

# Showrunners' Scripts are More Cognitively Complex

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# Abstract

The term "showrunner" is used in the US entertainment industry to describe the person who is the chief executive *and* creative officer of a television TV series. The position is very prestigious, often very financially rewarding, and thus highly sought-after. While there are many paths to the role-and even instances of almost overnight success-the vast majority of current showrunners worked their way up over several years from staff writing positions to production-related roles, often across several different series in the process. Conventional wisdom about how to climb the ladder from writer to showrunner strongly emphasizes the importance of both writing and of originality. While there is research linking objective characteristics of pilot episode scripts to success of the subsequent series, we are aware of no studies that consider whether and how scripts written by showrunners with those written by staff writers. Towards that end, in this study we compare the scripts written by showrunners with those written by their staff writers for two highly-acclaimed dramatic series from the last decade-*The Good Wife* (2009) and *The Mentalist* (2008). Specifically, we test for differences in the "cognitive complexity" of the two groups of scripts. As expected, we find that, on average, scripts written by showrunners exhibited higher cognitive complexity than those written by staff writers how have yet to attain to this role.

Keywords: television, screenwriting, showrunner, producer, screenplay, cognitive complexity, social network analysis, semantic network analysis, network text analysis, etymology, morphology, compound words, word formation, screenwriter, Hollywood

# 1. Introduction

# 1.1 What Is a Showrunner

The production of television series requires the combined efforts of numerous distinct activities including, but not limited to, those of writers, directors, producers, and actors. The role that has the broadest "mix between creative and managerial responsibilities" and that "has primary creative control and management of a TV show" is that of showrunner (Bedard, 2020).

They aren't always necessarily the creator of the show, but they're almost always a writer. Showrunners are responsible for keeping the writers' room moving forward, keeping the actors happy, and sticking to the budget for each episode. Most importantly, showrunners must adhere to the central creative vision of the series.

As the individual, responsible-directly or indirectly-for all key aspects of a show, from development to pre-production and then post-production, the role of showrunner has been described rightly as the "brass ring" for aspiring TV producers (McCreary, 2016). Not surprisingly, the role is highly lucrative and highly sought-after. Top showrunners such as Shonda Rimes, the creator of *Grey's Anatomy* (2005) and *Scandal* (2012) and Ryan Murphy, creator of *Glee* (2009) and *9-1-1* (2018) are reported to have compensation and reward packages with Netflix well in excess of \$100 million (Park, 2018).

# 1.2 Showrunners and Writers

According to Bedard (2020), a key responsibility of a showrunner involves running the writers' room-the location, typically a large office or conference room, "where writers of a particular TV show gather to work on the story together." (Hellerman, 2019). In their capacity as head of the writers' room, showrunners are responsible for hiring writing staff,

reading every episode to "ensure a consistent tone and voice" and generating "episode and season outlines" for consideration of and approval by network bosses (Bedard, 2020).

The size of a writer's room can vary from as few as two writers to as many as twenty. The ultimate number depends on several factors, not the least of which are the number of episodes in the series and the budget (Hellerman, 2019). There is a clear hierarchy and division of labor among room members (Hope, 2019):

- *Writers' Assistant:* in the WR as a note-taker. They may also perform support activities such as spell-checking and formatting documents and performing research.
- *Writers' Production Assistant:* They maintain the office and room space and assist the work of the assistants and writers.
- *Staff Writer:* title for low-level writers, typically during their first stint in a writing room. They often work without a guarantee of having their name on an episode.
- Story Editor: They are able to pitch stories for episodes and have their name appear on the credits for it.
- *Executive Story Editor:* Middle of the writing hierarchy, typical title for someone in their third or higher year on a show.
- *Co-Producer/Producer:* Typically 4-5 seasons (years) of experience. Primary description still involves writing but may also have a role in casting, working on the set, and interfacing with directors.
- *Supervising Producer:* Upper-level writer with expanded responsibilities for the show including leading the writers' room with the showrunner and Co-Executive Producer are busy.
- *Co-Executive Producer*: the showrunner's right-hand with responsibilities that include reviewing and re-writing scripts before the showrunner sees them. In short, a showrunner-in-waiting.
- *Showrunner/Executive Producer:* The executive in charge of all creative decisions on a television show. They "break" the story, set and control the budget, have a hand in casting and selecting directors. As a series first showrunner, they most often have written the pilot episode, as well as others throughout the first season.

While no more than two or three people are typically credited as writers of any particular script-these most often being the Staff Writer, Story Editor, Executive Story Editor, and/or Showrunner-inputs into the writing process can and do come from any of the above.

## 1.3 Getting into the Writing Room

There is no single path to becoming a working television writer (Hellerman, 2019). One common approach is to start as an assistant in a writing room, a role that builds a network or contacts who at some point may be willing to read your writing (ibid.) Another is to write spec scripts for existing shows either as writing samples or with the hopes that it might get produced. As summarized below, current and former showrunners offer a great number of tips for aspiring writers to break into the industry, i.e. to get a job in a writing room. Not surprisingly, most of them on writing.

- Have an original voice (LeRoi, 2019; Keith, 2019; Hope, 2019)
- Write original material rather than, e.g. a spec script for an existing show (Keith, 2019; Singleton, 2019)
- Write spec scripts as practice (LeRoi, 2019)
- Write a pilot as a writing/staffing sample (Hope, 2019)
- Make sure the first act is really good (Keith, 2019)
- Learn the craft of writing (LeRoi, 2019)
- Appear educated, write in grammatically and typographically correct English (Hope, 2019) not in "text message" language.
- Don't try to be "meta" or rely on overly clever tricks (LeRoi, 2019)
- Don't imitate anyone's method of success (Keith, 2019)
- Write, start what you finish, get feedback and write again to show that you can sustain the process of writing continuously (LeRoi, 2019)
- Write about what you are impassioned about (Birmingham, 2019)
- Have a table read of your script (Hope, 2019)
- Be the first person to execute on the script idea that you have (Keith, 2019)

### 1.4 The Path from Writer to Showrunner

In a *Producers Guild of America* panel discussion (McCreary, 2016) entitled "What is a Showrunner? The pros weigh in", Sarah Treem, former writer on *House of Cards* (2013) and showrunner for *The Affair* (2014) told assembled audience members and aspiring producers that "You can't know the job (of showrunner) until you have it." Her extended remarks, however, revealed that despite having climbed several successive rungs of the career ladder, the transition into the role of showrunner was one for which that experience didn't adequately prepare her. Her experience is by no means unique. Three years later, Ali Leroi, former writer former writer on *The Chris Rock Show* (1997) and showrunner for *Everybody Hates Chris* (2005) and *Are We There Yet*?, echoed the same sentiment during another industry panel discussion , declaring that "...showrunning is a crash course in everything...in running a multi-million dollar business (sometimes) with no training..." (Hope, 2019).

At first blush these statement might seem at odds with typical career path that leads from writers to show runners, as described below here Hundt (2018):

Most showrunners have a writing background, usually in television, and work their way up from being part of a writers' room. The path typically looks something like this: writer, story editor, co-producer, producer, supervising producer, co-executive producer, and then executive producer (i.e. showrunner).

But in their subsequent remarks, both Treem and Leroi clarify that it was the increased responsibility (for all aspects of a series) for which they were not adequately prepared. The importance and centrality of writing in no way diminishes, however, as Treem (2016) made abundantly clear:

...my reputation was built on (my) writing. Then becoming a show runner with 150 people needing direction (from you) is a steep learning curve. The role is in many ways like parenting but different.

#### 1.5 Relevant Research

Despite the obvious importance of writing in both becoming and being a showrunner, it's somewhat surprising that there is such a paucity of empirical research on this subject. More specifically, we are aware of no empirical or even qualitative research that has examines the role that writing quality and/or quantity plays in climbing the aforementioned career ladder from staff writer to showrunner. The closest of which we are aware is a body of research by Hunter and colleagues (Hunter, 2014, 2019; Hunter, Smith, & Chinta, 2016; Hunter & Breen, 2017) that examines the impact of textual and content-related factors on the performance of new, dramatic, TV series. Specifically, those three factors were (a) the originality of the show's premise or concept (b) the track record of success of the series' showrunner and (c) the cognitive complexity of the series' pilot episode script, a scrip that was always (co-)authored by the showrunner.

In their studies of dramatic series appearing on the four major US broadcast networks-ABC, NBC, CBS, and Fox-the authors reported that the cognitive complexity of the pilot episode script strongly predicted the length of the series first season (Hunter & Breen, 2017), the number of viewers that watched the first five episodes (Hunter, Smith, & Chinta, 2016), the number of viewers of the first season (Hunter, Chinta, Smith, et al, 2016), and the Nielsen ratings (18-49 demo) for the first five episodes (Hunter, 2019). Cognitive complexity is a construct common in the academic psychology literature to ascertain the level of complexity of an individual's frames of reference or perceptual skills (Bieri, 1955). Among its most prevalent definitions are "the number of independent dimensions of concepts that an individual brings to bear in describing a particular domain of phenomena" (Scott 1962: 405) and "the number of independent constructs a person uses in perceiving and interpreting the environment." (Tinsley et al. 1983: 94). In the studies mentioned above, the researches constructed concept maps-"morpho-etymological networks" (Hunter, 2014)-from selected words in pilot episode scripts, the size of which was taken as a proxy measure for cognitive complexity. Absent from consideration, however, was any evaluation of the impact on a series' performance that could be attributed to non-pilot scripts, the majority of which are not written by the showrunner. While that question is the not specific concern of the present study, we propose what we believe are an equally important pair of research questions.

The first is whether scripts written by showrunners are more or less cognitively complex than those written by other writing room members. Secondly, we seek to determine whether writing room members whose scripts had greater cognitive complexity were more likely to become showrunners in their own right compared to writers whose scripts had lower cognitive complexity. As explained in the next section, we answer these questions using data obtained from our analysis of all first-season scripts of two highly-acclaimed original dramatic series-*The Good Wife* (2009) and *The Mentalist* (2008).

#### 2. Data and Method

The Method section describes in detail how the study was conducted, including conceptual and operational definitions of the variables used in the study, Different types of studies will rely on different methodologies; however, a complete description of the methods used enables the reader to evaluate the appropriateness of your methods and the reliability

and the validity of your results, It also permits experienced investigators to replicate the study, If your manuscript is an update of an ongoing or earlier study and the method has been published in detail elsewhere, you may refer the reader to that source and simply give a brief synopsis of the method in this section.

## 2.1 Pilot Episode Scripts

For US-based broadcast and cable networks, pilot episode scripts available for hundreds of current and past dramatic TV series on US-based broadcast television and cable. These pilot scripts can typically be found online. Hundreds of TV pilot episodes are available free of charge on sites like *TV Writing* (2010) and *Simply Scripts* (2000) while others are available only for a fee on sites like *dou* (2001. These sites post pilot episode scripts for hundreds of US-produced television series. For a select number of highly popular series, the non-pilot scripts. i.e. scripts for other episodes, are sometimes also available. However, even for those most popular shows, it is very rare to find both the pilot episode and the scripts for rest of the episodes in the first season. There's a good reason for the extraordinary emphasis placed on pilot episode scripts.

First, consider the general process by which a new, broadcast TV series in the US traditionally got greenlit. As shown in Figure 1, below, that process began each year during the late spring and early summer in what was called "pitching season" (Douglas, 2011), the first stage in the innovation funnel (Cooper & Edgett, 2009), shown below. Here pitches about a new series are made by writers to producers, typically 20-30 minutes in length, often without visual aides (Cullen, 2014). Producers may listen to pitches for several hours a day for weeks on end (Russell, 2013). At the end of the process, a select number of writers are invited to submit pilot scripts based on the idea that they pitched. These are reviewed in the fall and by year's end or very early in the new year, a certain number will be given money to produce the pilot episode. Then, it mid-Spring at the upfronts-presentations by networks to potential advertisers-a final decision is made as to which filmed pilots will be added to the fall schedule (Blattberg, 2015; Sereday & Cui, 2017) As soon as the upfronts are done, typically in mid-May, pitching season begins anew.

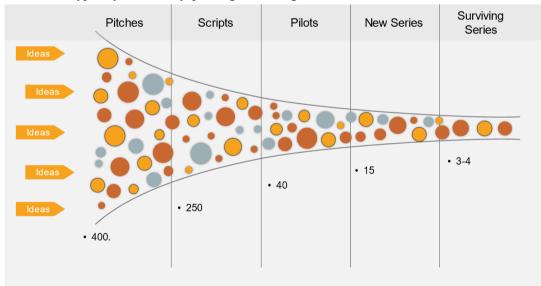


Figure 1. The Innovation Funnel for Television Series

Although the exact number of pitches that are made each has not been definitively tracked over the years, in the book *Writing the TV Drama*, Douglas (2011) offered the following estimates for large broadcast networks like ABC and NBC:

All the networks "open" for new series pitches during the summer. ... 500 pitches (June to October)...50-100 pilot scripts (August-November)...20 pilots made (January-April)... 5 series sold (May)...1 new show succeeds and is renewed.

In his book *Inside the Room: Writing Television with the Pros*, Hatem (2013) estimated that "...last year over 400 one-hour drama pitches to the five major broadcast networks...turned into 250 pilot scripts, which turned into 40 pilots, which turned into 15 new shows."

To be clear, it is only after a series is sold to a network, i.e. that it has been greenlit, that the showrunner will begin to hire a writers and others to staff the writing room and begin writing episodes for the remainder of the first season. Thus, because quality of the pilot episodes determines whether or not a writer gets their pilot script turned into a series, both

the academic literature and the how-to books are largely focused on writing pilots (Rabkin, 2011; Calvisi, 2016; Miller, 2016).

In our search of TV script databases, we identified 176 series where more than one script was available. However, among those 82 had the pilot episode plus at least one other episode in the first season was also available. Among those, however, only three series were identified where all episodes for the entire first season were present-*Castle* (2009), *The Good Wife* (2009) and *The Mentalist* (2008). As discussed in Appendix 1 and 2, while all three were original series, the latter two were far more comparable. Both had full first seasons-23 episodes apiece-and were written and run by accomplished showrunners. *Castle*, however, was created by a former film writer and producer and, because it was a mid-season replacement, had only 10 episodes in its first season. Also, while it was ostensibly a murder mystery novelist who helped the NYPD solve cases, the show's IMDB listing assigned it to crime, drama, and comedy genres while both *The Good Wife* and *The Mentalist* were assigned to the crime, drama, and mystery genres. As such, *Castle* was excluded from further consideration in our analysis.

## 2.2 Calculating Cognitive Complexity

Following prior research by Hunter and colleagues (Hunter, Chinta, Smith, et al 2016; Hunter, Smith, and Singh, 2016; Hunter & Breen, 2017; Hunter, 2019) each of the 46 scripts was coded for its cognitive complexity using the semi-automated, morpho-etymological approach detailed by Hunter (2014) in a paper entitled *A Novel Method of Network Text Analysis.* In that paper, it is noted that several distinct approaches exist for creating networks from texts, approaches that differ along a number of dimensions including the level of automation, whether and how words are abstracted to higher-order conceptual categories, and the nature of the underlying relationship used to connect the words or concepts. Hunter (2014) opted to abstract words into higher-order conceptual categories defined by common etymological roots and to connect conceptual categories according to their co-occurrence in "multi-morphemic compounds" (MMCs).

MMCs may include, but are not necessarily limited to, *open compounds* (post office, attorney general), *closed compounds* (airport, gunshot), *abbreviations and acronyms* (GPS, CEO, SUV, NATO), *portmanteau* or *blend words* (prequel, biopic, mockumentary), *hyphenated multiword expressions* (state-of-the-art, glow-in-the-dark, attorney-client), *infixes* (kango-bloody-roos, fan-flaming-tastic), *appositional compounds* (actor/model, player/coach), *hyphenated compounds* (rapid-fire, wide-eyed), *clipped words* (internet, wi-fi), and *pseudo-compound* words (misunderstanding, overrated). Within any given script or screenplay, MMCs are highly complex, as measured by the number of characters, and consist largely of unique, context-specific terminology, conceptual vocabulary, jargon, or lexicon of the kind that distinguishes film and television genres from one another.

The first step in the creation of the text networks involved identifying the MMCs in each of the 46 scripts in our sample-all 23 in the first season of each series. To accomplish this we first used the *Generate Concept List* and the *Identify Possible Acronyms* routines in the CASOS Institute's Automap software program (Carley & Diesner, 2005) to generate word lists for each script in the sample. Each word list was analyzed by a pair of authors. individually with the intent of identifying all of the MMCs contained therein. Then each pair, in conjunction with a third author, reconciled all differences in coding choices.

The second step involved decomposing every MMC in each list into its constituent words. For example, the closed compound *policeman* is comprised of two words-police and man. Next, each constituent word was assigned to a conceptual category defined by its most remote etymological root. Typically, the most remote root was Indo-European, as defined in the 3<sup>rd</sup> edition of *American Heritage Dictionary of Indo-European Roots* (Watkins, 2013). That source assigns over 13,000 English words to over 1,300 Indo-European (IE) roots. For example, the word *police* descends from the IE root *pele-3* which means "citadel, fortified high place," while the word *man* descends from the IE root *man-1*, which means "man."

The final stage was to represent the pairs of etymological roots as a network of concepts with the use of the UCINet software program (Borgatti, Everett, & Freeman, 2002). In social network analysis, the largest cluster of mutually-reachable nodes in a network is referred to as the "main component." Figures 1 and 2, below, depict the main components of morpho-etymological networks constructed from the scripts of the 9<sup>th</sup> and 17<sup>th</sup> episodes of the first season of *The Mentalist* entitled and *Flame Red* and *Carnelian*, respectively. Our measure of the cognitive complexity of a script was the number of links contained in the main component of the network. The former script was written by Ashely Gable, a writer who has yet, as of 2021, to become a showrunner. The main component of the network formed from her script had 42 nodes and 59 links among them. The latter was penned by the showrunner, Bruno Heller, and its main component had 96 nodes with 122 links.

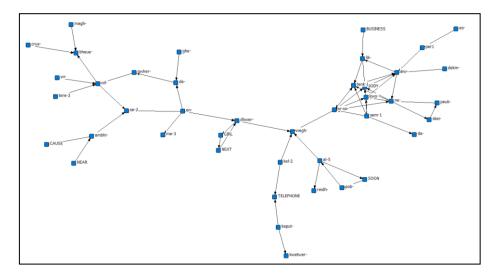


Figure 2. Morpho-Etymological Network of the Script for The Mentalist (S01E09-Flame Red)

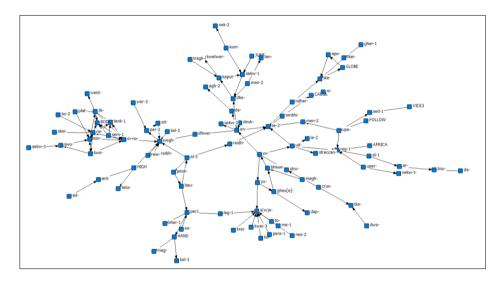


Figure 3. Morpho-Etymological Network of the Script for The Mentalist (S01E17-Carnelian)

## 3. Discussion of Results

## 3.1 Showrunners vs. Other Writers

As indicated in Table 1, the two showrunners of *The Good Wife* (King & King) wrote the scripts for Episodes 1, 2, and 7 together and another three scripts with two other writers-Brinkerhoff (Episode 23) and Schkolnick (Episodes 14 and 18). In this analysis we exclude those latter co-authored scripts. The average cognitive complexity of the three showrunner-penned episodes was 100.7 with the lowest cognitive complexity in found in Episode 7 (82) and the highest in the pilot episode (135). The average of the episodes written by others was 72.2 with a low of 26 (Episode 20) and a high of 103 (Episodes 5 and 9). Thus, the episodes written by the two showrunners were 39% more cognitively complex. Because of the small number of episodes written only by the showrunners, it was not possible to determine if this difference is statistically significant.

	The Mentalist		The Good Wife	
Episode	Cognitive Complexity	Author	Cognitive Complexity	Author
1	75	Heller**	135	King&King**
2	100	Heller**	85	King&King**
3	36	Gable	67	Johnson
4	55	Glasberg	65	Kessler
5	76	Bushell	103	Humphrey*
6	49	Green	35	Velez
7	56	Glasberg	82	King&King**
8	78	Woodruff*	99	Brinkerhoff*
9	59	Gable	103	Humphrey*
10	34	Mahony	43	Kessler
11	62	Heller**	43	Smuts
12	73	Bushell	89	Brinkerhoff*
13	38	Mahony	76	Humphrey*
14	30	Woodruff*	53	King&King&Schkolnick
15	67	Green	93	Agboh*
16	55	Glasberg	101	Segel
17	122	Heller**	60	Brinkerhoff*
18	99	Gable	33	King&King&Schkolnick
19	32	Bushell	80	Humphrey*
20	47	Mahony	26	Kessler
21	93	Woodruff*	78	Hall
22	29	Green	66	Pierson
	72	Heller**	56	King&King&Brinkerhoff

Table 1. Cognitive Complexity by Series and Episode

As for *The Mentalist*, the showrunner, Bruno Heller, wrote the pilot episode, which had a cognitive complexity of 87, as well as episodes 2, 11, 17, and 23 (the season finale). Taken together, Heller's episodes had a high of 100, a low of 62 and an average of 88.6. The other 18 episodes, which penned by six other writers on *The Mentalist*, had a high of 99 (Episode 18), a low of 29 (Episode 22) and an average of 55.9. Here, then the showrunner's episodes had 58% higher cognitive complexity. A Kruskal-Wallis test, a non-parametric alternative to the one-way ANOVA test, reveals that the difference in the median levels of cognitive complexity in the two groups of scripts are statistically significant in the expected direction (p = 0.017, 1-tailed test). Thus, in both instances we have strong support for our first research question, that being that the cognitive complexity of scripts written by showrunners is higher than those penned by other members of the writing room.

### 3.2 Future Showrunners vs. Other Writers

The second research question concerned whether those writers who in subsequent years became showrunners wrote scripts that were more cognitively complex than those who did not achieve that status.

Three writers from the first season of *The Good Wife* became showrunners in the next several years. The first was Courtney Kemp Agboh who in became showrunner for the series *Power* which first aired in 2014. The second was Corinne Brinkerhoff who became the showrunner for the series *American Gothic* (2016) and *No Tomorrow* both of which began airing in 2016. The third was Ted Humphrey who became show runner for the series *Wisdom of the Crowd* 

which began airing in 2017. As writers on *The Good Wife*, the scripts penned by these three had an average of 87.9 compared to only 58.2 for the others, a difference of 51%. The Kruskal-Wallis test reveals this difference to be statistically significant in the expected direction (p = 0.016, 1-tailed test).

As for *The Mentalist* only one of the writing team rose to the rank of showrunner-Ken Woodruff for the series *The Enemy Within* which began airing in 2019. He penned three scripts in the first season of *The Mentalist,* those for episodes 8, 14, and 21 which had an average cognitive complexity of 67. The remaining writers penned fifteen episodes with an average cognitive complexity of 53.7 which is a 25% difference. Though the difference is in the expected direction, because of the small number of episodes accredited to Woodruff, it was not possible to determine whether this it is statistically significant.

All of the above analyses and tests were based on treating the series separately. If, however, the distributions of the scores are not different, then the results could be combined, the results being that the statistical tests above would have greater validity. A Mann-Whitney U test of the two sets of scripts-23 scripts per set-generated a U-score of 204 which has a corresponding z-score of 1.32 and p-value of 0.187 which is not statistically significant (p < 0.05, two-tailed). Thus, the two sets of scripts are sufficiently similar to allow them to be combined.

When the data sets are combined, we see that the showrunner scripts had an average cognitive complexity of 93.1 versus 63.8 for scripts by other writers. A Kruskal-Wallis test finds this difference to be statistically significant at the 0.05-level for a one-tailed test ( $c^2 = 6.391 > c^2_{Critical} = 3.841$ , p = 0.0115). Thus, again we find support for our assertion that showrunners' scripts are more cognitively complex than those of the rest of the writing staff. A second Kruskal-Wallis with combined data shows that this effect extends to future showrunners. Specifically, we find that future showrunner scripts had an average of 82.2 while that of the other writers was only 55.4, a 48% difference. That difference is even more statistically significant than the one just observed ( $c^2 = 9.23 > c^2_{Critical} = 3.84$ , p = 0.0024).

Given the above, we assert that we there is very strong support for both research questions or hypothesis. Specifically, the scripts written by current showrunners are the most cognitively complex and that, secondarily, scripts written future showrunners had higher cognitive complexity than those penned by writers who never achieved this rank.

### 4. Conclusion

Showrunning is a highly prestigious, financially-rewarding, and hence highly sought-after role in today's television industry in the US. As described above, the conventional wisdom concerning how to achieve this rank strongly emphasizes the importance of writing, of practicing and honing ones skills as a TV writer (Treem, 2016). And while that conventional wisdom emphasizes both the quantity and quality of writing (Star, 2016), academic literature has, to date, attempted no systematic or empirical examination of whether and/or how the writing of showrunners differs from that of non-showrunners. This study takes the first steps in addressing this gap in the screenwriting research literature. Specifically, we find that as expected, scripts penned by showrunners are significantly more cognitively complex than those written by other writing staff. Our combined data for the two series showed the average difference to be just over 45% higher, a difference that was very statistically significant. In addition, we found that among writing staff who eventually became showrunners also wrote scripts that were almost 50% more cognitively complex than those of their peers.

Conventional wisdom would likely explain these results by pointing out that the showrunners were already more experienced and accomplished-as evidenced by the fact that they wrote the pilot that got made into a series. It might also explain these results by noting that they future showrunners also had more time in the job or had spent more time as television writers. While this *more-writing-equals-better-writing* argument surely accounts for some of the differences in the observed level of cognitive complexity, we did not have sufficient data to determine just how much. And this is an undoubted limitation about how far we can generalize our findings. That having been said, there are other aspects of our findings that suggest that there is more at work than the quantity of time spent writing scripts. Put another way, some our results also suggest strongly that quality matters, especially quality in word choice.

Recall that "the number of independent dimensions of concepts that an individual brings to bear in describing a particular domain of phenomena" (Scott 1962: 405) and "the number of independent constructs a person uses in perceiving and interpreting the environment" (Tinsley, Kass, Moreland, and Harrison, 1983:94). Rather than using time or experience as an explanation, our results offer a more specific one. They indicate that showrunners-present and future-bring to bear a *larger* conceptual vocabulary in their scripts. And when represented as a network, we observe that a greater number of those terms are interconnected. Our results suggest that, in addition, a greater number of those terms might be-for lack of a better term-more relevant to or "consistent" with the series' "tone or voice" (Bedard, 2020) and standards for quality (Star, 2016). Here's what we mean by that.

As noted above the Flame Red episode of The Mentalist was penned by writer Ashely Gable. In the episode, the team of

investigators travelled "to a small farming town to investigate the murder of a National Guard veteran...who was killed in an arson fire."

The main component of the network extracted from the episode script had 59 links among its 42 nodes. Recall that each link represents one or a part of one multi-morphemic compound (MMC). Excluding pronouns and prepositions, the MMCs identified in the script are listed below.

- Acronyms and abbreviations: KP (kitchen patrol), ASAP, CBI (California Bureau of Investigation), DA (district attorney), HQ, MO (modus operandi)
- Other: alarm(ed), along, already, always, benefits, never, nice, pride, proud, separate, until, window
- *Closed compounds:* backdraft, backseat, bullpen, caretaker, cocktail, cornfield, crossbeam, deadpan, doorway, earbud, farmland, fireman, firetruck, firewood, football, forever, groundwater, hallway, headphones, indoors, innermost, kickass, landscape, madmen, makeshift, maybe, misunderstanding, moonlight, outbuilding, painkillers, paperback, peapod, policeman, potluck,
- *Hyphenated compounds:* beat-up, burned out, burnt-up, business-like, cell(phone), dog-eared, half-grown, handicapped-looking, nicely-appointed, red-eyed, ring-studded, self-assured, self-defense, teenager, upset, windshield, year-old
- Multiword expressions: can-do, go-to, girl-next-door, matter-of-fact, son-of-a-bitch, to-burn-list

Notably, while many of the multi-morphemic compounds found in the network give a sense of the context or setting of the crime and its solution, e.g. words related to soldiers and to burning, none of them ended up in the main component of the network. That is to say, these highly relevant terms were conceptually disconnected from the bulk of terms used in the script.

In marked contrast stands the *Carnelian* episode, penned by showrunner Heller. A Wikipedia summary of the episode reads as follows:

An anonymous campaign against a big corporation begins with the threat of a murder at a specific time and place. Greed and betrayal pits Jane against a passel of alpha male financiers. CBI investigates a series of murders at a corporate retreat in the wilds of the Sierra Nevada foothills.

This network had 96 nodes-each representing an etymological root-and 122 links, each representing all or part of a multi-morphemic compound. Among the relevant terms that ended up in the main component of the network were: CEO, PR (public relations), high-end, manufacture, pride, privileged, VP (Vice President), AG (Attorney General), secret, security, and shotgun, mountainside, airport, hangar, jumpsuit, trailhead, headquarters. Thus, while the conventional wisdom for becoming a showrunner is to start as a writer, to develop one's craft by writing a lot, our results suggest a more nuanced path. Specifically, gain mastery of one's craft by learning the specific vocabulary and terminology-not just the tone and voice, the syntax, cadence, and structure-of the genre and the specific series, mastery which might be best achieved first by writing "spec" scripts rather than pilots (Hundt, 2018).

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