth frame portrayal – for each of the four TV series, along with some explanatory cases.

In Lea (Table 5a), a pediatric nurse lost her son and is faced with the case of Kolja, a boy sick with cancer (F1.1) and abandoned by his adoptive parents (F2.1). The storyline allows viewers to explore the character's ghost, exposing the nurse to the fear of losing a child again: a powerful care frame driver (F2.4). In other patients' stories, besides medicine, family support remains crucial in the healing process. That is, for instance, the case of the other recurring patient, Viola, who suffers from kidney failure and in episode 8, after a cardiac arrest, her parents are asked to donate a kidney. Tragedy can be overcome only through the family staying or becoming united specifically for the children's needs. This is the utmost expression of the F2.4 narrative and can be traced also in some anthology plots. For instance, in episode 7 a young boy has bone marrow aplasia, and his parents are required to take a genetic test to verify their compatibility to donate marrow. The mother is hesitant, fearing that this will reveal that her husband is not the child's real father, but, being the family close-knit, the nurse chooses to cover up for the woman, thus preserving the family integrity. In Lea even the abandonment frame (F2.1, involving only Koljia, but for as many as 8 episodes, hence resulting as the most relevant) and the less common generational conflict

Frame	Units	Frame OCC	Percentage
F1.1 (Medical)	6	16	72.7
F1.2 (Socio-structural)	2	2	9.1
F1.3 (Lifestyle)	2	2	9.1
F1.4 (Environmental)	1	1	4.5
F1.5 (Therapeutic)	1	1	4.5
F1 TOTAL	12	22	100.0
F2.1 (Abandonment)	1	8	50
F2.2 (Generational conflict)	3	3	18.8
F2.3 (Lostness)	1	1	6.3
F2.4 (Care)	4	4	25
F2 TOTAL	9	16	100

Table 5A
Frame distribution in *Lea*.

frames (F2.2) are all resolved in a positive family-oriented manner. What all these parents have in common is that they are initially absent, missing, or inadequate and see in their children's illness an opportunity for redemption.

In Fino all'ultimo battito (Table 5b), the protagonist's son (Paolo) suffers from a severe heart disease: his life is in danger and must be saved at any cost (F2.4), even if it means coming to terms with the mafia. The underlying moral question is how far parents – even those with the best ethical principles – can push themselves out of fear of losing their children. The causes of illnesses can be traced almost exclusively to biological determinants (MF1). Exceptions to this are two characters, who have, however, limited screen time as patients: the boss's son (Cosimo Patruno), hit by a gunshot due to his family affiliation (crime falls within F1.2), and Irena, a young woman victim of human trafficking who suffers complications during pregnancy (F1.2) and leaves her child in a nunnery (F2.1). Cosimo Patruno is also significant since he is the only case of generational conflict (F2.2) in the show: the teen boy does not tolerate belonging to the underworld and wants to emancipate himself from his family. The recurring patients, however, can be fully inscribed in the F2.4. These are Paolo Mancini and Viola Coppi, the young girl who was supposed to receive a new heart and who is cared for by her father and the whole hospital community.

Moving to the OTT Series, the fifth episode of Netflix's *ECFS* (Table 5c) offers an exemplary perspective of the series strong imbalance towards

Frame	Units	Frame OCC	Percentage
F1.1 (Medical)	2	20	91
F1.2 (Socio-structural)	2	2	9
F1.3 (Lifestyle)	0	0	0
F1.4 (Environmental)	0	0	0
F1.5 (Therapeutic)	0	0	0
F1 TOTAL	4	22	100
F2.1 (Abandonment)	1	1	4.5
F2.2 (Generational conflict)	1	1	4.5
F2.3 (Lostness)	0	0	0.0
F2.4 (Care)	2	20	90.9
F2 TOTAL	4	22	100.0

Table 5B

Frame distribution in Fino all'ultimo battito.

Frame	Units	Frame OCC	Percentage
F1.1 (Medical)	0	0	0
F1.2 (Socio-structural)	2	13	50
F1.3 (Lifestyle)	2	13	50
F1.4 (Environmental)	0	0	0
F1.5 (Therapeutic)	0	0	0
F1 TOTAL	4	26	100
F2.1 (Abandonment)	0	0	0
F2.2 (Generational conflict)	2	13	50
F2.3 (Lostness)	1	7	26.9
F2.4 (Care)	1	6	23.1
F2 TOTAL	4	26	100

TABLE 5C Frame distribution in *ECFS*.

two of the non-biological health frames (F1.3 and F1.4). Daniele Cenni is a young man with previous mental health problems who finds himself in a psychiatric ward after a bad reaction to substances. In episode 5 his thought on the issue becomes explicit: "the illnesses of all those who are in here... they seem to me like one single illness. But it's not our illness. It's the world's." Medicine is featured in *ECFS*, but it never represents an actual cure for mental health problems, whose origins seem to go beyond bio-organic reasons (MF2). Although it is difficult, given the limited diagnostic details, to establish a dominant health frame for each of the young patients, some socio-structural and lifestyle hints can be identified. For instance, the case of Gianluca - a gay young man suffering from bipolar disorder - was here listed as part of the socio-structural frame (F1.2), since his distress is caused by his father's homophobia (that also falls into F2.2), while Nina's suicidal tendencies stem from her problematic acting career and her relationship with a possessive mother (F1.2 and F2.2). Listed as part of the lifestyle frame (F1.3), are, instead, the case of Daniele, whose psychotic episodes are triggered by drug abuse, and Alessandro, whose state of catalepsy appears to derive from a workplace accident. Daniele can also be regarded as the main representative of the lostness frame (F2.3), since his problems are not caused by family, but by his inability to cope with adult life. The resolution coincides both with his reintegration within the family unit and with the

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creation of a new one (Nina, his girlfriend, turns out to be pregnant in the last episode).

On the contrary, in *Mental* (Table 5d) diagnoses are always communicated and the importance of medication in treating mental illness is frequently mentioned (MF1). All four patients fall into the medical frame, since each of them has a precise diagnostic label based on the DSM criteria: Schizophrenia (Nicoletta), Anorexia Nervosa (Emma), Borderline Personality Disorder (Michele) and Bipolar Disorder (Daniel). Sometimes, other possible socio-structural variables (such as past traumas) seem to contribute to their clinical pictures, but, as the psychiatrist emphasizes in episode 7, these accidents cannot be considered as causes, if anything just triggers of already latent diseases. Such characteristics make the illness portrayal in *Mental* the opposite of *ECFS*. In terms of youth media frames, the two series are instead more closely aligned. In Mental, two lostness frames can be traced in Nicoletta and Emma storylines: both the girls certainly do not have a peaceful relationship with their parents, but much of the consequences of their discomfort can be attributed to their rebellious character or their feeling of alienation (F2.3). Instead, a glaring frame of abandonment and neglect (F2.1) pervades the stories of Michele and Daniel, both of whom were separated from their families, whether biological or adoptive.

Frame	Units	Frame OCC	Percentage
F1.1 (Medical)	4	32	100
F1.2 (Socio-structural)	0	0	0
F1.3 (Lifestyle)	0	0	0
F1.4 (Environmental)	0	0	0
F1.5 (Therapeutic)	0	0	0
F1 TOTAL	4	32	100
F2.1 (Abandonment)	2	16	50
F2.2 (Generational conflict)	0	0	0
F2.3 (Lostness)	2	16	50
F2.4 (Care)	0	0	0
F2 TOTAL	4	32	100

Table 5D

Frame distribution in Mental.

Analysis and Results

Since OTT medical series can be considered the real novelty of the genre in Italy – with contents deemed closer to teen dramas – the hypothesis is that the two less prevalent macro-frames (MF2 and MF3) might instead be prevailing or more balanced in the platforms' narrative in comparison to the broadcast ones. Besides the four products' differences, the choice to break down the sample into Broadcast and OTT is justified not only by the different modes of the series airing (back-to-back and binge releasing) that inevitably influence the content design, but also by the age of viewers, which in the case of streaming platforms is believed to be significantly lower. Rather than a single 'lost generation' there seem to be two, at least on the youth frame perspective: one that is morally, psychologically or physically lost because of parents' negative actions and the other that is already morally, psychologically or physically lost and can be cured only with parents' or adults' help. This double articulation seems to suggest that two generations of target audiences (with different sets of expectations) might exist.

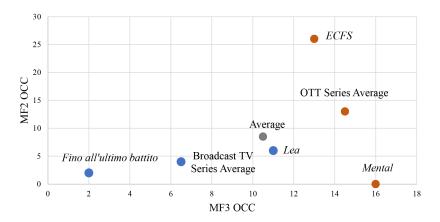


FIGURE 1A
MF2 and MF3 distribution in absolute values.

On the Y axis is located the MF2 (non-medical) associated with health care. On top are the series in which patients' sufferings are caused more by external determinants. The youth MF3 is positioned in the X axis: on the right are the TV series whose patients are lost for the most part due to parents' negative involvement in their lives (MF3). The frame occurrences (OCC) are here presented both in absolute values (Figure 1a) and as percentage to their overall frame OCC (Figure 1b).

Matching the two macro-frame categories (MF2 about illness portrayal and MF3 about youth depiction) in a positioning map (Figure 1), some key findings arise.

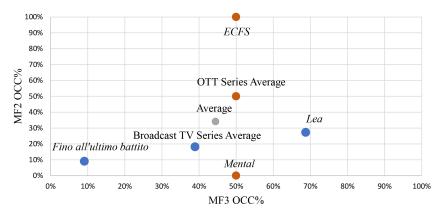


FIGURE 1B MF3 percentage distribution compared to their respective counterparts (MF1 and MF4).

Macro-frame OCC	ECFS	Fino all'ultimo battito	Lea	Mental	Average	OTT Average	Broadcast TV Average
MF3 (parents' negative involvement score)	13 (50%)	2 (9.1%)	11 (68.8%)	16 (50%)	10.5 (44.5%)	14.5 (50%)	6.5 (38.9%)
MF2 (non-medical triggers score)	26 (100%)	2 (9.1%)	6 (27.3%)	0 (0%)	8.5 (34.1%)	13 (50%)	4 (18.2%)

FIGURE I DATASET

As seen in Figure 1a, the two broadcast TV series stay on the map bottom-left corner, while OTT series are more on the right of the spectrum: that is probably because, being coming-of-age stories, they tend to depict parents in a more negative or disillusioned manner. Among *Mental*, *Lea* and *Fino all'ultimo battito*, there are no significant differences on the Y-axis (MF2) score (although *Lea* is, compared to the other two, slightly less biased toward the medical frame), while *ECFS* is an exception to the rest of

the sample precisely because of the absence of strictly medical frames in young patients.

If the OCC percentage values of the two macro-frames are considered (Figure 1b) – i.e., weighing MF2 and MF3 upon their respective counterparts (MF1 and MF4) – some evidence persists. The major discrepancy lies in *Lea's* being positioned more towards the right and turning out to be the series with the highest percentage of MF3 OCC in ratio to its total frame OCC – coherently with the abandonment frame (F2.1) relevance within its storylines. Also, the two OTT series, although displaying the highest OCC of MF3 in absolute values, are perfectly balanced in terms of youth macro-frame (MF3 and MF4) representation (with a 50:50 ratio, see Figure 1b and Table 6).

Macro-frame	Broadcast OCC	отт осс	
MF1 (medical)	36 (81.8%)	32 (55.2%)	
MF2 (non-medical)	8 (18.2%)	26 (44.8%)	
MF3 (abandonment and generational conflict)	13 (34.2%)	29 (50%)	
MF4 (lostness and care)	25 (65.8%)	29 (50%)	

Table 6
Macro-frame distribution in the two television offerings.

If the OCC of the two offerings is compared (Table 6) – both in absolute values and as a percentage ratio of their overall frame OCC – MF1 prevails in both offerings, while MF2 weighs more among streamers, where the health narrative is apparently more balanced. This actually depends on the connivance, within the OTT corpus, of two series very different in their mental illness portrayal. Nevertheless, MF2 turns out to be more communicated in OTT narratives than in broadcast series (26 vs. 8) where non-medical determinants are absolutely in the minority (8, 18.2%). Regarding youth media frames, both OTT series are internally balanced between MF3 and MF4, displaying a larger presence of MF3 representations compared to the broadcast ones, in which this macro-framing – although very present, especially in the case of *Lea* – remains a minority out of its overall offering values (13, 34.2%).

It can therefore be stated that at least the MF3 prevalence hypothesis in the streamers' medical offering can be considered reliable, although further analyses on a larger scale of samples and with statistical tests should be done to validate and generalize these results.

Conclusions

Despite the obvious research limitations – particularly due to the narrow sample size – by applying those frame groupings some preliminary differences emerged between the two television offerings' medical narratives, the most obvious being the higher rate of parental conflict and abandonment frames among OTT series.

In the two Rai 1 series doctors seem to heal children in agreement with or thanks to families, while in the two OTT series hospitals tend to replace family care, creating new communities in contrast to the former generation's values. Also, the two broadcast series appear to explore parental fears, while the OTT ones are more focused on enhancing teens' independence aspirations.

In any case, central to Italian medical dramas remains the attention paid to a younger generation deemed sick, lost or defeated. If medical drama really is capable to intercept society's biggest issues, this recurring depiction of youthful disorders might perhaps hide the 'symptom' of a traumatic 'illness': Italy's lack of generational turnover. A fear that, although approached from different angles – from young people's hopelessness to parents' worry of losing their children – seems, under track, to pervade many of the recent Italian medical TV parratives.

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A LOST GENERATION. YOUTH AND ITS ILLNESSES IN ITALIAN MEDICAL DRAMA



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10. New Trends in Health Communication

Entanglements between Social Media, TV Series, Psychology, and Mental Health

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■ ABSTRACT

In recent years, significant changes have occurred in health communication. New challenges and opportunities have emerged, such as the need to provide timely information without creating a news overload, healthcare professionals becoming players in health communication by introducing new strategies and hybridizing media languages for medical and scientific dissemination, and user-generated content produced by patients on social media leading to the destigmatization of some diseases. The goal of this chapter is to understand these changes through a socio-technical approach that studies the mutual connections between health communication, institutions, the media, communicators, and the social context. Through the analysis of a case study, chosen for its significance, the entanglements between TV series, social media, and psychology are shown. The main results point out that health communication is a multidimensional process in which there are many overlaps between disciplines. TV series can be successfully used in psychotherapy and can be a significant starting point for scientific dissemination on social media because they help to create relevant and understandable messages. The rise of health communicators has also highlighted the need to elaborate deontological guidelines for communication. This chapter contributes to the field by adopting an original approach to health communication that considers its multidimensionality and current trends.

KEYWORDS

Social media; TV series; psychology; health; mental health.

Introduction

In the last 20 years, digital and social media have disrupted health communication practices. New players have appeared, such as influencers and healthcare professionals, while public institutions have faced a partial loss of trust. Various forms of media have increased their connections, hybridized their languages, and contaminated each other. Social media has also caused new forms of health communication to emerge, such as user-generated content by citizens who have started talking about health issues that once were kept secret, destigmatizing some conditions or diseases. These processes were magnified during the Covid-19 pandemic, which constituted an unprecedented situation.

The pandemic has passed, but the world is facing new challenges, many of which involve health, such as the aging of the population, persistent health system stress, wars that create health emergencies, and the disruption of the global supply chain that causes difficulties in the production and distribution of medicines. This scenario needs to be carefully studied, since it is highly relevant to the health of the global population.

The goal of this chapter is to frame these changes within a socio-technical approach that studies the mutual connections and influences between the actors involved: institutions, the media, communicators, and the social context. This is done through the analysis of a case study (*TV Therapy*) chosen for its significance in this context. The article first maps out the theoretical background concerning the recent changes in health communication, with a focus on the Covid-19 pandemic. Thereafter, the methodology is described. The next section illustrates the case study, disentangling the dimensions involved: communication about psychology issues, TV series, and social media. The chapter concludes with a discussion of the main results that highlights the complex network of relations between health, social media, and other media and pinpoints the need for further interdisciplinary research.

Theoretical Background: Changes in Health Communication

Health is defined by the World Health Organization (WHO) as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO n.d.b), highlighting the importance of considering health from a holistic approach and not only from the perspective of healthcare or diseases. This perspective is also adopted in relation to mental health, which is defined as

a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in. Mental health is a basic human right. And it is crucial to personal, community and socio-economic development. Mental health is more than the absence of mental disorders. (WHO 2022)

It can be argued, then, that the concept of health has shifted toward wellness, with the absence of diseases considered to be only one of the necessary conditions. From this point of view, health treatments are an important part of care but not the only one. Among the tools for health promotion WHO (n.d.a) also identifies communication, for its potentially powerful impact on the health condition of citizens. Health communication is the result of the interaction between institutions, communicators, culture, the media, and the social context (Lovari 2017). In the last 20 years, institutions have faced a loss of trust by citizens; new reliable players of communication have emerged (such as digital media influencers, citizens, and professionals); and the media landscape has been increasingly affected by digitalization and hybridization between various forms of media. Moreover, the Covid-19 pandemic showed how effective and accurate communication is important to manage emergency situations and accelerated several processes that had been underway and that involve public institutions (such as the WHO, the Centers for Disease Control and Prevention, and local governments), citizens, social media influencers, and healthcare workers.

A first point to be addressed is that an unprecedented quantity of health information is now available in the media environment. However, quantity cannot be equated with quality. What happened during the Covid-19

pandemic demonstrates this. The rapid spread of Covid-19 required the activation of quick and effective communication channels among the different levels of the population to prevent infection and reassure people. The abundance of information that became available created information chaos, which the WHO defines as an *infodemic* (Nielsen et al. 2020, Ducci et al. 2022). It became difficult for people to distinguish between accurate and reliable information, fake news, and misleading information, as well as between qualified and unqualified sources.

Governments around the world, public health authorities such as the WHO, and social media platforms all took steps to contain the spread of disinformation, with varying degrees of success. Governments launched communication campaigns on both broadcast and social media to update citizens and provide them with useful information. For example, they empowered citizens to manage the pandemic by communicating the measures necessary to contain and prevent contagion, such as proper handwashing and mask-wearing (Raamkumar et al. 2020, Hanson et al. 2021, Shin et al. 2022). They also made agreements with social media platforms to limit the spread of misinformation (Lovari 2020). Social media platforms, for their part, created information centers (Carelli and Vittadini 2020) and attempted to moderate fake news, although it was noted that moderating or banning certain keywords resulted in conversations being encrypted or moved to other platforms (Seiter and Brophy 2022). These efforts were in line with the health promotion actions suggested by the Ottawa Charter: build healthy public policy, create supportive environments, strengthen community actions, develop personal skills, reorient health services, and move to the future (WHO 1986). They were also almost coherent with the WHO guidelines (2017) for an effective health communication that should be accessible, actionable, credible, trusted, relevant, timely, and understandable.

Another process that has been observed is the destigmatization of some diseases and pathological conditions through broadcast media, news, and social media. Research has shown that depicting mental illness or addiction in the media can help to diminish the stigma about some conditions (Theriot 2013, Oldfield 2021). Exposure to different social networks can also reduce some social stereotypes (Neubaum et al. 2020). Moreover, people who suffer from chronic diseases or disabilities (such as eating disorders, mental health issues, and rare diseases) can share their experiences and daily lives through user-generated social media content, such as blog posts or videos. By telling their experiences and therapeutic journeys, they can contribute to raising

awareness of these lesser-known issues, destigmatizing these conditions, and encouraging others to seek help from healthcare professionals (Moorhead et al. 2013). Photographs, other images, and videos are among the most used formats on social media. They are particularly well suited for narratives and storytelling because they allow users to show themselves and tell their stories in their own voices. This pervasiveness of the visual dimension has also led to cross-contamination with other media. Memetic culture is one of the most remarkable examples of the hybridization of visual cultures, creating mashups of different visual materials taken from movies, TV series, broadcast programs, and internet culture. Memes have been successfully employed in healthcare communication, with their particular tone of voice adding a hint of humor to serious content (Reynolds and Boyd 2021).

The internet and social media have been used for health purposes, such as information seeking and obtaining social support, since 2010 (Eysenbach 2008, Moorhead et al. 2013). Research has shown that the Covid-19 pandemic intensified these practices. Especially at the beginning of the pandemic, people increased their use of internet and social media for a variety of purposes, including to seek information about the ongoing situation, maintain social contact, or entertain themselves (Marchal and Au 2020, Abuhashesh et al. 2021, Kothari et al. 2022). Together with the abundant information that was available, and the social isolation caused by local lockdowns, this situation produced stress and anxiety among people (Eleftheriades et al. 2022, Liu et al. 2022). However, the internet and social media were also valuable sources for understanding the context of the pandemic: people found qualified material among peers and institutional channels (Akhther and Sopory 2022, Basch et al. 2022, Lanier et al. 2022) as well as social support (Hooper et al. 2022, Qin et al. 2022).

During the pandemic, social media influencers and celebrities supported the visibility of preventive measures (such as handwashing, mask-wearing, and vaccines) and encouraged people to do fitness activities at home (Godefroy 2020, Gupta et al. 2022, Pöyry et al. 2022). Studies have shown, for example, that celebrities' tweets obtained more visibility than those of medical or public health institutions (such as the Centers for Disease Control and Prevention or the WHO) due to the tone of voice they used (more emotional or connected to experience) and the celebrities' visibility (Kothari et al. 2022, Myrick and Willoughby 2022).

At the intersection of these communication dynamics, healthcare workers emerged as new players in communication. The pandemic forced them to

rethink their communication strategies and move from traditional channels to digital ones, such as social media, for the purpose of disseminating information and presenting their profession. This was particularly the case for self-employed professionals who, during the pandemic, found themselves having to communicate with their patients in an unprecedented context. Research has shown that healthcare workers disseminated accurate information about the pandemic through their social media accounts, debunking fake news or misleading information and revealing what was happening in hospitals (Pangborn et al. 2023).

This trend strengthened after the pandemic. Studies have demonstrated that, healthcare professionals were able to use the "idioms of practice" (Fernández-Ardèvol et al. 2020) that had already been consolidated by influencers regarding managing profiles and relationships with online communities (Locatelli 2021). In order to build coherent profiles, healthcare professionals created their own brand image and developed a continuous editorial plan over time. In their medical and scientific communication, they tried to popularize technical concepts and make them understandable by laypeople. This was done, for example, by using hints of humor or irony, taking inspiration from other media or from internet culture (making memes or tutorials for example), and interacting with their followers (Locatelli, 2021). Scholars have also argued that the involvement of healthcare workers, adequately supported by their institutions, has positive effects on health promotion campaigns (Czerniak et al. 2023). An important point to be addressed in this context is the need to give healthcare professionals adequate communication training (Yilmaz et al. 2022) and to formulate ethics and deontological norms (Kiasalar et al. 2022).

The Covid-19 Pandemic in Italy

In order to contextualize the case study of this chapter, it is important to briefly trace how the Covid-19 pandemic developed in Italy. Italy was one of the first countries to experience major outbreaks of Covid-19, particularly in Lombardy. In the province of Bergamo, where the first major outbreaks occurred, hospitals were overcrowded, and many ill people died at home. This was a very threatening and stressful experience for people. It became necessary to provide citizens with health information without requiring them to travel to hospitals, as hospital access was restricted to urgent care and Covid-19 patients (Lovari 2020). The Italian government chose to live

stream their daily press conferences on Facebook to update people on the evolution of the pandemic and the measures taken. Local health authorities also used their social media profiles to communicate with people (Locatelli and Lovari 2021). The response to the pandemic evolved as knowledge about the virus and its spread deepened. Between March and May 2020, there was a general lockdown. During the summer of 2020, people gradually resumed work and social activities, with restrictions and preventive measures such as wearing masks and maintaining social distance. Autumn and winter 2020, as well as 2021, were characterized by new spikes in the number of cases – with consequent local lockdowns – but also by the introduction of vaccines. During 2021 and 2022, people learned to live together with the virus, and at the end of March 2023, the Italian government lifted the state of emergency.

The above scenario depicts a context in which there are several intersections between fields that were once separated. It is, therefore, interesting to investigate the entanglements between the health communication of healthcare professionals, broadcast media, and social media. This is a new and underdeveloped topic, since these subjects are usually studied among the respective fields. However, due to the contemporary complex media system, it is a very promising area of investigation. In light of the novelty of the approach, the chapter focuses on a case study, chosen for its significance according to the theoretical background described.

Research Background and Methodology

The analysis of the case study presented here is part of a broader portfolio of projects being carried out at the Università Cattolica del Sacro Cuore that aim to investigate the transformation of health communication, new forms of scientific dissemination, and the role of social media in this process. These are *Health Communication Monitor*, a systematic review and scientific dissemination project on the latest trends in health and media communication research, managed by the author of this article and promoted by the Graduate Schools ALMED and ALTEMS; *Progetto Abbi Cura di Te*, a project for master's students about health communication and social media, led by the author of this article during her *Media and Reti Sociali* course; and *Trust in Science*, an interdisciplinary project investigating how scientific knowledge is mediated in our contemporary complex society,

with Piermarco Aroldi as the principal investigator. While research for these projects was being conducted, the case of *TV Therapy* was discovered and considered worth analyzing because of the entanglement between health communication, social media, and TV series that it presents.

The methodology adopted a grounded approach (Glaser and Strauss 1967), allowing the data to guide the interpretation in light of the background described above. Data collection consisted of an in-depth interview with the two creators of the project (Alessia and Giorgia Romanazzi), the identification of the Instagram contents related to *TV Therapy*, and of the podcast episodes dedicated to medical dramas *Doc – nelle tue mani* (Rai1, 2020-) and *In Treatment* (HBO, 2008-2011). The analysis consisted of a content analysis of the transcription of the interview; a longitudinal content analysis of the themed *TV Therapy* posts and stories published on the Instagram account of Alessia Romanazzi (Rose 2016, Locatelli 2021); and a content analysis of the podcast episodes. Particular attention was paid to the visual dimension during the analysis of the Instagram posts and stories.

About the ethics of research, the full disclosure of the case study, of the names of the two creators, and of their social accounts was discussed and decided together with them considering the already public nature of the project.

TV Therapy: The Case Study

TV Therapy is a complex project that consists of group psychotherapy, a podcast, and an Instagram column. In order to understand the entanglements between (social and broadcast) media and psychology, it is important to describe the project and its structure.

The Project

TV Therapy was first conceived as an experimental form of group psychotherapy by Alessia Romanazzi, a psychologist and psychotherapist, and her sister Giorgia Romanazzi, a TV series editor, combining their professional expertise. They adapted to TV series the well-established technique of using books and movies in psychotherapy sessions, with the aim of helping patients explain their psychological states.

In the rest of this article, they are referred to as "the creators" for brevity.

Group therapy is a technique in which psychotherapy is done in groups with a maximum of eight participants. The presence of other patients stimulates "mirroring", through which patients help each other accept a psychological problem or ask questions about it. *TV Therapy* consists of weekly online meetings led by the creators. Alessia Romanazzi chooses the participants after interviewing them to evaluate whether this kind of therapy is suitable for them (for example, they do not need individual psychological support or have serious mental illnesses). At the time of the interview with the creators, the patients involved in the project were all female and mostly aged between 25 and 40 years old.

Patients are assigned to watch a TV series, which is then used in the meetings as a trigger for discussion; unfolding diseases and pathologies (such as post-traumatic stress disorder and panic attacks); telling everyone's stories; exploring personal emotions; and understanding the underlying psychological dynamics.

The creators were inspired by what emerged during the group therapy to create the podcast *TV Therapy* with the goal of explaining psychology through TV series to the general public (while preserving the privacy and professional secrecy of their patients). The podcast is distributed through major music streaming platforms, such as Spotify. The topic of each episode is chosen after consideration of news stories, media discourses, and suggestions by Instagram followers. The tone of the podcast is serious but not grave in order to frame TV series as more than an entertainment product. Both the creators contribute to conceiving and writing the episodes, taking special care to be accurate and not misleading.

The podcast episodes have the following structure: they are between 30 and 50 minutes long, and they are narrated by the two creators. Their titles imitate the ones of the famous TV series *Friends* (NBC, 1994-2004), starting with "Quello che..." ("The one with..."). The cover image of the podcast is a mashup of images reminiscent of both the fields involved: media (a television, a microphone, and a cassette tape) and psychology (Sigmund Freud and a chair). Its main colors are light blue and yellow, matching the graphic style and visual identity of the Instagram accounts of the two creators (light blue from the Instagram account of Alessia Romanazzi² and yellow from the one of Giorgia Romanazzi³).

^{2 @}iononmistresso

^{3 @}tellyst

Each episode is dedicated to a TV series and starts by describing its plot, main characters, features, anecdotes, and trivia. Then it examines the psychological dynamics of the characters or the situations narrated, alternating the description of the plot (through the voice of Giorgia Romanazzi) with the explanation of the psychological dynamics presented (through the voice of Alessia Romanazzi). In this way, it is possible to explain mental states or illnesses (such as anxiety, anger, or narcissism) through describing key episodes or moments from the TV series chosen.

Both the group therapy and the podcast are promoted on Instagram through dedicated posts and stories identified by the hashtag #tvtherapy. The posts and stories also have the goal of encouraging discussions about psychology on Instagram using TV series as a starting point. The colors of the posts and stories match the ones of the podcast cover.

A longitudinal analysis of the posts revealed the evolution of their style. The first ones were simple, composed of one picture consisting of a screengrab of the Spotify interface. Later, they evolved into carousels consisting of two pictures: a cover image and a graphic describing the main contents of the episode. Reels (short videos) with brief extracts of the episodes also began to be posted. The latest posts are more elaborate, containing a carousel composed of the cover image and then a series of graphics explaining the key insights of the episode. They include images of the main characters of the TV series or some significative pictures or brief extracts to highlight the situations that are explored. Other posts take inspiration from TV series to realize memes featuring well-known characters (for example, Jessica Fletcher from *Murder, She Wrote*, CBS, 1984-1996).

The captions summarize the episode in a way that makes the public curious to listen to it (for example, they might start with a question asking whether the reader has ever thought about a certain aspect of a TV series) and end with the explicit request to followers to post comments and ask questions. The longitudinal analysis of the posts showed also that during time TV Therapy became a periodic and recurring content (like a sort of editorial column) in the creators' Instagram accounts.

Psychology and TV Series

In group psychotherapy, the creators assign participants a TV series to watch according to the topic that they want to explore (for example, anger or anxiety) and then, during the meetings, they discuss it. The situations depicted

in the TV series can be used as a starting point for participants to describe their personal situations. According to Alessia Romanazzi, this technique works because participants start describing an aspect or an episode that impressed them and, in doing this, they begin to speak about themselves. In order to work on participants' decision-making process, the creators use interactive episodes or ask participants to reflect on the choices that characters made by describing what they would have done in their shoes.

The creators explained that participants seem to "interiorize" TV series, unconsciously using them as "repertoires" for talking about their lives and for giving names to emotions and psychological states. This process is very similar to the catharsis described by Aristoteles, in which people can experience feelings and emotions without really living them. The creators cited the example of the TV series The Bear (Hulu, 2022-), which starts with the image of a bear in a cage. After the group watched it, the creators noticed that participants started using the expression "to feel caged" (to feel trapped), which they had never used before, without referring directly to the series. Another interesting example of this process is that during group therapy, patients tend to cite TV series that aired on broadcast television when they were younger, such as *The Gilmore Girls* (The WB, 2000-2007). The creators also pointed out that participants interpret TV series in a very personal and individual way, according to their condition, background, or mood. The same scene, for example, can be described in very different ways, each one from a different perspective.

One important point to consider regarding using TV series as a tool for exploring personal emotions is how they are accurate in describing the psychological states or mental illnesses of the characters. As the creators highlighted, in recent years, the psychological description of characters has become more accurate, specific, and multidimensional, especially in British series (such as *Fleabag*, BBC Three, BBC One, 2017-2019) that mix psychological accuracy with comedy and drama. According to Giorgia Romanazzi, screenwriters are like "artists who draw from their personal experience to stage emotions and feelings. They put in images what they have felt or lived." Alessia Romanazzi expressed that it is like screenwriters have become group therapy participants: sharing their emotions and experiences through images, they "mirror" actual patients who draw on these images to speak about themselves.

The creators noted that TV series that do not directly deal with mental health are paradoxically more accurate because they delve into the psychology

of the characters in a deeper and more detailed way. Marvel series such as *Moon Knight* (Disney+, 2022) and *WandaVision* (Disney+, 2021), which really delve into the emotional aspects of the superheroes, are remarkable examples of this. Another one – albeit in the context of film rather than TV series – is constituted by the dementors in the *Harry Potter* franchise (2001-2011) that deprive people of all their emotions. In doing this, they are, according to the two creators, a perfect description of the state of depression and desperation, although they are not connected with a mental health issue at all. Another example is *SKAM Italia* (TIM Vision, Netflix, 2018-), which contains many tiny details about the everyday lives of adolescents that permit adolescents to identify with the characters but also let adults "go back in time," as Giorgia Romanazzi put it, and realize how much they have in common with contemporary adolescents despite their different historical contexts.

Giorgia Romanazzi also pointed out that the episode structure of TV series develops over time, allowing the screenwriters to deepen the psychological description of the characters and their many facets. For long-running TV series, viewers, actors, and characters grow together.

Another aspect that emerged from both group therapy and conversations with followers on Instagram is that people reflexively and consciously choose TV series according to their psychological states or pathologies. The two creators observed that, for example, participants' TV series preferences changed during the Covid-19 pandemic. In the beginning of the outbreak, people chose familiar, slow-paced, and reassuring products, such as Friends (1994-2004), Gilmore Girls (2000-2007), and the first episodes of The Office US (NBC, 2005-2013). During the second phase of the pandemic (after 2020), people chose TV series that let them express and explore their anxiety, worry, and discomfort and reprocess the uncertainty and sense of impotence they were experiencing. Specifically, the creators noticed that products such as medical or crime series reassure people because they have a standard structure which is repeated during every single episode. Their characters also show great competence and devotion in doing their work, giving viewers the comforting idea that in tragic situations, there are people who know what to do.

The algorithmic recommendations of streaming platforms, especially Netflix, are another factor that influences people's choices. Giorgia Romanazzi remarked that when Netflix promotes a TV series through its recommendations or its social media accounts, more people reach out to her on Instagram to ask questions about it.

Mental Health, Dissemination, and Social Media

Alessia Romanazzi started her professional Instagram account in 2015. She approached it as a way to disseminate psychology content, choosing a serious but not grave tone of voice. She chose a graphic style and organized her content in periodical columns (it is to say contents regularly and periodically published like magazines' ones), creating a strong personal image. She has improved the channel over time, adding new columns; trying new formats (posts, carousels, stories, Instagram Live, reels, interactive stickers); and changing the graphic style according to the trends of the platform. *TV Therapy* and TV series are only some of the many topics she analyzes. She regularly interacts with her followers through comments or question boxes. In the interview, she defined her audience as "self-selected," very interested in her topics, educated, kind, inclined to debate, with rare incidents of flaming. The audience constitutes a "community" where people can establish a dialogue.

One thing that the creators noticed when looking at the analytics of their Spotify account is that their audience is predominantly made up of women between the ages of 25 and 40 from Northern Italy, with a small and increasing presence of men. This is consistent with the composition of the group therapy participants. Alessia Romanazzi explained this by clarifying that, in Italy, men are less confident or comfortable when speaking about mental health than women. In order to address this gap, the creators are trying to engage the male audience both on the podcast and on Instagram by choosing TV series that might be interesting to them, such as *Game of Thrones* (HBO, 2011-2019), *The Last of Us* (HBO, 2023-), *The Lord of the Rings: The Rings of Power* (Amazon Prime Video, 2022-), and *You* (Netflix, 2018-). They also decided to focus more on the TV series themselves than on psychology as a starting point to create a connection with men followers.

Alessia Romanazzi noted that dissemination about psychology is not easy, because she must find a balance between the accuracy of the content and the need to reach a large audience. According to her, it is impossible to appeal to everyone or to take all people into account because of the many individual variables involved. Furthermore, she highlighted that the process of normalizing the discussion of mental health allows people to speak more openly about certain aspects of their lives but also exposes them to excessive psychologization, which risks pathologizing even normal situations. For example, people sometimes use expressions that indicate pathology (such as dependency disorder, toxic relationships, narcissism, imposter syndrome)

when they describe problematic situations that are normal. According to the psychologist, this is a form of backlash against the past, when people did not speak about mental health. Now the task is to normalize the fact that not every problematic situation is pathologic. The chance to speak publicly about mental health and normalize mental health issues or just problematic situations is in line with the approach proposed by the WHO (2022) which portrays mental health as more than the absence of mental disorders and as related to a state of well-being and the capacity to manage the complexities of everyday life.

Alessia Romanazzi emphasized that science communicators must explain scientific and technical topics and make them understandable without being trivial or simply following trends. It is also important not to just say what people want to hear or try to make everyone happy, because that is impossible. Moreover, she argued that healthcare professionals should never lose their critical viewpoint and fall into a sort of "populism." Scientific communicators must keep their critical distance and scientific accuracy to help people dive under the surface of things. The creators agreed that social media is a place where experts, such as themselves, can engage in dialogue with people about their subjects of expertise on an equal level. They said that they have a reciprocal relationship with their followers, in which they influence each other by opening new perspectives or helping each other think about situations in different ways. This is a consequence of the fact that they have a small number of highly engaged followers. 4 It is also probably due to the role of platform algorithms in showing their content and recommending them to new followers who share, for example, the same interests or geographical area.

TV Therapy and Medical Dramas

Two episodes of the podcast are particularly interesting because they are dedicated to medical dramas: episode 25 to *Doc – Nelle tue mani* and episode 59 to *In Treatment*. An analysis of these two episodes shed more light on the entanglements of social media, health communication, and TV series.

Based on the true story of doctor Pierdante Piccioni, *Doc – Nelle tue* mani is a very successful Italian TV series that tells the story of Andrea

⁴ @iononmistresso has 44.800 followers, and @tellyst has 4.700 followers (numbers updated in September 2023).

Fanti, a doctor who loses his memory and must re-discover himself and restart his career in a public hospital. The series was aired in February 2020, overlapping with the beginning of the Covid-19 pandemic in Italy. This coincidence influenced its success: according to the creators, the plot is full of good sentiments and is based on doctors who are devoted to their work, doing it with passion and taking excellent care of patients. These elements contrasted sharply with what people were experiencing in Italy at the time (during the first weeks of the pandemic, a huge number of ill people were stuck in hospital without being able to see their families). While watching the series, viewers experienced psychological gratification and were reassured by doctors taking good care of dying patients. Thus, *Doc – Nelle tue mani* let people express and aggregate their feelings at a time when they could not leave their homes or meet up with other people. Giorgia Romanazzi said that this series acted as a sort of soothing 'balm' for people because it gave dignity to dying patients.

The second season was aired in 2022. The screenwriters decided to add the Covid-19 pandemic to the plot, featuring several situations experienced in 2020, such as empty streets, the need to travel with self-certification, and the continuous sound of ambulance sirens. By 2022, the population had become less fearful about dying from the disease, but new psychological states had appeared, such as Covid-19 fatigue, prolonged stress, and anxiety. The episodes gave viewers the chance to reprocess what had happened, express the fatigue of co-living with Covid-19, and realize the importance of taking care of everyone's psychological wounds. Therefore, according to the creators, *Doc – Nelle tue mani* was the perfect trigger for people to start reprocessing what had happened during the pandemic.

Episode 59 of the podcast is about *In Treatment*, an American TV series that tells the story of a psychotherapist (Paul Weston) and his psychotherapy sessions with patients. The series highlights the psychological dynamics of the patients but also delves into the personality of the psychotherapist, depicting him as having both positive and negative personality traits. It was written under the supervision of professionals and is therefore highly accurate. Giorgia Romanazzi noted that an interesting aspect of the production of the series is that its episodes were recorded following the real order of the sessions, with the aim of reproducing the development of the therapy. She also highlighted that the screenwriters used a fascinating narrative expedient: since during the sessions the psychotherapist is not allowed to communicate his feelings about what the patient is sharing, the screenwriters decid-

ed to reveal them through the soundtrack. Alessia Romanazzi pinpointed that there is a sort of 'parental' representation of the psychotherapist: as there are no perfect parents, there are no perfect psychotherapists. The goal of therapy is not to be perfect but to help patients learn to deal with their problems and emotions.

Discussion and Conclusions

The analysis of the entanglements between social media, TV series, and psychology has unfolded some contemporary aspects of the media land-scape and the evolution of health communication. This study contributed to the field by adopting an original approach to health communication that considered its multidimensionality and the complex network of influence among the actors involved.

First, it emerged that TV series are useful for mirroring and reprocessing psychological dynamics. This is possible due to the accurate depictions of characters and situations through everyday details that help people relate to the story told. This mirroring process of living or re-living a situation without experiencing its consequences is very similar to the Aristotelian *catharsis*.

Using broadcast media together with social media meets the need for communication to be relevant, which is one of the WHO's criteria for strategic health communication. TV series and social media have content and contexts that are relevant to people and grab their attention. They are understandable because they speak a language that people can comprehend, and they are easily accessible.

There are also many links between this study's findings and those of media studies and research on the sociology of media. The findings about the interiorization of TV series and the importance of the ones watched during youth are reminiscent of what research about media and generations has found: media provide people with generational repertoires that let them build their generational belonging (Vittadini et al. 2013, Vittadini 2018, Colombo 2019). As the two creators noted, *TV Therapy* session participants (but also many social media followers) interpret TV series in their own ways, according to their backgrounds, moods, experiences, and emotions. This recalls what well-established media research paradigms have already demonstrated, such as the informational-semiotic model of Umberto Eco and Paolo Fabbri (1978); the encoding/decoding model (Hall 1973); and

the uses and gratification model (Katz et al. 1973). It is not possible to fully explain these theories here. In sum, it can be said that media research has highlighted the active role that the public plays in understanding media messages according to their cultural and social background. In line with this, people choose media content that fulfills their needs, as was demonstrated during the Covid-19 pandemic. This is one of the possible explanations for people's choice of TV series that should be backed up with more research. Another possible one is that the recommendation algorithms of streaming platforms influence people's choices.

The case study presented revealed mutual connections and influence between seemingly distant elements, such as group psychotherapy, TV series, podcast episodes, and social media accounts. Sometimes social media inspired a podcast episode, other times the latter was the trigger for a discussion with Instagram followers, and other times a TV series inspired group therapy, podcasts, and Instagram posts. Both the podcast and the column on the Instagram account helped people discover psychology and discuss it with a professional. Medical and scientific dissemination requires making technical concepts accessible to the general public. In line with the WHO principles for health communication, this hybridization process makes health communication understandable and actionable: it is possible for people to better understand concepts and to start reflecting or acting on certain topics.

Institutions may benefit from adopting this approach to health communication, which will help them produce targeted messages or campaigns that are more relevant and understandable for people because they are framed in a way that relates to their experience. Appropriate and effective health communication, especially about mental health, can be crucial for prevention, which is one of the pillars of conceiving health as a complete state of well-being and not only the absence of diseases. The use of visual communication or visual materials – as in the case study described and also as demonstrated in previous research (Locatelli and Lovari 2021, Lee et al. 2022) – can improve the effectiveness of such communication.

During the pandemic, there was a surge in online searches for health information and support concerning a range of psychological issues and other scientific and medical ones. Due to the possible influence on people's health that social media may have, it is important to continue studying these forms of medical and scientific communication to understand how they affect people. As Alessia Romanazzi highlighted, healthcare professionals have a huge

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responsibility on social media and cannot abandon their accuracy or critical approach to pursue social media metrics or their followers' favor. According to the WHO, health communication should be credible and trusted. This stresses the urgent need to establish ethical and deontological guidelines for healthcare professionals and improve people's digital health literacy so that they can distinguish between accurate and non-accurate information. These efforts will make important contributions to limiting the spread of disinformation and reinforcing the trust in institutions.

This research is limited to a single case study that can be defined as a best practice. The results cannot be generalized, but they represent a promising starting point for further research.

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NEW TRENDS IN HEALTH COMMUNICATION: ENTANGLEMENTS BETWEEN SOCIAL MEDIA, TV SERIES, PSYCHOLOGY, AND MENTAL HEALTH



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11. Polysemy of Drama

The Representation of Autism Spectrum Disorder¹

Susanna Bandi and Federica Villa

■ ABSTRACT

Within the frame of Self Media Lab Study Center (University of Pavia) starting from open research on the theme *New digital and visual technologies in therapeutic and diagnostic protocols for patients with Autism Spectrum Disorder*, this chapter focuses on the concept of "drama", in the sense of dramaturgic writing. It is aimed at the representation of the disease, focusing on three fields of study: how the therapeutic relationship with subjects affected by autism is represented (drama as a form of representation); how this representation is shared through social media (drama as a form of awareness); how the use of digital video technologies can elaborate therapeutic forms of storytelling (drama as a health device).

The study of autism portrayal focuses on a corpus of medical drama, starting from the analysis of *The Good Doctor* (ABC, 2017-), and including some of the most famous TV series such as *Grey's Anatomy* (ABC, 2005-) and *Chicago Med* (NBC, 2015-). The aims are to investigate the stereotypical models of medical and patient figures on the one hand, and on the other hand to highlight forms of dramatization of an often-invisible disease.

KEYWORDS

Autism Spectrum Disorder; medical drama; self-representation; visual digital technologies; *The Good Doctor*.

¹ This chapter was discussed by both authors. Federica Villa wrote the first paragraph, Susanna Bandi wrote the second, the third and the fourth paragraphs.

The Research Framework

In recent years, the Self Media Lab Study Centre (University of Pavia) has set up a series of projects within the framework of the Medical Humanities.² These projects are particularly interested in developing productive forms of interdisciplinary collaboration focused on the use of digital and visual technologies as devices for the construction of remote therapeutic relationships (telemedicine); and on the incidence of diagnostic images in the subjects' digital autoconfiguration practices.

Starting from ongoing research on the theme of *New digital and visual technologies in therapeutic and diagnostic protocols for patients with Autism Spectrum Disorders*, this chapter focuses on the concept of *drama*, in the sense of dramaturgic writing aimed at the representation of the disease on three fields of study:

- 1. how the therapeutic relationship with subjects affected by autism is represented (drama as a form of representation);
- 2. how this representation is shared through social media (drama as a form of awareness);
- 3. how digital video technologies can elaborate therapeutic forms of storytelling (drama as a health device).

The idea is to underline how the concept of medical drama can be opened up to a plurality of meanings within the framework of the disease of autism and we also think about other pathologies. We will not dwell on the first trajectory of research, as in the following part of our chapter a case study will shed light on how autism is represented in cinema and television, considering stereotypes and affordances. In fact, our research starts from an

² Self Media Lab Study Centre (University of Pavia) was founded in 2012 and deals with forms of self-configuration through media and new technologies. It is directed by Federica Villa.

extensive mapping of the broad panorama of audiovisual narrations on this disease, composed of TV series and cinematographic productions recounting autism as a world apart, made up of otherness, genius and repetition.

However, on closer look, to make the concept of *drama* constructive, we must force ourselves towards its polysemy: we propose, alongside the representative processes, that there are at least two other trajectories of research equally rich in suggestions and heralding fields of studies for the Medical Humanities.

In the first place, it becomes essential to work on the forms of digital socialization of disease. In this sense, the second trajectory intercepts the many FB pages, Instagram profiles, blogs, etc., born to increase public awareness of the great diffusion of this disorder, and that contributed to build up parental groups of mutual help, through forms of dramatization of everyday life, which can be constantly updated.

As exemplary cases, we think about Stefano Belisari (band leader of Elio e le storie tese) and his autistic son Dante who often contribute to awareness campaigns via social networks https://www.facebook.com/unitiperlautismo/. Or Franco and Andrea Antonello (www.facebook.com/unitiperlautismo/. Or Franco and Andrea Antonello (www.facebook.com/unitiperlautismo/. Who, through the assiduity of their stories on Instagram (@franco_e_andrea), update us punctually on their days, on their travels and on the life of the associations they support, producing movements of awareness and acceptance. The need to put the autistic experience in a dramatic form becomes a vehicle for communicating what does not communicate, normalizing and accepting what requires effort and frustration.³

This second type of drama typical of recounting autism leads this disturb to find in images a more intimate way of restitution than those of representation: a form of familiarization of drama within a drama. It becomes even more interesting to think that this aspect of dramatization that images spontaneously offer enters the disease itself in therapeutic protocols

³ We are also dealing with influencer cases of autistic women @Autistic_Red_fryk_hey, @Lunnylunnylunny and @La_panzer, who use social media to talk about their disorder but also to fight feminist battles. By bringing different skills and qualities into play, the three influencers exploit the media of vision and create content of the highest ethical and aesthetic value, intended for both neurotypical and neurodiverse. Social networks are the necessary tools for useful and advantageous dissemination, leaving the word to those concerned – the autistic – too often excluded from official debates and reaching a wider and more heterogeneous audience.

and diagnostic pathways. This is the third trajectory along which the Self Media Lab Study Centre is planning to work, conducting research in close collaboration with the territory's Institutes of Community and Care. We are currently working with IRCSS "Eugenio Medea" to understand how the use of digital/vision technologies contributes to the construction of good remote therapeutic practices between subjects affected by autism spectrum disorders and the places and actors of care (doctors, social workers, family members, teachers).4 Furthermore, work includes developing and testing therapeutic protocols with the help of immersive technologies. Virtual Reality (VR) is considered a rehabilitation tool for children with autism, useful in functional behavioural training, such as interaction with unknown people or sudden and unexpected encounters (just to name an example of our work, the VR and AR are the basis of the 5A Project, or Autonomies for Autism Through Virtual Reality, Augmented Reality and conversational agents, born from the collaboration of the Sacra Famiglia Onlus Foundation and the Our Family Association and the Polytechnic of Milan).⁵ This last trajectory brings the dramatization into the disturb, as it is the same subjects involved – patients, healthcare professionals, caregivers – who experiment, through technology, the experience of the 'as if', staging themselves in a different context, on a technological stage, where simulation aims to rework one's sensory and cognitive capacities.

⁴ With the IRCCS "Eugenio Medea" (La Nostra Famiglia, Bosisio Parini LC) we are planning a therapeutic path in telemedicine, with a team of neuropsychiatrists, psychologists, and therapists with a sample of thirty families. The results of the research will be available at the end of the experimental phase.

⁵ 5A Project aims to improve the social autonomy of medium/high functioning and high functioning autistic people aged from 16 years to adulthood. Available anywhere-anytime through smartphones, tablets and low-cost headsets, 5A applications promote the ability to generalize through transmedia elements that create a continuum between training in the virtual world and experiences in the real world. www.deib.polimi. it/eng/research-projects/details/411.

Investigate Autism

Within the framework of the Ph.D. conducted at the University of Pavia, in the Self Media Lab Study Center, the project on the theme *New digital vision technologies in therapeutic and diagnostic protocols for patients with Autism Spectrum Disorder* aims to investigate the contamination between vision technologies and autism and a line of research has been identified in the representation of ASD (Autism Spectrum Disorder) within the TV series, and specifically in the medical drama.

It can be noted, in fact, that in medical drama there is a certain recurrence of the figure of the autistic doctor, first of all the TV series *The Good* Doctor (ABC, 2017-), entirely focused on a surgeon on the spectrum. Not only that, but also other famous medical dramas such as, for example, *Grey's* Anatomy (ABC, 2005-) and Chicago Med (NBC, 2015-) resort to autistic doctors, or still many see Gregory House, in House, M.D. (Fox, 2004-2012) on the autistic spectrum. On the other hand, the autistic patient also seems to have a certain fascination with hospital representations, and we find examples in The Good Doctor, Grey's Anatomy and House, M.D. As we will see, representing the Autistic Spectrum Disorder, is actually a real challenge for television serialities, as it is an extremely varied disorder and, involving the brain, does not necessarily have obvious manifestations. In addition, we speak of the "broad spectrum" of autism by referring to the heterogeneity of this condition, which varies both in intensity but also in the presence of a certain aspect or not, depending on the individual. All this makes a staging that meets the criteria of belonging and recognition extremely difficult, thus relying on a highly stereotypical but identifiable panorama. However, the representation of the characters changes considerably, according to the role in which they are placed: therefore, as we will see, the peculiarities of autism that are shown and underlined are outlined as socially and economically characterized. But what is autism? To introduce this topic, we want to explain the parameters currently used to diagnose autism. Following the DSM-5 of 2013, the Diagnostic and Statistical Manual of Mental Disorders, a single large label "Autism Spectrum Disorder" is used, which collects within it those that before were four distinct disorders (Autistic Disorder, Asperger's syndrome, pervasive developmental disorder and childhood disintegrative disorder), sharing the same symptoms but with different intensities and sizes. This manual identifies two criteria as necessary to make the diagnosis:

- A. Persistent deficit of social communication and social interaction across multiple contexts;
- B. Restricted, repetitive patterns of behavior, interests or activities. To these two basic indicators must be added other elements that help to make the diagnosis more specific and they are:
 - With or without concomitant intellectual impairment;
 - With or without language impairment;
 - Associated with a known medical or genetic condition or environmental factor;
 - Associated with another problem of neurodevelopment, mental or behavior.

Then, based on the presence and intensity of these factors, the following severity levels are outlined within the DSM-5:

- Level 1 Support required
- Level 2 Substantial support required
- Level 3 Very substantial support required

So basically, autism is defined as a different (not wrong) condition (not a disease), substantially a way of being. It is a neurobiological disorder, that in the nervous system of the child develops according to different trajectories from those typical. In addition, autism is a chronic condition, therefore people cannot 'heal' from autism, but it is configured as a way of being, that accompanies the entire development of an individual's life. However, it is important to stress, in this regard, that there may be significant improvements in this disorder, especially where early intervention is arranged from childhood (Moore 2019). Currently, the precise causes of autism are still being studied and are not known, however, it is a disorder partly genetically based, and there is, in fact, a high heredity rate, about 90% (DSM-5:57). At the same time, in some cases, epigenetic factors (such as the advanced age of the parents or the low weight of the fetus at birth) also seem to contribute to the development of this disorder, as the DSM-5 underlines. And this condition creates some alterations in specific areas, those mentioned above, which are for example behavior, social interaction, communication, etc. Unfortunately, autism can be aggravated by comorbidity, in relation to the fact that there is a greater incidence of some pathologies such as, for example, at the neuropsychiatric level: intellectual disability, speech disorders, attention disorders, etc. but also at a medical level: metabolic disorders, allergies, epilepsy, etc. Autism, therefore, manifests itself as an extremely complex, and at the same time heterogeneous, disorder, which develops in individuals in a different way, sometimes with lighter nuances, sometimes with more problematic repercussions.

The latest data from the Atlanta CDC, Centers of Disease Control and Prevention,⁶ tell us that in the United States 1 person in 36 is autistic, of which about 4% is male and 1% is female, while in Italy, the figure updated to 2021, estimates 1 child in 77, with an incidence 4.4 times higher in males than in females.⁷

The spread of autism, in fact, is increasing progressively from year to year, certainly thanks to the improvement of diagnostic tools and medical research, but at the same time, this growth is also due to a real increase in this disorder. It is therefore a preeminent and permanent condition in our lives, and it is partly for this reason that representations of autism have progressively increased within the media, and especially in film and television. This is interesting because compared to other psychiatric disorders, there are researches that show that not so long ago ASD was less represented (Butler and Hyler 2005, Stuart 2006, Conn and Bhugra 2012, Nordahl-Hansen 2018), while probably with a growth in prevalence and attention to inclusion, the representation of autism has also increased (Conn and Bhugra 2012, Nordahl-Hansen 2018).

Although it is a rising disorder, many people do not know it and do not know how to behave. Within this framework, the medical drama, with its depiction of autism, makes itself an essential medical device, necessary for useful and advantageous dissemination, showing the peculiarities of the disorder and helping the viewer to understand it, emphasizing the medical and technical aspects. Moreover, the form of seriality, by its nature, is able to reach a wider and more heterogeneous audience than the scientific journals to which these researches are usually designed and therefore to involve a whole part of the population who would not normally receive these instructions and advice.

⁶ Centers of Disease Control and Prevention, Atlanta Georgia. https://www.cdc.gov/ncbddd/autism/data.html (last accessed 04-07-23).

Data taken from the Italian Ministry of Health website, on the Mental Health Section devoted to Autism. https://www.salute.gov.it/portale/saluteMentale/dettaglioContenutiSaluteMentale.jsp?lingua=italiano&id=5613&area=salute%20mentale&menu=vuoto (last accessed 27-06-23); Linea Guida Italiana: SNLG 21, 2011 – Il trattamento dei disturbi dello spettro autistico nei bambini e negli adolescenti per la diagnosi e trattamento dei bambini e adolescenti con disturbi dello spettro autistico.

How is Autism Represented in Medical Dramas?

As we said, autism is a neurobiological condition and it's actually invisible on the outside. It doesn't necessarily have any obvious manifestations. Here then becomes problematic: how do you represent the invisible?

To this is added a necessary premise: autism presents itself as an extremely heterogeneous condition, precisely for this reason we speak of "broad spectrum". Every autistic, like every person, is in fact unique. Therefore, it is difficult to draw a model that is valid for everyone, and this is why representing it becomes a real challenge for those who try this and can generate a high risk of criticality.

Yet, the representation in medical TV series (and not only) seems dictated by some characteristics that resort to a highly stereotypical landscape. This situation is caused by the fact that the rules of serial and cinematographic writing, of narrative economics, teach us that the clearer is a character the easier is for the viewer to identify him. We tend to prefer 'instant' forms of reading and recognition of the characteristics of the character. As a result, it is necessary for autism to find something that identifies it, that is public knowledge or that can be recognizable by everyone. The narrative itself requires it. So, as the scholars Pomerance and Palmer ask themselves, "what features about autism can easily (quickly, cheaply, without undue study) be shown, then? And by implication, what is it that most viewers will instantly recognize (diagnose)?" (2022: 3).

The distinctive feature in the representation of ASD is identified in gestures and communication. These actions, however, such as tic or crisis for the behavior area, can be frequent in several disorders and diseases that are not only autism; therefore, again it is not enough just one of them to recognize whether the character is in the spectrum or not. It is, therefore, necessary that the person has traits that lead him back to a common imagination, and those characteristics are, as Palmer and Pomerance tell us, often presented in this way:

Dramatized, because autism need not present visible scars. Exaggerated, because the slight or only marginal extenuation of speech or gestural tic might be too small to be noticed in a richly organized shot. Awkward and easily read, because the writer wants to proceed as though the autist is known and recognized now, not as though it is necessary to spend the

first act arranging recognition. Caricatured, at least in part, because the presentation must read at a great distance – sometimes around the world – for audiences not connected or familiar with autism at all (Palmer and Pomerance 2022: 4).

A first consideration that can be made in this regard is that these characteristics depend on social and economic position. For example, if we think about the medical-patient binomial, where the former plays a role of superiority over the latter, as it is he who must provide help and has the answers to the questions and problems of the patient, we can see that, where they are both autistic, they are characterized in very different ways. In most cases, in medical dramas, what is represented can be categorized into two broad groups. The first one is high social and economic positions: the characters are high-functioning autistics (level 1), often accompanied by Savant Syndrome; therefore, presented as superheroes capable of solving problems that no one else could, with really clever strategies and insights. In this case, autism is presented to us as a fascinating disorder, which intrigues the viewer by impressing him with its peculiar but effective ways of acting. Examples of this category are Shaun Murphy in The Good Doctor, Virginia Dixon in Grey's Anatomy, Isidore Latham in Chicago Med and Gregory House in House, M.D., even if not explicitly stated.

The second category is low social and economic positions: the characters, in this case, are low-functioning autistics (level 3), full of problems and completely limited by their own autism. This representation, on the other hand, provokes in the viewer a sense of pity and compassion, unlike the previous one. Therefore it is difficult to identify with these characters and we often perceive autism as something we would like to stay away from. We find examples in the autistic patient (played by the autistic actor Coby Bird) who appears in the episode *22 Steps* (01x07) of *The Good Doctor*, in *Grey's Anatomy*, from the episode *The Whole Package* (15x20) to the episode

The term "idiot savant" was first used by the British doctor J. Langdon Down "to describe individuals with developmental disability who demonstrate some particular skill" (Miller 1998: 73). Savant Syndrome is currently referred to a condition, often in the presence of intellectual disability, in which an individual presents exceptional quality in some areas and disciplines. The tools and criteria of screening and diagnosis are still insufficient to systematically identify this condition (Park 2023), but we know that there is a very close relationship with autism, in fact 50% of people who have this syndrome is also on the autism spectrum (Park 2023).

Jump into the Fog (15x25), and in the patient of the episode Lines in the Sand (03x04) in House, M.D. While the autistic adult, in the House, M.D. episode Half-Wit (03x15), is partly an exceptional case because it is still high functioning even if the episode highlights its poor autonomy compared to Gregory House.

The gap becomes even more noticeable and significant in the comparison between the doctor and autistic patient, and this is well made in *The Good Doctor*, as it is comparing a doctor and patient both with autism. In the course of the aforementioned episode, we can observe that two different points of view are brought forward: on the one hand, there are the parents of the patient who initially claim that the two, having the same disorder, have the same limits and problems (all also reiterated by the patient's question "you are like me" and the confirmation, albeit late, by Dr. Murphy). On the other hand, there is the medical team that emphasizes the skills of Shaun and the distance from the boy, as if they had two different disorders. Compared to Liam, the patient, Shaun is on another level, in many ways: he is presented as someone who has made it, who has come to terms with his autism, and who can be a model for other people.

In this regard, one of the most frequent criticisms from the autistic community and its advocates is that, in most cases, the representation stages only a very small percentage of people in the spectrum, which is that of very high-functioning genius, which also has Savant Syndrome (they are less than 10% of people with autism). This figure is congenial to the representation: doctor (moreover they are always surgeons, with the exception of Dr House) is fascinating, and if we add the charm that this disorder has, with its traits of genius, everything is explained. The purpose of this representation is what Stuart Murray (2006) and Allison Moore (2019) define as a "sentimental savant", whose autism serves to "inform and enrich the lives of his non-autistic [...] but also to reinforce compulsory neurotypicality" (Moore 2019: 2). In this direction the neurotypicals take advantage from the experience of vision and in front of disability take note of their actions and choices, drawing lessons from it. As Murray argues, representations of autism often "use the refraction narrative of paired impaired/non-impaired characters not only to explore ideas of difference but also to illuminate for majority audience's questions of individual responsibility, behavior and knowledge" (Murray 2008a: 123).

Autism in The Good Doctor

An emblematic case of representation of autism, in medical dramas, is undoubtedly *The Good Doctor*, an American television series, broadcast from 2017 to today, on ABC, created by David Shore, who is also the creator of *House, M.D.* (this explains the many similarities between the two characters). It is an adaptation of the South Korean TV series of the same name, in 2013, and tells the story of a young autistic surgeon, Shaun Murphy, played by neurotypical actor Freddie Highmore, inside the St. Bonaventure Hospital (San Jose, California).

The distinctive features of this depiction of autism emerge from the first episode of the first season, Burnt Food, in which we see Shaun being employed at the hospital, following the first major test he faces: saving a child's life at the airport with innovative and ingenious solutions. From the beginning of the TV series, Dr Murphy is presented to us as an ordinary person, with an attentive eye maybe a little particular. In fact, we cannot notice any distinctive feature and if they didn't tell us, on the show, that he has Autism Spectrum Disorder, we'd probably have trouble identifying his autism. Gradually, from the moment of entry into the airport, we notice that some of its peculiarities are defined, which basically already identify what will be his distinctive features throughout the TV series. These characteristics are for example difficulties in social interaction, that is, problems in communicating his intentions. We find an example in the scene with the policeman at the airport, who does not understand him and believes he is a criminal; or again, later, in the scene of the ambulance when he starts saying some words like "lower equal amplitude lower voltage" and then repeats them in hysterics. In addition to this, it is very direct and this is well seen in the conversation with Dr Melendez, when he finally asks him if being a good doctor means being arrogant like him. To these peculiarities, it is necessary to add stimming or self-stimulation, repetitive behavior, that is for example, in the first episode, the continuous repetition of the gesture of rubbing with his hands the brother's toy scalpel to feel calm and pleasure. In conclusion, he has an alteration of sensory perception, with hypersensitivity: such as when, at the airport, he has a stimulatory overload, which shows his lack of being able to filter stimuli.

At the same time, however, are already evident also the characteristics that identify Shaun as a super genius, with very high functioning and Savant syndrome: a description that, among other things, recurs several times in words, during the first episode and throughout the entire TV series and that also characterizes the slogan of ABC to promote the series: "A young surgeon with autism and Savant syndrome uses his extraordinary gifts to save lives and challenge skepticism" (Hilsabeck 2022: 72). And how is his Savant shown? First of all, as for the communication area, we can notice that he has difficulties in social interaction, but his language is perfect, he has a wide vocabulary and knows all the technical terms. While, for what concerns the gestures and behavior area, he immediately shows his strong intelligence giving proof of his abilities. In fact, starting with the scene of the airport creates a line of superiority between his intelligence and that of the neurotypical doctor who is not prepared like him. In this regard, we can mention, again, the episode 22 steps (01x07) in which is highlighted its diversity precisely because Savant, almost emphasizing that it is a trait inextricably linked to its value both as a doctor and as a person.

Secondly, he transmits important life lessons to his colleagues and the neurotypical public, leading us all to reflect on our behavior: for example, in moments when he is particularly direct and says his thoughts bluntly. We find an example in the aforementioned speech with Dr. Melendez when he points out that he is very arrogant and asks him if being a good doctor means being arrogant. This is from the perspective of the sentimental savant: not only Shaun will give us important lessons in medicine, surpassing his colleagues professionally, but also morally, his innocence and simplicity will lead us to reflect on our morality.

Finally, perhaps the most peculiar and emblematic feature of his Savantautism is the representation of his thoughts through augmented reality. There is, indeed, a powerful visual dimension within the series, and probably the TV series want to play on the fact that many people with autism reason mainly by images and prefer the visual aspect to the linguistic one, as Professor Temple Grandin shows us:

I think in pictures. Words are like a second language to me. I translate both spoken and written words into full-color movies, complete with sound, which run like a VCR tape in my head. When somebody speaks to me, his words are instantly translated into pictures (Grandin 2006: 23).

Shaun's powerful memory is shown us using augmented reality, which overlaps with reality and can only be seen by him, in his mind, and by us spectators. In these scenes, where augmented reality takes place, his colleagues are perplexed and don't understand what's happening. It is interesting to note how in reality the association between AR and autism is actually a recurring theme, that appears in several TV series such as *Extraordinary Attorney Woo* (ENA, 2022), whose leading character is a young career lawyer with Autistic Spectrum Disorder, and it is also present in *Sherlock* (2010-2017), detective not admittedly autistic but that presents many of the characteristics of this disorder.

Obviously, in *The Good Doctor*, the purpose of this augmented reality, in addition to simplifying the progress of his memory, is also to show the viewers what is happening in the mind of the doctor. The images we see, however, are not immediately clear, and the public is called to action and try to understand the brilliant idea of the doctor. Often though, understanding comes only at a time when he also explains it to other colleagues and it is an interesting perspective because it reverses the situation: are we, the neurotypical, those who have difficulties in understanding and who seem to speak a different language?

To conclude, we would like to reflect on the debate, within the autistic and non-autistic communities, about the representation of autism that arose following the release of the series. Autism Ontario⁹ also creates for this series a committee to judge it, which partly condemned and partly appreciated the series. In addition, the writing was supervised entirely by Doctor Melissa Reiner, neurologist and pediatrician, who participated as an autism consultant and worked closely with Highmore to help him in the interpretation of Dr Shaun. She also created a YouTube channel¹⁰ where she explains the choices made for the various episodes regarding the representation of Shaun's autism.

If from an educational and popularizing point of view, it is essential that the representation of autism is included and increased, to make it easier to understand and to represent autistic people, on the other hand it is a double-edged sword, because it can be so misleading as to produce a negative effect. And *The Good Doctor*, unfortunately is not far from this view, staging another 'wonderful' autistic with his superpowers, in the wake of

⁹ Autism Ontario (legally incorporated as Autism Society Ontario) is a charitable organization with a history of over 49 years representing the thousands of people on the autism spectrum and their families across Ontario. https://www.autismontario.com/about-us (last accessed 09-07-23).

¹⁰ AskMNow, Doctor Melissa Reiner's YouTube channel. https://www.youtube.com/@AskMNow (last accessed 09-07-23).

Rain Man (1988), although in the pilot of the series, they try to distance themselves from the film, as Dr. Glassman reminds us when he says "it is not Rain Man". Surely, Murphy takes steps forward, for example showing us the weaknesses and some moments of crisis, but not in a caricatural dimension, as also Dr. Reiner pointed out in several interviews, offering hope to motivation to overcome their limitations and difficulties, both neurotypicals and neurodiverse. However, it remains a representation that fits within that imaginary and refers only to a very small part of people with autism (less than 10%) and this type of staging actually responds to specific needs, such as making the difference acceptable, showing an example of good and well-integrated autism, also underlined in the TV series by the adjective "good" in the title. Moreover, it is undoubtedly fascinating, we see a superhero, who manages to solve problems with strategies that the viewer does not even imagine. Finally, he is an exemplifier of the concept of the "sentimental savant" and "the narrative function of the 'sentimental genius' is to shed light on the behavior, attitudes, and relationships of the non-autistic and expose its deficits of communication, interaction and empathy" (Moore 2019: 9) and "in other words, Hollywood uses cognitive disability to set up a figure-ground relationship: neurological difference creates a space out of which the real story emerges, the personal growth of neurotypical people. This description applies pretty fully to *The Good Doctor*" (Hilsabeck 2022: 73).

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POLYSEMY OF DRAMA: THE REPRESENTATION OF AUTISM SPECTRUM DISORDER



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12. Covid, Post-Covid and Covid-free Fantasy Worlds in Medical Drama TV Series

Eszter Nádasi¹

■ ABSTRACT

Five American medical television series (Chicago Med, Grey's Anatomy, New Amsterdam, The Good Doctor, and The Resident) integrated Covid-19 into their storylines. This qualitative analysis examines the content of the coronavirus-related episodes and the central medical cases beyond coronavirus in the 2020-2021 and 2021-2022 television seasons. The number of Covidspecific episodes varies per series. In the portrayal of the pandemic, three stages appear: (1) pre-crisis: first cases; (2) crises; (3) post-crisis aftermaths. Storylines admitted the limitations of sources and technology; common plot elements included patient overload, changing spatial structure within the hospital, and blurring hierarchical and specialty lines. Series stood up for the scientific approaches to coronavirus and safety protocols. After two special episodes, The Good Doctor and The Resident reallocated their story world to a Covid-free future - but they admitted that coronavirus still exists. It is a crucial step because, as former studies show, the audience tends to use this genre as an information source on medical issues. Cultivation theory is a well-established research framework of medical series. The second part of the analysis discusses the central medical storylines beyond Covid-19 to see what other directions the five productions focused on.

KEYWORDS

Television series; medical drama; medicine in popular culture; Covid-19 representation; edutainment.

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Pandemics and Content Creation

In 2020, when Covid-19 hit the United States, American medical drama television series donated their props (including masks, gloves, and gowns) to hospitals that experienced shortages in medical supplies. Shootings have stopped or slowed down, just as in other genres of the television industry.

Medical series intended to act responsibly regarding their storylines too. Premiered on 17th March, the hospital superbug related *The Resident* (Fox, 2018-2023) episode entitled "So Long, Dawn Long" (03x18) began with a title card stating that the writing happened months before the pandemic and that any relationship to current events is coincidental. The cards also announced support for hospital staff and first responders who risk their lives daily. The same disclaimer appears in the next episode. On 14th April, the New Amsterdam (NBC, 2018-2023) episode "A Matter of Seconds" (02x18) started with an explanation from actors Ryan Eggold and Daniel Dae Kim: the originally scheduled episode "Pandemic" was canceled because coincidentally, its storyline was too like the actual pandemic. The explanation created a bridge between the last aired episode and the forthcoming one, introducing Kim's character, trauma surgeon Cassian Shin. Show creators believed that the portrayal of a fictional pandemic would be emotionally overwhelming and potentially misleading for the audience because the treatment of the fictitious virus followed different protocols than those that were in force.

Next, show creators had to decide whether to include Covid-19 in the storylines. What is the right choice creatively, emotionally, and financially? The exclusion to provide an opportunity to escape from the pandemic-infected world or the inclusion to reflect on it? Is it morally right to use Covid-19 for entertainment? In 2001, creators of New York-based shows had a similar dilemma with 9/11. There were passive reflections, like removing the Twin Towers from the city views as it happened in the case of

Friends (NBC, 1994-2004), Sex and the City (HBO, 1998-2004), and The Sopranos (HBO, 1999-2007). A more active reflection was the inclusion of the attacks in the story world: one of the most prominent examples is Third Watch (NBC, 1999-2005) which follows the lives of police officers, first responders, and firefighters. On 15th October, the documentary episode "In Their Own Words" (03x01) premiered: the actors interviewed real agents of these professions. Following that, episodes that included the 9/11 attacks premiered, so the characters had their related storylines.

Nevertheless, why did *The Resident* and *New Amsterdam's* creators feel responsible for their content? Because medical dramas were always more than entertainment: from the genre's birth in the 1950s, these productions had educational purposes.

Medical Series as Education

Hospitals are central locations of the medical series; the protagonists of these pre-scripted entertainment shows are healthcare professionals (mainly doctors and nurses); and the diagnosis and treatment of disease or injury are core plot elements (Lee and Taylor 2014, Nádasi 2021, Rocchi 2019). Since the beginning, realism and medical accuracy have been among the creators' goals (Turow 2010). These series aim to present state-of-the-art medicine, accurate display of medical conditions and their treatment, professional jargon, atmospheric hospital settings, and proper medical equipment. To gain these goals, from the appearance of the first productions of the genre, the medical content was reviewed by real-life experts who corrected the scientific content and influenced the personality of the fictitious doctors. This kind of control is not typical anymore, but healthcare professionals still participate in script creation and shootings. However, there are limits to authenticity; for instance, the procedures on-screen usually happen faster than in real hospitals.

Research articles identify good practices and shortcomings in portraying certain diseases, injuries, procedures, or character types — even in prestigious medical journals. Arguments about the relevancy of such papers include the genre's popularity, the high viewership of certain shows, and the audience's tendency to use these series as health information sources (Murphy et al. 2008, Lee and Taylor 2014, Bodoh-Creed 2017). The entertaining, emotional storylines enhance the chance of knowledge transfer.

Medical series' entertainment-education (edutainment) potential is also a research topic. The Kaiser Family Foundation (KFF) collaborated with *ER* (NBC, 1994-2009) creators to test whether the viewers learned from the content; they evaluated storylines about emergency contraception and sexually transmittable diseases (Brodie et al. 2001). KFF also worked with the *Grey's Anatomy* (ABC, 2005-) staff and helped the development of a storyline that addressed that fetal HIV infection is preventable with medication (Rideout 2008). The Hollywood Health & Society (HH&S) group gave information to the *ER* writers on teenage obesity, high blood pressure, and heart disease (Valente et al. 2007). HH&S also encouraged television writers to display BRCA gene mutations in their storylines: creators of *ER* and *Grey's Anatomy* developed plots about these. The study concluded that presenting the same information in multiple series is highly effective because repetition strongly impacts viewers (Hether et al. 2008).

Cultivation theory is a well-established framework in medical series research, stating that TV has a long-term effect on viewers' reality perception. Products of the genre affect the knowledge, attitude, and behavior of the viewers; the content can both positively and negatively impact how people see medical conditions, treatments, hospitals, and healthcare workers (Pfau et al. 1995, Chory-Assad and Tamborini 2003, Quick 2009, Quick et al. 2013, Mickel, McGuire and Gross-Gray 2013, Pokhrel 2015, Hoffman et al. 2017, Kato et al. 2017). Genre-specific cultivation means that the perceived realism of the content depends on the genre, so the program's type influences the cultivation effect's strength (Grabe and Drew 2007, Morgan and Shanahan 2009). As mentioned, medical dramas make efforts towards realism; many of these are transparent in the media, which can also strengthen the potential of content cultivation.

Reflection = Responsibility?

As Cambra-Badii et al. (2022) prognosticated, coronavirus will impact art and popular culture for years. Because of their fast production, television can reflect on real-life events before movies and books. Accordingly, TV series in different genres depicted Covid-19, including *Superstore* (NBC, 2015-2021, situation comedy) and *The Morning Show* (Apple TV+, 2019-, drama). In both series, the professional life of the characters – whether they are shopkeepers or reporters – were influenced by the pandemics.

What are the arguments for including Covid-19 in the medical series? There are many. Their story worlds show the present time and metropolises like New York, Chicago, and Seattle. Their storylines regularly include real-life medical cases, and infectious diseases and pandemics are well-established elements in the genre. For instance, *ER* paid considerable attention to HIV/AIDS, while the pilot of *New Amsterdam* reflected on the Ebola cases that appeared in New York in 2014. From the creative side, adding real-life medical or social issues to the plotline is an opportunity to renew the shows.

Several medical drama creators started to speak up for representation, as they felt it was a duty and responsibility for this genre. One was Naser Alazari, senior surgical consultant of *Grey's Anatomy*, stating that the series was responsible for addressing coronavirus, as it is the "biggest medical story in recent history". Alazari emphasized the audience's intense emotional connection to the production. "I feel our show has such an incredible accessibility to people and relatability to people that we need to be there with them" (CNN Business 2021). David Schulner, writer of *New Amsterdam*, stated: "I would be so ashamed, if we didn't address [coronavirus] fully, responsibly (...) we're a hospital show set in NYC, and it was a moral imperative on our part to tell this story" (Deadline 2021). Finally, five American medical series included Covid-19; the number of Covid-centered episodes varied per series.

These productions contain the formulaic elements of the genre; some follow the milestones closely, while others try to include more unique elements. *Chicago Med* (NBC, 2015-) centers in an emergency room of a metropolis, like the genre classic, *ER*. The longest-running prime-time medical series is *Grey's Anatomy* (ABC, 2005-): beyond its well-known romantic storylines, it depicts research, innovation, and emerging technologies (Nádasi 2016, 2017, 2020). *New Amsterdam* (NBC, 2018-2023) highlights the systemic, structural, and social problems behind the illnesses and the challenges public hospitals face. *The Good Doctor* (ABC, 2017-) stars a surgeon with autism spectrum disorder and Savant syndrome. *The Resident* (Fox, 2018-2023) introduces the healthcare system's dark side, including malpractice cover-ups and insurance fraud.

The categorization of these productions can happen in multiple ways. First, according to the medical specialization they focus on: each show presents multiple hospital departments, but *Grey's Anatomy* and *The Good Doctor* are surgery-centered. In contrast, *Chicago Med* focuses on emergency medicine. Another defining factor is the character structure: *Grey's Anatomy* and

The Good Doctor have a single protagonist; however, Chicago Med has more than one central character. Furthermore, the hybridization with other genres can also create subgenres: to differing extents, but melodrama is present in every series. However, Chicago Med uses considerable action, while The Resident includes crime elements (Dunai and Lengyel 2020, Nádasi 2021).

The qualitative content analysis of the five medical series covers the 2020-2021 and 2021-2022 television seasons. The first part of the analysis focuses on Covid-19 representation; the second examines the series' medically relevant, central storylines other than coronavirus. The aim is the identification of themes and representation patterns common in most of the series. The research covered the following seasons of the shows:

	2020-2021 TV SEASON	2021-2022 TV SEASON
The Good Doctor	S4 (20 episodes)	S5 (18 episodes)
The Resident	S4 (14 episodes)	S5 (23 episodes)
Chicago Med	S6 (22 episodes)	S7 (22 episodes)
Grey's Anatomy	S17 (17 episodes)	S18 (20 episodes)
New Amsterdam	S3 (14 episodes)	S4 (22 episodes)

Covid-19 in Medical Series

The quantitative analysis by Cambra-Badii et al. (2022) covered six months from November 2020 to May 2021. The seven most frequently occurring story elements they identified are hospital protocols for managing the disease; psychological effects on healthcare workers; infection of healthcare workers; shortages of hospital resources; deaths of patients; dying patients' goodbye video calls; patient survivorship, and discharge. Each of these story elements appears in the qualitative research, in some cases, under other categories. Generally, in the pandemic portrayal, three time periods appear to various extents (Nádasi 2022):

- 1. pre-crisis: first cases
- 2. crisis in the hospital
- 3. post-crisis, the aftermath.

Pre-Crisis: First Cases

The analyzed series start with the Covid episodes in the 2020-2021 television season. The fourth season of The Good Doctor opens on 26th February 2020, one week before California declares a state of emergency. Covid-19 is more like a distant disease spreading in Asia. The infection suspicion arises if someone recently traveled to China or contacted someone who was there. Doctors reassure worried patients. The geographical distance gives a sense of security: there are health workers who seem skeptical² about whether the virus can reach the US. A patient gets a false influenza diagnosis, so she has no proper treatment, and she spreads the virus freely. These scenes give an ominous sense of calm. The creators of this show follow linear storytelling, while The Resident uses flashbacks in telling their Covid story; this is how the audience gets to see the first case of the Chastain Park Memorial. At the beginning of *New Amsterdam*, a few minute-long music video sets the tone for the Covid storylines. In Grey's Anatomy, recovered from his surgery, Richard Webber (James Pickens Jr.) returns to work and gets an explanation of things that have changed in the hospital since Covid-19 patients appeared. Flashbacks are also applied to bridge the time gap between the sudden end of Season 16. Chicago Med's time jump from Season 5 to Season 6 is even more straightforward since Covid-19 already heavily influences Gaffney in the first episode. In summary, no medical series has an episode that focuses solely on the pre-crisis stage; the portrayal of the period is brief.

Crisis in the Hospital

The number of crisis-centered episodes varied between two-seventeen; however, several story elements appeared consistently across the five series. The term crisis suggests a sudden, critical, acute event with an exact ending. Despite this, the crisis is more like a permanent state in these episodes; the hospitals are like war zones where a fight occurs against an invisible enemy.

² They are not coronavirus deniers. Later, medical series show some patient characters who think that Covid-19 is a scam, for instance, *Grey's Anatomy* and *New Amsterdam* feature virus deniers. The hospital staff intends to dispel their beliefs. However, portraying misconceptions is risky, as the mere representation of a misbelief can increase its range visibility. The explicit denial of a misconception is not convincing to all viewers; some might resonate with what the deniers state.

Hospitals: safe spaces or danger zones? The crises-centered episodes show the overloaded hospitals – but what are these institutions, safe spaces, or danger zones? As Michel Foucault explains in *The Birth of the Clinic: An Archeology of Medical Perception* (1963), since the late 18th century, hospitals have been intended to be spaces of control, institutionalized places of treatment, where the strict space structure helps to distribute specialized care and avoid infection. Before it, these places were spaces of danger, centers of infection: disease and poverty mixed here, and in most cases, no adequate medical care was provided.

In the Covid-19 crisis episodes, hospitals are both safe and dangerous. They offer treatment, but some people, including doctors and nurses, get infected here and die. Meredith Grey (Ellen Pompeo), the protagonist of *Grey's Anatomy*, gets Covid (17x03) and develops a critical condition during the crisis. Others had to deal with their losses while treating patients. In *Grey's Anatomy*, Miranda Bailey (Chanda Wilson) took care of a patient in the same ward where her mother died a few days ago (17x06). One of *The Resident's* protagonists, Devon Pravesh (Manish Dayal), lost his father as he died in an overburdened public hospital (04x01).

Changing space structure. The world outside the hospital is under quarantine. However, hospitals are also closed worlds; within the walls, the spatial arrangement has been reshaped to manage the pandemic. While treatment goals previously determined the space structure, the priority became infection control. Care is provided in intensive care units (ICU) and ad hoc wards, which are necessary because of the high number of patients. In *Grey's Anatomy*, the hospital canteen becomes a ward (17x06). Within these zones, hospital staff wore high-tech protective clothing that gave a science-fiction atmosphere. There is an entering zone between the hospital and the outside world: the temporary tents for testing. Only those patients can cross the safety life whose Covid status requires hospitalization or have other life-threatening³ conditions.

Shifting responsibilities. Elective procedures and preventive medicine were canceled and postponed dedicating space and human resources to coronavirus patients; doctors and nurses from different departments collaborated

³ In some cases, even in the crisis centered episodes, other diseases and injuries appeared: *Chicago Med* mixed the cases for instance.

in the Covid wards. Some could not work due to age limits or underlying medical conditions, while others were periodically off work because of coronavirus infection. Residents got more freedom and responsibility in decision-making and implementation of procedures without supervision.

Changing protocols. Healthcare workers had to adapt to new safety, diagnostic, and treatment protocols that could change within hours. The development of new testing methods and experimental drugs changes the regulations, just as the emerging number of infected people and missing supplies. Procedures that increased the risk of the medical staff's infection (e.g., chest compression of coronavirus patients) became prohibited. The new rules enhanced medical, management, and moral challenges. The psychological pressure was enormous: medical professionals made decisions for the benefit of the population inside and outside of the hospital, and in some cases, this came with individual sacrifices.

Limited sources. Medical dramas tend to be criticized for depicting inexhaustible hospital sources. Many series controverted this representation pattern before, but the coronavirus episodes addressed the shortages openly. There are no endless sources regarding knowledge, money, and equipment. How to fight an infectious disease without hygiene equipment – like masks and rubber gloves? Their production and distribution stalled: scenes depictured disinfected single-use masks hanging up in changing rooms. The test shortage makes diagnostics a time-consuming process. More patients need 0/24 ventilators to survive than hospitals have, so an ethical challenge arises: doctors must decide how to allocate these. On what basis can they choose between patients? Decisive factors include the progression of the disease, the expected survival rate, and the patient's overall health condition. As a medical drama that often introduces innovations, *Grey's Anatomy* presents how doctors try to use one ventilator to treat two (17x10).

The effectiveness of technology is limited. Another criticism of medical series is that they exaggerate the effectiveness of medical procedures and technologies – patients often make a rapid and complete recovery. However, in Covid-episodes, their limits are admitted: high-tech life-saving devices cannot save everybody, their impact on the critically ill is limited, even if healthcare workers fight heroic battles equipped with them. These episodes are less-techno optimistic. The Covid-19 narrative acknowledged both hu-

man and technological limitations. That is why the discharge of Covid-19 patients recovering from the critical state is so celebratory through the hospital corridors while cheerful music is played. These moments give hope to other patients and the physically and mentally exhausted hospital staff.

Online communication. Hospital meetings have moved to the online space, with conference calls between staff inside and outside the hospital. Healthcare professionals communicate with their patients via video calls; hospitalized patients keep contact with their relatives through this because of visiting restrictions that apply to the dying patients' families as well: they even say goodbye like this. In *The Good Doctor*, a patient's wife witnesses the sudden deterioration of her husband's condition (4x01-02). Many doctors and nurses physically isolated themselves from their loved ones to protect them from potential infection from their workplace.

Post-Crisis: The Aftermaths

Medical dramas depict one pandemic wave and provide a complex answer to what can stop the pandemic. First, science: doctors and nurses are optimistic about vaccine development, and their hopes are verified; with the advent of vaccination, case numbers drop, and they can return from Covid wards to their original jobs. Second, the expertise and heroism of healthcare workers. Finally, laypeople who trust science, get vaccinated, and follow the safety protocols.

After their Covid-19 episodes, two series declared their relocation to an imaginary Covid-free world where coronavirus belongs to the past. *The Good Doctor* episodes (4x01-02, "Frontline") are framed with title cards stating that the events are fictional stories of a real battle still being fought. The cards also invite the audience to honor the "frontline heroes" of the fight, many of whom have given their lives. The final message is, "Do your part. Wear a mask." The third episode of the season "Newbies" begins with a message from Freddie Highmore – dressed as the protagonist, Dr. Shaun Murphy – stating that the episode portrays hope for the future where no one will have to wear masks or take other steps to stay safe. Highmore ends the message by encouraging viewers to protect themselves and others until that happens.

The first two episodes of *The Resident's* fourth season also apply card disclaimers declaring that some parts of the storylines are sometime in the future when the Covid-19 pandemic is history; and dedication to the health-

care professionals who risk their lives daily. Executive producer Peter Elkoff stated that show creators felt that their audience was exhausted by the pressures of the real pandemic, so they created a "post-vaccine" world for them (CNN Business). In season 5, there is a time jump between episodes 5 and 6.

Declarations are forms of responsibility-taking for the audience: show creators differentiate their content from the real world. It was always their choice to decide what disease to cover and to what extent; the medical conditions represented in these series never overlapped with real-life statistics (Hetsroni 2009). Nevertheless, in this case, they explained the absence of a specific disease. Furthermore, the creators encourage the audience to take responsibility: viewers are explicitly asked to follow regulations.

Despite these declarations, the two series are not entirely Covid-free. In *The Good Doctor*, a post-Covid patient (06x18) appears, and Doctor Lim (Christina Chang) develops PTSD from treating coronavirus patients. There is a sick person in *The Resident* who has missed appointments since the outbreak of the pandemic (04x12), an intubated Covid patient experiencing trachea complications (05x03), and someone cannot receive a transplant due to his vaccination status (05x21). However, the pandemic no longer drives storylines.

The other three medical series reflect more on the let-up and aftermaths of the crisis, together with the long-term health, economic, and emotional effects – but regarding screentime, not equally. In *Chicago Med*, after three Covid-focused episodes, there are some reflections on Covid-ward of the Gaffney Medical Center; for nurse April Sexton (Yaya DaCacosta), it was hard to finish working there, but the head of the emergency department ordered her to (06x03). However, later she works there temporarily (06x11). Drs. Hammer and Halstead deal with a pregnant patient needing an emergency C-section who only wants a blood transfusion with Covid-19 vaccine-free blood (07x12). Later, a patient with a long-hauler coronavirus condition appears (07x14)

New Amsterdam portrays poor people as vulnerable targets for scams because they lack access to authentic information (03x09). The staff struggles to distribute the remaining vaccines close to their expiration date (03x13).

Grey's Anatomy dedicated⁴ its Season 17 to Covid-19, while Season 18 was like a chronicle the post-Covid world: many storylines address the

⁴ In this crisis-centered pandemic portrayal, most medical cases were Covid-related. Other notable storylines included, for instance, the specialization change of surgical resi-

medical and social problems that the pandemic involved. However, as announced at the beginning of the season, they moved the story to a fictional post-Covid world after the former season's deep involvement with reality. They stopped following the portrayal of the acute virus. Through the season, creators ensure that the audience is reminded of the differences between reality and fiction; for instance, at the end of the episodes, they reinforce the importance of following protocols. Moreover, they guided viewers to websites that display authentic information about the state of the pandemic. The non-medical consequences of Covid-19 became medical when an Asian hate crime victim is admitted to the emergency room: the abusers of the older woman blame Asian people for the outbreak (18x18). The series highlights potential future health crises, the shortage of doctors, especially surgeons. Many doctors quit or retired after the crisis, changed specialties, some experience burnout, and residents fell behind with their training because they worked in Covid wards for months while surgeries were canceled.

Like *The Good Doctor*, these shows also problematize that many avoid hospitals since the coronavirus outbreak because of the fear of infection. However, this is dangerous; some patients are diagnosed with advanced malignant disease too late. Creators take a new form of responsibility by encouraging people to return to the hospitals for check-ups and elective procedures – these are important to avoid a potential future healthcare crisis because of untreated cases.

On a paratextual level, *Grey's Anatomy* stands for the scientific coronavirus approaches. Official visual materials of the show accompanied its characters with messages in line with the communication of scientific and governmental institutions to increase confidence in medicine and healthcare. Thus, the series followed the genre's tradition to educate and instruct the viewers.

dent Jo Wilson (Camilla Luddington) to OB/GYN, the fight of Andrew Deluca (Giacomo Giannotti) for human trafficking victims and his violent death.

Core non-Covid-19 Cases

After examining the pandemic narratives, the qualitative analysis focuses on central healthcare-related storylines beyond Covid-19. The identification of centrality followed the narrative complexity theory of Jason Mittel (2015). Episodic and serial storylines were divided; the research sample consisted of the latter and contained themes that lasted more than one episode or appeared repeatedly. The aim was to identify the focal topics. Are these different in the two series that reallocated their story worlds directly after the crisis episodes than in the other three productions? What directions did medical series take after they came to a common platform by including Covid-19?

The Good Doctor and The Resident

Common storylines included:

- hospital ownership, financial, and management difficulties of the institutions,
- cyber-attacks against the hospital,
- cancer treatment,
- experimental procedures, and cutting-edge technologies.

The latter category covered CRISPR and T-cell treatment in *The Good Doctor*, while *The Resident* included gene therapy for sickle cell anemia.

Above these, *The Good Doctor* centralized autism, blood shortage, death caused by expired medicine, dementia, miscarriage, restorative surgery, and resident education. *The Resident* portrayed Alzheimer's, brain injury and brain death, Huntington, multiple sclerosis, palliative care, physiotherapy, and rehabilitation.

Chicago Med, Grey's Anatomy, and New Amsterdam

Common storylines included:

- hospital ownership, financial, and management difficulties of the institutions,
- cancer treatment,
- transplantation,
- experimental procedures; cutting-edge technologies.

Grey's Anatomy and New Amsterdam:

- blood shortage,
- heat, and broken air-conditioning make it difficult to work in the hospital.

The ever-changing patients with various diseases and injuries belong to the nature of a metropolitan emergency department, as *Chicago Med* displayed it. However, the show had noteworthy serial storylines about a heart medicine's clinical trial and unethical use of a central venous catheter ("Vas-COM"). The series introduced a healthcare profession as Nurse Sexton became a nurse practitioner. Resident Taylor (Ashja Cooper) commits Adderall fraud to keep up with the burdens of residency.

In Season 18, the storylines of *Grey's Anatomy* are heavily driven by Parkinson's research. Other significant topics are the long-term effects of burn pits and physician-assisted suicide. The medical cases are diverse, just as the specialization palette (cardiothoracic surgery, neurosurgery, OB/GYN, orthopedic surgery, and pediatrics).

New Amsterdam displays diabetes, eating disorders, holistic medicine, and psychiatric cases since, similarly to *Chicago Med*, it has a psychiatrist among the main characters. In this series, the hospital is like a patient: the building is dangerously old, and a collapse causes chemical infection. There is a cyber-attack against its computer system, and a hurricane hits New York.

Discussions

Productions of the genre represent similar illnesses and treatments from time to time: accidents, cancer, cardiovascular diseases, and transplantation are regular story elements. Even rare cases like cobalt poisoning and domino transplantation surgery are interpreted by different series. Despite these, it was unique that five medical dramas reflected on coronavirus simultaneously. Storyline similarities appear in the 2020-2021 and 2021-2022 television seasons beyond Covid-19, within and between the two sample categories. The non-episodic storylines are regularly connected to the main characters: for instance, the patient's treatment is a professionally and emotionally challenging career step; the patient is a relative of someone from the hospital staff, or they are the patients themselves.

The return of techno-optimism, research and innovation storylines is spectacular. However, series are less optimistic toward hospitals' computer

systems, which are fragile and easy to manipulate from inside and outside. In *The Good Doctor*, IT specialist Lea Dilallo (Paige Spara) saves the system from hackers (04x10); but later she upgrades the patient's evaluation of Dr. Murphy (05x05). While there are high-tech sources, hospitals are in danger of financial breakdown: Chastain Park Memorial Hospital becomes a public hospital from a private institution in *The Resident*. Differences in medical cases are more likely to come from the original profile of the series, like their specialty focus.

Summary

The five analyzed series run on three broadcast channels. The two NBC productions tended to mix Covid and non-Covid cases in their pandemic representation. Interestingly, ABC has a limited and an extended coverage as well: *The Good Doctor* condensed its reflection into two episodes, while *Grey's Anatomy* had a whole Covid season. Fox production *The Resident* dropped the virus narrative after two episodes.

The hardship of keeping control is a central element of the coronavirus representations. Mortality rates are high because of the strengths of the virus. From the first medical series, heroic healthcare workers are core characters of the genre; later series started to portray them as vulnerable beings in their professional and private lives. Following this line, in the Covid-19 episodes, they were heroic but vulnerable: they experienced the virus through their bodies, work, and personal lives.

Previous research on medical series proved the educational effect of the genre: the creators tried to exploit this by providing information on Covid-19 in emotionally engaging scenes. They gave an insight into Covid-treatment. There was no basis for comparison for many viewers since real hospitals had entry restrictions; furthermore, in many countries, the media had limited access to reporting. However, the series integrated elements that viewers were familiar with from the news, such as shortages, overcrowding, and the creation of ad hoc departments. Less personal experience may increase the chances of viewers crediting the representation. The cultivation effect can be increased by sustained, extended, and repeated portrayal. The characters and sets were already familiar to the viewers. They could compare the "normal" and Covid-19 periods, just as the former pandemic representations with the coronavirus storylines — even if the narrative emphasizes the

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situation's uniqueness. This establishment and continuity can potentially extend the effect of the specific episodes. Genre-specific cultivation can be increased because these series are known to have medical consultants to keep authenticity.

The return of Covid-19 episodes is currently unlikely, as the second part of the qualitative analysis showed that medical storylines took new directions. The analysis of the 2022-2023 television season was not a part of the analysis, however, a preliminary review on the newest episodes affirms this statement. Furthermore, two analyzed series (*New Amsterdam* and *The Resident*) were canceled in 2023.

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COVID, POST-COVID AND COVID-FREE FANTASY WORLDS IN MEDICAL DRAMA TV SERIES



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13. Covid-19: Narrative Engine and Characters Embedding

Allegra Sonego

■ ABSTRACT

This study delves into the narrative dynamics of medical drama TV series, focusing on the representation and impact of the Covid-19 theme. Drawing on the framework proposed by Rocchi and Pescatore (2022), the research examines the incorporation of themes within character-driven storylines. Through a quantitative content analysis, the Covid-19 theme is analyzed as a central narrative element, with sub-themes representing its diverse manifestations. Guided by two research inquiries, the quantification of the prominence of the Covid-19 theme and the correlation between the Covid-19 and main narrative isotopies (sentimental, professional, and medical cases plot), this study employs the novel concept of "narrative biomass" to assess thematic integration.

KEYWORDS

Medical drama; TV series; Covid-19; quantitative content analysis; thematic analysis.

Introduction

Medical dramas TV series have long been a popular genre in television, captivating audiences with their compelling portrayals of medical professionals and the intense scenarios they encounter in healthcare settings. Set in hospitals or health facilities, these fictional products intertwine medical cases with the personal and professional lives of the characters, creating engaging storylines filled with human drama, ethical dilemmas, and life-or-death decisions. As a result, medical dramas not only entertain but also provide a unique window into the complexities and challenges faced by healthcare practitioners.

As for the genre, it is possible to identify different features also of seriality more generally, which motivate the formulation of the following hypotheses:

- 1. Broadcast TV series are permeable and open, which means they are able to absorb elements of the reality and rework them inside the narration.
- Medical drama narrative structure allows and endorses the introduction of a rather large number of characters (Pescatore e Rocchi 2019), patients, who consequently appear for one or two episodes, or members of the medical staff, therefore more present in the narrative.
- 3. In addition to the aforementioned matter about characters, central feature of the long seriality is the continuous introduction of new narrative elements on a repetitive structure (Eco 1984).
- 4. Furthermore, the medical drama is a genre that has a strong pedagogical and educational impact and intent both when it concerns professionals (Williams et al. 2015, Baños et al. 2019, Terry and Peck 2019) and the public (Movius et al. 2007, Hether et al. 2008, Asbeek et al. 2015, Alismail 2018). Despite this, social issues represented in TV series of this genre have rarely been investigated in literature, with exceptions such as the theme of abortion (Sisson and Kimport 2017, Herold and Sisson 2020), the depiction of African Americans (McQueeney 2022) or opioids addiction (Wistrand 2017).

This chapter is part of the wider PRIN research project Narrative Ecosystem

Analysis and Development Framework (NEAD Framework). A Systemic Approach to Contemporary Serial Product. The Medical Drama Case. In particular, we took as starting point to the work of Rocchi and Pescatore published in 2022. They investigated the storytelling evolution of eight medical dramas by identifying three main narrative isotopies: professional, sentimental and medical cases plot, showing the strength of the medical genre and its ability to rebuild, in its microcosm, the human macrocosm, where random everyday life elements mix and overlap with working and social relationships. They proved that the three isotopies are good descriptors for the medical drama genre, measured their narrative biomass and identified four possible narrative profiles: the soap formula, the anthology formula, the doctor and patients' formula, and the social formula.

From these assumptions arose a research project with a threefold objective: identify and define the main social themes in medical products, quantify their narrative presence and demonstrate their ability to generate narrative arcs involving characters. At this stage of research 10 themes have been identified: Covid, Racism, Eating Disorders, Abortion, Mental Health, Opioids Addiction, Gender-based Violence, Mass Shootings, LGBTQIA+community and Climate Change. For this contribution the focus is on the theme of Covid-19, previously analyzed in several works both from a narrative (Cambra-Badii et al. 2022, Possenti and Serra 2021), productive and consumption point of view (Boursier et al. 2021, Degli Esposti et al. 2021, Sigre-Leiròs 2022).

This contribution is only the first step of the wider work on the themes, therefore the aims are to:

- Mention the theoretical frame of reference and give a first definition of the theme.
- Illustrate the protocol used to quantify the presence of Covid theme and its declinations.
- Track the presence of characters, operation that will be useful for the next steps.

Definition of Theme and Characters Embedding: Covid Case Study

The first step of the analysis is to identify the definition of the theme, starting from a semantic fundamental dichotomy: figurative level/ thematic level. Figurativeness "gives rise to gradual manifestations, depending on the use that the discourse makes" (Bertrand 2007). However, for this level to be

understood by the user, the thematic level is necessary: the theme, in fact, gives meaning and value to the figures (Bertrand 2007).

The notion of theme can also be meant in this context as a configuration, "a kind of micro-story with an autonomous syntactic-semantic organization and capable of being integrated into wider discursive units" (Greimas and Courtes 2007). Greimas (1984) identifies two levels in the narrative object, the narrative and the discursive, which, though parallel, are distinct. Both serve to understand the paths that the subject faces: while the narrative program, constituted by actantial roles, can be identified as one level, the trajectory outlined by configurations exists on another level. The former, to some extent, forms the basis of the narration, while the latter contains the multiple realizations that the narrative program can have (Greimas refers to this as a discursive dictionary, understood as a stock of themes and motifs) (Greimas 1984). In other words, the configuration allows for permanence of a specific theme in the text through various articulations. Just as the Greimasian configuration "incorporates all the figures [...] that can associate"2 (Greimas 1984) the configuration in our research will constitute a theme capable of encompassing the diverse articulations it can associate. However, there is a significant difference between the traditional narrative model identified by Greimas and the serial model proposed by us: in the former case, the configurations encompassing different figures are integrated into the pre-established narrative path, whereas in the latter case, they become the narrative engine and generate the narrations. Following this reasoning, it is as if the process is reversed: in the traditional model, an abstract level is given first and then a more concrete one, whereas in the serial model, the abstract can be deduced from the concrete. In the case of Covid, for example, having a configuration of this type implying a series of realizations (which we will later see as *sub-codes*) results in the generation of a series of different narratives that we could define as a narrative path. As for the TV series, or rather the Narrative Ecosystems, the theme takes on a narrative role: the hypothesis behind the research project is that not only the themes are able to generate narrative arcs, but that they perform this action by entering the characters and producing an embedding.

From a textual point of view, in this context, Covid will be referred to as isotopy. Indeed, with reference to this case study it is possible to talk about

¹ My translation.

² My translation.

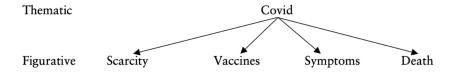


FIGURE 1
Distinction between thematic and figurative level applied to the Covid case study.

thematic and figurative isotopies: (I) the Covid theme can be considered the thematic isotopy, located at a deeper and more abstract level, which is responsible for subjecting the figurative elements to place them in relation to each other; (II) to this last isotopy correspond several sub-themes that can be defined as figurative isotopies, declined in a more concrete way (Greimas and Courtes 2007).

The Covid isotopy is found in the text through the actualization of different situations: the symptoms of patients and professionals, the scarcity of medical materials, the change in human relations due to the pandemic. These elements, which are defined as sub-themes or figurative isotopies, are identified in the analysis process as sub-codes described in the Methodology section. In a more practical perspective, in this analysis we refer to the term isotopy in a narrative sense, so its meaning will be analogous to that of the term general plot.

In summary, on the one hand we will have a more general plot, the Covid one, and on the other more specific subplots, such as the scarcity of medical material, the symptoms of professionals and patients, or in other words the declinations through which the theme is manifested. The important point to note is that they are considered part of the theme, and of its relative manifestations, the only elements that contribute to its narrative development.

Finally, at this stage of research, character embedding has been loosely formulated as a hypothesis. For this reason, during the analysis of the material we will proceed with the annotation of the characters, but the results will not be processed.

This contribution is then guided by two main research questions:

RQ1: Is it possible to quantify the narrative biomass of Covid isotopy? In the ecological field, the word *biomass* typically refers to the total mass of living organisms within a given area or ecosystem. Then, translating the term into serial context, it can be understood as the

collective body of narratives, stories, characters and storytelling elements that exist within a specific narrative ecosystem. Quantifying the narrative biomass of Covid, consists in the estimated measurement of isotopy within the narrative development and in the identification of its declinations.

RQ2: Is it possible to quantitatively correlate the Covid isotopy with the main narrative isotopies?³

The goal is to demonstrate how the Covid theme is distributed on the main narrative lines and obtain formulas that describe the different declinations of the theme. A first hypothesis is that the pandemic, according to the TV series considered, could be represented in a pathetic (sentimental plot), professional (professional plot) or environmental (medical cases plot) key.

Corpus

The corpus was selected considering the seasons dealing with Covid and its effects from four medical TV series of the USA prime-time: *Chicago Med* (NBC, 2015-), *Grey's Anatomy* (ABC, 2005-), *New Amsterdam* (NBC, 2018-), *The Good Doctor* (ABC, 2017-). The series have some elements in common that motivate the choice: (I) all pertain medical genre, (II) all belong to the USA prime-time, (III) they are different products in narrative terms so allow to grasp the different declinations of the theme. To conduct the quantitative content analysis, a dataset with the related codes was first built (Table 1).

Within the selected corpus, we then proceed with a distinction between episodes that represent events that take place in the middle of a pandemic and those that are set after the vaccines administration, period in which measures are still taken in order to contain Coronavirus and there are explicit references to the pandemic. The episodes of *Chicago Med* included in the corpus take place almost all in the height of the pandemic in which Covid departments are still active and the doses of vaccine are still to be distributed, event that occurs in episode 06x05. In the TV series *New Amsterdam* only the first minutes of episode 03x01 are devoted to the narrative of the emergency, so the episodes of the third season will be entirely placed in

³ Pescatore and Rocchi (2019) identified three narrative isotopies: sentimental and professional plot, belonging to the running plot, and medical cases plot, belonging to the anthology one.

TV series	Initials	Pandemic	Post Pandemic	
Chicago Med	CM	06x01 "When Did We Begin to Change?" 06x02 "Those Things Hidden In Plain Sight" 06x03 "Do You Know the Way Home" 06x04 "In Search for Forgiveness, Not Permission"	06x05 "When Your Hearth Rules Your Head"	
Grey's Anatomy	GA	17x01 "All Tomorrow's Parties" 17x02 "The Center Won't Hold" 17x03 "My Happy Ending" 17x04 "You'll Never Walk Alone" 17x05 "Fight the Power" 17x06 "No Time for Despair" 17x07 "Helplessly Hoping" 17x08 "It's All Too Much" 17x09 "In My Life" 17x10 "Breathe" 17x11 "Sorry Doesn't Always Make It Right" 17x12 "Sign O' the Times" 17x13 "Good as Hell" 17x14 "Look Up Child" 17x15 "Tradition" 17x16 "I'm Still Standing" 17x17 "Someone Saved My Life Tonight"		
New Amsterdam	NA		03x01 "The New Normal" 03x02 "Essential Workers" 03x03 "Safe Enough" 03x07 "The Legend of Howie Cournemeyer" 03x09 "Disconnected"	
The Good Doctor	TGD	04x01 "Frontline: Part 1" 04x02 "Frontline: Part 2"	04x03 "Newbies" 04x06 "Lim" 04x09 "Irresponsible Salad Bar Practices"	
TOTAL		23 episodes	9 episodes	

Table 1

Corpus TV series, related codes and distinction between Pandemic and Post Pandemic episodes.

the "Post Pandemic" category. Unlike the other products mentioned, *Grey's Anatomy* has dedicated an entire season (S17) to pandemic, focusing mainly on the character of Meredith Grey. The first two episodes of the fourth season of *The Good Doctor* fully fall into the category "Pandemic" and describe the work in front line during the emergency. A speech by actor Freddie Highmore in the third episode announces the end of the pandemic, even though residual elements have subsequently appeared.

Quantitative Content Analysis: Coding Covid-19 Isotopy

The methodology chosen is quantitative content analysis, widely used in the context of media (Alexopoulos, Gamble 2022, Barker et al. 2020, Chapoton et al. 2020, Sink and Mastro 2017). This methodology allows a large number of data to be collected, indexed and mapped, and then reduced and interpreted (Elliott 2018). Indeed, as far as audiovisual products are concerned, the material often includes high playing time that is difficult to analyse in other ways. Moreover, it is good to note that in quantitative analysis, the collection of the dataset is only the first step: it is fundamental, then, the interpretation of the corpus and the elaboration of data-driven theories.

The working field on which the analysis will be conducted is an Excel sheet, where the different data to be collected will be reported.

STAGE 1. Code and sub-codes definition. The analysis starts from the notion of code, defined as "labels that assign symbolic meaning to the descriptive or inferential information compiled during a study" (Miles et al. 2014: 71) or as "symbolically assigns a summative, salient, essence-capturing and/or evocative attribute for a portion of language-based or visual data" (Saldaña 2014: 4). The coding process that has been carried out is an emergent coding, so data collection has started without a pre-specified set of codes. Indeed, if the main code (Covid) was immediately identified, the sub-codes were detected throughout the viewing of the product, partly relying on material already published (Baños et al. 2022). The reason is to be traced in the fact that, despite some of the situations attributable to Covid are intuitive and similar in all products, some declinations of the theme are unique.

Sub-theme	Sub-code	Example	
Covid protocols	C1	Triage	
Covid effects on mental health	C2	Mental breakdown	
Symptoms of professionals or patients	C3	Cough	
Scarcity of medical supplies	C4	Lack of meidicines or masks	
Death of professionals or patients	C5	Cardiomiopathy	
Human relationships modified by Covid	C6	Videocall	
Vaccines	C7	No vax	
Impact of Covid on the hospital system	C8	Promotions	

Table 2
List of COVID sub-themes, related sub-codes and examples.

The following sub-codes⁴ emerged from the selected episodes (Table 2). The first subcode is the most generic one and refers to all protocols put in place to contain the virus and standardize procedures in the hospital, then triage before entering the emergency room, the distribution of protection devices to medical personnel, and the administration of swabs. The second (C2) takes into consideration all the consequences that the pandemic has had on the mental health of both doctors and patients: mental collapse after the death of a patient, PTSD, and problems in returning to post-Covid normality. Subcode C3 covers the more strictly medical aspects, in particular contagion, virus symptoms or healing. The other subcode related to the disease itself is C5 which refers to the death of professionals and sufferers both due to direct symptoms of the virus, such as lung failure, and indirect ones from long Covid. In addition to these, also the subcode of vaccines (C7) is part of the medical sphere and includes discussions on vaccines, cases of non-vax people or vaccination campaigns. All cases of the scarcity of medical supplies, such as the lack of masks or tampons, but also the difficult finding of drugs, fall under sub-code C4. More related to the sentimental aspects is C6, the subcode of human relationships modified by Covid, i.e. video calls, love stories that become long-distance, and problems in contact with other people. As for the professional sphere, the consequences of the pandemic, both career advancements, redundancies, and transfers, have emerged.

⁴ In this context, we will refer to the terms "sub-themes" and "sub-codes" as synonyms since the former represent the manifestations of Covid in full, while the latter are a simplification to facilitate the writing of the chapter.

Exclusion Criteria

Some elements will not be classified through Covid isotopy for two concurrent reasons: (I) when an element integrates into the environment, but does not contribute to its development, it cannot be counted among the isotopy declinations; (II) the theme is not made explicit and consequently has a marginal narrative impact, if not absent.

Here are some examples:

- Masks as a simple protective device in post-pandemic episodes. If there is a segment where two doctors are in the emergency room and are still required to wear masks, but they are dealing with a medical case involving a firearm victim who has nothing to do with Covid, it will not be classified.
- Routine Covid tests before admission to the emergency room even after the pandemic. If a segment sees a patient go to the hospital for suspected diabetes and before being admitted is declared negativity to the Covid test, it will not be classified.
- Word "pandemic" as a mere temporal reference. If a segment includes a conversation between two doctors, which refers to the pandemic as a period of time without it giving rise to a speech on Covid, it will not be classified.

STAGE 2. Units of analysis. The first step of this protocol foresees the definition of the units of analysis that will be classified, in a second moment, through the sub-codes of the Covid theme. Considering the second research question that involves the attempt to correlate the Covid isotopy to the main isotopies, it was considered appropriate to use the dataset collected by Rocchi and Pescatore in the wider framework of research on Narrative Ecosystems (2022). The two scholars defined as units of analysis, which they call segment, "a specific portion of the audiovisual product that is characterized both by space-time-action continuity and invariance in the thematic narrative elements (i.e., isotopies)" (Pescatore and Rocchi 2022). The method involves the breakdown of the narrative material manually determining the start and end time of each segment and, therefore, its extremes must be reported in the columns reserved for playtime. Each segment must then be assigned a code (professional plot, sentimental plot or medical cases plot) and each of them can be assigned a value (weight) between 1 and 6. The ideal situation sees a portion of video assigned to a single code, but in practical research we are often faced with segments that see an overlap of codes. This procedure allows to obtain two results: (I) to correctly identify the narrative biomass of Covid, (II) to make the comparison between Covid isotopy and main isotopies using the same units of measurement.

STAGE 3. Character record. In this phase of the research, the character record is useful to identify the entry point of the selected theme. In a wider framework, marking the character can allow the researcher to verify the narrative arcs that the theme is able to generate. As we previously mentioned, the data will be reported in an Excel sheet: therefore, in the column "Character" the name of the character present on screen and involved in the theme must be noted.

Three types of character have been identified:

- 1. Main character. It is to be considered as belonging to this category every recurring character who has a strong importance within the narrative (e.g., doctors protagonists);
- 2. Recurrent character. This category includes characters who appears from time to time during the series' run: in some cases, they appear for one or a few episodes, in others even during multiple seasons (e.g., doctor who appears in a few episodes, partner of one of the doctors);
- 3. Guest. The characters in the episode cases belong to this group.

If there are two or more characters, they must be marked in different columns to facilitate analysis.

Here two examples:

- If only Max Goodwin is on stage, the character's name will be marked in the first column.
- If the scene sees a dialogue between Max Goodwin and Iggie Frome, the first name in the first column and the second one in the next column will be marked.
- When the segment is not about the theme, the character does not have to be marked and therefore it will be enough to enter a 0.

STAGE 4. Attribution of code and value. Based on the segments previously assigned to the three main isotopies (professional, sentimental and medical cases plot), one or more sub-codes of the Covid isotopy (code) should be assigned. For the assignment, you will have 8 columns of the sub-codes

illustrated in Table 2: Covid protocols (C1), Covid effects on mental health (C2), Symptoms of professionals or patients (C3) Scarcity of medical supplies (C4), Death of professionals or patients (C5), Human relationships modified by Covid (C6), Vaccines (C7) and Impact of Covid on the hospital system (C8). The segment will then be assigned to the sub-code whose theme is closer to the events represented. In some units of analysis, the subthemes present could be more than one: in this case, there will be an overlap of sub-codes.

To assign the sub-code, it is necessary to give a value to each segment. The first issue concerns how value should be assigned considering two aspects: the narrative development and time. First, the researcher should assess how much the segment contributes to the syntagmatic development of the Covid theme. In addition to this, the researcher should evaluate the time devoted to the topic within the segment. In fact, if time can usually be considered a valid indicator, not in all cases it is exhaustive. The range of values goes from 0, when the theme completely absent, to 6,5 when it is strongly relevant in narrative terms.

The maximum value is therefore equal to 6, but the Covid isotopy is not necessarily exhaustive, unlike the others, and therefore a total value less than 6 can be assigned. This is because it is not said that the entire playtime of the segment is dedicated to the theme. In fact, the residual value (if any) must be recorded in a separate column, called "NT". When overlaps occur, the value must be distributed among the different sub-codes involved.

Here two examples:

- Death of a patient because of Covid. If during the episode the course of a patient's pathology is followed and the segment (60s) showing his death arrives, during which, for example, doctors try to revive him and relatives cry on video call, it will have a value of 6.
- Debate on the future of a relationship. If two doctors talk about their relationship and, among the problems, they mention the difficulties dictated by the pandemic, the segment in which the situation occurs (60 s) then will be worth 2.

⁵ This range of values has been chosen to make the analysis of the Covid isotopy homogeneous to that of the other isotopies.

⁶ In the context of broader research on themes as narrative engine, the "Non-Thematic" also includes overlaps with other topics, such as abortion, racism, eating disorders etc.

STAGE 5. Conversion of value in time. The conversion of the value in weighed time serves to reach two goals: calculate the time dedicated to each sub-code and the time dedicated to the Covid code. Thereby to proceed with the first purpose, values from 0 to 6 assigned to sub-codes must be converted in time. The latter is obtained by putting in proportion the value of one or more sub-codes with the time of the segment. Instead, if the focus is on the theme in its entirety, before proceeding with the proportion the values distributed on more sub-codes will have to be added. From this data, it is then possible to obtain the time of Covid isotopy and its sub-codes in each episode (and season) and compare it with the non-thematic material.

STAGE 6. Correlation of Covid isotopy with main plots. At this stage, the weighed time of segments dedicated to Covid will already be known after applying the proportion. Through a second proportion it is then possible to quantify the time of the individual segments devoted to Covid distributed on the value of the isotopies. Finally, we proceed with the addition of the time of the Covid isotopies distributed on the other isotopies within the single episode and then the entire season.

The last step of the work involves the identification of narrative formulas that can qualitatively describe how the Covid theme is depicted within the series under examination. As mentioned in the introduction, it can be assumed that the representation can be in a pathetic, professional or environmental key. In the first case, the theme will be mainly related to the sentimental plot of the series: will then be shown more the relationships modified by the virus, any loss of the main characters, moments of personal crisis. If the professional plot prevails, the formula will be professional and consequently there will be more emergency situations in the hospital, promotions or dismissals due to the pandemic, but also systemic difficulties in finding drugs. Finally, the environmental formula will be that in which the Covid theme is mainly based on the isotopy of medical cases. In this case will be more frequent scenes showing the actual pathology, operations on positive patients, intubations, cases of long covid.

Results

Covid Biomass: Covid Time on Total Time and Declinations of Subthemes Time

The first results to be evaluated are those of the time devoted to Covid isotopy on the total playtime of the episodes taken into account. As you can see in the chart below (Figure 2), in *Chicago Med* the Covid time in percentage is about 19%. More generally, this number is justified by the fact that, although the hospital management of the pandemic is represented (e.g., covid ward, remote medical visits), other narrative lines are simultaneously present: numerous medical cases, Dr. Hannah having a withdrawal crisis and the opening a new medical trial. As emerges from the coding, the first episode (06x01 "When Did We Begin to Change?") is the one with a higher percentage, precisely because the theme is introduced and contextualized. The negative peak is instead in the 6x03 "Do You Know the Way Home": the nurse Sexton is transferred from the Covid ward to the emergency room because of an incoming mental breakdown, Dr. Halsted is in the middle of trial management so he needs to find new patients, and Nathalie and Crockett are working on a case involving a kidnapped patient.

In *Grey's Anatomy* the percentage of Covid isotopy is a bit higher for a total of about 32%. The high value is mainly due to two factors: on the one hand, the whole season is dedicated to the theme and follows the course of the pandemic from emergency to return to normality; on the other the theme enters and is developed through some main characters, among which Meredith Grey and in minor part Tom Koracick and Miranda Bailey. The negative peaks are episodes 17x09 "In My Life" and 17x14 "Look Up Child" because the theme is almost absent: in fact, they are both filler episodes in which the personal stories of Teddy Altman (her past, her current PTSD after the death of De Luca and her relationship with Hunt) and Jackson Avery (his professional future and the relationship with his father) are deepened. The first positive peak is in episode 17x05 "Fight the Power" in which several characters are involved:

- Meredith Grey. In the previous episode Meredith has entered a state of unconsciousness and her symptoms have worsen.
- Tom Koracick. He is now positive at Covid and hospitalized and his health is improving.
- Miranda Bailey. Miranda learns that, after her mother tested positive

for Covid, she must be hospitalized. Her condition is so severe that a little later she will die because of the virus.

The second peak is at the following episode (17x06 "No Time for Despair") and involves the same characters:

- Miranda Bailey. She is facing the psychological consequences of his mother's death. However, she decides to stay and work, but too many things remind her of the loss she just suffered.
- Meredith. She continues to deal with the virus showing signs of recovery and awakening from unconsciousness. While she is still in intensive care, she intervenes during the cardiac arrest of a Covid patient, but the effort is too much and her health worsens once again.
- Koracick. Being admitted to the same ward as Meredith, he decides
 to go to her room to talk about how both are experiencing the virus
 and the situation in the hospital, despite the fact that the contact
 between patients it is forbidden by the protocols.

Distanced from the first two, the third peak is towards the end of the season, more specifically in episode 17x13 "Good as Hell" and is due to a variety of factors:

- It seems that there is no longer hope for the health situation of Meredith, but Winston comes up with the idea of taking her daughter Zola to the hospital to get a medical reaction. Weber and Altman, after a little resistance, agree, arrange the meeting and finally Meredith wakes up.
- The covid case of episode concerns a woman treated by Bailey and Schmitt.
- Amelia Shepherd tries to get back to work, facing surgery on a patient of Link, after the lockdown caused by the pandemic and the period of maternity.

As for *New Amsterdam*, only the first 4 minutes and 44 seconds of the first episode of the third season "The New Normal" are dedicated to the full Covid emergency: indeed, images of all the constituent elements of the pandemic are shown on screen, as the first cases, mental collapse of the medical staff, the administration of vaccines in the hospital. At a later stage, the theme reappears through the consequences of the virus and this explains a total value of the Covid isotopy, of 25%. As you can expect, the highest value at the episodic level, about 40%, is in the first episode and is decreasing (except for the episode 03x03 "Safe Enough") up to a value of 6% in episode 03x09 "Disconnected". It is interesting to note the increase in value

in episode 03x03 "Safe Enough" of 39% (compared to the previous 30%): the increase is due to the fact that (I) both medical cases refer to Covid and the consequences of the virus on people's habits; (II) Health Board asks Goodwin to record a promotional spot to entice scared patients to return to the hospital for checkups.

In the case of *The Good Doctor*, only the first two episodes are set in the months of the pandemic rush, in fact it is then announced by actor Freddie Highmore that starting from episode 04x03 "Newbies" the TV series imagines a future in which the virus is under control. However, the value of Covid isotopy equal to 41% because the first two episodes ,04x01 "Frontline: part 1" and 04x02 "Frontline: part 2", count respectively 84% and 60% of Covid on the total playtime and this rise the total percentage that is the highest. It is shown the beginning of pandemic by means of a patient who goes to the hospital for respiratory symptoms, after hearing about the new pathology that is spreading in China. Then there are the elements common to all the TV series under consideration: lack of ventilators and masks, death of patients and professionals, problems in long-distance relationships, slippage of scheduled surgeries. After the decrease of episode 04x06 "Lim" (3%), the next increase in 04x09 "Irresponsible Salad Bar



FIGURE 2
Percentage of Covid isotopy on total playtime of episodes selected of *Chicago Med* (CM), *Grey's Anatomy* (GA), *New Amsterdam* (NA) and *The Good Doctor* (TGD).

Practices" with a value of 18% is due to the focus on mental health of Dr. Lim struggling with a PTSD, caused by Covid, for which she begins to be treated with sertraline.

The chart in Figure 3 shows all the percentages of the presence of the sub-themes on the total Covid isotopy per series. As for *Grey's Anatomy*, emerge as the highest values the sub-code C2 of *Covid effects on mental health* (22%) and the sub-code C3 of *Symptoms of professionals or patients* (45%). As already explained in the previous section, Meredith Grey catalyzes the attention of the series with his hospitalization (as well as Tom Koracick). However, not only the protagonists are shown positive at Covid. Several patients are in fact treated for the virus, such as the nurse in episode 17x17 "Someone Saved My Life Tonight" who is discharged but suffering from side effects, is hospitalized again and operated by Grey and Altman. Particularly low is the C4 (*Scarcity of medical supplies*) sub-code's value (1%) whose declensions can be traced back to Koracick's wrong order of masks in episode 17x01 "All Tomorrow's Parties" and Pierce's idea of ventilators sharing in episode 17x10 "Breathe".

As in the case of *Grey's Anatomy*, also in *Chicago Med* the two sub-codes that have the highest values are C2 (33%) and C3 (33%). This product, even before Covid, often had the focus on mental health and sees the presence of Dr. Charles in several medical cases: in the episodes dedicated to the pandemic, the psychiatrist invites all colleagues to a therapy session to talk about the psychological relapses of the virus, both in the personal and professional field. The strong presence of the sub-code C3 is motivated by the focus on the Covid ward: Dr. Choi, Dr. Lanik and in particular



Percentage of Covid isotopy on episodes of *Chicago Med* (CM), *Grey's Anatomy* (GA), *New Amsterdam* (NA) and *The Good Doctor* (TGD).

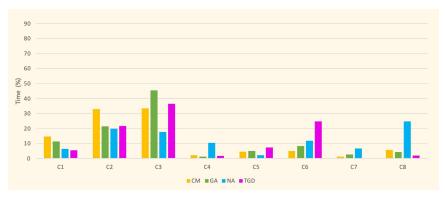


FIGURE 4

Percentage of sub-codes on Covid isotopy *Chicago Med* (CM), *Grey's Anatomy* (GA), *New Amsterdam* (NA) and *The Good Doctor* (TGD). The sub-codes in the y-axis are as follows: *Covid protocols* (C1), *Covid effects on mental health* (C2), *Symptoms of professionals or patients* (C3), *Scarcity of medical supplies* (C4), *Death of professionals or patients* (C5), *Human relationships modified by Covid* (C6), *Vaccines* (C7) and *Impact of Covid on the hospital system* (C8).

Nurse Sexton work intensively to beat the pandemic during which they lose many patients and discharge others. The sub-code with the lowest percentage (1%) is C7 (*Vaccines*), because the theme is only mentioned in episode 06x05 "When Your Hearth Rules Your Head" through Dr. Halstead.

Unlike all other series, *New Amsterdam* reports the highest value (25%) in sub-code of *Impact of Covid on the hospital system* (C8): it focuses, in fact, on the damage to the hospital system caused by Covid (e.g., delays in checkups with relative worsening of patients' health, inability to provide psychological support in presence) and on the career of professionals (e.g., the return of Reynolds from San Francisco). Value that instead seems to be in line with the other products is instead that of C2 (20%): this theme finds its expression especially in the difficulty of returning to normality after the complex period. The sub-code of *Death of professionals and patients* (C5) has a value of 2% which is distributed in the first two episodes in which images or verbal references to hospital deaths during the pandemic are shown.

The results of *The Good Doctor* are consistent with previous ones. The sub-code C3 is in fact the highest, with a value of 37%, and focuses on the first episodes that see the team at the frontline. It is necessary to emphasize the sub-code C6 (*Human relationships modified by Covid*) that is in the second place with the 25% of presence: some relationships become long-dis-

tance, such as that of Lia and Shaun, and others become complicated, as in the case of Park with Mia and their son. To be noted, the sub-code related to vaccines (C7) that is completely absent.

Covid Isotopy Correlation with other Isotopies

The last step of the results evaluation requires the identification of narrative formulas that can qualitatively describe how the Covid theme is distributed on the main isotopies, professional, sentimental and medical plot, within the series under examination. Three types of representation are expected: pathetic, professional or environmental. However, account must be taken of the fact that the formulas may not be so clear-cut and may show overlaps.

Starting from *Chicago Med*, the distribution of the Covid theme focuses on the isotopy of medical cases with a value of 48%. The data are justified, as previously said, by the fact that the most present codes are those of the effects of Covid on mental health and the symptoms of patients and professionals: these two sub-themes involve both the characters defined as "guest", and consequently the medical cases of episode, both the main characters which, in case of symptoms, involve not only the sentimental sphere but also the medical one (i.e., an overlap of sentimental and medical cases plots. The remaining time is almost equally distributed over professional (22%) and sentimental (29%) isotopies.

Two TV series feature a prevalence of Covid isotopy on the sentimental one: Grey's Anatomy (47%) and The Good Doctor (48%). As regards the first one, there are several elements that motivate the data: as for Chicago Med, the most present sub-codes are C2 and C3, but there are more main characters who get sick (e.g., Weber, Grey, Koracick) or who have relatives tested positive to the virus (e.g., Bailey). In addition, the sentimental plot is called into question by the many mental breakdowns of the professionals: Koracick in the first episode after he noticed not to have ordered correctly the masks, Bailey after the death of his mother, Hunt after having lost so many patients whose death he have to communicate to the families or still, Maggie struggling to work knowing her sister might not wake up from her coma. For reasons already explained above, the percentage of the Covid theme on that of medical cases is quite high (36%). However, the value of the Covid isotopy on that of medical cases with 36% remains very high due to the frequent overlaps between sentimental and medical cases plots during the pathology of Meredith and Koracick and the constant presence of hospitalized Covid patients.

From the coding of *The Good Doctor*, it emerges that the first data, the sentimental plot, is very similar to the previous series: in this case, however, it is also due to the code C6 that signals the human relationships modified by the pandemic. Murphy and her girlfriend are forced to face a long-distance relationship because Lia is not a first-aid worker and, like everyone else, must be in lockdown. Dr. Park already had a long-distance relationship with his wife Mia and their son: the impossibility of travelling caused a break between the two spouses and misunderstandings between father and son. Finally, Glassman and his wife whose forced coexistence in lockdown causes quarrels: on the one hand, he is not accustomed to give up work and on the other, she does not respect his spaces and wants to spend time together. Very high also the value of C/MC (45%) concentrated in the first two episodes which we have already discussed.

The last product investigated is *New Amsterdam*. The Covid theme falls mainly on the professional plot (38%): the distribution is consistent with the prevailing code, C8, which summarizes the impact of the pandemic on the health system. At only four percentage points, the value of the Covid isotopy on the sentimental one (34%) that could be explained by the presence of mental health and relationships (both couple and parental) that undergo changes.

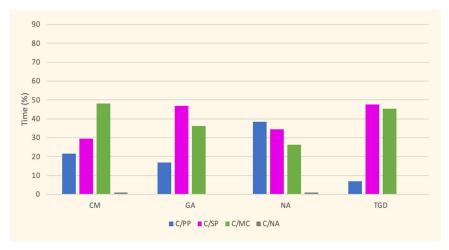


FIGURE 5
Percentage of Covid Isotopy (C) on Professional plot (PP), Sentimental plot (SP) and Medical Cases plot (MC) of *Chicago Med* (CM), *Grey's Anatomy* (GA), *New Amsterdam* (NA) and *The Good Doctor* (TGD).

Based on the results described in the previous paragraph, it is possible to assume the following narrative formulas:

- Pathetic. The depiction of pandemic mainly includes the declinations of the sentimental plot, such as couple relationships, friendships or personal crisis. Both *Grey's Anatomy* and *The Good Doctor* fit this description.
- Professional. The focus is on the aspects of management of the pandemic by hospitals, the social injustices caused by the virus on the most marginalized classes and the consequences of Covid on the health system. This representation can be found in the TV series *New Amsterdam*.
- Environmental. The theme is represented from the medical point of view, with the focus on the anthological plot, and includes a more frequent presence of characters called "guest". In this category falls *Chicago Med*.

It should be noted that, referring to the work of Rocchi and Pescatore on US medical dramas (2022), the results of the representation of the Covid theme and its distributions on the main isotopies are consistent with the narrative formula of the series under consideration: *Chicago Med* is part of the Doctors and patients formula, *Grey's Anatomy* belongs to that Soap one and *New Amsterdam* to the Social one. The only exception is *The Good Doctor*, but the two researchers in the paper mention a possible reversal of narrative trend that could bring this series closer to *Grey's Anatomy* (Rocchi and Pescatore 2022).

Conclusions

In conclusion, this chapter has provided valuable insights into the analysis of the Covid-19 theme in medical TV series, specifically focusing on *Chicago Med, Grey's Anatomy, New Amsterdam*, and *The Good Doctor*. The research aimed to quantify the narrative biomass of the Covid isotopy, correlate it with the main narrative isotopies, and identify the distribution of the theme on the professional, sentimental, and medical plot. The findings shed light on the different representations and formulas used to depict the Covid theme within the series.

The results show that each series has a unique approach in representing the theme of Covid-19. *Chicago Med* mainly focuses on the medical plot,

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highlighting the effects of Covid on mental health and the symptoms experienced by patients and professionals. *Grey's Anatomy* and *The Good Doctor* display a predominance of the sentimental plot, exploring the impact of the virus on relationships, personal crises, and mental breakdowns. *New Amsterdam* primarily emphasizes the professional plot, delving into the consequences of the pandemic on the healthcare system: this led to the identification of the narrative formulas that reflect the characteristics just illustrated. It is then important to note that these results are only a first taxonomy, but they need to be deepened. However, these findings align with the narrative profiles identified by Rocchi and Pescatore (2022) in their research on US medical dramas, even though *The Good Doctor* deviates slightly from the expected formula, suggesting a potential narrative trend reversal that could align it more closely with *Grey's Anatomy*.

Looking forward, future perspectives involve expanding the analysis to other themes present in medical TV series and measuring their presence within the narrative. In addition, once the corpus has been expanded, it is proposed to refine the narrative formulas to obtain a more accurate description of products of the medical genre. Finally, efforts will be made to develop a protocol that traces the narrative arcs generated by the themes and the characters embedded within them. These future endeavors will further enhance our understanding of narrative ecosystems and the evolution of narration within the medical drama genre.

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14. Screening Gender Medicine

Health and the Gendered Body in Recent US-Based Medical Dramas and Dramedies

Rosa Barotsi, Clio Nicastro and Roberta Martina Zagarella¹

■ ABSTRACT

In recent years, awareness of sex and gender inequalities in healthcare has been gaining momentum, following a number of paradigm-shifting developments in the bioclinical and cultural fields. Although not immune to complexity, gender medicine has led to a number of positive steps towards a more nuanced understanding of healthcare inequalities based on sex and gender. The effects of those discoveries on the way popular culture represents and narrates gendered health are already visible. Yet medical dramas, which might seem like an ideal vehicle for gender medicine communication, occupy an uneasy position in relation to it. After an introduction to gender medicine from a bioethics perspective, this chapter will proceed through a number of close readings of specific scenes from recent medical dramas and other genres of seriality to examine two broad gender medicine examples: women's cardiac events, and eating disorders. Through the encounter between the medical drama format and gender medicine-related patient cases, our analysis foregrounds the importance of the question of temporality in accounting for complexity in the audiovisual representation of health and illness.

KEYWORDS

Gender-specific medicine; TV series; women's heart attacks; eating disorders; temporality.

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Gender Medicine - An Overview²

In recent years, awareness of sex and gender inequalities in healthcare has been gaining momentum, following a number of paradigm-shifting developments in the biomedical and cultural fields. Some significant developments, in this sense, have been the birth and consolidation of the field of gender medicine in the 21st century,³ which places attention upon the impact of sex and gender on human pathophysiology; and mobilisations by women and queer people around the world against the abuse of power by men, most famously in the film industry, and the effects of those abuses on mental and physical health. Gender medicine, itself partly influenced by the long tail of the feminist women's health movement of the 60s (Shai et al. 2021: 7), has led to a number of positive steps towards the elimination of healthcare inequalities based on sex and gender: after much lobbying and research, for example, it is now common knowledge that part of the reason why women die of coronary heart disease at a much higher rate than men is due to treatment and assessment bias, as well as failing to account for the different symptomatology of this pathology between the sexes (Khamis et al. 2016: 1144-47).

Since its recent birth at the turn of the century, gender medicine has brought much needed attention to the importance of sex and gender for health and medical knowledge more generally (see, for example, Garattini and Banzi 2022). Gender medicine, which focuses, according to one definition, on the "impact of gender on human physiology, pathophysiology, and clinical features of diseases" (European Society of Gender Health and

² Parts of this introduction have been adapted from Rosa Barotsi (2019).

³ For an overview of this process of institutionalisation in the case of Italy, for instance, see Istituto Superiore di Sanità, EpiCentro – Epidemiology for Public Health (2021).

⁴ The World Health Organization recognizes that "discrimination against women and girls can lead to ill health" (World Health Organization 2022).

Medicine), has led to invaluable insights regarding previously unknown differences in the way people exhibit symptoms, are diagnosed, and respond to therapies.

Although a positive step forward, gender medicine has not been immune to complexity, as the definitional work around the term itself demonstrates. Whilst some, as in the example above, define gender medicine solely in biomedical terms, others understand the latter as deeply intertwined with sociocultural health aspects: "Gender-specific medicine is the study of how diseases differ between men and women in terms of prevention, clinical signs, therapeutic approach, prognosis, psychological and social impact" (Baggio et al. 2013).

A potent example of how gender medicine has at times (unwittingly?) reinforced the gender and dimorphic biases that it was, in principle, created to address can be seen in pediatrician George M. Lazarus' description of the scene that sparked his interest in gender medicine, in his contribution to one of the first textbooks in the field, *Principles of gender-specific medicine* (2004):

[At an outdoor concert he attended,] the girls danced, ballet-style, to the music. The boys chased and tackled each other like little football players. No one told the children how to play. They just did what came naturally and there was no cross-over behavior between the boys and girls (Lazarus 2004: 2).

This kind of medical attention to difference is similar to the one we are used to seeing employed to reinforce hierarchies of race and gender. Historically, this has been the case with the junk science produced in 18th- and 19th-century Europe and the US to justify the institution of slavery on the basis of the biological inferiority of non-white races (Epstein 2008: 36-7) or to deny women suffrage during moments when progressive political possibilities were threatening patriarchal authority (Shai et al. 2021: 7, Oudshoorn 2003: 22, Barrows in Lacquer 1987: 18). The idea of fundamental sexual differences as fixed in the body has therefore been employed many times in the recent past and present to naturalise social inequalities (Epstein 2008: 34). Finally, as trans and non-binary activists point out, a sex-segregated health system risks turning gender medicine into "two-gender medicine", which adds barriers to non-dimorphic people's access to healthcare (Snelgrove et al. 2012).

As these examples suggest, an approach to healthcare that takes difference into consideration must be particularly careful to bring to light is-

sues such as inherent bias, access, communication, language, and cultural competence. The risks of a pure logic of difference that does not take into account sociopolitical factors but presumes to be based on purely biological ones (under the false assumption that biological factors are in some way completely separate to the sociopolitical context) are immense (Hamberg 2008). We know, for example, that women with cardiovascular problems may tend to underreport basic symptoms such as chest pain for social reasons (Richards et al. 2002); that women have a higher rate of orbital fractures, which might be explained as a result of domestic violence (Goldberg et al. 2000); and that lesbian women have a higher rate of breast cancer, which might be explained by their higher reluctance to visit doctors for regular checks out of fear of being mistreated by medical staff (Epstein 2008: 270). The numerous social factors that result in health differences between men and women are often overlooked in gender medicine (GM) research. As Shai et al. report, for instance,

GM publications quote observational studies according to which women suffer from more cardiac sequelae after acute coronary syndrome (ACS). However, a recent study demonstrated that gender roles, such as being the primary provider, employment, and household responsibilities, rather than sex, are those associated with prognosis after ACS [...]. Searching for these variables and their significance to health, instead of using sex as a proxy for their values, would benefit personalized medicine (Shai et al. 2021).

Gender Medicine and Medical Dramas

The institution of gender medicine is, in many ways, a step towards health-care equality. But as the examples above demonstrate, it can only function as such if it does not take its role as self-evident, and its assumptions as objectively inviolable. In other words, the mere fact that such a thing as gender medicine exists does not hinder sociocultural bias against women, non-binary and non-cis people from continuing to influence its conclusions. The concept of difference⁵ is a particularly potent example of this – as a strictly

⁵ In the contemporary debate, an author who insists on interrogating the complexity of 'difference' is Italian feminist, journalist, and philosopher Ida Dominijanni. Dominijanni understands 'sexual difference' neither as a mere biological marker nor a solely cultural construction, but rather as the socio-symbolic trait that inherently defines human exist-

biomedical category, it involves great risk from a social-justice point of view. Conversely, as a biopolitical project, it can lead to complex and nuanced discussions regarding issues such as self-determination, minority rights, and state policy. *How* we think about and visualise difference is, in that sense, of immense importance in the era of gender medicine.

As Kara Keeling points out, our bodies often exceed the schemas available to represent them (Keeling in Halberstam 2018: 88). The ways in which representations organise social reality can be rigid and prescriptive, for example in the way in which they describe female and male bodies as opposite to and complementary with each other. But they can also be disturbed and changed by those who do not see themselves reflected in them. It is therefore crucial to understand how that relationship functions and evolves, as changes led by different interest groups – new discoveries by the biomedical community, the fight against misrepresentation by different social groups reforms that promote equal access to healthcare by institutions – impact our collective visualisations of health and illness.

We suggest that gender medicine is compromised by the incomplete project of an interdisciplinary dialogue between the biomedical field and areas of thought that include feminist science studies, gender and queer studies, media and cultural studies, and philosophy. The absence of meaningful communication between these fields disallows gender medicine from acquiring an expanded view of itself as part of larger social structures (Shai et al. 2021: 8). It has long been recognised that cultural representations of medical practices and institutions and their reception is a fundamental part of understanding the relationship of medicine and healthcare to the societies they are embedded in and which they help shape (Lupton 1994, Gilman 1988). But there has been very little research into how visual culture has reflected, promoted or understood the recent gender medicine developments.

Within that visual culture, and especially popular visual culture, medical dramas should offer themselves as particularly fruitful vehicles for gender medicine communication. Medical dramas are one of the most popular televisual genres; they often feature medical doctors on their screenwriting teams; and research has confirmed their influence on the public's perception

ence. According to Dominjanni, 'sexual difference' emerges from multiple dimensions: the social and the psychic dimension, cultural and unconscious processes, symbolic and imaginary realms. See Dominijanni (2012).

of medical assistance (Rocchi 2019: 72, 74). The hypothesis we are testing out in this chapter is that the basic format of the medical drama does not necessarily align well with the type of communication required for visualising the insights of a gender medicine that addresses the complex associations between sex, gender, and health (Shai et al. 2021: 8). Through the encounter between the medical drama format and gender medicine-related patient cases, our analysis foregrounds the importance of the question of temporality in accounting for complexity in the audiovisual representation of health and illness.

As researchers have pointed out, medical drama patient narrative arcs generally have to conclude within the confines of a single episode, and have to additionally compete for screen time with at least one other patient case, to accommodate the larger narrative arcs of the medical ensemble cast and their relationships. This is the paradox at the heart of the medical drama, according to some researchers: that "the very qualities that contribute to uniquely compelling enactments of medical scenarios also threaten to undermine their objective accuracy" (Goodman 2007). There is therefore usually not enough room for complexity and nuance in the presentation of many medical cases, whilst patient characters don't have enough time to develop into three-dimensional figures the way the medical doctors who are the protagonists of the series do. Additionally, the disease narrative arc remains largely within the confines of something along the following lines: symptom – diagnosis no.1 – crisis – diagnosis no.2 – resolution (cure or death).

As we will see in our examples, we find more nuance and complexity in the depiction of pathologies when the patient is one of the doctors who form part of the protagonist ensemble cast, since "the overriding narrative concern" of the genre is to foreground the relationships between the lead characters (Hart 2016). In this chapter, we will also try to suggest that it is not surprising that other formats and genres, such as dramedies, often do a better job of presenting medical cases where the recent lessons of gender medicine are more adequately addressed. This, as we'll see, comes down at least partly to the fact that we are not meant to identify with the medical gaze, but with that of the patient/(co-)protagonist, who is therefore programmatically and already a fully realised three-dimensional character when they encounter patient-hood.

Women's Heart Attack: Grey's Anatomy (ABC, 2005-) vs. Crazy Ex Girlfriend (The CW, 2015-2019)

We will base our analysis on episodes of two shows, *Grey's Anatomy* (ABC, 2005-) and Crazy Ex Girlfriend (The CW, 2015-2019), as examples of the ways in which popular culture has attempted to visualise the changing awareness surrounding women's heart attack symptoms in both the medical community and patients themselves. As noted in the introduction, heart disease in women constitutes a sort of prototypical case of gender medicine research and communication: it has been more than thirty years since researchers first concluded that symptomatology and therefore diagnosis, prevention and treatment of heart disease in women and men can differ significantly in ways that had been previously ignored (see Cutter 2012: 2). For instance, research demonstrating that low-dosage aspirin for primary prevention of cardiovascular events does not work for women (while the risks remain the same for both sexes) has been circulating at least since 2006 (Berger et al. 2006), and it has been at least ten years since the American Heart Association begun releasing attention-grabbing informational videos in which recognisable TV stars attempt to deconstruct the fallacy that women don't get heart attacks ("Just a little heart attack" 2012;6 "A man's world," 20147). Even though awareness that women are also vulnerable to heart disease has therefore been increasing over the past decades, it seems that the differences in the symptomatology of cardiovascular events in women is still struggling to become mainstream knowledge.

Our example from *Grey's Anatomy* stages the ongoing struggle, even within the medical community, to take into account the specificities of heart attack presentation in women, who may experience symptoms that are typically less associated with cardiac events, such as fatigue and indigestion. As we will see, the episode also tackles the intersectional complexities of medical bias when issues of gender, race and mental health are compounded.⁸

In episode 11, Season 14 of *Grey's Anatomy* (2018), "(Don't Fear) the Reaper", Miranda Bailey (Chandra Wilson), Grey Sloan Memorial Hospital's

⁶ https://www.youtube.com/watch?v=_JI487DlgTA.

⁷ https://www.ispot.tv/ad/7FWj/go-red-for-women-ceiling-crasher (Thank you to Thomas Scherer for this reference).

⁸ This bias is still confirmed in recent large-scale research into doctors' notes (cf. Markowitz 2022).

chief of surgery, realises she's having a heart attack. Her symptoms include indigestion, nausea, and stomachache. Reluctant to let her husband and colleagues know, she rushes to the emergency room of a different hospital. When her electrocardiogram comes back normal, the doctor insists her heart is fine and immediately begins a different line of questioning: "Any big stressors in your life?" Bailey, in the no-nonsense tone she is known for, promptly replies: "Do not go down that road with me: The road where a woman shows up in an ER with physical symptoms, and you decide that it must be that she's not able to handle all her feelings. No, this is not about anxiety. My secret heart doesn't need fixing. My actual heart needs fixing."

The scene is staged as an argument between two Chiefs of Surgery, one of whom is also a patient: Dr. Bailey, a Black woman, and Dr. Maxwell (Mark Moses), Chief of Surgery of the Seattle Press Hospital, a middle-aged white man who, we're told, has studied at Yale. Despite Dr. Maxwell's attempts to appease the patient, Chief Bailey insists on educating him (and us) about his blind spots regarding women's heart disease symptomatology: "Apparently your teachers didn't get the memo that women's heart attacks don't manifest the way they do in men. They're not all chest-clutching, vomiting, 'Help, my arm is numb,' boom, floor drop." Dr. Maxwell is shown to ignore Dr. Bailey's requests and insists on asking her about her stress levels and any medication she's on. At this point, the spectators are shown a flashback montage sequence of stressful events in Bailey's personal and professional life. As spectators of this debate, our willingness to believe Bailey might momentarily take a hit at this point: is Dr. Maxwell right to suggest that a highly successful person in this profession might be experiencing too much stress for their own good?

The news that Bailey also takes statins and antidepressants to manage an obsessive-compulsive disorder appears to further convince Dr. Maxwell (and perhaps some of the audience) that Bailey's issues stem from her mental health. This prompts Bailey to ask for a second medical opinion, as she realises her mental health diagnosis reinforces Maxwell's biased medical opinion of her condition. She retorts: "Yes, I have obsessive-compulsive disorder. I am not ashamed of that, but it's not my story. It's just one piece. And if you continue to look at just that one piece, if you check the mental illness box and refuse to look at anything else, then I'm not gonna live long enough to finish the rest of my story". Unsurprisingly perhaps, Maxwell appears to concede to Bailey's request for a second opinion, only to send a psychiatrist to follow up with her. At this point, undeterred, Bailey gives us an

explicit lesson in gender medicine, complete with stats: "Sixty-three percent of women who die suddenly from coronary heart disease had no previous symptoms, and women of color are at a far greater risk, so if I were consulting on the patient you describe, I would take into consideration statistics that would never even occur to people who look like you." The episode does not provide a conciliatory resolution, forcing Bailey to enlist the help of her colleagues Dr. Maggie Pierce (Kelly McCreary), a young Black doctor, and her mentor Dr. Richard Webber (James Pickens Jr.). Together they attempt to force Maxwell's hand by emphasising the importance of new protocols and non-conventional approaches to women's health, but it is the physical demonstration of heart attack symptoms Bailey eventually experiences in front of him that convinces Maxwell to allow her colleagues to rush her to the operating room for a life-saving procedure.

This example from *Grey's Anatomy* is interesting to compare with an episode from a different series that, although in some sense as far from the medical drama genre as possible, was born at least in part with the goal of discussing women's health issues. The musical dramedy *Crazy Ex Girlfriend* is, in fact, infamous for tackling underdiscussed aspects of women's mental and physical health in ways that have sometimes attracted accusations of didacticism (Pape 2019).

In episode 12 of season 4 "I Need a Break", which aired in February 2019, about a year after "(Don't Fear) the Reaper," the protagonist's best friend and sidekick, Paula Proctor (Donna Lynne Champlin), a woman in her early 50s who works as a paralegal and is studying for the Bar whilst raising two teenagers and doing pro-bono case work for incarcerated women, shows up for work understandably exhausted. As everyone insists on telling her how terrible she looks, she fires back with assurances that she's fine and all she needs is another cup of coffee. She exhibits symptoms that include excessive sweating and fatigue, which prompt the people around her to make a series of assumptions about what the issue might be: her work friend, drawing on her own experience, suggests she is going through menopause, her husband that she is working too hard. Finally convinced that she needs to visit her gynecologist, Paula wastes no time and asks him to prescribe her something that helps with menopausal symptoms so she can get back to work. The doctor (Kunal Dudheker) insists she tell him precisely what her symptoms are, at which point she lists the fatigue, hot flashes and sweating, along with achy arms and vomiting. To her surprise, the doctor asks her to describe the vomit ("kind of white and milky"). In a light-hearted tone the doctor then replies, as he picks up the phone to the ICU:

- Doctor: "Well, I'll tell you what. It is possible that you're starting to go through menopause, but I think you're also having a heart attack."
- Paula: "Ha-ha."
- Doctor: "Nope, not ha-ha. Not a ha-ha thing. [On the phone] I
 have a patient here who needs to go to cardiac ICU immediately."

We can make a couple of inferences based on this dialogue: from the doctor's reaction, we are meant to understand that the association between Paula's symptomatology and risk of heart attack is established knowledge in his field. From the patient's point of view, instead, the episode stages "common knowledge," as expressed by Paula and the people around her, as including (probably accurate) assumptions about menopausal symptoms – but not about women's heart attack symptoms. This is in opposition to the *Grey's Anatomy* episode, which stages an internal debate between two groups of doctors (on one side, a team of three white men, on the other, a group composed of two Black women and a Black man). In that debate, spectators are led to one of two conclusions: either that knowledge about these types of symptoms is not fully consolidated within the field; or that medical bias disallows this information from being taken seriously within parts of the medical community, affecting diagnostic ability to the detriment of women, and especially women of colour.

It is our contention that, as opposed to the medical drama format, where medical cases are typically presented, debated and resolved within the span of more or less a single episode, other genres, such as dramedies in the case of *Crazy Ex Girlfriend*, have the advantage of being able to develop character arcs over a much longer period, within which issues of mental and physical health can be nestled. This leads, naturally, to a kind of temporality of illness that allows for a much more nuanced and complex representation. It is not a coincidence, therefore, that the *Grey's Anatomy* episode we analysed earlier uses the vehicle of the doctor-patient who is a member of the ensemble cast in order to allow for that complexity to emerge. What we know about Bailey and her character, and what we are allowed to remember with her during the flashback scenes, helps us, as spectators, to better understand the force of her advocacy for her own health crisis. Having characters that spectators know and love experience these health crises is undoubtedly a much stronger tool in raising awareness about the importance of gender medicine. If this

much is true of heart attacks, with their relatively circumscribed temporality of presentation, it is even truer of eating disorders, which can be classified as chronic, and which require a multidisciplinary therapeutic approach. As we will see in the next section, we found very similar patterns in the choice of character-vehicles for eating disorder cases in medical dramas.

Medical Dramas and Eating Disorders

Eating disorders (EDs) constitute an emblematic example of how gender medicine issues are weaved into the narrative in medical dramas: the genre tends to reinforce the gendered construction of such disorders, by which patients are usually women and, furthermore, it appears to support our argument that nuanced representations of such medical issues almost always involve members of the doctors' ensemble cast. This transposition of EDs onto the medical staff curiously corresponds, as we will see, with a higher rate of men who manifest ED symptoms. Additionally, cases where a doctor is shown to suffer from an ED display more accuracy in the peculiar temporal dimension of such disorders. Time plays a key role in cinematic representations of eating disorders, especially because EDs require a long, multi-therapeutical approach, since they are mostly chronic illnesses subject to relapse, and in conflict with the daily routine of food intake. A comparison of medical, psychological, and sociological explanatory models of eating disorders shows that anorexia, bulimia, binge eating, and chronic dieting do not have a single cause, but this is not the sense one gets from watching most medical dramas that address them. As we will see, not eating is most often depicted as a tantrum, and in ways that stigmatise the patient. While there are some examples of male binge eating and bulimia in medical dramas, there are - to the best of our knowledge - no cases of male anorexia patients in this genre. Even though statistics show that anorexia, in particular, afflicts mostly women, the focus on a single affected constituency not only marginalizes afflicted minorities, but also hinders understanding of the complex and multifaceted nature of the disorder, on both an individual and social level. As recent studies have shown, men, who are increasingly affected by EDs (especially vigorexia, ortorexia, and anorexia), are often underdiagnosed, as the stereotypical idea that they are only girls' problems persists.

⁹ See Bartel (2020).

Furthermore, dysmorphia and EDs are present in queer communities where they can overlap with dysphoria, therefore making a sex-gender lens on the diagnosis and treatment of EDs even more crucial.¹⁰

In the four medical dramas we selected for our analysis of the portrayal of EDs – *The Good Doctor* (ABC, 2017-), *Chicago Med* (NBC, 2015-), *New Amsterdam* (NBC, 2018-2023), and *Holby City* (BBC One, 1999-2022) –, we encountered the persistence of gendered stereotypes in the patient narrative arcs, and less damaging and more nuanced depictions of such disorders only in cases where a doctor/co-protagonist is the person living with the condition.

In *The Good Doctor* (02x05) and *Chicago Med* (05x04), two anorexic female patients both arrive at the hospital in critical condition caused by being severely underweight after a life-long struggle with anorexia. The woman in *The Good Doctor*, Louisa (Reiko Aylesworth), needs to have life-saving heart surgery but she is too frail and debilitated. After failing to force-feed Louisa, Dr. Browne (Antonia Thomas) pushes for an experimental deep brain stimulation surgery. Following a debate on the multiple risks of this operation, including changes in her personality that could damage her emotional connection with her child, the committee and Louisa decide to go ahead with the surgery.

Throughout the episode, the anorexic character is presented exclusively as a mother and wife. We know nothing about the "biography of her symptom" (Nicastro 2022a) except that being pregnant was the only time she was able to force herself to eat, by looking at the ultrasound and visualising the food nourishing the baby instead of her. Both the family and the medical staff appear to ascribe her with the full responsibility of her eating behavior ("how hard can it be to eat" says the son) while at the same time reducing anorexia to a purely organic problem located in the brain. ¹¹ When she wakes up after the surgery, her very first words are "I'm hungry," confirming the success of the experimental medical procedure, to everyone's relief. But when she hugs her child something has changed: alone with Doctor Browne, the woman confesses this troubling perception. Despite "the successful surgery" we don't know whether Louisa has lost the capacity to feel.

¹⁰ See Sauer (forthcoming).

¹¹ We don't want to undermine or deny the psychiatric dimension of eating disorders but simply underline the mono-dimensional depiction of them that most medical dramas provide.

In *Chicago Med*, we find a similar stigmatization of the female anorexic patient, Allison (Morgan Weed), whose corporeality is morbidly exposed to us and the doctors, with the camera often dwelling on Allison's bony, frantic body. The first scene closes with the nurse covering the patient with a sheet in a way that anticipates her death at the end of the episode. When Dr. Choi (Brian Tee) asks the head of psychiatry for his support, the latter seems to detect from a distance that Allison is a "difficult" case of anorexia: the door of her room is open, and we see the woman lying in bed in the background. The psychiatrist approaches her in a grotesquely aggressive way, inquiring about the latest trendy weight-loss tricks in the online anorexia communities. When she protests and asks to be released from the hospital, he opens the bed rail and invites her to leave to prove that she doesn't have the strength to do so. The patient appears to trigger a sadistic behavior in all the doctors except Dr. Charles' medical intern, Sarah Reese, who is shaken by the patient's drive to "kill herself".

Both Louisa and Allison's narrative arcs end with a resolution in which the subtext is that the price to pay for their "choice" is extremely high: in one case, death, in the other, the ultimate sacrifice for a mother to make, that is, to keep herself alive but lose her affection for her son, and therefore her sense of motherhood. For a woman who has been presented to the audience as nothing other than a wife and a mother – no other information about her life or psychological history is given to us – this sacrifice is also meant as the ultimate punishment, and is intended to make us consider whether this is a fate worse than death.

Both *Chicago Med* and *The Good Doctor* feature adult women – one in her 30s, another a mother in her 40s – highlighting the fact that eating disorders do not only affect teenagers but are often chronic conditions that last well into adulthood. Yet both patients are infantilised, and the general tenor of the episodes seems to suggest that there is a personal responsibility or choice involved in "reducing" oneself to a state of poor health through disordered eating

By contrast, *New Amsterdam* (season 3, 2021) presents the experience of a man who has been dealing with binge eating since he was a child. Dr. Iggy Frome, one of the doctors in the ensemble cast, is caught in the act by a colleague who herself had addiction problems in previous episodes. The story was included in the script thanks to Tyler Labine – the actor who plays Dr. Frome – who suffers from body dysmorphia and binge eating (Heldman 2021). Dr. Frome's story is explicitly dealt with in the second

episode of the third season, but it is preceded by several episodes where he is shown to eat compulsively. Additionally, the episode dedicates a significant amount of time to discussions about Dr. Frome's childhood and complicated relationship with his father, who constantly berated him for being "fat and weak". Although the psychological aspect is simplified and reduced to a mere "chain of cause and effect", there is an attempt to delve behind the surface of his behavior and to treat it as an addiction, not as a choice, or as gluttony. Similarly, in the British medical drama *Holby City* (season 22, 2021-2022), John Hudson (Trieve Blackwood-Cambridge), is a Black doctor who suffers from bulimia. As in the case of Dr. Frome, there is no final resolution in Hudson's narrative arc, and the development of both these characters is allowed to follow the temporality of their disorders, which is characterised by chronicity and relapse.

In the medical dramas we have selected as our case studies on eating disorders, it is the doctors, and specifically male doctors, who receive enough time and attention for the psychological and the socio-cultural aspects of disordered behaviors to unfold. Additionally, the doctor-patients are affected by two issues that are usually less visible (and less often represented in cinematic narratives) than anorexia, namely bulimia and binge eating. But these two forms of eating disorders are also the most widespread, and people affected by them can often have an apparently functional life, as in the case of Dr. Frome and Dr. Hudson.

Medical dramas usually take place in a hospital. Yet limit cases, such as the famous In treatment (HBO, 2008-2021), whose setting is a psychoanalyst's office, seem to offer an alternative temporality of patient arcs. The first season of In Treatment features the story of a teenager, Sophie (Mia Wasikowska), who starts therapy with Dr. Paul Weston (Gabriel Byrne) because she needs an expert's opinion for an insurance report detailing her recent suspicious bike accident. Sophie is a very precocious gymnast whose issues with anorexia will only emerge gradually towards the end of the season/therapy, as her eating disorder is intertwined with the complexity of her relationship with her parents, her trainer, and her peers. Not surprisingly, the series reflects the difference between how eating disorders are treated in a hospital (where people usually arrive in an emergency situation) and in a therapeutic setting. The series format, which is structured around recurring weekly sessions with the same group of patients for the entire season, adopts a temporality that allows us to slowly understand Sophie's eating disorder as part of a complex and three-dimensional character. Today we know that eating disorders benefit from a multi-therapeutical approach that considers physiological and social aspects (Woodruff et al. 2020). Medical dramas would benefit from giving more space to such a perspective, as well as providing a more diversified representation of patient groups in terms of gender and race. This is of course neither an easy task nor the only one – of equal importance, for instance, would be to begin to address the recurring fantasies of people affected by eating disorders, such as those concerning a body or identity that is not (yet) the "right" one.¹²

Conclusions

As one of the most popular television genres, medical dramas have rightfully attracted investigations into their power to reflect as well as popularise ideas around health and illness. Recent medical dramas famously tackle important bioethical and political subjects, such as racial bias in the diagnostic process, euthanasia, body donation, discriminatory blood donation criteria, and, more recently, the repeal of Roe v. Wade. Over the past few years, series such as *The Good Doctor* have reflected a paradigm shift from paternalistic medicine (the exemplary case of which is *House*, *M.D.*, Fox, 2004-2012) to patient-centred medicine. At the same time, recent research has demonstrated that consumption of medical-themed media such as medical dramas, as opposed to other genres of entertainment, can skew gender-based disease perception in ways that reflect gendered stereotypes (van Driel et al. 2018).

In this chapter, we suggested that the format of the medical drama is often less capacious than expected when it comes to representing the complexities of gender medicine in its patient arcs. Ultimately, this was shown to boil down to a question of temporality. Other formats and genres, such as dramedies, or the "sex education" sub-genre that has recently been flour-ishing,¹³ often do a better job of presenting medical cases where the recent

¹² See Nicastro (2022a), Nicastro (2022b) and Lemma (2010).

¹³ This can be said to include series such as *Sex Education* (Netflix, 2019-2023) and *Big Mouth* (Neflix, 2017-2024), as well as the Argentinian multi-platform miniseries *4 Feet High* (2020). Other recent examples include Jessie Kahnweiler's short comedy webseries *The Skinny* (2016), which she made with the explicit goal of raising awareness about eating disorders, especially those that are less commonly represented on screen. Kahnweiler, who suffers from bulimia, wanted to move out of the clinical space and into that of daily life, the ordinary and yet invisible environment of eating disorders. As an alternative to

lessons of gender medicine are more adequately addressed. This, as we saw, comes down at least partly to the fact that, in such cases, we do not identify with the medical gaze, but with that of the patient/(co-)protagonist, who is therefore programmatically and already a fully realised three-dimensional character when they encounter patient-hood. In fact, the medical drama examples that allow for a similar level of complexity to emerge were shown to unfold in the longer temporal narratives that focus on members of the ensemble cast, therefore drawing on the potent melodrama narrative tools that form such a big part of the genre's popularity.

compulsively conclusive ED narratives, she stresses the undulating temporalities of EDs by calling the first episode of her series "Relapse."

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SCREENING GENDER MEDICINE: HEALTH AND THE GENDERED BODY IN RECENT US-BASED MEDICAL DRAMAS AND DRAMEDIES



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15. From Paternalism to Paternity

The Portrayal of Fatherhood in Medical TV Series

Marie Moreau

■ ABSTRACT

TV content has been documented to portray male and female roles which contribute to maintaining gender stereotypes. Even though they feature male and female health care workers, medical shows have also tended to associate male characters with professional attributes and female characters with interpersonal ones. This study thus explores the portrayal of male physicians as fathers in three American medical TV shows set in highly-frequented urban hospitals and spanning over the last three decades: ER (NBC, 1994-2009), Grey's Anatomy (ABC, 2005-) and New Amsterdam (NBC, 2018-2023). Findings point towards a more equalitarian depiction of fathers who are fighting to be more involved in their children's lives than their own fathers were. This was first initiated with ER and coincides with the end of the paternalistic representation of the doctor as a hero, and was further developed in Grey's Anatomy and New Amsterdam. These more recent shows provide the viewer with portrayals of nurturing fathers which challenge the hegemonic representation of masculinity, while still retaining some traditional characteristics of masculinity by turning the doctor into father heroes.

KEYWORDS

Fatherhood; masculinity; stereotypes; gender; portrayal.

Introduction

Research carried out since the 1970s on the gendered portrayals of characters on prime-time television has consistently found that female characters are more likely to have interpersonal roles - that is to say roles involving romance, friends and family – whereas male characters are more likely to be identified with work roles (Tedesco 1974, Signorielli 1982, Signorielli and Kahlenberg 2001, Lauzen et al. 2008, Vande Berg and Streckfuss 1992, Ward and Grower 2020). These different characteristics, while they do not strictly respect the separation between the private sphere and the public sphere – female characters can have interpersonal roles while being employed reinforce the association of female characters with domestic attributes and male characters with professional ones, thus maintaining - and even reinforcing – gender stereotypes through representation on television (Sink and Mastro 2017, Scharrer and Blackburn 2018, Signorielli 2011, Wille et al. 2018). Because they are set in a professional environment, medical dramas could be seen as a way to erase this gender bias since all lead characters male and female alike - are health care workers, and are thus represented as enacting work-related roles. However, studies have demonstrated than even for TV shows set in a professional environment, gendered stereotypes could remain. For instance, Kalsich and Kalsich (1984) and Vande Berg and Streckfuss (1992) found that, even in shows where women were nearly as likely as men to be employed as professionals, they were far more likely to hold lower positions than their male coworkers (i.e., for medical shows, nurses rather than physicians). In addition, female professionals – i.e., nurses – were also depicted as being less assertive, less work-driven, and more benevolent than male professionals – i.e., physicians (Kalsich and Kalsich 1984). Female characters also tended to be shown as performing fewer decisional and operational actions and more interpersonal actions (such as socializing, reassuring, listening, counseling, etc.) than male characters (Vande Berg and Streckfuss 1992). In other words, even though women are present in the workplace, they are still attached to their domestic role and attributes. To a certain extent, these representations echo the reality of a highly gender-segregated US health care system. Over the last decades, a growing share of female physicians have started to rebalance a professional field which used to be widely dominated by men; according to the Association of American Medical Colleges (AAMC 2022b), in 2021, more than onethird (37.1%) of the active physician workforce in the United States was female, compared to 28.3% in 2008 (AAMC 2008). In addition, for the first time in 2017, more than 50% of students enrolled in U.S. medical schools were women (Pelley and Carnes 2020). Yet, U.S. medicine is still organized around lingering gender stereotypes, with male-dominated specialties (more than 90% of the workforce) being associated with characteristics traditionally attributed to masculinity – strength, vitality, virility, intelligence: orthopedic surgery (94.1% of male physicians), sports medicine (92.2%), cardiology and thoracic surgery (91.8%), neurological surgery (90.4%), urology (90%) (AAMC 2022a). Conversely, the top 6 specialties with the lowest proportion of male physicians are all linked with traditional female attributes or areas such as care, nurturing and maternity: pediatrics (35% of men), obstetrics and gynecology (39.5%), pediatric oncology (44.3%), geriatric medicine (44.9%), child psychiatry (45.5%) and neonatal medicine (45.8%) (AAMC 2022a). In short, American male physicians tend not to choose specialties which can be associated with domestic roles and attributes - taking care of children, elderly people or family members - and require more interpersonal actions - reassuring, comforting, playing.

Recent findings have shown that media, and in particular the expectations around masculinity that are conveyed on television, contribute to boys and men's beliefs about manhood and to how they perform their masculinity (Ferris et al. 2007, Giaccardi et al. 2016, Scharrer and Blackburn 2018). Therefore, to determine whether recent medical TV shows are contributing to maintaining gender stereotypes, this chapter thus intends to assess the extent to which men are shown performing interpersonal actions and given domestic attributes. More particularly, because one major aspect of gender stereotyping has been the portrayal of women as mothers (Ex et al. 2002, Feltmate and Brackett 2014), this study will focus on the portrayal of male physicians as fathers. In order to do so, we will focus on three American medical series spanning over the last three decades: *ER* (NBC, 1994-2009), *Grey's Anatomy* (ABC, 2005-) and *New Amsterdam* (NBC, 2018-2023).

Because these three shows are set in highly-frequented urban hospitals (in Chicago, Seattle and New York), they picture doctor-fathers with similar working conditions. Michael Crichton's *ER* might be considered as one of the first post-paternalistic medical dramas featuring male doctors struggling in their jobs but also with their family lives, especially with fatherhood. *Grey's Anatomy*'s creator and producer – the self-proclaimed post-feminist Shonda Rhimes (Warner 2015) – has put the emphasis on more equalitarian gendered depictions, and that includes more equalitarian fathers. Finally, the plot of *New Amsterdam* revolves around the male lead character, Dr. Max Godwin, who, after spending months torn between his commitment as the new medical director of New Amsterdam hospital and his pregnant wife, becomes a single father when his wife dies very shortly after giving birth.

Analyzing how male characters are depicted as fathers in a medical and highly-demanding professional context in these three shows will enable us to see whether the portrayal of fatherhood in medical drama TV series challenges traditional and hegemonic representations of masculinity and gender stereotypes.

Moving the Line Between the Professional and Private Spheres Along the Gender Line

Over the last decades, a shift in family roles in North-American societies has made the line between the private and the public spheres more porous. Starting in the 1970s, women massively entered the labor market, and more specifically, mothers did, demonstrating that parenthood and work were not incompatible: in 1980, only 41.9% of mothers with a child under 3 and 46.8% with a child under 6 worked, up to respectively 64.2% and 66.5% in 2021 (US Department of Labor 2021). As a result, the line between the domestic and the professional life started to be blurred, with more women having legitimate claims over the professional sphere. This trend was reflected on television, in particular on medical shows, with narratives which were built around women's professional ambitions. In the 1990s, ER started to portray female characters who refused to sacrifice their careers for the sake of family, such as Dr Mark Greene's wife, eventually leaving him for a position in a law firm in Milwaukee. For these physicians doing long hours at the hospital, reconciling their private and professional lives can be challenging, leading some female doctors to put their job first; when Susan Lewis is asked by a patient if she is married, she answers "No, I'm a doctor" (24 hours, 01x01). Grey's Anatomy goes further in portraying women prioritizing their professional careers over family: in the first seasons of Grey's Anatomy, Miranda Bailey is constantly accused by her first husband of spending too much time at work and not enough at home with him and their baby. Her husband is presented as being the main care provider for their young son while she is shown systematically putting surgeries before important family moments. When given an ultimatum by her husband to choose between their marriage and applying for a new fellowship, she decides to leave him (Now or Never, 05x24). Cristina Yang is also an ambition-driven female doctor putting her love for surgery before family: in season 2, she plans to have an abortion for her unwanted pregnancy – but eventually miscarries before the procedure – and in season 8 (She's Gone, 08x02) she has an abortion despite her husband's opposition. Her love for her job is explicitly mentioned as being the reason why she does not want to have children, as Meredith Grey explains to Cristina's husband:

Do you know what will happen to Cristina? If she has a kid that she doesn't want? It will almost kill her. Trying to pretend that she loves a kid as much as she loves surgery will almost kill her. [...] The guilt of resenting her own kid will eat her alive (*Free Falling*, 08x01).

When women in the show prioritize work over family, they are blamed by the men in their lives (Mark Greene, Miranda's husband, Cristina's husband), however, men are equally blamed when they make that same choice. In *Grey's Anatomy*, Chief Richard Weber is accused by his wife of putting the hospital before his family on several occasions, which results in her leaving him after years of marriage. When Mark Greene's wife blames him for refusing to quit his job in Chicago to follow her to Milwaukee, his answers is "Why are you so intent on making me give up a job I spent years trying to get?" (*Sleepless night in Chicago*, 01x18). She thus objects that he is the one who has never sacrificed anything for her, and leaves him. In *New Amsterdam*, Max Goodwin's pregnant wife left him because he accepted the position of medical director of New Amsterdam without telling her, when they had both decided to focus on their family. She compares Max's relation to work to a toxic addiction (*Six or Seven Minutes*, 01x10):

Georgia: We made a promise Max, remember? We were going to raise this child together. We were going to put our careers second. I gave up everything. This job is the opposite of that.

MARIE MOREAU

Max: I'm gonna make it work. [...] I'm going to figure out a way to squeeze everything in.

Georgia: Oh, great Max, will you figure out how you can squeeze me in and... and your child?

Max: [...] I can come home early. I can take weekends.

Georgia: You won't.

Max: But Georgia, this is the life of a doctor. This is my life.

Georgia. No, it's not. [...] You're obsessed. [...] I know you love me. But when the hospital calls, it always wins.

If male physicians prioritizing their job over their family is not initially considered as positive, it is nevertheless still possible for male doctors to move past this dichotomy between job and family, as Georgia proves when she later tells Max not to step down from his position: "This job is who you are. It's who you've always been" (Six or Seven Minutes, 01x10). Male doctors can have it all, caring for their family while being strongly committed to their careers, as the regular depictions of Max carrying his baby with his New Amsterdam ID card pinned on his baby carrier illustrate. In these medical shows, being an involved father does not call into question their professional competence.¹

On the contrary, Max is shown as being really efficient in his job while caring well for his baby; he is often staged as chairing important staff meetings while feeding and burping his newborn baby daughter at the same time, making important decisions while playing with her, or having talks with his colleagues while carrying her to daycare.

While men's identities are still strongly associated with their jobs, medical shows gradually decorrelate masculinity and professional attributes

This it is not necessarily the case for women who occupy a position that can be considered as inconsistent with the gendered expectations around female characters. For instance, when women are featured in top professional positions, as Lauzen et al. explain: "The association of female characters with interpersonal roles focusing on romance, family, and friendship is gender consistent and thus familiar. The association of male characters with work roles is similarly consistent. Programs featuring characters in gender-inconsistent social roles must address how a female could occupy a work role commonly thought to be inconsistent with female capabilities (i.e., *Commander in Chief*). In other words, nearly every episode in these series must be consumed with explaining how a female or a male could possibly fill such a role, how the character came to find herself or himself in this role, how they navigate this less-traveled road, and other characters' reactions to this role reversal." (2008: 211).

and this process is reflected in the opening scenes of our three shows. In the oldest one, ER, that first aired in the 1990s, the pilot opens on Mark Greene, clearly identified as a doctor and set in his professional environment – sleeping in an on-call room during a night shift in the E.R. Eleven years later, *Grey's Anatomy* opens on a very private scene between Meredith Grey and Derek Shepard, in a private place - Meredith's home - without any indication about their professional status. The same choice was made in 2018 for the opening scene of New Amsterdam: the first image the viewer gets to see is Max Goodwin's phone background, picturing him and his wife; we learn about his relationship status before learning he is a doctor. The lines between professional and private are blurred, male doctors are no longer uniquely defined by their profession. As women became professionally empowered, men were encouraged to take a more active role at home (Wall and Arnold 2007), which they did, although they did not cross the domestic line to the same extent as women crossed the public line. Reports on how American men and women spend their time show that men spend more time taking care of household activities now than they used to: in 2003 they spent an average of 23 minutes/day on housework compared to 30 minutes in 2021; in 2003 they spent 25 min/day on food preparation versus 42 min in 2021 (US Department of Labor 2005, 2022). Fathers have also been encouraged to be more involved in their kids' lives: fathers who have a child under 6 used to spend an average of 1h22min caring for them in 2003, up to 2h in 2021.

The three medical shows under study reflect this will to depict more involved fathers, while showing this evolution over the decades. Starting with *ER*, in which fathers are shown *trying* to be involved in their kids' lives, while still mostly failing because of how absorbed they are by their professional careers. At the beginning of the show, Mark Green, for instance, is presented as a family man, trying to maintain a family life with his wife and daughter despite his long hours in the E.R. When his wife and daughter move to Milwaukee, he *tries* to maintain the family unit by commuting for a year, before his wife eventually leaves him. Ambitious surgeon Peter Benton fights several custody battles in court to make sure he plays an active role in his son's life. If *ER* fathers of the 1990s *try* to be more involved, *New Amsterdam* and *Grey's Anatomy*'s fathers took it one step further by not only *trying* to do better but by fully embracing paternity. In *Grey's Anatomy*, gender equality is pushed quite far with male characters who seem more willing and ready to have children than female characters: Derek Shephard is the

one leading in the adoption process of Zola, the couple's first kid; Owen Hunt is the one pushing his first two wives (Cristina Yang and Amelia Shephard) to have kids, and since their refusal leads to their divorce, he eventually adopts a kid alone; Atticus Lincoln (Linc) is also the one pushing his partner to have other kids (her refusal will lead to them separating), and he also helps his friend Jo Wilson by adopting a baby for her; Mark Sloane wants to adopt his daughter's baby when she considers giving the baby up for adoption. In New Amsterdam, Iggy Frome loves having children so much that - even though he has already adopted four and his husband refuses to have any additional children – he goes on with an adoption procedure without his husband's consent. Even when they are not with the baby's mother, these fathers want to remain involved. ER had this ambition with Mark Greene agreeing with his ex-wife to share custody of their daughter Rachel. However, in addition to being unrealistic because they live miles from each other, Rachel is never shown on screen in Mark's daily life. And while he blamed his wife for taking Rachel away, resulting in her "not growing up with her father" (Sleepless night in Chicago, 01x18), he also admits that he would not be able to take care of her on his own. A few decades helped the custody arrangements: in Grey's Anatomy, Mark Sloane, Linc and Jakson Avery all have joint custody (which Jackson legally fought for).

The New Father: Mending the Past

Pediatrician Doug Ross in *ER* is a notable exception: in the first season, the viewer learns that he has a son whom he has never seen and whose name he does not even know. Interestingly, choosing this plot for Doug Ross was a means for *ER* executive producer John Wells to mirror what he saw with a lot of men around him who were not involved in their children's lives, as he explained in an interview (Gelman 2019):

There are people among us who lose track of their children. [George Clooney and I] talked about it at the time. We both know men who had children that they have no contact with for whatever reason. That's what we were trying to play with"

Society's expectations around fatherhood have changed since the 1990s, and most fathers of the shows have integrated it. Most of them blame their own fathers for being negligent and they want to turn the tide on fatherhood by

being more involved and more caring than the previous generation of absentee fathers. Mark Greene has a very strained relationship with his father, whom he accuses of choosing his Navy career over his family; Peter Benton's father is never mentioned but Peter is the one caring for his aging mother; Doug Ross's father abandoned his family when Doug was a kid. In *Grey's Anatomy*, Alex Karev's dad was a violent alcoholic and drug-addict who left his young son in charge of his schizophrenic mother, which led him to different foster homes and a juvenile detention center; Jackson Avery's dad abandoned his son after he divorced his mom and did not even recognize Jackson when he went and found him years after; Derek Shepard's dad was killed when he was a kid. *New Amsterdam*'s Floyd Reynolds grew up without his father; Iggy Frome has an eating disorder because of his abusive father. For all these men, missing or resenting their absentee or negligent father is a defining element in their identity, a major storyline in their characterization and a recurring topic throughout the episodes.

Because they know what it feels like to have a deficient father, this new generation of dads want to mend the past; they blame themselves when they feel they have not lived up to their own expectations, and they try to redeem themselves. For instance, the storyline of neurosurgeon Vijay Kapoor, one of the older doctors at New Amsterdam, revolves around him blaming himself for not being a caring-enough father for his now grown-up son and he is intent on redeeming himself by being a better grand-father.

ER executive producer John Wells also revealed that there is a redemptive dimension to the character of Doug Ross, who tries to make amends for being an absentee father and decided to "become a pediatrician and care for children" because of "his guilt that he wasn't the person he wanted to be when he had a child as a young man" (Gelman 2019). Yet, the best two examples of mending the past are maybe provided by Mark Greene from ER, and Alex Karev from Grey's Anatomy. When Mark Greene learns he has terminal cancer, he uses his last days trying to fix his relationship with his troubled teenage daughter Rachel by taking her to Hawaii, where he spent a few childhood years and remembers being happy with his father. He apologizes for not being present enough in her life and tries to be the father he wished he had been.

In *Grey's Anatomy*, being the father he wished he had had is also an obsession for Alex Karev. When he discovers that his ex-wife Izzie Stevens has been secretly raising the kids he did not even know he had, he abandons everything – his current wife included – to go live with them. He writes a

letter to his wife to explain his decision, explicitly saying that he wants to mend the past:

But Izzie had my kids. And I know you get what that really means. I know you of all people understand why I can't just leave now, why I can't miss another second of my kids' lives. I have a chance to make this family whole. I need to give these kids the family you and I never had, with barbecuing out on the back porch and soccer games and movie nights and book reports. I didn't know she would have my kids and now that she does, I don't know how to look anyone in the eye if I don't stay and do everything I can to make this work, make this a life, make this a family. [...] I missed five years of their lives. And not because I was a junkie like my dad or off my meds like my mom. I didn't exist to them until I walked through the front door. And once I did, I had this family I never knew I had on this insane farm, and I wish getting everything I always wanted didn't have to hurt you in the process (*Leave a Light On*, 16x16).

Fatherhood as Challenging Traditional and Hegemonic Representations of Masculinity

Going beyond the portrayal of stereotypical ideals that would conform to hegemonic masculinities (Connell 2005, Connell and Messerschmidt 2005), the new generation fathers of New Amsterdam and Grey's Anatomy are depicted as being full hands-on dads, not only "fun dads" (Poniewozik 2012, Neuhaus 2013). They are not simply portrayed as occasional caregivers or unexperienced and unequal parents, nor are they depicted as the Father- Knows-Best-type of parents, playing with their 6-or-7-year-old children or helping them in difficult situations, offering a paternalistic style of parenting. Here, father doctors are shown as emotionally connecting with and providing nurturing care to their children – often babies – in a way that does not necessarily fit with patriarchal expectations of gendered family roles: feeding babies and burping them, changing their diapers, pushing strollers, carrying them in baby carriers, kissing them, taking them to doctor's appointments, etc. In addition, these fathers embrace this nurturing paternity in plain sight at the hospital in front of – and with the validation of – their male colleagues. This more equalitarian approach of child care reflects a gradual – yet much slower in reality than as depicted in New Amsterdam and Grey's Anatomy – evolution of American fathers' family behaviors. The US Department of Labor (2005, 2022) found that, out of the additional 40 minutes a day American dads spent taking care of their children in 2022 compared to 2003, time spent on tasks traditionally associated with interpersonal relation and nurturing – and therefore with the mother – such as physical care, reading to children or talking with them, had increased, showing that involved fatherhood is slowly challenging expectations about masculinity.

Some elements of the traditional depiction of masculinity are tested by the way fatherhood is portrayed in these shows. Ability, physicality and strength for instance are tackled in ER with Peter Benton's initial hard time accepting the disability of his hearing-impaired son, before he eventually rises to the challenge and fully accepts it. In Grey's Anatomy, body and gendered norms are questioned when Owen Hunt and Teddy Altman's son, Leo, exhibits early signs of gender fluidity, which Owen Hunt fully supports. When asked by his mother why Leo is wearing a tutu – as he often does - Owen simply answers: "Cause he likes tutus" (Here Comes the Sun, 18x01). Owen does not force masculinity onto his son, and he calls him "cowgirl" when Leo wears a pink cowboy costume (Should I say or Should I Go, 18x16) or "Elsa" when he wears a Frozen princess costume (Some Kind of tomorrow, 18x02). And when his wife Teddy expresses doubts about Leo's gender fluidity, Owen is the one defending his child: "Teddy, if Leo says he is a girl then I'm just gonna listen. [...] We just have to follow his lead" (Should I say or Should I Go, 18x16).

These fathers also question hegemonic masculinity by showing alternate possibilities of fatherhood, for instance by accepting to be weak and vulnerable. This is the case of Grey's Anatomy's cynical, self-centered and sexist neurosurgeon Tom Koracick, whose portrayal changes when the viewers learn that he had a 10-year-old son who died in an accident. A very emotional Tom admits that he was a mess after the accident, that his marriage fell apart and that he never recovered. Being a vulnerable and wounded dad humanizes him, and his arrogance and apparent cold-heartedness are then balanced with occasional reminders of his vulnerability – for instance when he starts crying while explaining to a coworker that he now hates Halloween because it painfully reminds him that it was his son's favorite holiday (Whistlin' Past the Graveyard, 16x06). Men are commended for showing signs of weakness and accepting their flaws. In New Amsterdam, Max earns the respect of his parents-in-law, and of the viewers, for acknowledging that he is not infallible and struggles as a dad: "Everything that you said this morning is true. I'm not a perfect father and I never will be. But I am a good father and I will be better tomorrow and the day after that" (Fight Time, 03x13).

From the Doctor Hero to Father Hero

In *ER*, *Grey's Anatomy* and *New Amsterdam*, male doctors are fallible on a professional and on a personal level: they are not always likeable, they go through depression and addiction, they have doubts, they make mistakes, they make wrong decisions. As Ryan Eggold – the actor who plays Max Goodwin in *New Amsterdam* – put it in an interview:

I had a lot of conversations with Eric² about what his struggles [as a doctor] were, and he reminded me that doctors are not always infallible. That was a good reminder not to play a knight in shining armor but to play a human being, warts and all (Li 2018).

This shift away from the figure of the 'doctor hero' is quite recent. In older medical shows – *Dr Kildare* (NBC, 1961-1966) in the 1960s or *Marcus Welby*, *M.D.* (ABC, 1969-1976) in the 1970s for instance – the "doctor-hero figure was a constant reminder that medicine can be good, and doctors can be nice and caring about their patients and families" (Cambra-Badii et al. 2020: 105). This idealistic and paternalistic portrayal began to change in the mid-1990s, as Pfau and Garrow (1995: 444) found:

What has changed is that contemporary prime-time television depictions of physicians [...] reveal occasional uncertainties in diagnoses and mistakes in treatments, and exposing unflattering personal traits (adultery, arrogance, and avarice, to name a few) [...] Needless to say, this is a significant departure from the medical programs of years past, which collectively portrayed a "super-doctor".

Right from the start, male doctors from *ER* and *New Amsterdam* are presented as fallible family men. Two minutes into the pilot of *ER*, we learn that Mark Greene is having problems with his wife. In the pilot of *New Amsterdam*, Max Goodwin is separated from his pregnant wife Georgia as a result of Max betraying his promise not to put his job first: "Listen, I know what I did was wrong, I should have put you and the baby first, but I'm gonna change, I'm gonna win you back" (*Pilot*, 01x01).In *Grey's Anatomy*, the opening scene introduces a naked Derek Shephard who has just spent

² Dr Eric Manheimer, the formal medical director of Bellevue Hospital in New York, whose story – and memoire *Twelve Patients* – inspired the plot of *New Amsterdam*.

the night with a woman – Meredith Grey – whose name he does not even know, a depiction that does not inspire family reliability at first.

One feature of the doctor hero that endures in more contemporary depictions, however, is the idea of self-sacrifice. In 1965, Myerhoff et al. described the figure of the doctor hero as follows: "The physician [...] has been traditionally depicted as a charismatic hero, a harbinger of progress, and a self-sacrificing, uniquely gifted semi-divine figure." (1965: 189). With contemporary father doctors, medical shows have moved from an era of doctor heroes to an era of father heroes. These fathers are very talented doctors who are driven by ambition and whose love for medicine is of paramount importance. However, they do not hesitate to sacrifice their careers for the sake of their children. Peter Benton from ER, while being constantly portrayed as being overly ambitious and career-oriented, resigns from County General to work better hours in a private hospital when he risks losing custody of his son because of his long hours. In Grey's Anatomy, Alex Karev leaves Seattle and his well-established career - he was the head of pediatric surgery, the interim chief of surgery, a member of the hospital board – to move to Kansas to be with his children. As for Max Goodwin, the episodes focusing on the Covid-19 pandemic portray him as a martyr figure, sacrificing himself for his daughter Luna's sake by entrusting her to his parents-in-law far from New York with no possibility for him to see her. When his parents-in-law file for Luna's custody, they accuse him of always putting the hospital first, but instead of appearing as an unfit father, he appears as a martyr (Fight Time, 03x13):

Max's lawyer: Dr. Goodwin has a very important job. Mother-in-law: Well, you could leave it. You could work fewer hours. But you choose work over Luna at every opportunity, even when it meant sending her away for months. You work in a hospital. You brought a child into the middle of a plague to make yourself feel more like a father. You were in a recovery ward for days because you exposed yourself to toxic chemicals. Did you stop to think about Luna then? Max: I think about her every moment of every day. About protecting her, but no one will be safe until everyone is, so that is a lot of people.

Selflessness and self-sacrifice are typical attributes of heroic figures in popular culture, it is also a characteristic we can expect from traditional depictions of masculine values. By being martyrs, or father heroes, these doctors claim back elements of hegemonic masculinity that were softened by

previous nurturing depictions. All the more so that, as for typical heroic figures, the idea of the righteousness of the fight is very present. In this case, fathers fighting for their children and never giving up on them. Fathers fighting custody battles, for instance, are featured in all three shows. In *New Amsterdam*, Max's love interest, Dr Helen Sharpe, while talking about his custody battle, illustrates the significant place fighting righteous battles has in Max's life: "Fight for her. When have you ever not wanted all of us to aim higher, to fight? It's all a fight. Luna, vaccines, this hospital, us. If you don't have to fight for it, it's because it's not worth it" (*Fight Time*, 03x13). Max then comes to embody that knight in shining armor – that his character was not supposed to be – for his daughter, as exemplified by his speech to his parents-in-law (*Fight Time*, 03x13):

If you want to go to court, we can, but you'll lose, and when that happens, I will walk out of that courtroom and you will never see Luna again. And I don't want that – for Luna, for you, for Georgia. Because she knew so clearly what you clearly don't, and that is that I will never stop fighting for my daughter. I will fight for her until the day I die. Now I'm here to take her home.

By giving such a striking demonstration of strength, determination and power, and by leading that righteous fight, Max's character reconciles the nurturing dimension of his fatherhood with more traditional characteristics of masculinity.

Conclusions

The image of fathers in the media (in movies, on television, in the newspapers, in magazines) is slowly changing as they are increasingly portrayed as parenting and nurturing rather than just breadwinning. However, depictions of fathers still largely overemphasize men's stereotypically masculine identities while placing them in secondary parenting positions (Drakish 1989, Schmitz 2016). Research has shown that men are aware of the discourses about fatherhood in the media and may internalize the cultural and gendered messages they receive through this channel (Brownson and Gilbert 2002, Schmitz 2016), which may well shape their beliefs about fatherhood and their behaviors as fathers. In particular, Kuo and Ward (2016) found that first-time expectant fathers may be especially vulnerable to media rep-

resentations of fatherhood. *Grey's Anatomy* and *New Amsterdam* could therefore influence fathers' behaviors by portraying father doctors who emotionally connect with their children – and babies – and who embrace a nurturing paternity. More importantly, having a working environment – and male colleagues – which support and even encourage expressive and nurturing paternity could have a gradual impact on fathers who often lack professional and institutional support to be as involved as mothers.³

The case of medical shows may be particularly relevant when it comes to influencing men's cultural beliefs and behaviors surrounding fatherhood. First, because the era of the doctor hero has come to an end, making way for flawed, fallible and vulnerable doctors and fathers. Barboza (2018) has shown that having a flawed father on screen improved viewer's relatability; these fathers were seen as more human and as potential role models and tended to be identified as 'good' fathers. The male audience of Grey's Anatomy and New Amsterdam may then realize that struggling and learning, as encouraged in the shows, is part of being an involved father. Second, when working on first-time expectant fathers' reception, Kuo and Ward (2016) noticed that men could react positively to negative TV portrayals of male characters as fathers – incompetent parents or men who were not sensitive or emotionally connected with their children – simply because these characters were powerful, dominant or sexually virile, which led them to conclude that expectant fathers may be encoding messages about masculinity that are discordant with sensitive and involved fatherhood. In this case, doctor fathers in Grey's Anatomy and New Amsterdam, because they all retain some stereotypical attributes of masculinity – beauty, power, virility, talent, money, ethics – while promoting a more nurturing approach to fatherhood, could be particularly important in shaping more equalitarian fathers among their male viewers.

³ The fear of social stigma and perceived professional penalties is the main obstacle preventing American fathers from taking a paternity leave to be with their newborn (Rehel 2014, Patnaik 2019).

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FROM PATERNALISM TO PATERNITY: THE PORTRAYAL OF FATHERHOOD IN MEDICAL TV SERIES



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16. Biomedical Imaging and Rhetoric of Diagnosis in Medical Dramas and Docuseries¹

Alice Cati and Deborah Toschi

■ ABSTRACT

The article aims to investigate different representations and imaginaries of care in contemporary audiovisual products, with particular reference to popular cultural products such as medical dramas and docuseries. By analysing some case studies, two perspectives will be put in close dialogue: on the one hand, the position of healthcare institutions and doctors, and on the other hand, the position of patients. Despite their partly fictitious and rhetorical nature, these audiovisual products demonstrate the way illness and health are represented and imagined, which constitutes not only an aesthetic of care, but care as felt and experienced in and through some practices of the body. In particular, the authors will consider how medical dramas and docuseries represent new technologies, from diagnostic imaging to extended reality technologies, investigating how these techno-scientific innovations reshape the conceptualisation of the body, the image of illness, the perception of therapeutic practices, and the relationship between doctor and patient.

KEYWORDS

Bioimaging; diagnosis, doctor-patient relationship; docuseries; medical drama.

¹ The chapter was discussed jointly by the authors. Deborah Toschi wrote the first and the second paragraphs, while Alice Cati wrote the third and the fourth paragraphs.

Introduction

Since the Second World War, medical practice has undergone a profound transformation concerning the introduction of numerous and increasingly sophisticated medical imaging technologies, which have profoundly changed the diagnostic procedure and the doctor-patient relationship. In mirroring this process, biomedical images and technologies are frequently captured, represented, and revived in medical dramas and docuseries, significantly impacting popular culture and the collective imaginaries. Indeed, medical series shape the social perception of doctors and health care institutions, as well as the rhetoric codes and discursive construction for the body's observation, diagnostic documentation, and care. On this level, it becomes particularly interesting to observe how the narrative models of medical drama have influenced the representation and narration of illness and healing in some recent docuseries. Accordingly, this essay aims to analyse two different television products, medical dramas and docuseries, which have both worked on the representation of illness and hospitals (Chory-Assad et al. 2001, Jain 2013).

We intend to verify how they have represented the hospitals and their technologies, and how they have shaped the experience of cure and the doctor-patient relationship. By focusing on the most popular and widespread international products within the contemporary English-speaking context, particularly the US one, this article will also question the role of diagnosis in the narrative advancement of medical drama, and how it introduces the element of detection in some series, both fictional and documentary. Finally, the two trajectories of diagnosis will be investigated: clinical assessment, which has acquired a solid technological and objectifying component, and patient data collection, which instead maintains the centrality of the sufferer in the narration of their experience of the disease.

How to See the Body in Contemporary Medical Dramas: Anatomical Vision and Scientific Display

Since the second half of the 1990s, this genre has redefined its identity thanks to the innovation made by television series like ER (NBC, 1994-2009), Cardiac Arrest (BBC1, 1994-1996) and Chicago Hope (CBS, 1994-2000). Under the label of "contemporary medical dramas," there is a constellation of sub-genres: period drama like Call the Midwife (BBC1, 2012-), A Young Doctor's Notebook (Sky Arts, 2012-2013), The Knick (Cinemax, 2014-2015); dark comedy like Nurse Jackie (Showtime, 2009-2015), Getting On (HBO, 2013-2015), surreal sitcoms Scrubs (MTV, 2001-2010), Green Wing (Channel 4, 2004-2007), dramatic series like Code Black (CBS, 2015-2018), and the medical dramas that tends towards the soap opera, like the Shondaland universe (2007-2013). Although each series has its format, we can usually find some common elements: the hospital setting and a poor representation of everyday life outside of work, as protagonists, the team of doctors/residents with often a primus inter pares, a multi-strand narrative, and the patients-of-the-week formula (usually two) that changes with each episode (Bignell and Woods 2022, Rocchi 2019).

Contemporary medical drama distinguished itself by the spectacularisation of the medicalised body. The scholar Jason Jacobs states, "The explicit visualisation of emergency treatment was one of the most distinctive features of the new hospital drama" (2003: 54). Graphic depictions of serious injury, bleeding wounds, and realistic or ultra-realistic representation become critical elements of the mise en scène. Similarly, Basil Glynn and Jeongmee Kim discuss the "visceral effect" (2016). Despite dealing with a traumatised body treated with invasive techniques, Jacobs notes that the genre avoids horror or splatter drifts (even series like Nip/Tuck, FX, 2003-2010), because, in the medical drama, the "body is regulated, extended and technologised," as articulating Michel Foucault's ideas of the "disciplined body" (Foucault 1975). "The heartbeat becomes the sound of the EKG monitor; blood is circulated through tubes, bags, and ventilators assist breathing" (Jacobs 2003: 69). A second element to highlight an increasingly characteristic of the genre is the exhibited presence of biomedical imaging. In the real medical context, the spread of medical imaging technologies has grown exponentially since the 1950s, so much that Kelly Joyce underlines that these technologies have imposed a "visual turn" (Joyce 2008). Within this framework, it is worth analysing the presence of medical imaging in hospital television series, its style of representation, and its role in the doctor-patient relationship and the narrative economy of medical drama.

Medical imaging is widespread in all hospital-set dramas (Bonner 2005), even in a period drama such as *The Knick*, directed by Steven Soderbergh, set in the Knickerbocker Hospital in New York at the beginning of the Nineteenth Century. For example, let us recall that the episodes focus on the radiographic technique (01x05, 01x06). But never, like today, medical technologies have been put on display. In this perspective, we can refer to the numerous product placement agreements of shows such as the ongoing Grey's Anatomy (ABC, 2005-), which advertises even through special episodes Littman stethoscope (19x15, 19x16), Da Vinci Surgical System (02), Lodoxlow dose X-ray Statscanner (09x18), Philips MX 16-slice CT scanner (06x02), etc. A particular emphasis is placed on experimental technologies; we suggest, for instance, the MasSpec Pen that provides automated feedback to determine whether a tissue is normal or cancerous, used by Dr. Richard Webber for the Grey Sloan Surgical Innovation Contest (14x12), or the futuristic use of the 3D printer CubeX (10x08) or the floating 3D holographic imaging technology developed by Realview Imaging Limited that gives doctors a real-time view of the organ they are operating on by merging the data mined from X-ray, MRI or ultrasound imaging. Cristina Yang uses this fascinating technology in her firewall episode (10x22). We would also add one of the hospital dramas built on the union of medicine and technology, Pure Genius (CBS, 2016-2017), set in Silicon Valley and defined as a "high-tech doctor drama" because it invents unique technologies inspired by real-world ones (Poniewozic 2016). Bioimaging technologies, whether real or imaginary, are omnipresent and punctually highlighted in stylistic terms, as demonstrated by some unusual shots from New Amsterdam (NBC, 2018-2023).

Analysing not only the diffusion but the use of imaging in medical dramas, television doctors relate to the sick body primarily through screens and diagnostic images, which have become indispensable for identifying the disease and monitoring treatment. In many sequences, the patient's body is not physically present, the doctor contemplates medical images of the body, and the diagnosis is made only through its visualisations. Furthermore, it is often through bioimaging that the doctor interprets the body, providing a series of technical explanations of its malfunction to both the patient and the students of the teaching hospital (Arawi 2010, Ostherr 2013, Cappi

2015). The doctor-student relationship overshadows that between the doctor and the audience. Technologies give access to the inside of the body, and in medical dramas, they have been widely integrated in narrative and stylistic terms. Indeed, as claimed by Carlin, medical imaging promotes "greater comprehension of the illness or injury" and also has an "emotional effect linked to viewing one's *invisible body*" (Carlin et al. 2014). Moreover, bioimaging is perceived as an element of evidence. This technologically sophisticated and objective analysis has an essential role in clinical decision-making, also about the evidence-based method at the basis of medical education (Turow 1989).

At the same time, diagnostic imaging remains silent for the patient and the public. To decipher these images, the doctor's competence is necessary and gives the physician superior knowledge and a position of authority. Indeed, House, M.D. (Fox, 2004-2012) has done the most work on diagnostic interpretation (Dusi 2007, Freccero 2007). Doctor Gregory House (played by Hugh Laurie), who chairs a diagnostic team in the fictional Princeton-Plainsboro Teaching Hospital in New Jersey, is inspired by Dr. Lisa Sanders' New York Times Magazine column "Diagnosis". In this show, the medical drama merges with the procedural; reports and medical imaging become pieces of objective evidence, which rarely match the patient's narratives and must be put together in a coherent puzzle. As *House*, *M. D*. teaches us, patients lie, but medical reports don't. So, the doctors make the correct diagnosis only by following the evidence of reports and medical imaging, despite the patient's narrative (Holtz 2006, Laften 2010, Goldstein Jutel 2019). In many medical dramas, the patient's medical history plays a secondary role; it is reduced to a starting point for the medical team's work. The repetitive scheme assigned to this part, always carried out in the hospital, flattens the representation of the sick person to a series of symptoms. In the custom of the fictional genre, we never have access to the representation of the "patients-of-the-week" in their everyday life, not even in flashbacks. The patient's narration eventually builds a dramatic climax, but the focus in these sequences remains anchored to the doctor. In some series, this focus is reaffirmed by narrative and stylistic elements, for example, in Grey's Anatomy, the starting and closing voice-over monologue performed by Meredith.

In this perspective, the originality of *House, M.D.*'s narrative construction lies in proposing a mediation between two opposing trends: on the one hand, the blind fate in sophisticated diagnostic tools, and on the other, the

art of clinical reasoning (Görgen 2019). Rapezzi *et al.* meditate on the clinician-detective analogies during the golden age, the end of the 18th Century:

During their golden age, the two disciplines thrived on a climate of faith in the apparently unlimited capabilities of science and based their methods on a deterministic interpretation of clues, signs, and symptoms. Detectives and clinicians reach a final, reasoned 'diagnosis' by decoding signs (clues) that are often meaningless or disconcerting to the layman (Rapezzi 2005: 1491).

Not by chance, but shortly after the Holmes/Watson couple (Doyle 1887), we recall here the fictional character of John Thorndike, created by the pen of Richard Austin Freeman (Freeman 1907).

In House, M.D., in addition to bioimaging, the audience can literally enter the patient's body and see the inner workings, thanks to miniature effects, motion control photography, and 3D motion capture. Some scholars have referred to an "X-Rays aesthetic" or "anatomical vision" (Kevles 1997, Roethe 2018); in the field of media studies, José Van Dijck suggested the fitting expression "endoscopic gaze", also about the contemporary cultural ideology of the "transparent body" (Van Dijck 2001, Van Dijck 2005, Sawchuk 2000). In this sense, an aesthetic analogy between biomedical imaging and digital compositing is used to probe internal body surfaces and spaces. In both cases, these are computational images, data processing, and visualisations which, due to the grain and the colors, refer to a virtual representation of the body. However, this style of representation is promoted as realistic, truthful, and believable. This kind of representation, in the medical-scientific context, has been legitimised by the Visible Human Project in 1994 (Male data set) and 1995 (Female data set), and was conveyed to the general public through the digital effects of the forensic drama franchise CSI - Crime Scene Investigation (CBS, 2000-2015). The Visible Human Project, achieved by the National Library of Medicine, is a 3D anatomically detailed representation of a human body, realised from a natural cryogenic body, a public-domain data set for testing medical imaging algorithms, planning treatment, and creating a virtual reality model (Ackerman 1998, Waldby 2003). The proximity between CSI and House, M.D. is also underlined by Antonella Napoli and Alessandra Santoro, who suggest that a series such as House, M.D. had already used the techniques of digital image manipulation to probe, through the symbolic resources of medical imaging, the possibilities of symbolic exploration of the sick body, in a con-

text of close contiguity with death and the elaboration of mourning such as the hospital (Napoli and Santoro. 2017). We could extend the observation also to Bones (Fox, 2005-2017), the forensic comedy-drama following the adventures of the FBI and the team of Medico-Legal Lab of the fictional Jeffersonian Institute (that overshadows the Smithsonian Institute). In this television series, the graphics program Angelator or Angelatron visualises the inner body, which can generate holograms. In all the narratives of these series, the internal 3D visualisation of the interior in macroscopic CGI shares with bioimaging the virtual aesthetics, the functional dimension (i.e., that we can observe and measure bodily activities in real-time), and the status of evidence (Thali et al. 2009, Bull 2019). Graphic visualisation, perhaps precisely because of its explicitly fictional, technologically reconstructed, algorithmic nature, becomes credible as an infographic in an educational text. Therefore, the "anatomical vision" falls within the scientific visual display realm. As Michel Lynch suggests, "Visual displays are not only valuable as illustrations in scientific texts; they are irreplaceable as documents that enable objects of study to be perceived and analysed initially. Such displays systematically transform specimen materials into observable and mathematically analysable data" (Lynch 2006: 195). Medical dramas spread the idea that biomedical images are "working objects" that help the spectator to see the essential and overlook the incidental (Datson and Galison 2007), also insisting on the technical processes of measuring and presenting the body in a scientific space, be it the hospital or the laboratory (Hillnhuetter et al. 2021, Latour 1986). As working objects, these visualisations are both elements of evidence and tools for thinking about the body and possible interventions.

Unsurprisingly, this aesthetic convention is also used in the recent medical drama *The Good Doctor* (ABC, 2017-). In this case, the augmented capabilities of the physician with high-functioning autism allow him to imagine alternative medical solutions quickly. The narrative of a doctor with an anatomical vision (Hilsabeck 2022), quite like biomedical imaging, encyclopedic knowledge, a fast data processing capacity, and an alternative point of view, on the one hand, underlines the permeation between man and technology; on the other hand, it seems to project us into a futuristic scenario governed by artificial intelligence.

Emotional Bodies in Real Medical Series

To better understand how, over the years, the rhetoric of diagnosis has evolved, it is necessary to investigate the relationship between medical entertainment and seriality by going beyond the strict field of fiction. As well known, since the 1990s, with the advent of reality shows, factual programs, and docusoaps, TV has ceased to be a mere mirror of real events, progressively transforming itself into a proper *reality-producing* apparatus (Lorusso 2018: 28), because with these new genres TV acts and generates the situations it is representing. It appears, therefore, interesting to observe how this immersion in everyday life, close to ordinary people and, therefore, to the experiences that we can *all live*, has led to a new consumption of TV both as a source of health information and as an instrument of empathic connection with sick and vulnerable subjects, whose stories overturn the boundaries between private and public spheres, as well as between reality television and social reality.

In particular, as some scholars pointed out (Lichak and Olympia 2022), the more a television program appears 'real' to viewers, the more it is capable of changing the degree of trust they have in medicine and treatment, shaping their prefiguration of the doctor-patient relationship differently and, consequently, broadening the understanding of risks concerning diseases, from which the intention to plan possible prevention strategies can arise.

For this reason, many docuseries explicitly focused on health - i.e., filmed in real hospitals, with actual patients and operators – have a specific potential to profoundly influence viewers' perception of the medical sector. In such docuseries, the spectator sees a perfect integration between the *plane* of reality (the correspondence to the clinical environments inhabited by doctors and patients) and the regime of truth (the verifiability of clinical facts through the presentation of anamneses, the search for a diagnosis according to the formulation of interpretative hypotheses, investigations conducted employing particular technologies or surgical interventions, the experimentation of therapies). Inevitably, the processes of narrativisation of the 'real matter' are based on the adoption of a canon built on the identification of protagonists, sidekicks, antagonists, objects of value, etc., in which, after all, the figure of truth and authentication of the tale is no longer given using visual technologies or the presence of biomedical images. In the docuseries, it is instead the emotional, impulsive, and sentimental components that characterise the experience of individual patients and the doctors who treat

them that give viewers back the objective complexity of the disease, its diagnosis, and the medical process for its treatment.

This phenomenon has matured over time: initially, medical conditions, techniques, and therapies were presented within specific health columns, inserted in the news, or the interstitial areas of daily palimpsest. But it was not until 1997 that real medical television made its first appearance with the series Trauma: Life in the E.R. (NYT Television, 1997-2002), designed as a 'real-life' version of the popular US television series, ER (1994-2009), to capitalise on its success. Since then, frequently following the same production logic, dozens of docuseries have been created by adopting the grammar of medical dramas. According to Christenson and Ivancin, nowadays these productions can be traced back to specific sub-genres: "lifestyle transformation" series (e.g., The Biggest Loser, NBC, USA Network, 2004-2017; Cold Turkey, Pax TV, 2004-5; My 600-lb Life, TLC, 2012; Sex Clinic, 2013) are focused on ordinary but, at the same time, 'eccentric' people affected by illnesses or afflictions with a certain social problematicity (super-obese, super-thin, sex-addicts, deformities, etc.); "makeover series" (e.g., Dr. 90210, E!, 2004-8; Extreme Makeover, ABC, 2002-7; Plastic Surgery: Before and After, 2002) are devoted to plastic surgery, showing the change that takes place at both the bodily and psychological level in the persons depicted; "medical miracle shows" (e.g., Miracle Workers, TBS, 2006; Mystery Diagnosis, Discovery Channel, 2005-2011; Chasing the Cure, TNT, 2019) that more explicitly portray medical personnel diagnosing and treating severe or puzzling conditions; and, finally, "hospital docuseries" (e.g., Untold Stories of the ER, TLC, 2004-2020) set in hospital facilities or in the emergency room of some urban clinic (Christenson and Ivancin 2006). Specifically, the last two subgenres have been the subject of a significant revival in recent times, thus becoming an interesting space of observation for surveying the representation of biomedical technologies within real medical environments.

As far as medical miracle shows are concerned, the narrative structure is based on the story of medical failures and, therefore, a feeling of frustration that affects patients and their loved ones because of the inability of doctors to find an adequate diagnosis and treatment for their condition, which in the end continues to be precisely a mystery. This type of docuseries aims to involve the viewer in investigative enquiry, during which the clues, sometimes shared in the form of medical history, parameters, biomedical images, and initial diagnostic formulations, seem indecipherable. At the same time, we can grasp the attempt to subvert the paradigm of the "disci-

plined body", since visceral or even horror effects are introduced every time crunchy pathologies such as deforming body parts, striking skin diseases, contamination with viruses and insects, etc. are presented.

Recently, two docuseries have focused on the revival of this format by adopting different strategies.

Medical stories was scheduled for nationwide distribution, on the PBS Network, in 2019 and is now available online. Through a series of 8–10-minute documentaries, this production seeks to collect testimonies documenting the plurality of life-saving treatments, medical breakthroughs, advances in research and technology, and understanding of the human body to enable audiences to understand how medicine is changing today.

From common to rare diseases to paralysis due to accidents, each story is told in the first person by the patient, with the doctors and researchers making a positive contribution to diagnosing the case and finding either a cure or a method to stabilise the clinical state.

Biomedical images mainly document the patient's clinical past, i.e., to emphasise their resilience in an objectively dramatic situation.

Therefore, the series aims to reinterpret the frame of the miracle not so much on arriving at a diagnosis but rather on the ability of patients and doctors to work together to find extraordinary resources, both scientific and affective, to deal with the disease. In this sense, viewers encounter patients' stories of hope, encouragement, and empowerment to strengthen their knowledge of and trust in science and medicine.

Decidedly more innovative is the work undertaken by a Netflix production such as *Diagnosis* (2019), based on the famous *New York Times* Magazine column that Dr. Lisa Sanders – former consultant for *House, M.D.* – has been running since 2002. *Diagnosis* follows several patients searching for a diagnosis for their mysterious illnesses, hoping to find a cure.

Precisely as in *House, M.D.*'s fictional elaboration, we similarly find contamination between circumstantial reasoning and the creative process (Dusi 2007). The failure to define a diagnosis also puts common scientific knowledge into crisis to search for new enlightening insights that had previously eluded doctors. If in fiction these insights were entrusted to the exceptional mind of a single character, insofar as he was able to contaminate scientific knowledge and disciplinary fields, to grasp details of everyday life that were extraneous to normal anamnesis, in *Diagnosis* the choice is made to collapse both the personalism of the doctor and the *auctoritas* of a single scientific community in favour of openness towards the diversity of perspectives of

global crowdsourcing, social media, and transdisciplinary and transnational scientific expertise.

Thus, rather than scientific knowledge or technique, healing seems to derive from the contact that patients can establish with other people who can identify with their experiences because they experience them first-hand, or loved ones are affected, or simply because they want to formulate a diagnostic hypothesis that is not always based on recognised expertise.

As in the medical miracle show tradition, the scientific documentation appears silent or incorrectly deciphered. Moreover, biomedical devices are flanked by CGI elaborations to illustrate to the viewer through anatomical visions the various new diagnostic hypotheses identified by the crowd. It is a simplified and essential representation of the sick body with the function of zeroing in on the initial complexity of the clinical case. Dr. Sanders' task is, on the one hand, to write the patient's anamnesis to be published on the NYT website and, on the other hand, to filter the contributions received by the crowd without any intention of influencing the perception of the patient and their family.

The medical discourse is therefore articulated from different management of scientific knowledge and trust in science and doctors, from which the general belief regime constructed by the docuseries derives.

As far as knowledge is concerned, all content moves within a constant dialectic between objectivity and subjectivity, in which the scientific datum and its reification in the form of graphic traces or images is no longer sufficient to manage illness. The same level of legitimisation has been achieved by everyday and practical knowledge, or rather by knowledge of life that, as such, seems more truthful and authentic. In this way, we have moved from the community of experts as supra-individual actant to the crowd. Still, an equally supra-individual subject, but made up of individuals recognisable by their private emotionality, expressing itself seemingly unmediated.

Concerning trust, all patients present themselves as tired and distrustful of the medical system: the absence of a definite diagnosis leads them to shut themselves away in private, to distrust the proposed treatment, and to seek an emotional rather than a scientific community of support. In some cases (01x02 and 01x05), not even Dr Sanders' suggestions are fully considered.

If, therefore, knowledge is no longer the result of a process of learning and acquiring established skills, anyone can have the authority to speak up and be listened to, at the risk of undermining and neutralising scientific sources, be they medical personnel or biomedical documents.

In the hospital docuseries, we can find a perspective more inclined in keeping with an ordinary medical imaginary, in which exceptionalism is more related to the extraordinary skills of the doctors than to the drama or rarity of the cases. If it is easy to recognise a positive, even heroic, image of the professionals for their courage, timing, insight, and sensitivity to the feelings of their patients, equally evident is the potential similarity between the viewer and the patient, whose condition of vulnerability – be it cancer, heart attack, or physical trauma – is in the end purely accidental and coincidental. Therefore, anyone could be in their place, and the same diagnosis could happen to anyone. Furthermore, by adopting a reportage style, these series aim to provide a field observation in a hospital's various wards or the emergency room's hectic spaces, dropping the gaze into the flow of events as if any situation were captured live.

Two recent Netflix productions, *Lennox Hill* (2020) and *Emergency NYC* (2022), created and developed by Ruthie Shatz and Adi Barash, relaunch this strand. As for the former, *Lennox Hill* is set in a New York hospital, where the lives and stories of four doctors are followed: two neurosurgeons, David Langer and John Boockvar, and two female doctors, namely an emergency room doctor, Mirtha Macri, and obstetrics and gynaecology department head Amanda Little-Richardson. While the first two offer a self-portrayal essentially built on devotion to the medical profession, the two women, both pregnant during the filming, often shift their doctor-centered focus as they shed their medical robes to put on those of patients during the various gynaecological examinations, ultrasound scans, genetic samples, and up to the birthing experience.

Within this scenario, biomedical devices appear integrated with the hospital environment, almost acting as naturalised prostheses of any gesture performed by doctors. In other words, devices are already medical practices, constantly acted upon to operate on or monitor patients' bodies, so much to make it natural to shift between configurations of the medical gaze, now increasingly hybrid and in perfect balance between processes of internalisation of techno-morphic perspectives and externalisation of diagnostic views.

Concerning the rhetoric of diagnosis, in *Lennox Hill*, we perceive a move away from the prevailing rhetoric that every case is a diagnostic mystery to be solved. When, for example, doctors treat patients with neurological pathologies, the diagnoses are often already shared; if anything, the disease's unpredictable evolution needs to be managed and monitored.

Emblematic is the story of Christopher, a 41-year-old glioblastoma patient who survived for four years and was struck again within a month by a new incurable brain tumour (01x08). The CT scan images are shown and analysed with the patient and later discussed by John Boockvar and the vascular and tumour board to understand why some blood vessels have swollen. In the meeting room, multiple digital elaborations are projected on a screen to discuss the action to be taken: to operate or not to run on the patient at the risk of removing the mass, compromising his physiological state. In the end, John Boockvar decided to conduct the operation between several monitors with endoscopic views and treat the brain matter without further mediation. The camera, therefore, documents the process of investigation and then the removal of the new tumour. At the same time, the doctor explains and comments on the drama of the situation without the fear of showing his surprise and discouragement. The authentication strategy is thus not sought through devices but through the subjectification of the gaze, thanks to the doctor's voice.

In another sequence (01x02), Dr. Amanda Little-Richardson undergoes an ultrasound scan with nuchal translucency: the centre of observation is the screen on which the image of the foetus is recognisable within the familiar interface with biomedical data and the recording of some still frames. In this case, the "real" bursts in abruptly when the gynaecologist asks to stop filming because she is somehow aware that she is participating in a representation that, however documentary, responds to the logic of *mise-en-scène* and the rhetoric of happy motherhood. The lens lingers for a few seconds, with dramatic effect, on the father's astonished and frightened face, while after a short cut-off comes the suggestion of a further diagnostic test (chorionic villus sampling) because the foetus presents an anomaly, which will later be confirmed (01x03).

Thus, in this situation, the veridical figure continues to be sought in the connection between the devices and the patient's emotional experience (here also a doctor capable of interpreting the diagnosis received) rather than in the mere datafication or "scientification" of the biomedical body.

The same approach can be found in the *Emergency NYC* series, which is always careful to provide a good amount of medical information, often describing trauma and emergency procedures in detail regarding transplants, gunshots, accidents of various kinds, and so on.

Compared to the previous series, we see a different perception of existential time: whereas in *Lennox Hill*, remedies and cures are supposed to help extend and grant patients more time to live, in *Emergency NYC*, time

must be measured to the limit and compressed to save lives at risk. For this reason, geolocation and communication devices are as vital as diagnostic devices for treating sick, injured, and suffering bodies, often hovering between life and death. Tragic, among the many that could be cited, is the case of the new-born child, stricken with a syncytial virus and at risk of a heart attack, here flanked by a paramedic-nurse who heroically plans on the ambulance the different transfer options to intensive care according to the clinical paramaters of the little patient (01x02).

Conclusions

Our investigation into medical serial forms in both the fiction and documentary fields has brought to light specific points of contact in how the rhetoric of diagnosis is treated narratively. In both areas, we find contamination of elements that draw from the repertoires of certain codified genres, such as melodrama and the detection story. If, however, these elements are used to consolidate a narrative model mainly based on the figure of the doctor-hero in fiction, within the docuseries, significant space is given to the patient's feelings and private life. All this is, moreover, governed by a different focalisation of the narration: in some ways, fiction tends to construct a third-person narrative, while the documentary frequently resorts to first-person singular narration, thus favouring the process of identification and greater empathy with the protagonist, to the point of leading viewers to see themselves as susceptible to the events experienced by that patient (Chen et al. 2016).

Another significant issue is the different valorisation of biomedical devices, whose presence in the representation is a mark of evidence and authentication of the medical discourse in fiction. In contrast, in docuseries, biomedical images are directly connected to modes of action and practices of use, even when they are opaque in the definition of the diagnosis. In both fields, given the evolution of the diagnostic system, these devices now appear to be integrated into diagnosis research, intervention actions, and therapeutic experimentation. In this sense, not only an increasingly sophisticated prosthetic gaze is the access key to the "transparent body", but the viewing of medical dramas and docuseries provides the spectators with metacommunicative skills because it provides instructions for use in reading medical images of their bodies.

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BIOMEDICAL IMAGING AND RHETORIC OF DIAGNOSIS IN MEDICAL DRAMAS AND DOCUSERIES



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17. When the Doctor is Sick, or We Could Say, the Medical Antihero

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■ ABSTRACT

The trend of featuring anti-hero protagonists in contemporary television series has become well established. In crime genre shows, the protagonist often adopts certain villainous characteristics, resulting in their anti-heroic status. Despite being a flawed character, the protagonist manages to retain a good-natured demeanor. In medical TV series the antagonist isn't embodied through a person, but rather, it is the disease itself. The illness is the adversary that the doctor is duty-bound to vanquish to rescue the patient. Thus, to fully comprehend the construction of an anti-hero protagonist within a medical drama, we must examine the intermingling between the main character and their nemesis: the illness. Consequently, the anti-heroic doctor is the sick doctor. It is a protagonist made defective or flawed by being affected by the same enemy he must fight. As spectators we will find ourselves looking at an imperfect doctor because he is sick and whose illness makes him apparently unable to be effective on patients. Starting from these premises, I will try to identify how the figure of the anti-heroic doctor is constructed as a flawed character in two TV series: House, M.D. (Fox, 2004-2012), The Good Doctor (ABC, 2017-).

KEYWORDS

Medical drama; TV series; antihero; narratology; television studies.

Introduction

The presence of anti-heroic protagonists in contemporary television series is an established trend. Over the past few decades, viewers have grown accustomed to this unique, and certainly not conventional protagonist. These are often antisocial, obnoxious, villainous, and morally questionable characters who are generically referred to as antiheroes. This term refers to a protagonist who is flawed or weak, seemingly incapable of accomplishing the heroic deeds she/he are destined for. This is because it is no longer the classic 'spotless and fearless' heroic protagonist but is precisely a character who is somehow morally less than perfect or fearful in facing dangers. The antihero can be morally flawed, closer to a villain than a hero. Or he may be characterized as weak and ineffective with respect to the task he is destined for, thereby reduced to being deemed inefficient.

In traditional crime genres, the protagonist often morphs into an antihero, adopting certain unfavorable traits typically associated with the villain. This similarity with the antagonist tends to be apparent from a moral perspective. Despite their flawed attributes, these characters are consistently portrayed as capable of resolving the challenging situations they encounter. This type of protagonist remains effective and solution-oriented in their actions, while appearing ethically ambiguous to the viewer.

This is a representation of the character that allows the authors to give her/him depth and complexity. Often the problematic nature of the antihero is linked to a difficult past, to a trauma that has marked his/her existence and that determines his relationship difficulties. In this way, screenwriters have a way to build nuanced and complex characters. The complexity of the antiheroic character is thus linked to the form of television storytelling that Jason Mittell has called complex television (2015).

However, there seems to be narrative genres of television seriality in which this complex characterization of the protagonist is more difficult to

find. One such genre is the medical genre. Most likely it is the need of this narrative genre to portray the figure of the medical protagonist in positive terms. The risk is to make the protagonist ineffective for the main function for which he is intended: treating patients. Consequently, it is possible to identify, as we shall see, particular constructions of protagonists in medical TV series that can be defined as anti-heroic (Santangelo 2015). Basically, in medical TV series antiheroes exist, the problem is to identify the particular way in which they are presented to the viewer.

We may inquire, what constructs the anti-heroic protagonist character in medical TV series, and why are they portrayed in such a manner?

The Construction of the Medical Antihero

If the antihero is the result of the synthesis between the characteristics of the protagonist and his antagonist, we must properly identify the figure of the antagonist in television medical drama.

First of all, in every medical plot there is always a doctor character who opposes the protagonist, and this figure represents a sort of specular reversal of the protagonist's characteristics. This character is depicted as a corrupt careerist, often a greedy doctor, who represents a simple weight that slows down the action of the heroic protagonist. According to the narrative logic of the hero's opponent vs. helper couple, this character performs the function of the classic opponent. He represents an obstacle or slowdown in the action of the protagonist, but not the protagonist's true enemy. This is not the antagonist we seek. We must look for our protagonist's real adversary, not for her/his mere opponent or obstacle to her/his action. We are looking for an individual or entity possessing a purpose or goal in contrast to that of the protagonist. An entity moved by a narrative agenda contrary to that of the hero.

Thus, the question is: where is it possible to identify the true antagonist in a medical drama?

Medical drama has its own narrative logic that does not involve an embodiment of evil in a physical person whose actions the protagonist seeks to counteract. Actually, in this kind of narrative the antagonist is not represented by a person, but by disease itself. Illness is the real enemy that the doctor must defeat in order to save the patient.

Therefore, to identify the anti-heroic protagonist in the medical drama, we must examine the blend of characteristics between the protagonist and

their antagonist. A characterization that makes him/her weak and flawed in the eyes of the viewer, thus seemingly unfit for the task of fighting his natural antagonist, disease.

We can argue that the anti-heroic doctor is, in fact, a sick doctor. It is a protagonist made defective or flawed by being affected by the same enemy he must fight. As spectators we perceive this doctor to be an imperfect doctor because due to his illness which, seemingly makes him apparently unable to be effective on his patients. The physician's illness may be either physical or mental, but more often the latter, or the character may be suffering from a mental disorder that results as a consequence from an impairment or physical illness. But the question is, how does this characterization change the effectiveness and operational capabilities of the antiheroic doctor?

The Functionality of the Antihero

The physician's illness or impairment in medical drama representations should inevitably limit the effectiveness of the physician's own actions. The interesting thing is that this figure of a physically or mentally dysfunctional doctor actually proves to be perfectly functional in the patients' care. This is due to the fact that the doctor's illness is represented in TV fiction as a gift that allows him to perform his functions much better than "normal" not ill doctors. The illness from which the anti-heroic doctor suffers, often some form of mental disorder, becomes thus a kind of superpower, rather than representing an impediment, as it would happen in real life.

Generally speaking, we have a similar situation in the portrayal of characters with mental illnesses in TV series. Mental illness in many TV series is not represented as an uncomfortable factor or one that determines a dysfunctionality of the subject, but as a positive factor, almost a superpower. In the fictional representation, mental illness offers the character the opportunity to see things differently and the ability to understand reality in a way inaccessible to 'normal' people. The madman in the fictional representation of the TV series is not dysfunctional but, on the contrary, hyper-functional.

For example, in the espionage TV series *Homeland* (Showtime, 2011-20), the main character, Carrie Matheson, is a CIA agent suffering from bipolar disorder, an illness she keeps under control using medication and which she keeps hidden from CIA'S supervisors so as not to be removed from active duty. Carrie, with her exceptional attention to detail that others often overlook, uncovers a series of clues leading her to suspect that a mili-

tary man, missing in action for eight years and recently returned, is secretly working for the Al-Qaeda terrorist group. It is her severe disorder that allows her to be more effective than other CIA agents.

Similarly, but in a different narrative genre, the protagonist of the crime series *Perception* (TNT, 2012-15), Daniel Pierce, is a brilliant lecturer in cognitive science and neuroscience who is used by the FBI to solve complex criminal cases in which his special skills as a psychologist are crucial. The issue is that he struggles with a severe form of schizophrenia, characterized by persistent hallucinations and occasional manic episodes. However, it is through these hallucinatory experiences that Pierce is able to work out solutions to the cases he is called upon to assist. His illness becomes the superpower that allows him to have a different or perhaps superior perception (hence the title of the series) of things rather than those unaffected by the disease.

This portrayal of illness, particularly mental illness, overlooks the true suffering experienced by those affected. Within the fictional narrative, however, the illness transforms the individual into a hyper functional and efficient protagonist. Although unrealistic, this plot device serves the purpose of crafting a compelling story within the TV series, centred around a flawed hero.

Starting from this assumption, I will try to identify the way in which the figure of the anti-heroic doctor is constructed as a flawed character in two specific TV series considered as exemplary cases. I will not consider here cases of antiheroic physicians placed in the context of choral narrative structures, such as the cases of dr. Doug Ross and dr. Kerry Weaver in *ER* (NBC, 1994-2009), because in these cases the narrative role performed by their flawed characterization contrasts with that of single-protagonist medical series. In choral structure TV series, the depiction of one or more antiheroic characters serves to provide the viewer with a wider range of character types, from the most good to the most evil, through the more nuanced characterizations of different gradations of the anti-heroic. Nevertheless, in such cases the effect achieved on the viewer by the inclusion of such characterized characters is less powerful and distinct compared to narratives that focus on a single antiheroic protagonist.

House: the Antisocial Antihero

The first example, *House, M.D.* series (2004-2012), centres on a physician, Dr Gregory House, specialized in nephrology and infectious disease with a very unique characterization. He is in charge of an emergency diagnos-

tic medicine unit that deals with extreme and difficult clinical cases. The problem is that his great diagnostic abilities are accompanied by a particularly difficult character. He is basically an antisocial person who refuses any contact with his patients and behaves brusquely and aggressively even with his colleagues. The justification for his behaviour comes from an illness: he suffers from an impairment in his right leg that limits his movement and brings constant pain. Due to this, House has become addicted to a strong painkiller, Vicodin, which further exacerbates the toughness of his character. Despite his physical impairment and difficulty in interpersonal relationships, House is portrayed as a capable physician who solves clinical cases where other doctors would have failed. This side of the character's characterization seems to allow the screenwriters to take the rationality of his behaviour to extremes. If House is apparently devoid of empathy for patients, his judgment will not be distorted or impaired by any emotional involvements. Illness increases rationality and thus the character's operational and pragmatic effectiveness in his professional activities.

House's ability to solve extreme clinical cases thus derives from his hyper-rationality. A disposition to hyper-rationality that stems from his sick condition. His illness involves the exclusion of any form of emotional participation in the clinical case. Although there's no risk of House being distracted from the patient's case, the show's producers have explicitly state that his primary objective is to cure the disease rather than the individual. This makes a difference with respect to his condition and his representation compared to the other doctors of his team who are instead emotionally involved and thus distracted in their cognitive action of solving their clinical cases. In the complex world of medical diagnosis, doctors often face a challenging situation where both their emotional and cognitive abilities come into conflict. This phenomenon is exhibited in a recurring narrative scenario in the popular TV show known as "the blackboard". During each episode, Dr House presents conflicting patient symptoms on a blackboard to his team and conducts brainstorming sessions. It is in this situation that the hyper-rationality of House's character becomes evident, which exceeds that of the other doctors present, every time, in efficiency and efficacy. House, as a result of his condition, is able to act in a cynical manner in

¹ Regarding the relationship between body representations and the use of technologies in *House M.D.* see Bentes 2010.

seeking the solution to the clinical cases by trial and error. House can be considered a Popperian physician who works through trial and error to test a hypothesis (Popper 1963): he identifies the solution by venturing an assumption and subsequently examining whether that assumption is correct or not (Bernardelli 2008). The problem is that in doing this, he often puts the patient's life at risk. For it is only by verifying the failure or falsification of a possible interpretive hypothesis regarding the patient's illness that he can determine if that line of inquiry should be abandoned in favour of another path. Falsifying a hypothesis involves putting the patient's life at risk through an attempt with treatment that often turns out to be wrong.² This cynical attitude towards the patient is possible only because House's character has been constructed in such a way that he shows no form of empathy towards the patient. His lack of empathy allows him to approach patient care in an absolutely technical and, as previously mentioned, hyper-rational form. Owing to his illness determines the fact that he can act so functionally, indeed hyper-functionally.

The Good Doctor: the Innocent Antihero

The other relevant case is that of the protagonist of the TV series *The Good Doctor* (2017-). The protagonist of the series is Shaun Murphy who has autism and savant syndrome (Poniewozik 2017). He comes from the small town of Casper, Wyoming, where he had a difficult past of abandonment and loneliness. After graduating from medical school, he gets a job at San Jose St. Bonaventure hospital, a prestigious private medical institution. He is helped and mentored in his career by his friend and sort of stepfather, Dr Aaron Glassman. Thanks to the latter he is hired at St Bonaventure creating controversy and divisions within the hospital board.

His savant abilities include near-photographic recall and the ability to note minute details and changes in patients' conditions. He is able to depict the patient's condition almost radiographically in his mind. An ability depicted through shots that enter the patient's body showing its mechanisms in a sort of 3D reconstruction.

Shaun's problem is that he possesses no empathic ability towards patients due to his disease. At the same time, and for the same reason, he manifests

² "We treat it. If she gets better, we know that we're right." (01x01)

in the eyes of the viewer a form of naive perspective of the world. The latter is a condition for which he is also rebuked by other doctors who do not understand his lack of cynicism and inability to understand the dynamics of the world. Shaun's illness involves attributing to the character, a higher-than-normal ability to concentrate – typical of the fictional representation of people with autism. This results in his ability to visualize the patient's condition, but also the possible developments of his clinical condition. The 3D visualization is used to make the viewer think that Shaun processes information in an almost mechanical, hyper-rationalistic manner, like that of a form of AI. This also illustrates Shaun's ability to use skills quantitatively superior to those of a physician without autism to solve the case. A mode of operation of Shaun not within the reach of other physicians that makes evident that condition we have termed hyper-functionality of the antihero with a mental disorder.

This condition of Shaun is somewhat parallel to that of House, whose hyper-rationality is induced by his illness and his consequent lack of empathy. In Shaun, however, this condition is accompanied by the naiveté of his attitude towards the world. Shaun is incapable of understanding, due to his illness, "how things are in the world." This is seen by his colleagues as a flaw, as an inability to interpret situations and thus to know how to handle himself in interpersonal relationships without being offensive or embarrassing at times. In the eyes of the viewer, Shaun's condition is instead a counterbalance to his lack of empathy. The hyper-rationality of Shaun's behaviour that might come across as cold and standoffish in the viewer's eyes, reducing him to a sociopath like House, is instead diluted by the naiveté of the character who often moves through the world like a child. In this way, the viewer's empathy towards the character is activated. In House's case the viewer's empathy is instead activated through the rational aspect of the character, that is, through his irony and cynicism towards the world. The empathic relationship with the viewer is activated in House's case by rational means, while in Shaun's case by emotional means.

Conclusions

I will leave aside the ethical issues which the portrayal of a dysfunctional doctor raises in the viewer's perception. Instead, I will focus on the writing motivations that may have justified such an unusual character construction and seemingly contrary to the expectations of the specific narrative genre. In

fact, in a medical drama the viewer is looking for a perfect doctor, a sort of 'Dr Kildare' (quoting a classic of the genre from the 1960s; NCB, 1961-66). In this more traditional genre of television series, the protagonist is always empathetic and efficient towards patients, and he is not characterized by any negative characteristics that would put him in an anti-heroic perspective in the viewer's eyes.

What narrative mechanisms are activated through the construction of the figure of a dysfunctional and fragile doctor? What effects can be achieved on the viewer?

The idea is that the antiheroic characterization of the protagonist in medical dramas creates a dialectical relationship between the emotional and the rational aspects of the narrative.

Illness inevitably increases the emotional focus on the character and the relative involvement of the viewer. Usually, it is the patient who receives this connotation and thus plays an emotionally relevant role in the eyes of the viewer. However, the patient is the temporary protagonist of the individual vertical plots in the serial story structure. The viewer's emotional involvement in traditional medical drama is therefore not continuous; it does not possess inter-episodic continuity (except for the rare occasions when the narrative of a single clinical case is extended over several episodes). Instead, the line of emotional continuity in traditional medical drama is defined by romance, by the interplay of the interpersonal emotional relationships (through the dialectic of Love & Hate) between doctors and other caregivers. Not by drama, not by a serious tone or subject. This kind of viewer's emotional empathy for the protagonist stems not from issues related to his sentimental or relational sphere, but from the condition of his body and mind. There is a shift from romance to drama that changes the type of emotional involvement of the viewer.

In *House, M.D.* and *The Good Doctor*, the protagonists' illness, their imperfection, shifts the emotional charge, and thus the viewers' attention, to the doctors themselves who are the protagonists of the story. This results in a very strong form of inter-episodic continuity in viewer involvement. The viewer is focused on the protagonists continuously, and along two different axes. The sick doctor is at the same time perfectly rational and efficient at work, but in the eyes of the viewer he is also the source of a strong emotional charge and investment, unusual in other medical series. The figure of a weak or anti-heroic doctor thus becomes a dual source of empathic bonding for

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the viewer instead of becoming a factor of detachment due to his supposed ineffectiveness as a physician.

In conclusion, we can say that Gregory House and Shaun Murphy are thus invested with a complex role. They are patients and doctors at the same time. With the consequence of leading the viewer to focus his/her attention on them according to a dual register, rational and emotional at the same time. And this happens in the inter-episodic continuity of the story of the two protagonists. This is also why these are TV series that are particularly focused on the two protagonists, rather than on the episode cases.

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WHEN THE DOCTOR IS SICK, OR WE COULD SAY, THE MEDICAL ANTIHERO



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18. "No Pulp Scenes on Raiuno!"

The Case of Cuori, an Italian Medical Drama on Broadcast Television¹

Elisa Farinacci and Emiliano Rossi

■ ABSTRACT

Since its inception, broadcast television in Italy has cherished and safeguarded its pedagogical vocation. Among its aims, Rai is compelled to provide a plausible and accurate (or verisimilar) representation of Italy's national identity and sociocultural history throughout its programming. This function has been manifestly accomplished through the news and documentaries. In the last two decades, however, more experimentation has been carried out on TV dramas. A peculiar example is the 2021 medical drama *Cuori* (Riccardo Donna), co-produced by Rai Fiction and Aurora Tv, which aired on Raiuno's primetime. Set in 1960s Turin, the series is inspired by true historical events regarding a group of Italian pioneers of medicine who revolutionized the field of heart surgery, experimenting with new techniques and challenging the limits of science of the time. Building on an extensive fieldwork research conducted on the set during the shooting of the second season of the series, we wish to focus on how a media company as Rai can adapt the format and narrative structure of a contemporary medical drama such as *Cuori* to its public service mission. We will address this issue from a production standpoint which will analyze the use of a multiplicity of historical sources and consultants to develop the plot, set design, costumes, and actor performances. Our preliminary findings show that a calculated blend of historical accuracy with the standards of the medical genre was set in place to appeal to a wide Italian audience.

KEYWORDS

Medical drama; public service; national history; production strategies; ethnographic fieldwork.

¹ This work is the result of a collaboration between the authors in all parts of the essay, which was conceived and written cooperatively.

Introduction

Turin, Italy, 1967. The race for the heart transplant is the dream of Cesare Corvara, chief of cardiology at The Molinette Hospital and founder of the first Italian department of cardiac surgery, together with Alberto Ferrari, his most talented protege. The arrival of Delia Brunello, one of the first heart specialists returning from the United States and endowed with an extraordinary diagnostic ability, will soon unsettle the hospital balance. Set in the fervid atmosphere of the Italian Sixties, the series develops around high-risk surgical interventions, subtle power struggles, ties of friendship, and past love affairs.

The concept of *Cuori* (*Hearts*), period-medical tv drama aired in 2021 by the first channel of the Italian public broadcaster, takes inspiration from true historical events regarding a group of pioneers of medicine who challenge the limits of the medical practice of the time by revolutionizing the field of heart surgery. Those were the years in which cardiology was making the most advancements and its main exponents became actual stars in the society of the time. Big personalities, exceptional skills, and the constant challenge to write new pages in the history of medicine are only a few of the topics featured in the successful tv series *Cuori*.

By no means exhaustive, this article provides an explorative account and examination of the preliminary results of a research project started in 2021. We conducted a qualitative analysis of this product, focusing on the intersection of its main textual elements with specific aspects of its production chain, and offer some final interpretative possibilities. Building on two fieldwork expeditions conducted on the set during the shooting of its second season of the series, we focus primarily on the way that a media company such as Rai can adapt the format and narrative structure of a contemporary medical content to its public service mission. The inquiry delves around two different research question, concerning (i) the positioning of



the case study within the editorial policies of the State-owned broadcaster and (ii) the narrative use of history, both in a perspective of genre and in the philological reconstruction which underlies the whole production.

Since its inception, broadcast tv in Italy has cherished and safeguarded its pedagogical vision, also through a meticulous representation of the Country throughout its programming, especially in the case of tv dramas and *Cuori* is no exception. The series is coherent with a typically national fictional *corpus*, as demonstrated in the first section of the chapter, an aspect that sheds light on the specificities of health-related titles in the context of a public corporation service and of its serial production.

After some details related to the research design and a methodological outline, the core of the contribution explores the use of a multiplicity of historical sources and consultants to develop the plot. In particular, based on the in-depth interviews conducted with professionals and other stakeholders, attention will be drawn to the audiovisual materials – often sponsored by Rai itself – deployed before and during the creation of the series. Our first findings show that a calculated blend of historical accuracy, the structure of the medical drama, and a substantial dose of romanticised subplots was developed to appeal to a wide Italian audience. In conclusion, we will address some final remarks on the aspects which still need to be expanded, mostly in respect to future research avenues.

Which Medical Drama? The Editorial Positioning of Cuori

Commissioned by Rai Fiction, *Cuori* is a co-production between Rai and Aurora tv (part of multinational tv factory Banijay), written by Fabrizio Cestaro, Mauro Casiraghi and Simona Coppini and directed by Riccardo Donna.² Among others, the cast include Daniele Pecci, Matteo Martari and Pilar Fogliati, and the series was created thanks to the support of Piemonte Film Commission and Rai's local production centre in Turin. The first season of *Cuori* was broadcasted on flagship channel Raiuno on a weekly basis and in the format of two episodes/evening, from October 17 to November 28, 2021, with an average audience share of 18.4%;³ the programming of the second season is scheduled, also on Raiuno, for the first week of October 2023 (and, thus, will not be included in the analysis since it was not yet released at the time this chapter was written).

Two are the components which, at an editorial level, are worth noticing. First, Cuori is a domestic, self-produced drama – or "fiction", as it has commonly been referred to since the early '90s (Carini, 2013) - which encompasses and reflects its broadcaster's mandate. In line with Rai's programming, Cuori should accordingly be framed as a product called upon to strengthen the public service mandate and commitment. It should not be forgotten, indeed, that "contemporary Italian tv fiction production is the result of both a long historical tradition and a complex broadcasting scenario" (Barra and Scaglioni 2015: 65). The classic pedagogical matrix of the public service has often arisen in "hagiographic miniseries, socially committed fiction and relevant comedies" (Ibid.), which became emblematic genres of Rai's productions and distinct editorial lines. Public service operates as a cultural bond and civic aggregator in a landscape increasingly dominated by digital fragmentation, in the attempt to forge a sense of communal belonging while shaping Italian citizenry, fulfilling criteria of transversality, inclusivity and connection with the whole territory (see Buonanno 2012a, 2012b, Cardini 2004, Colombo and Scaglioni 2008, Grasso 2004, Menduni 1998). In the wake of the sceneggiato footprint, public tv drama is first and foremost required to construct and reflect a

² The genesis of the series (concept and first contacts with Rai) dates back to 2017, as emerged during an interview with the producer Giannandrea Pecorelli.

This was quite a satisfactory result, in line with the average share audience of the channel.

national epic, against the backdrop of a "common denominator programming, appealing to all social groups and unifying its viewers" (Bettetini 1990: 115) and according to the audience's "needs of organization, interpretation, symbolic mediation and understanding of everyday life" (Silverstone 1999: 41). Such a distinctive "Italian style", perfectly embodied by a title like *Cuori*, can be traced back to the context of its broadcasting channel, Raiuno. As clarified in Rai Fiction's guidelines,4 as well as in the company annual budget report⁵ and in the editorial presentations of the last few years,6 "Raiuno targets a general viewership, totalizing the highest geographical and population coverage in Italy [...]". Thus, "Raiuno's offer comprises popular stories directed to all the segments of the audience, strong in terms of values and able to portray weaknesses and hardships, with recognizable but not stereotyped characters." Furthermore, "Raiuno is a prestigious and reliable channel, asked to deliver with respect and elegance its contents, detecting the spectators' demands with sensitivity, professionalism, and responsibility." Those signature features are all upheld by the case here analyzed, starting with the contamination of genres displayed by the series, in line with the tendency of blending narrative strands that engage the viewer through original textual hybridizations and (re)-compositions. From this standpoint, Rai's fictional genres are not conceived as isolated factors, but rather as tightly interdependent entities.⁷ Suspended between tradition and progress, continuity and rupture, Cuori seems to follow a unique path towards medical drama. At a closer look, Cuori features a hybridisation of genres, incorporating a marked romantic strand focused on the private experiences of the characters involved in the medical main thematic line. This romance-filled emotional center provides a warm and engaging narration, developing what may be defined as a "tabloidization"

⁴ Rai Fiction's guidelines are available here: https://www.rai.it/portale/La-fabbrica-delle-storie-86dc82f3-3f7a-4f7a-9b06-bf21e4185832.html (last accessed 28-07-23).

Rai's financial documents are available here: https://www.rai.it/trasparenza/Financials-b5a1b45c-a875-4d42-ba62-e51518b57fa7.html (last accessed 28-07-23).

⁶ Reference materials can be reached at the following links: https://www.rai.it/dl/doc/1688733601975_Rai%20Fiction.pdf; https://www.rai.it/dl/doc/1656340198662_Fiction.pdf; https://www.rai.it/dl/doc/1624537267327_FICTION%202022%20AFF%20 RID%20OK.pdf; https://www.rai.it/dl/doc/1624353498300_PALINSESTI%20RAI1%20 AFF%20RID%20OK.pdf (last accessed 28-07-23).

⁷ This tendency is confirmed by Rai's editorial scheme (see https://www.rai.it/portale/Lafabbrica-delle-storie-86dc82f3-3f7a-4f7a-9b06-bf21e4185832.html, last accessed 28-07-23).

of the medical genre, as Valentina Esposito underlines in a review published on Cinematographe.it:

The story of *Cuori* is as ancient as the world, but so universal that it appeals to every spectator: the eternal fight between reason and sentiment. [...] *Cuori* is a sentimental medical drama, and its vintage setting and historical flavour offer a vivid aesthetic. [...] For these reasons, *Cuori* is a promise and a pleasant break from other Rai's productions, which always tune on the same frequencies. [translation by the authors]⁸

Appealing to the same taste for melodrama which made the fotoromanzi so popular in Italy, the consistency of the series with the hospital genre is mostly visible in the professional dynamics.9 Once more, Cuori seems to certify how the perimeter of the genre bends and vanishes when attempting to label it, exhibiting a constant tension between fixed elements and variations. The audience of Raiuno face what could be defined as the 'spectacle' of medicine, commodified for the use and consumption both of the medium and its average audience, not devoid of some representational limits (e.g., the omission of obscene or pulp scenes). Confirming the genre "isotopies" identified by Pescatore and Rocchi (2019) as the grounds of the typical plot structure, the medical plot of Cuori appear as a pretext to narrate something else, from love affairs to collective stories of social empowerment, that draw parallels between the ethical dilemmas of that time with contemporary aporias raised today by genetics and by scientific innovations more broadly. Whether being "realistic or ridiculous" (Harris and Willoughby 2009), medical details are surely functional to the attractiveness of the product, thanks to the pathemical components intrinsic in the genre. Moreover, in Cuori the hospital emerges as a microcosm where emotions are heightened, acting as an emotional booster for spectators.

It has been highlighted that *Cuori* adheres to medical genre structures, mixing horizontal and single-episode narratives, while breaking away from some of its canons, resulting in an inter-genre and thematically spurious

⁸ The full review is available here: https://www.cinematographe.it/focus-serie/cuoristoria-vera-fiction-rai/ (last accessed 28-07-23).

⁹ According to Rai's editorial lines, the professional genre "develops around organisations or professional institutions with the aim of representing human and business relation dealing with those universes" (see https://www.rai.it/portale/La-fabbrica-dellestorie-86dc82f3-3f7a-4f7a-9b06-bf21e4185832.html, last accessed 28-07-23).

series. Some additional elements seem to confirm this thesis. Firstly, the depiction of gender equality and the fight against male prejudice embodied by the Delia's character and her fight against gender bias in the workplace (analyzed in detail in the following section). Her fight against prejudice is meant to reflect the societal changes taking place in 1960s Italy such as generational conflicts, women's rights and the breaking down of barriers between public and private spaces. Secondly, *Cuori* offers an insight into the biopic genre, understood by Rai as "the celebration of exemplary characters or leading exponents of the past" and of the "Italian genius". ¹⁰ This becomes apparent when thinking about the real people and events that have inspired the series, which echo the commitment of the public service in shaping a shared national identity. Memory, present and future thus converge creating an aspirational atmosphere that revel the self-evident educational tendency of all Rai's productions.

Lastly, *Cuori* also shares some of the features of the period drama by setting the events and characters in a near past. The subplot, dotted by the character's private stories, is a mixture of collective reference able to cater to an intergenerational audience by exploiting the so-called "retromania effect", which foregrounds an optimistic and positive portrayal of the 1960s.

As John Caughie writes about the period drama, "history becomes the present in costume" (quoted in Buonanno 2012a: 122). The rehabilitation of history becomes here the added value of the series, establishing a syntony with the current sensitivity, in a time dominated by a sense of uncertainty and disorientation towards the future. When retrospective, the televised past presents a reassuring vision of a stable and comforting landscape, acting as a connector between modernity and memory, which enacts and renews the original public service charge. *Cuori*, therefore, heralds the cultural mission of Rai as a socially committed drama able to attract large audience thanks to an edifying tone and plot, as Paolo Sutera reports on TvBlog:

Undoubtedly, *Cuori* is a travel back in time, but the historical context becomes an occasion to actively catch the attention of today's audience. [...] No futuristic instruments, nor new technologies, but a way of living this profession with courage [...]: this allows the series to develop without the

¹⁰ A detailed explanation of Rai fiction genre's is provided here: https://www.rai.it/portale/La-fabbrica-delle-storie-86dc82f3-3f7a-4f7a-9b06-bf21e4185832.html (last accessed 28-07-23).

anxiety of having to compete with contemporary hospital seriality. [...] *Cuori's* story is suspended between the past and the present. [translation by the authors]¹¹

Not surprisingly, *Cuori* does ultimately become a magnificent historical novel, which sacrifices complexity for accessibility in both content and language, especially concerning its least accessible medical ingredients: the inevitable compromise that a mainstream to series cannot avoid suiting large audiences.

Fieldwork and Methodology: a "Hands-On" Approach

We had the opportunity to conduct fieldwork research at the Lumiq studios in Turin on two different occasions (November 14, 2022 and January 16, 2023), which allowed us to consolidate our relationships with the above-the-line professionals and creative figures, expand our network of informants, and co-reference the possible changes in the work discourses and practices on the set between the beginning and end of the shooting (Caldwell 2008).

The fieldwork experience was facilitated by our connection with the producer of the tv series, Giannandrea Pecorelli (founder and current CEO of Aurora Tv), whom we met during a previous research project, ¹² which led us to the set of another period daily drama: *Il paradiso delle signore* (Rai1, 2015-). This previous experience is worth mentioning as it allows to draw

¹¹ The full reviews is available here: https://www.tvblog.it/post/cuori-recensione (last accessed 28-07-23).

Fieldwork research at the Videa Studios (Formello, Rome) on the set of the TV series Il Paradiso delle Signore. The research falls within the Bologna unit's work of the State-funded 2017 PRIN F-ACTOR. Forme dell'attorialità mediale contemporanea. Formazione, professionalizzazione, discorsi sociali in Italia (2000-2020) (F-ACTOR. Forms of Contemporary Media Professional Acting. Training, Recruitment and Management, Social Discourses in Italy (2000-2020). Further information about the project (Principal Investigator: Francesco Pitassio; Responsible of the Bologna unit: Luca Barra) can be found here: https://italianperformers.it/it/ (last accessed 28-07-23). On the website, a couple of reports edited by Emiliano Rossi about the on-field experiences at the Videa and Lumiq Studios can also be reached (https://italianperformers.it/it/articoli/la-via-italiana-al-medical-depoca-visita-sul-set-di-cuori/ and https://italianperformers.it/it/articoli/tutti-i-coloridel-paradiso-sul-set-di-un-daily-drama/, both last accessed 28-07-23).

insightful parallelisms at the productive level. Although there are no formal crossovers in the series (even though the epoch partially overlaps), clearly the work relationships established between professionals during the shooting of Il paradiso delle signore have created a network of alliances that carried over to Cuori (Holdaway 2017) and to other tv contents produced by Aurora Tv. Let us think for example at actors such as Neva Leoni, Marco Bonini, and Alessandro Tersigni who have worked on both sets. The first fieldwork, thus, opened the doors to the set of Cuori, privilege that can be connected to two main factors. On the one hand, in Italy there seems to be an underling desire shared by television producers to validate their work both within and outside the industry. As noted in previous experiences (Farinacci 2022), the university is often considered as an important gatekeeper in the cultural context. This aspect resonated true particularly due to Rai's national public service mandate, "due to this peculiar expectation, the interviews disclosed an unexpected wealth of information that might have been otherwise inaccessible" (Ibid.: 151). On the other hand, the knowhow and reputational capital (Ebbers and Wijnberg 2012) that we gained through the experience on the set of *Il paradiso delle signore* gave us more freedom and independence during the fieldwork, as we were granted full access to the set, actors, and creatives working in the different departments.

The approach adopted addresses television and media as complex entanglements of production and distribution cultures (Caldwell 2008, Szczepanik and Vonderau 2013, Barra, Bonini and Splendore 2016); in virtue of this, the instrument of in-depth interviews was prioritized to collect evidence and scientific data on the specific case study here discussed. In particular, the "studying down" approach (Mayer 2008; see also Nader 1969), which involves interactions primarily with producers and creatives, was implemented by more informal conversations and long observations of the shooting practices on set. These unofficial exchanges became possible due to the mediation of an intern, who arranged our visits and meetings at the studios. Her presence impacted the research on two levels. On the one hand, her participation during the semi-structured interviews allowed us to establish a more informal setting limiting the formality and control over the conversations that the presence of higher standing above-the-line professionals would have ensured. Starting with a "meeting between professionals" dynamic (Bruun 2016, Kraub 2018), the semi-structured interviews were enriched by personal anecdotes especially during our second visit. On the other hand, however, her lower standing position, combined with our status as young researchers, did not exercise sufficient pressure on some of the informants to find time to talk to us, creating long waits between each interaction.

The data collected on the field was then supplemented by follow-up interviews, email conversations, and the collecting of archival material that was used by the screen players, set designers, and costume designers to create the series. From the perspective of media production studies, the constant triangulation of the various sources implemented represents a fundamental methodological standard. On this basis, an analysis of additional paratextual sources was also accomplished, with a specific focus on trade and promotional documents (i.e., press kits, media releases, advertising), as well as on semi-public industrial documents dealing with the commissioner and its broadcasting strategies (i.e., schedules, marketing plans, ratings). Finally, to better contextualize its reception, some journalistic accounts and reviews of *Cuori* were included in the desk research.

The Historical Validity of *Cuori*: Sources and Philological Reconstruction

Cuori is a medical period drama that follows the genesis of the scientific and technical discoveries that lead in the late 1960s to the first heart transplant and to the development of an artificial heart in Turin's cardiac surgery department of the Molinette hospital. As previously mentioned, this product tries to find a balance between historical fact, a major concern for Rai, the medical genre, and melodrama (Byrne et al. 2022: 2). The tv series follows the story of a group of doctors who wants to revolutionize medicine. The historical narration of the innovative surgeries is mixed with a fictitious soapy running plot that follows the power struggles between surgeons, the rekindling of past loves, friendships, and infidelities all set in Italy's near past.¹³

As Joseph Turow asserts, "medicine as a profession is very much in style on television" (2010: 1). The interest in this genre is not a recent phenomenon, "there has been a long relationship between medicine and the small screen, and many of tv's most popular shows, on both sides of the Atlantic, have been medical in focus" (Byrne et al. 2022: 1-2).

Compare the tagline of the series available at: https://www.rai.it/dl/doc/16245372673 27_FICTION%202022%20AFF%20RID%20OK.pdf_(last accessed 28-07-23).

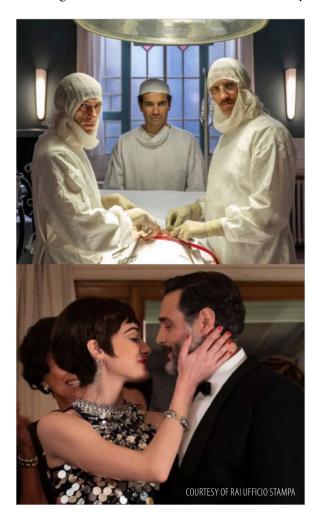
American medical drama has certainly made strides in gaining popularity among national and global audiences (Rocchi 2019). In this national context, the medical genre has proven to be a powerful outlet for sociopolitical critique by narrating how current news impact the characters (and in turn also the audience) personal experiences (Turow 2010). Popular tv shows including *ER* (NBC, 1994-2009), *Grey's Anatomy* (ABC, 2005-), *New Amsterdam* (NBC, 2018-2023), just to mention a few examples, incorporate and discuss in their plots controversial policy (such as the 2022 overturn of abortion rights in the United States), or injustices connected to the privatized healthcare system, or the racial discrimination inherent to specific treatments and diagnoses. While shows set in the present become "soft power" assets, capable of swaying public opinion to demand social change, period medical dramas function in a slightly different way.

Generally, historical dramas have been recognized as key role players within national audiovisual cultures across the Western World, acting both as an international 'shop window' and as catalysts to "generate major debates at home on the role of the past in contemporary national identity construction" (Bangert et al. 2016, xviii). These products tend to present the past as a "visually spectacular pastiche, inviting a nostalgic gaze that resists the ironies and social critiques so often suggested narratively by these films" (Higson 1993: 109). In the case of medical dramas this nostalgic fascination for the past is ever so curious as they explore "aspects of history [that] the modern viewer is least likely to feel nostalgic for; these pre-antibiotic, pre-anaesthetic, often unsanitary pasts are not places most of us would want to be a patient in" (Byrne et al. 2022: 2). Thus, in such products the attractiveness of the past does not so much lay in reliving the hardships of pre-modern medicine, but in the exploration of "gender and class politics that surrounded patient care, the moral and philosophical implications of scientific advances and experimentation, and the changing nature of the increasingly powerful medical profession" (Ibid.), as well as "the attractiveness of the leads and their romantic entanglements [that] help us to forget or forgive some of the less pleasant historical realities of the past under consideration" (Ibid.: 5).

In other words, medical period dramas represent issues that are still pertinent today both to offer commentaries on the issues surrounding medicine in the present day, and to retrace and praise the scientific innovations achieved within specific national contexts. In fact, period medical dramas such as *Cuori* "showcase doctors, nurses, and midwives at the forefront of modernizing their professions, sometimes risking their own lives to save

others" (Ibid.) in a way that celebrates a country's past achievements and consolidate its shared national identity, as detailed the previous sections.

In this direction move most of Rai's self-produced products and international co-productions. As mentioned above, Rai's public service charter as the Italian Republic broadcaster requires stringent guidelines to follow. One of the regulations that Rai's service contract must follow, involves the creation of products that provide a plausible and truthful representation of the present and past Italian cultural context and identity. Rai's attention towards broadcasting films and tv series that feature historically accurate, or



at least verisimilar, required the above-the-line creators and artisans of *Cuori* to engage in extensive archival research to write the script, construct the set design, and train the actors.

Against this backdrop, one of the goals of *Cuori* is to portray the historical events that lead to the development of the first Italian artificial heart. The race towards this medical innovation is narrated following the professional and private stories of the main characters of the series: Cesare Corvara and Alberto Ferraris, who are inspired by two historical figures, respectively Achille Mario Dogliotti – the first doctor in the world to perfect the application of the heart-lung machine for extracorporeal circulation – and Angelo Actis Dato, who developed a series of patents in the field of cardiac surgery (including the artificial heart, designed together with the engineer Roberto Bosio, and the first Italian pacemaker, which will be narrated in season two). The character of Delia, instead, is based on the life of Helen Brooke Taussig, an American pioneer of pediatric cardiology in the 1940s, who, having lost her hearing, listened to the heartbeat through her fingers – a skill that has been fictionalized in the series as Delia's perfect pitch.

To ensure a high degree of authenticity, the production of the series involved extensive documentation and assistance from medical professionals. The son of Angelo, Guglielmo Actis Dato – current chief cardiac surgeon at The Molinette hospital – was invited to actively participate as a consultant on the set along with Gino Lavista, a very young perfusionist, employed in the 1960s to control the machinery in Professor Dogliotti's operating room. If In fact, many of the cases featured in the episodes were taken both from the private and clinical notes of Angelo Actis Dato and Gino Lavista, as well as from actual footage that was shot during the operations recorded in the documentary *Caso 127*, and from other source material such as the book *Viaggio nel cuore. Storia e storie della cardiochirurgia*, a historical account written in 2012 by Ugo Filippo Tesler. As the TV series editor confirms during our interview, "every case that is described in *Cuori* comes from a story by Angelo Actis Dato, like in the case of the cross-circulation between the newlyweds" (Cristiano del Monte, editor) that we see in epi-

¹⁴ A full description of the plot is published on *Radiocorriere Tv* (no. 40, year 90, 04-07-2021), https://www.rai.it/dl/doc/1633336843531_Rdtv_N40_US.pdf (last accessed 28-07-23).

Caso 127, https://www.youtube.com/watch?v=P2NaG1OJNzg (last accessed 28-07-23).

¹⁶ All interviews in this work have been translated by the authors from Italian.



sode two. Furthermore, all the scans and ECGs performed in the series are part of Actis Dato archival source material. Even the audio recordings of the heartbeat's defects that Delia hears from the patients are "absolutely realistic [...] for every heart ailment the audio comes from real cases" (Cristiano del Monte, editor).

In addition to relying on the images drawn from *Caso 127* and on the expertise of its scientific supervisors, Rai has made extensive use of its own archival material: Teche (the company owned video library). Other au-

 $^{^{\}rm 17}$ $\,$ Interview held at the Lumiq studios (Turin), January 16, 2023.

dio-visual resources used to create *Cuori*'s plot were the reportage *1968*. *L'anno del cuore* (aired by Rai in its titular year), the documentary *All'estero per guarire* (also broadcasted by the public service in 1968) and other video fragments showing cardiovascular technologies of that time.

Let us look, for instance, at episode 13 when on December 3, 1967 the news breaks of the Italian defeat in the run for the heart transplant by the hand of Dr. Christiaan Barnard at the Groote Schuur Hospital in Cape Town, South Africa. ¹⁸ The characters find out about this extraordinary medical achievement on television where the footage playing is the authentic news feed that Rai broadcasted on that day (which also acts in the series as a sort of tele-medicine tool). ¹⁹ Thus, when watching the series all the audiovisual media inserted in the narration are archival materials either coming from Rai Teche or from the personal documentation of the Dato family, which originate as a high-impact metalinguistic device, deployed also in the promotional clips prepared by the digital department of Rai. ²⁰

The narration of the breakthroughs in the medical fields are accompanied in the TV series by representations of the changing Italian sociocultural context of those years. First, it discusses the ethical controversy that surrounded heart transplants with a strong and open opposition coming from the Catholic Church, which saw in the harvesting of a beating heart a form of murder. This ethical debate is clearly shown in several episodes: when the bishop of Turin refuses to undergo surgery at The Molinette hospital because such research is being developed (01x03); when the Head of the University of Tourin refuses to host a conference on the topic (01x05); when a delegation of Catholic doctors abruptly interrupts the conference demanding to shut down the project (01x06), and at the end of the series when a family withdraws their consent to donate their son's heart for Dr. Corvara's own transplant (01x16).

¹⁸ The success of Barnard's surgery found a wide coverage within Rai's internal and external publication, as emerges from the archive of *La nostra Rai* magazine, house organ for employees (archive research held by the authors on May 2023).

¹⁹ See, for instance, *Christiaan Barnard, il cardiochirurgo che effettuò il primo trapianto di cuore* on Rai Teche's video collection, https://www.teche.rai.it/2021/09/christiaan-barnard-il-cardiochirurgo-che-effettuo-il-primo-trapianto-di-cuore/ (last accessed 28-07-23).

²⁰ As underlined by our interviewees, the promotional material of the series was conceived to offer a "full overlapping" between the actual frames of *Cuori* and the original audiovisual materials of the epoch broadcasted by Rai.

Within the context of the medical practice in Italy, *Cuori* also touches on problematic issue of mental illness, which is narrated through the story of Alberto's sister who is afflicted by depression. In the 1960's mental illness was vastly treated with the controversial electroshock therapy, which was performed behind the closed doors of mental institutions. For a reform of the psychiatric system, Italy will have to wait until 1978 when Parliament approved the Basaglia Law (Mental Health Act), which imposed the closing down of all psychiatric hospitals to be gradually replaced with a range of community-based services. This topic is only partially developed in this first installment, but it is further explored in the second season.²¹

As already mentioned, another social issue depicted in the narration is related to the social standing of women both in the healthcare system and in Italian society more broadly. Although there is no outright reference to the feminist movement, which started to become vocal in those years, the issue is addressed on different levels: in the anthology plot when, for instance, the issue of women reproductive rights (abortion in Italy won't be legalized until 1978) is brought to the forefront when one of the nurses becomes pregnant outside of wedlock; in the running plot when the partially fictionalized character of Delia struggles to affirm her status among the colleagues and hospital staff (a plotline that reflects more contemporary sensibilities).

From the storytelling point of view, medical tv series have privileged different gazes onto the medical world depending on the decades when they were produced. Contrarily to the time period depicted in the series, *Cuori* seems to blend the narrative structures of 1960s and 1970s medical dramas, which focused on the "political-economic environment" (Turow 2010: 3) of the medical profession, with a more contemporary sensitivity towards the "doctors' personal lives and the time that doctors must establish relationships with patients" (Ibid.) – a shift that is detectable in medical dramas produced from the 2000s onward.

This openness towards the interworlds of the physicians, however, does not fully follow the more post-modern approaches that contemporary period dramas have embraced, that is understanding "precepts of fact, truth and history [as] carry[ing] the same status as invention, fable and myth, and any rigidity or distinction in relation to these terms collapses" (Cooke and

²¹ See the editorial presentation of Rai's 2023/2024 season available here: https://www.rai.it/portale/La-fabbrica-delle-storie-86dc82f3-3f7a-4f7a-9b06-bf21e4185832.html (last accessed 28-07-23).

Stone 2016: 259). However, we could venture to say that there is a peculiar "Rai way" to approach post-modern heritage dramas, which adopts a slight banding of historical facts to appeal to modern audiences as in the case of the construction of Delia's character. Through Delia, in fact, the series leans towards a more contemporary sensibility for gender equality by narrating her struggle that a gifted female cardiologist had to face to gain the respect of the all-male surgical team of The Molinette, as the actress Pilar Fogliati underlines:

Delia arrives from the States, and in America [...] a woman is more socially accepted, jobs and so on. So, she arrives at the hospital wearing an open lab coat, a mini skirt, and shows no fear in speaking in front of men simply because she is strong, because she is very competent, and she cannot believe it when she sees that not only her colleagues but [also] her patients feel calmer being operated on or diagnosed by a man. So the social thought that was well rooted, and the beauty of this series in my opinion, is that I didn't want to interpret a pissed off Delia who screams and says "you have to respect me", but I wanted her to show how she uses silence and her intelligence in a very effective way, that is, "I am competent", "I give you my diagnosis which is the right one". So her work will speak for itself.²²

Moreover, the director of the series, Riccardo Donna, seems to confirm those reflections: "[...] Delia has the perfect pitch, as many musicians, and that's why she does not auscultate: [...] a prodigy of medicine who is not worried to wear a mini-skirt on the job".²³

To adhere more closely to Italy's medical and social context, which exceptionally witnessed the presence of women doctors, Delia's character had to be written as exceptional from different points of view. Firstly, she possesses the unusual and fictional gift of the perfect pitch, and secondly, she underwent her medical training in the United States. The historical figure of Helen Brooke Taussig, from which the character of Delia takes inspiration, is unsurprisingly also North American. Thus, coming from an apparent more egalitarian research environment in the United States, the character of Delia – both localized and globalized – represents a *unicum* for her gift and expertise

²² Interview held at the Lumiq studios (Turin) January 16, 2023.

²³ Interview to Riccardo Donna available as a podcast here: https://www.spreaker.com/user/10480135/intervista-a-riccardo-donna (last accessed 28-07-23).

acquired abroad, as highlighted in episode 7 in a dialogue between Corvara and Cavalier Tosi, the investor from the Fiat automotive manufacturer:

Corvara: "[...] in Houston, the doctor [*Delia Brunello*] worked with the research group that is developing the artificial heart, [...] she knows more than anyone else here"

Cavalier Tosi: "I don't doubt it, but we're not in America here".

Delia's fight against prejudice is exacerbated also by her status as Corvara's wife, which is seen by the other doctors as the sole reason for her privileged position and treatment at the hospital. This struggle, however, is functional to the melodramatic love triangle more than an outright feminist manifesto. As the season develops her abilities are recognized shifting the focus on women's conditions to secondary characters and to the anthology plot.

When examining the close correlation that *Cuori* has with Italian history, we can observe how this medical drama does not simply wish to *look at* and *use* the past to understand the present, but to highlight a part of Italian history that is less known by national and international audiences. While Italy's reputation is usually connected to its cultural and artistic past, first and foremost the Renaissance, *Cuori* highlights the nation's contributions in the medical field, coherently with Rai's nation branding strategy.

Final Remarks and Future Research Avenues

The aim of this chapter is to relay some of the preliminary findings that emerged from the fieldwork research conducted on the set of *Cuori*. Far from being an exhaustive account of all the aspects that surround the creation of this TV series, our intent was to explore some of the creative choices that were adopted in the production process with particular attention to the meticulous work of historical documentation conducted by Rai and Aurora tv's professionals.

As strongly remarked by all the above-the-line creators and actors, *Cuori* wished to depict the achievements and struggles of a group of doctors who strived to change the face of modern medicine. The Italian past that this TV series represents is exposed and deeply connected to the wider global context: those doctors have worked and traveled around the world keeping close contact with the international scientific community. *Cuori* also regis-

ters the deep changes that Italian society was undergoing in the 1960s: the audience face a society that is experiencing an economic boom and questioning its traditions and values, slowly pushing the boundaries of religious beliefs and patriarchy.

Despite its positioning within Rai's editorial lines, the choice to revisit and celebrate Italy's past through a medical period drama is quite curious, given the dearth of this genre among Italian television productions. Together with some additional productive strategies, this is a phenomenon that deserves further investigation especially given the green light that *Cuori* received for a second season and the success obtained by other medical dramas, such as *DOC - Nelle tue mani* (Rai1, 2020-), currently distributed both on Disney+ and Amazon Prime Video.

The role of OTT players is another aspect that should be further explored in relation to the success of medical dramas as Netflix acquired the distribution rights of *Cuori* in 2022 and added the series to its catalogue (the acquisition is connected to the legal requirements imposed by EU to the streaming players active in the continent). Thus far it only appears to be featured on the Italian library but given the streaming platform's interest towards Italian narrations that have the potential to resonate also in the global market (Barra 2017), it would be interesting to monitor if and where this tv series may circulate in the future. Future steps of this research could finally focus on the audience reception of such a portrayal of Italy: a nation that was at the forefront of medical and technological innovation, able to overcome the more common and widely exploited nostalgic images of the past glories, from Ancient Rome to the Renaissance.

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"NO PULP SCENES ON RAIUNO!" THE CASE OF CUORI, AN ITALIAN MEDICAL DRAMA ON BROADCAST TELEVISION



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19. The (Many) Functions of DISEASE Metaphors in the Medical Drama TV Series *House*, *M.D.*

Adeline Terry

■ ABSTRACT

The corpus under scrutiny is constituted of the first two seasons of the American TV series House, M.D., in which 118 metaphorical expressions were identified following the procedure that was established by the Pragglejaz group (2007), the MIP (Metaphor Identification Procedure); these expressions were then classified according to the source domain which is used to conceptualise the target domain disease, following the theoretical framework of the Conceptual Metaphor Theory. The results show that the most productive conceptual metaphors are The SICK BODY IS A BROKEN MACHINE/OBJECT (29 occurrences), THE SICK BODY IS FOOD/DRINKS (21 occurrences), A disease is a person (20 occurrences), Having a disease is fighting a war (19 occurrences), and, to a lesser extent, A disease is A JOURNEY (5 occurrences), DIAGNOSING A DISEASE IS PLAYING A GAME (6 occurrences), and A disease is an animal/a monster (4 occurrences). All these metaphors have different, sometimes overlapping functions which are analysed in the discussion section. They are mostly used to explain or vulgarise medical discourse for the viewers. Naturally, due to the taboo nature of disease, they also fulfil a euphemistic or dysphemistic function depending on which character is using them, which often leads to a humorous interpretation for the viewers. Finally, they often contribute to the characterisation of the protagonist and the series.

KEYWORDS

Functions; *House, M.D.*; medical TV series; metaphor; X-phemisms.

Introduction

In recent years, linguists have become interested in studying the language of TV series and medical dramas are no exception; House, M.D. (Fox, 2004-2012) in particular has received significant attention in the field of pragmatics. The series focuses on the life of Dr. Gregory House, a misanthropic diagnostician who heads the diagnostic department of Princeton Plainsboro Hospital and solves a new medical mystery each episode with the help of his team. Several papers have focused on humour, sarcasm, irony, (im)politeness or metaphor in the series (see for example Dynel 2012a, 2012b, Tabacaru 2019, Terry 2019a), as the protagonist is known to be an asocial, sarcastic character, However, few studies have focused on medical discourse in the series, although disease, treatment and medicine constitute the main conversational topics. This chapter focuses on medical discourse, and more precisely on DISEASE metaphors, which are overwhelmingly present in House, M.D. due to its nature as a medical drama. More specifically, I present the results of the study of a corpus composed of the DISEASE metaphors found in the first two seasons of the American series *House, M.D.* It is based on two previous studies, Terry (2019a) and Terry (2019b), in which I studied metaphors and their functions in a larger TV series corpus that included *House*, M.D. The objective in this chapter is to focus exclusively on *House, M.D.* and on disease metaphors and to further investigate how they contribute to the characterisation of the protagonist and the series.

I firstly briefly define the theoretical framework and then present the corpus and the methodology adopted. The last part is devoted to the study of the corpus, in which I continue my reflection on the functions of the metaphors in *House, M.D.*

Theoretical Background: DISEASE Metaphors

The objective of this first part is firstly to define the theoretical concepts that are necessary to the study of metaphor, and secondly, to give an overview of existing studies on disease metaphors.

Definitions and CMT

The preconceived idea according to which metaphor is a mere ornament has long been swept away by studies on the subject, and in particular by the Conceptual Metaphor Theory (henceforth CMT), which was introduced in 1980 by Lakoff and Johnson in their landmark study *Metaphors We Live By*. Their claim is that metaphor is ubiquitous in everyday life and is embedded in human cognition (1980: 3).

This view is not entirely incompatible with previous studies on metaphor which focused on its literary, argumentative, rhetorical, explanatory, or even humorous functions; however, these traditional approaches failed to account for the pervasiveness of metaphor. The fact that thought is essentially metaphorical explains why metaphor is ubiquitous and which it can have so many functions in discourse. CMT therefore accounts for the frequency of metaphorical occurrences in language and discourse and the semantic links between different linguistic metaphors, which traditional studies have not been able to do (Deignan 2005: 3-4):

Although it can seem an obvious way to explain metaphor, the decorative approach runs into some problems. In particular, it does not explain the widely observable fact that many metaphors, both novel and conventional, are semantically related to each other [...] The decorative metaphor also failed to account for the frequency and ubiquity of metaphor.

Indeed, as Kövecses (2002: 4) explains, conceptual metaphors allow speakers to conceptualise one domain in terms of another. A conceptual metaphor takes the form CONCEPTUAL DOMAIN (A) IS CONCEPTUAL DOMAIN (B), where (A) is understood through (B). These conceptual metaphors are to be distinguished from linguistic metaphors, which are metaphorical terms or expressions that derive from a CONCEPTUAL DOMAIN (B) generally referred to as the source domain (CONCEPTUAL DOMAIN (A) is the target domain). For example, consider the following common linguistic metaphors: "You have to fight this disease", "She won the battle against cancer", and

"The treatment was really aggressive". These are three linguistic realisations of the same conceptual metaphor, HAVING A DISEASE IS FIGHTING A WAR. Systematic correspondences are established between the source and target domains (Kövecses 2002: 6), which implies that elements of the source domain are projected onto the target domain:

What does is mean exactly that A is understood in terms of B? The answer is that there is a set of systematic **correspondences** between the source and the target in the sense that constituent conceptual elements of B correspond to constituent elements of A. Technically, these conceptual correspondences are often referred to as **mappings**.

For instance, in HAVING A DISEASE IS FIGHTING A WAR, the target domain is HAVING A DISEASE and the source domain is FIGHTING A WAR; the main element in the target domain is the disease, which corresponds to the enemy in the source domain, but the opponent may in turn be the patient, the doctors, or the drugs. The ubiquity of these linguistic metaphors makes it possible to identify the existence of the underlying conceptual metaphor, of which the linguistic realisations vary.

It should also be noted that the source domain is generally more abstract than the target domain (Semino 2008: 6):

Cognitive metaphor theorists emphasise that target domains typically correspond to areas of experience that are relatively abstract, complex, unfamiliar, subjective or poorly delineated, such as time, emotion, life or death. In contrast, source domains typically correspond to concrete, simple, familiar, physical and well-delineated experiences, such as motion, bodily phenomena, physical objects and so on.

It is not surprising that concrete, very precisely defined, and familiar domains should be used to conceptualise abstract or complex domains insofar as metaphor makes it possible to understand one concept through another concept. Disease is a vast, complex domain that can be difficult to understand without resorting to metaphors because it would require extensive medical knowledge; additionally, despite recent medical progress, science and healthcare professionals can still not exhaustively explain the way all diseases, treatments, or the human body work. A source domain such as FIGHTING A WAR can help accurately describe the experience patients undergo and help healthcare practitioners communicate with their patients.

The existence of these systematic correspondences between the source and target domains implies that only certain elements of the source domain are projected onto the target domain. However, several source domains can be used to conceptualise the same target domain; for example, DISEASE can be conceptualised via the source domain war and the source domain JOURNEY, among others. The target domain will therefore be conceptualised differently depending on the source domain used, since each source domain allows certain aspects of the concept to be highlighted or hidden (Kövecses 2002: 80). In the examples cited above, the conceptual domain war will *a priori* rather allow to highlight the violent dimension of the disease, as well as the notion of courage, whereas the source domain JOURNEY will rather allow speakers to highlight the duration of the disease, as well as the different stages that it implies.

Degree of Lexicalisation

Conceptual Metaphor Theory can also prove useful to distinguish between lexicalised and creative metaphors; for Kövecses, classifying metaphors according to their degree of lexicalisation is a means to justify the anchoring of a metaphor in everyday use (Kövecses 2002: 29). Many linguists have established relatively classifications which include different degrees of lexicalisation, including Lakoff (1987), Goatly (1997), Deignan (2005: 36-47), Crespo Fernández (2008: 98), Semino (2008: 19), or Dancygier and Sweetser (2014: 35), to name a few. Although there are fine distinctions to be made in the degree of lexicalisation, in this chapter, I merely distinguish between lexicalised metaphors (in which the metaphorical expression is no longer considered as such, as in *seizure* in (1), or is widely used by speakers) and creative metaphors (which are the result of a new association, for example that of DISEASE and BASEBALL in (2)):

- 1. HOUSE: "29-year-old female, first **seizure** one month ago, lost the ability to speak. Babbled like a baby. Present deterioration of mental status." (*House 01x01*)
- 2. HOUSE: "Senator Gary H. Wright of New Jersey had childhood epilepsy. He took phenytoin. That drug, with the Epstein-Barr virus, is associated with common variable immunodeficiency disease. T-cells down, B-cells down, it keeps you from forming enough antibodies. See, antibodies are basically your defensive line. And your brain is like the quarterback. And then the fungi are like blitzing linebackers,

plunging up the middle. Your lungs are like... Okay, you've got two quarterbacks..." (*House 01x17*)

In this extended metaphor (2), the disease is conceptualised as a baseball team, and the body as the opposite baseball team. It does not *a priori* correspond to any existing conceptual metaphor although it relies on personification. Nevertheless, this creative linguistic metaphor contains numerous details and involves other conceptual domains. The correspondences are not evident and may be difficult to retrieve for the speakers as House tries to make them explicit for the co-speakers to understand but fails to do so.

DISEASE Metaphors and their Functions

Few studies have focused on the different source domains used to conceptualise disease; one of the most comprehensive studies conducted on the topic was a project entitled "Metaphor in end-of-life care", which aimed to study the metaphors used by patients and carers in palliative care in the UK (at Lancaster University). The research team collected a corpus of over 1.5 million words. They found that metaphors of war and violence can be positive or negative – i.e., euphemistic or dysphemistic – depending on the nature of the correspondences between the domains (Semino, Demjén, and Demmen 2016: 17, Semino et al. 2017); for example, having a disease is a journey metaphors can be positive or negative, based on the correspondences that are established between the two domains. Semino, Demjén, and Demmen (2016: 9) also mention other source domains that can be used to conceptualise disease ("machinery, sports, animals, fairground rides, and so on"), although war/violence and journey remain the most frequent.

The linguistic occurrences deriving from disease conceptual metaphors can have different functions in discourse. Most studies on the functions of disease metaphors focused on their X-phemistic function. Disease is, like death or sex, a taboo domain because of its close connection with religion and the human body (Terry 2019a). Allan and Burridge (1991: 173) note that the historical reason for the existence of this taboo is that many diseases could not be cured in the Middle Ages – not even through atrocious treatments – and that these diseases were therefore considered as divine punishments. The persistence of this taboo in our contemporary Western societies can be explained by the close link between disease and death, insofar as incurable diseases that inevitably lead to death are among the most tabooed;

this is for example the case of cancer. Thus, the mention of disease or any other taboo topic often involves the use of X-phemisms – that is, euphemisms, dysphemisms, or orthophemisms. Euphemisms are defined by Allan and Burridge (1991: 11) in the following words:

A **euphemism** is used as an alternative to a dispreferred expression, in order to avoid possible loss of face: either one's own face or, through giving offense, that of the audience, or of some third party.

Euphemisms allow speakers to preserve their face and to avoid offending their co-speakers; it is very often resorted to in order to mention the taboo domain DISEASE as it allows speakers to conceal unpleasant characteristics of the taboo. An orthophemism is the neutral term that refers to the taboo (Burridge 2012: 66); it is often the technical or scientific term in the case of the domain of disease. Lastly, a dysphemism is a term that is considered offensive by co-speakers (Allan and Burridge 1991: 26), that is to say a term that does not hide the most unpleasant characteristics of the taboo domain DISEASE. There is a continuum between these three types of X-phemisms: an overused euphemism is likely to become a dysphemism when it becomes contaminated by the taboo domain. Metaphor is the preferred means to create X-phemisms (Crespo Fernández 2011: 54), and this for two main reasons: firstly, metaphor is the most productive word-formation process in English (Jamet 2010: 7-12); secondly, thanks to the highlighting-hiding principle, it allows speakers to emphasise or conceal some aspects of the taboo.

Other studies have been conducted on the metaphors used to refer to disease or illness and their functions. These include studies in terminology such as Oliveira (2009) or Faure (2012); Oliveira (2009: 24), for example, focuses on terminological metaphors in the field of cardiology, which are used to name new medical concepts or conditions, but which are lexicalised and part of the medical jargon. They can also be dysphemistic for patients, who do not always understand them.

Finally, a few studies have focused on the potentially humorous function of disease metaphors (notably Demjén 2016: 24); Dynel (2012), as for her, worked on humorous metaphors in *House*, *M.D.*, but without restricting her analysis to disease metaphors.

It is also interesting to note that other studies have not focused on the functions of metaphors *per se* but on the debate surrounding their use in

medicine. Sontag (1979, 1988) rejected the use of metaphors – and more particularly war metaphors such as having a disease is fighting a war – to conceptualise disease. Sournia (1997: 98), Reisfield and Wilson (2004: 4024), or Ogien (2017: 67-69) have a more nuanced approach. They believe that these metaphors are necessary insofar as they would be difficult to replace and can be useful to both caregivers and patients, as they constitute a means that helps physicians to explain diagnosis to patients, who can then better apprehend it.

The functions of metaphors mentioned in this subpart, which were mainly retrieved in non-fictitious corpora, seem to be present in *House, M.D.* as well. However, the metaphors in a TV series also endorse other functions, such as the popularisation of medical English. In the next part, I will show that metaphors in the corpus seem to occupy in turn different functions, which often combine.

Analysis of the Corpus

Corpus and Results

The corpus is composed of the first two seasons of *House, M.D.* The metaphorical occurrences were manually collected following the protocol established by the Pragglejaz group (2007), the MIP (Metaphor Identification Procedure). A total of 109 metaphorical occurrences were found in the corpus and grouped according to their source domain. The results are shown in table 1.

The results show that the most productive conceptual domains are Machine/Object, food and drinks, person, and war/violence. The pervasiveness of some conceptual metaphors in the corpus is not surprising: this is notably the case for Having a disease is fighting a war (19 occurrences) and Having a disease is a journey (5 occurrences), which have received much scholarly attention in non-fictitious corpora. Additionally, the frequent resort to the domains object and machine and to personification can be explained as well as we tend to resort to more concrete source domains, to things we know, in order to conceptualise concepts that are more abstract or thing that we do not know. The resort to other conceptual domains, such as Game, is however slightly more surprising and those metaphors fulfil specific functions in the corpus.

Conceptual domain	Conceptual metaphor	Number of conceptual metaphors	Total
Machine / Object	(PART OF) THE SICK BODY IS A BROKEN MACHINE/ OBJECT	23	29
	THE MIND IS A MACHINE	2	
	A TUMOR/DISEASE/SYMPTOM IS AN OBJECT	4	
FOOD AND DRINKS	(Part of) the sick body is food	19	21
	An organ donation is a harvest	1	
	Drugs are drinks	1	
Person	A disease/bacteria/tumor is a person	8	20
	A disease/bacteria/tumor is a suspect/culprit	8	
	An organ is a person	4	
War / VIOLENCE	HAVING A DISEASE IS FIGHTING A WAR/VIOLENCE	19	19
JOURNEY	A DISEASE IS A JOURNEY	5	5
GAME	A disease/diagnosis is a game	3	6
	PATIENTS ARE PUZZLES	3	
ANIMAL	A DISEASE IS AN ANIMAL	3	4
Miscellaneous	Difficult to link to a conceptual metaphor	5	5

Table 1
Conceptual domains, conceptual metaphors, and number of occurrences.

The Function of the Metaphors in the Corpus

Metaphors in *House, M.D.* fulfil several functions that are often combined and that I shall attempt to identify in this part, relying on Terry (2019a) and Terry (2019b).

They all essentially serve the popularisation of scientific medical discourse – medicalese – which is too specialised to be accessible to the viewers, who are not, for the majority of them, trained physicians. The alternation of specialised discourse and metaphors allows the viewers to understand diagnoses and treatments thanks to the resort to simple concepts and it also allows them to become oblivious to their ignorance in the field of medicine. Therefore, many occurrences in the corpus have a basic **explanatory function**, as the three following examples:

- (3) WILSON: "The plan is basically to... **Reboot** your daughter. **Like a** computer. We shut her down then restart her." (*House 02x02*)
- (4) FOREMAN: "Could be amphetamines." HOUSE: "Or a bacteria **lunching** on his heart; or cardiomyopathy or some other very bad thing. He needs an EKG." (*House 02x12*)
- (5) CUDDY: "It worked! There's a clinic in Germany, they've been treating chronic pain by inducing comas and letting the mind basically reboot itself." (*House 02x24*)

In real life interactions – that is to say, outside the fictional world –, vulgarisation is needed in doctor/patient interactions (as in example (3)), but not in doctor/doctor interactions. The constant use of metaphors on-screen participates in the process of making the medical content available to the recipients (the viewers) but does not necessarily reflect real-life interactions. Some metaphors also have a **didactic/persuasive function** close to the explanatory function since they allow House to explain a diagnosis by guiding the interlocutors' thinking with more or less success:

(6) HOUSE: "You wake up in the morning, your paint's peeling, your curtains are gone, and the water's boiling. Which problem do you deal with first?"

FOREMAN: "House!"

HOUSE: "None of them! **The building's on fire!** We treat her symptoms, she dies, we find the cause, she lives. That tick is an IV drip of poison, we unhook it, she'll be fine." (House 02x16)

However, explanatory and didactic functions have a better chance of immediate success if the association between the two domains is not new, as in (3), (4) and (5). Indeed, extended, creative metaphors in *House, M.D.* usually remain incomprehensible for a long time because the association of the source and the target is incongruous (Dynel 2012a: 87-88), but maybe not as much as purely scientific talk would be. They ultimately allow the characters and the viewers/recipients to understand the meaning, as in (6), in which the paint peeling, the curtains and the water boiling stand for the symptoms while the building being on fire stands for the cause, that is to say, the disease.

Extended, creative metaphors in *House, M.D.* also tend to have a **humorous function** for the viewers – and this is the case of example (6). Dynel

(2012a: 102) identifies several factors that contribute to the humorousness of creative metaphors in *House*, *M.D.*, including the discrepancies between the source and the target domain (that is to say, the incongruity of the association of the two domains in creative metaphors) and the difficulty to retrieve the correspondences between the two domains. However, for humour to be interpreted as such, several conditions have to be met. Firstly, the incongruity must be resolved (Suls 1972), which means that the recipient has to ultimately understand which correspondences are projected from one domain to another. Secondly, the violation must be benign (McGraw and Warren 2010) – that is to say that the context must be interpreted as safe. This explains why at inter-character level, the metaphor in example (6) is not interpreted as humorous: the characters often do not understand the metaphor, they are under pressure as they need to save their patients' lives, and they are most of the time overtly denigrated and mocked by House; things are different for the viewers (Dynel 2012a: 108):

[U]nlike characters preoccupied with serious medical cases, viewers do not directly experience the gravity of the situations in which metaphors are produced, perceiving the medical problems as enthralling detective riddles which are bound to be resolved at the end. Listening to film discourse from their privileged position, viewers may be preoccupied with the problem at hand, but they do not feel threatened [...] This is why recipients can appreciate the humorous effects of diaphoric metaphors as such.

Dynel (2012a: 102) concludes that the humorousness of such metaphors is reinforced by communicative strategies.

Additionally, as disease is a taboo topic, disease metaphors can have an X-phemic function (which may in turn participate in the humorous dimension). In *House, M.D.*, they tend not to be euphemistic, which is not very surprising as the majority of them are used by Gregory House, a character described as misanthropic and cynical by his colleagues (67 occurrences out of 109, or 61%). A lot of them tend to be dysphemistic (a dysphemism being the offensive counterpart of a euphemism), especially those which rely on the conceptual metaphor THE SICK BODY IS FOOD GOING BAD. This is the case in example (7):

(7) FOREMAN: "Maybe we should just biopsy it." HOUSE: "She's a fridge with the power out. We start poking around inside, the vegetable goes bad. No offence." (House 02x14)

This metaphor, in which the patient's body is conceptualised as a fridge and their organs as rotting food, is dysphemistic because it is dehumanising and has negative connotations; however, the viewers, who are not part of the fictional world, do not interpret the situation as threatening but as humorous, because it is a benign violation at their level. This pervasive use of dysphemistic metaphors also participates in the characterisation of House.

Indeed, **characterisation** is also one of the functions endorsed by the metaphors in the series. Dysphemistic metaphors are mostly resorted to by Gregory House and they tend to dehumanise patients by conceptualising them as FOOD (8) or OBJECTS (9).

- (8) HOUSE: "Well, obviously not that mild. This keeps up and his hand will **literally be dead meat**. His hand is connected to his arm, his arm is connected to... I'm not sure, but I bet it's important." (*House 02x03*)
- (9) HOUSE: "See, that'll sound much better in court. Okay, go tell our human **pincushion** we'll be sticking him one more time." (*House 01x17*)

This is very defining of House's character as he systematically refuses to add a human dimension to his work as a diagnostician; by way of example, he refuses to meet his patients to focus on their disease. On the other hand, he often conceptualises DISEASE/BACTERIA/TUMORS as PEOPLE in personifications; although these metaphors evidently fulfil the aforementioned functions, the fact that people should systematically be associated with negative domains such as these ultimately negatively reflects on them in House's metaphors. This contributes to depicting him as a misanthrope, as in (10), as he repeatedly uses problematic relations or concepts that do not reflect well on humanity.

(10) CHASE: "Coma, vomiting, abdominal pain, Hep-C explains everything." HOUSE: "Except for the suddenness of the onset."

EOREMAN: "What's wrong with the timing?"

FOREMAN: "What's wrong with the timing?"

HOUSE: "You get home one night. Your wife hits you with a baseball bat. Likely cause is the fact you haven't thanked her for dinner in eight years, or the receipt for fur handcuffs she found in your pants. Sudden onset equals proximate cause." (House 01x15)

The fact that House should be the author of the vast majority of extended, creative metaphors actively participates in the characterisation of House as

a witty, creative, unconventional character. Beyond these functions, some of the conceptual metaphors also contribute to characterising the series and to distinguishing them from other medical dramas.

Conceptualising MAKING A DIAGNOSIS to Characterise the Series

In the corpus, there are six occurrences of a DISEASE/BACTERIA/TUMOR IS A SUSPECT/CULPRIT, a recurring metaphor that is introduced as early as the first episode:

(11) HOUSE: "Differential diagnosis, people: if it's not a tumor what are the suspects? Why couldn't she talk?" (*House 01x01*)

[...]

HOUSE: "There's never any **proof**. Five different doctors come up with five different diagnoses based on the same **evidence**." (*House 01x01*)
[...]

HOUSE: "Patients always want **proof**, we're not making cars here, we don't give guarantees." (*House 01x01*)

This conceptual metaphor is regularly resorted to in the series, quite often in more creative, elaborated occurrences than (11):

(12) HOUSE: "We assumed that the tumors were growing 'cos he's getting sicker, but he could have grown old and died and never known about them if he hadn't come here. We were looking for something; it's more or less in the right part of the brain. It's like we found someone standing over a dead body holding a gun. We arrested them, didn't look any further. Well sometimes, people really do just stumble into a murder scene."

[...]

WILSON: "What if it's not an infection?"

HOUSE: "Were you not paying attention when I was doing my murder scene metaphor?"

WILSON: "What if the tuberous sclerosis IS guilty? It had the guns in its hands, it was standing over the..."

HOUSE: "It doesn't cause fever." (House 02x19)

All these more broadly participate in a detective metaphor in which the process MAKING A DIAGNOSIS is conceptualised as SOLVING A CRIMINAL CASE. Different correspondences are established between the source domain SOLVING A CRIMINAL CASE and the target domain MAKING A DIAGNOSIS:

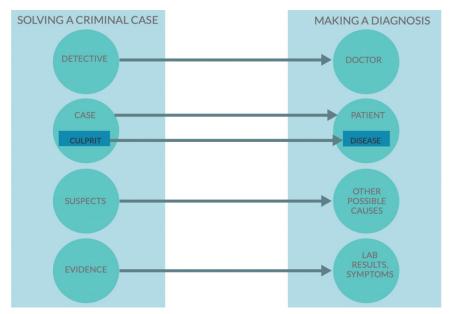


FIGURE 1
Correspondences in examples (11) and (12) (SOLVING A CRIMINAL CASE IS MAKING A DIAGNOSIS).

Although this conceptual metaphor is fruitful in *House, M.D.*, it is rather creative and specific to the series, and its function is to participate in the construction of *House, M.D.* as a "generic hybrid of medical and criminal/detective drama" (Armbrust 2012: 2). The main character, Gregory House, is inspired by Sherlock Holmes (which was specified by the creator of the series, David Shore), and this connection is particularly visible in the structure of the episodes, as underlined by Armbrust (2012: 2), who compares it to *CSI*:

- 0. Teaser, in which a victim is murdered / a patient develops symptoms that typically lead to a collapse. Generally, the show's recurring characters are not present at this initiating event, and the opening credits succeed the teaser, that is hence also referred to as a "cold start".
- 1. Act one, in which (after the opening credits) the detectives arrive at the crime scene / the patient arrives at the hospital and the experts begin their investigation into the identity of the murderer / the nature of the illness underlying the symptoms. This act typically ends in the negation of all the hypotheses initially entertained: the first suspect is innocent /

the medical case is more mysterious and life-threatening than assumed, which often manifests itself in graphic bodily displays of new symptoms.

- 2. Act two, in which the search for an explanation of the current situation begins anew; and ends again in the negation of the hypotheses.
- 3. Act three, which repeats the same steps to the effect that at the end of the third act, **imminent death looms over the patient** and the doctors seem further away from a solution than ever before.
- 4. Act four, in which the crime is finally reconstructed / the correct diagnosis is discovered, the murderer is arrested / the patient is treated and healed (or, in rare cases, diagnosed as terminal and informed that no treatment is possible).¹

This conceptual metaphor is however in competition with – or completed by – six other metaphorical occurrences that all rely on the source domain GAME. House likes to play games – and above all, solving puzzles, that is to say medical mysteries – before the patient dies, as his friend Wilson indicates in 01x06:

(13) FOREMAN: "I thought he liked rationality."

WILSON: "He likes puzzles."

FOREMAN: "Patients are puzzles?" WILSON: "You don't think so?"

FOREMAN: "I think they're people." (House 01x06)

- (14) WILSON: "You know how some doctors have the Messiah complex, they need to save the world? You've got the Rubik's complex, you need to solve the puzzle." (*House 01x09*)
- (15) CAMERON: "Then why did you sedate her? If she wasn't going to tell, if she was never going to do the right thing, why bother knocking her out? This isn't about them, if she talks, if she does the decent thing, then you don't get to solve your puzzle, your game's over, you lose." (*House 02x18*)

This metaphor is elaborated differently from MAKING A DIAGNOSIS IS SOLVING A CRIMINAL CASE: the domain A PUZZLE contains different pieces that correspond to the symptoms and the lab results, and the puzzle is the patient; the doctor is the player trying to reassemble the pieces. The metaphor is partly

¹ Emphasis is mine.

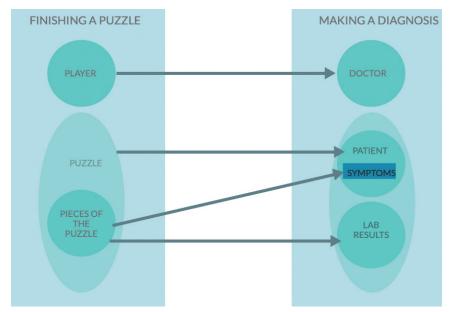


FIGURE 2 Correspondences in examples (13), (14) and (15) (FINISHING A PUZZLE IS MAKING A DIAGNOSIS).

dysphemistic because it suggests that the patient and their disease are not taken seriously, and there is a discrepancy between DISEASE and PUZZLE. Finally, to further define House as a witty character, all metaphors for the action of MAKING A DIAGNOSIS do not rely on SOLVING A CRIMINAL CASE OF FINISHING A PUZZLE; some of them can be even more creative and are entirely isolated occurrences that rely on analogies used once, as in this last example:

(16) FOREMAN: "But we can't biopsy his spleen. Respiratory distress? His platelets are 20 and dropping, his blood won't clot worth a damn."

CAMERON: "There's got to be another way to diagnose hairy-cell."

WILSON: "No, his bone marrow's indeterminate, spleen's the only way to go."

HOUSE: "You know, when the Inuit go fishing, they don't look for fish." WILSON: "Why, Dr. House?"

HOUSE: "They look for the blue heron, because there's no way to see the fish. But if there's fish, there's gonna be birds fishing. Now, if he's got hairy-cell, what else are we gonna see circling overhead?"

CHASE: "He should have all sorts of weird viruses." (House 01x17)

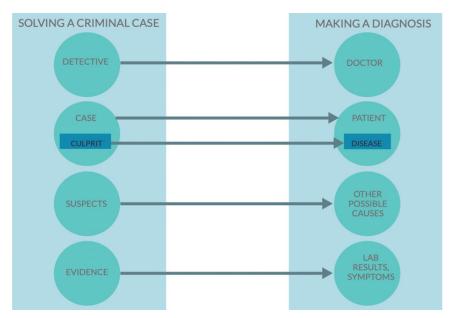


FIGURE 3 Metaphorical correspondences in example (16).

Beyond allowing a conceptualisation of MAKING A DIAGNOSIS, this metaphor is also representative of interactions in House (Dynel 2012); House is a witty character who resorts to metaphors and finds the diagnosis, while the other characters translate the metaphor in medical terms and collaborate with House. This allows the viewers to understand the diagnosis and to feel comfortable thanks to the familiar construction of the interaction.

Conclusions

I hope I successfully showed that the most used conceptual domains in the corpus for disease were machine / object, food and drinks, person, war / violence, journey, game, and animal / monster; some of them are commonly used conceptual domains, while others are creative occurrences. In the vast majority of them, the conceptualisation of disease is a means to popularise medical discourse, and these metaphors also have different functions which can overlap: explanatory, humorous, X-phemistic, or they may contribute to the characterisation of the characters and of the series as

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a whole. Creative and extended metaphors in particular tend to have a role beyond mere conceptualisation and vulgarisation as they are particularly salient and tend to serve characterisation and humour.

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THE (MANY) FUNCTIONS OF DISEASE METAPHORS IN THE MEDICAL DRAMA TV SERIES HOUSE, M.D.



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