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# **In-game Toponyms: Telling the Story and Building the Video Game World**

## **Abstract**

This article deals with video game toponyms as a representation of a toponymic concept – a unit of onomastic knowledge concerning spatial and geographical characteristics of a location. The importance of toponyms in video games lies in the realm of storytelling, as parts of the story are connected to locations, which, in turn, are interlinked. Moreover, toponyms are viewed as a means of building a post-apocalyptic worldview due to their introductory and descriptive functions. Thus, the research issues to be covered are the functions of in-game toponyms in general, the correlation of naming patterns of real toponyms and in-game ones, as well as the role of toponyms in establishing interactivity. In the first part of the analysis, the functions of toponyms in video games are studied. Three main functions can be distinguished here: navigating, storytelling, and world-building. Special cases of intertextuality known as “easter-eggs” are described. The second part deals with the role of toponyms in building a post-apocalyptic worldview of the video game (“Fallout 4”), addressing the correlation of traditional and fictional naming patterns. This paper shows that real-life toponyms’ classifications can be applied to in-game toponyms, with the most frequent being descriptive ones. Special attention is paid to the interactivity and intertextuality of the video game.

### **Keywords**

onomastics, cognitive onomastics, video game, toponyms, post-apocalyptic

## 1. Introduction

The attention of onomastics scholars has traditionally focused on toponyms. The reason for this interest lies in the sphere of their usage. Toponyms give characteristics of a definite place showing people's attitudes towards a place, and giving information about the place's ideological value. The study of toponyms is more common than that of other categories of onyms. Shcherbak (2012) determines the onomastic concept as a special type of onomastic knowledge that defines the semantics of proper names – a universal unit for storing and transmitting onomastic information, with the help of which the acquired knowledge is realized and structured. Further to this, she notes that the toponymic concept is one of the main onomastic concepts that are the bases of the formation of onyms (Shcherbak, 2012, pp. 37–38, 93, 95). The toponymic concept is a unit of onomastic knowledge regarding spatial and geographic characteristics. It is used, on the one hand, for accumulating knowledge about a proper name and its functioning in the real world. On the other hand, it serves to reflect the most essential aspects of the conceptual worldview as well as providing information about the mentality of a person or a community of people, illustrating the specifics of linguistic consciousness (Shcherbak, 2012, p. 95).

The correlation between a name and a person's life has been analyzed by Superanskaya (1973, pp. 36–42). A name is connected with the following:

- Geographical environment: that includes anthroponyms depicting landscape peculiarities, atmospheric conditions, etc. The connection between a name and its geographical environment is depicted most vividly in toponyms. The influence of the geographical environment on proper names is subject to change and varies based on a person's places of residence;
- Biological factors: specific traits or physical disabilities;
- Culture: culture is characterized by the influence on peripheral vocabulary because it is a dynamic complex of information reflected in a language. As a result, the trend of naming newborns after popular characters arises (*Jacob* and *Edward* from the *Twilight Saga*, *Bitcoin* with a reference to the popular cryptocurrency). Geographical names incorporate both influences of geographical environment and culture that are strongly connected, that is, geographical characteristics of a definite place of residence are supposed to predetermine cultural specifics that are reflected in place names;

- Social life: which includes the names of philanthropists perpetuated in geographical names, names of funds, scholarships, etc. By contrast, the names of notorious figures may get excluded from naming patterns in some countries;
- Trends and fashion: being strongly connected with culture, a name can go in and out of fashion, like any material object. The preconditions of such trends can be different, including relations between countries (e.g., the cinemas *Таллин* [*Tallin*], Rus. ‘Tallinn’, *Пуза* [*Riga*], Rus. ‘Riga’ in Soviet Moscow), achievements in science or culture (e.g., the car *Победа* [*Pobeda*], Rus. ‘victory’, the soap *Спутник* [*Sputnik*] Rus. ‘sputnik, satellite’), etc. (Superanskaya, 1973, pp. 36–42).

To sum up, proper names are strongly connected with all spheres of cultural and social life. What is important, however, is that toponyms are the most sensitive to changes in social life. Studying toponyms is impossible without paying special attention to extra-linguistic factors. In Russian onomastics, a toponym (Rus. *топоним*, [*toponim*]) is a term used instead of the common term “place name”. According to Podol’skaya (1978), a toponym or a geographical name is a category of onyms (p. 137). It is the name of any geographical object (the name of a river, a mountain, a town, etc.). Studying toponyms, scholars try to find answers to the following questions: What is it? Where is it? Who named this place? When was the place named? And why was it named this way and not some other way? (Tent & Blair, 2011, p. 68)

Tent and Blair (2011) have made an overview of a number of toponym classification schemes by Henry L. Mencken, George R. Stewart, Ronald Baker and Marvin Carmony, Robert Rennick, L. R. Marchant, Peder Gammeltoft, and others that resulted in proven inconsistencies in their structure: overlapping, limited usage (e.g., indigenous place names only), or disproportion of categories. The typology by Tent and Blair (2011) is based on the peculiarities of the naming process, taking into account strategies, motivations, and references. The categories and subcategories of the toponym typology as presented by Tent and Blair (2011, pp. 85–86) are as follows:

- (1) Unknown;
- (2) Descriptive (topographic, relative, locational, numerical/measurement);
- (3) Associative (local, occupation/activity, structures);
- (4) Occurrent (incident, occasion);
- (5) Evaluative (commendatory, condemnatory);
- (6) Shift (transfer, feature shift, relational);

- (7) Indigenous (non-toponymic word, original placename, dual name);
- (8) Eponymous (persons, other living entity, non-living entity);
- (9) Linguistic Innovation (blend, anagram, humor);
- (10) Erroneous (popular etymology, form confusion).

The distinct advantage of this classification lies in the fact that attention is paid not only to motivations as in semantic classifications but also to the word-building process.

The problem of lexical-semantic classification of toponyms was thoroughly investigated by Russian scholars. Melnikova (2008) turns to the works of ancient philosophers and the question of naming nature: whether names are formed by nature (*physis*) or by some convention (*thesis*). This opposition between the conventionalist and naturalist views is reflected in the naming patterns of toponyms (Melnikova, 2008, p. 8). Likewise, motivations for naming toponyms lie in the sphere of:

- (1) Reflecting people's activity (mainly anthropotoponyms based on the names of settlers, landowners, farm owners, etc.) and ethnonyms storing information about the nationality of settlers or residents of a certain area (this includes indigenous community, etc.);
- (2) Showing characteristics of the surrounding world (i.e., geographical and environmental characteristics): these toponyms go back to common names or appellatives (Reprintseva, 2011, p. 107).

Referring to an earlier discussion of the toponymic concept as a basis for naming, it should be noted that Shcherbak (2012) lists the following basic conceptual areas of a toponymic concept: (1) concept of a person; (2) religious beliefs; (3) water; (4) vegetation; (5) natural landscape views; (6) numerals; (7) figurative and evaluative representations; (8) memorial locations. It is emphasized that the perception of fragments of space is associated with the perception of a coherent worldview (Shcherbak, 2012, pp. 227–229) and that names themselves do not appear in isolation but in interconnection to create a comprehensive world model.

The fictional world of a video game is a construct of the real world. The video game world represents a chain of interlinked locations, which are connected to a part of the story. Moreover, the location name serves introductory and descriptive functions, conveying a particular message. It is of importance to analyze the naming patterns of locations in a role-playing video game (RPG)

to see whether the fictional names are built with traditional naming patterns (i.e., with typical motivations based on nature and conventions) and to discover any distinctions. This raises the following questions:

- (1) What is the function of game toponyms in a video game?
- (2) Are game locations named in patterns similar to real places?
- (3) What is the role of toponyms in ensuring “player–game” interactivity?

## 2. Data

The information under analysis is drawn from “Fallout 4”, a typical example of an open-world role-playing game. “Fallout 4” is the fifth installment in the “Fallout” series released in 2015 (Steinman, 2015). This game has come a long way since its first installment in 1997. Starting from being a turn-based strategy game, it has become an action RPG with an open world that provides a wide variety of objects to interact with and locations to explore.

In his interview on the official website of Bethesda Game Studios, Todd Howard, who led the development of the “Fallout” series, says that “Fallout 4” comprises “environmental storytelling” and “dynamic details,” suspending the disbelief that this is a real world (Howard, 2015). “Fallout 4” enables a profound crafting system as a means of customizing your character and improving the harsh environment. But, most importantly, “Fallout 4” makes it possible for players to explore the post-apocalyptic world freely (Steinman, 2015). Based on the players’ freedom in roaming the game world, “Fallout 4” can be considered a brilliant source of name material that should be analyzed in terms of its naming patterns and its correlation with traditional naming systems and classifications.

The toponyms were recovered from “Nukapedia” articles. “Nukapedia + The Vault Fallout Wiki” (Nukapedia, n.d.) is a wiki-principle based guide to the “Fallout” series. The grounds for choosing this source are discussed in detail in my previous research and could be summarized as follows: its relevance, quality, and number of articles (Kuzmenko, 2019, p. 124). Given that Nukapedia is the most comprehensive “Fallout” game guide, the toponyms were selected from a list with “Fallout 4” locations, then analyzed and grouped

into thematic clusters having a particular naming motivation. The “Fallout 4” classification system was then analyzed, which resulted in the identification of the most frequent motivations and purposes they serve. Finally, the “Fallout 4” naming structure was compared to traditional classifications to identify peculiarities in the naming process.

### 3. Analysis

#### 3.1. Toponyms in games

The importance of toponyms for a role-playing video game is considerable and stems from the video game’s characteristics. Three main elements present in any role-playing game are *Character Development*, *Exploration*, and *Story* (HiddenX, 2014). *Exploration* includes the player character moving within the game world, finding new locations, interacting with non-player characters and items, manipulating the game world as far as the game allows (HiddenX, 2014). In terms of *Story*, as Shaker et al. (2016) explain, a common way of integrating a part of the story into a plot is through a quest (p. 123). In its traditional meaning, a quest is “an act or instance of seeking” (Merriam-Webster, n.d.-a). However, in gaming, this definition is revised, and its scope broadened. In video games, a quest is “a special mission that the player engages in, that requires a specific set of activities to be performed, that has a definite ending point with some sort of reward” (Karlsen, 2008). This corresponds to the fact that in a role-playing game, each element of a story is connected to a specific location. As Rouse (2005) explains, “the levels are set in locations that match the needs of the story line” (p. 301).

**Table 1. Beginning of the “Fallout 4” main quest**

	Element of the quest	Location
1	Exit Vault 111	(Vault 111)
2	Go home	(Vault 111, Sanctuary Hills)
3	Search for Shaun	(Sanctuary Hills)

Source: own work based on the data retrieved from Nukapedia.

The main quest of “Fallout 4” is the framework of the story. All parts of the main storyline are connected with a specific location or with several locations, as shown in Table 1.

Discussing the creation of game worlds, Shaker et al. (2016) specify that a game world must represent a “coherent sequence of events” that, metaphorically speaking, appear in the form of islands (locations in which events occur) and bridges (areas between islands which branch out, resulting in locations that are optional to visit) (pp. 133–134). Thus, to create a game world one should:

- (1) Make a sequence of island locations;
- (2) Generate an intermediate representation of the world model known as a space tree showing the size of the game world, uniqueness of island locations, and the ways they are adjacent to each other;
- (3) Create an environment transition graph – a structure showing the probability of transitioning from a definite location to another;
- (4) Form the game world graphically: create graphical visualization of a game world based on an abstract representation (a space tree) and later define the visuals of a given location etc. (Shaker et al., 2016, pp. 133–134).

Thus, to create a world that can be interacted with, a game designer must form a chain of interlinked locations that are mandatory to visit and determine what type of transitions match the game world. Investigating the toponymic logic of the streets in “Grand Theft Auto IV”, Martin (2011) states that in an “open” world, a name, first of all, serves a navigating function. A mini-map located in the lower corner of the screen serves to show the most convenient way to the next goal (Martin, 2011, p. 7). Likewise, in “Fallout”, a player uses the character’s Pip-Boy<sup>1</sup> to navigate through the game world which can get especially tricky in mini locations (houses, factories, supermarkets, etc.). The notorious concentric maze-like location “Megaton” (“Fallout 3”) continues to confuse players to this day.

Players share their experience in the thread “Even after years of playing Fallout 3, I still end up getting lost in Megaton while looking for Moira’s shop”, posted on Reddit by *\_X075\_* (2015):

“Megaton was super confusing. That’s why I blew it up.”

<sup>1</sup> The Pip-Boy is an electronic Personal Information Processor (PIP) capable of showing inventory, map, player-character’s statistics, etc. (Nukapedia).

“Yea and your house is to the left. Finding the water plant on the other hand...”

“Last time I played, I started looking for those damn pipes and ended up just murdering the entire town instead.”

“I’m replaying *Fallout 3* and it took me an hour of searching yesterday to find the water plant and Walter.”

“I have no problem believing when they were designing *F3*’s first main location someone in testing said ‘this layout is so frustrating I wish I could nuke it’.”

As shown by the examples, the only way to find the necessary spot is to memorize its location in relation to other locations/objects which also serve a navigating function because they are seen as a field name, a geographic feature, or a landmark.

Other functions of in-game toponyms, according to Martin (2011, p. 10), are presenting a virtual world with its history and referring to real-life locations. Likewise, in “*Fallout 4*”, whose setting is a post-nuclear war Boston, Massachusetts and its vicinity, there is an opposition between real toponyms (or those referring to actual places) and fictional toponyms. This serves the purpose of introducing the player to the story and building a post-apocalyptic scenario based on an existing location that leads to the perception of the game world as a possible reality. Thus, the names of real-life places function as intertextual elements that refer to the players’ background knowledge to insert a possible post-apocalyptic scenario into a well-known (or partially known) location. These toponyms include post-apocalyptic Boston (*Boston Airport, Boston Harbor, Boston Common, Central Boston, Charlestown condo, Charlestown laundry, North Boston*, etc.) and Massachusetts (*Concord Church, Commonwealth Weaponry, Hawthorne Estate, Malden Township*, etc.).

Butler (2016) adds to the issue of analyzing toponymy in open-world games, shedding light on “means of insertion” elements that provoke a definite emotional response within a given genre. Terrapsychology is the study of the emotional responses to certain environments, and the ways these responses can be altered is analyzed. The key part is the fact that through a name the most essential information is expressed that enables interactivity between a player and an environment. The importance of a location’s name lies within the sphere of “hyper-realistic representation of the real world” with additional stylistic elements used to achieve a certain goal (Butler, 2016, pp. 22–25). Last but not least, a video game is a mass media text – the importance of its audio-visual part is beyond question. As Butler emphasizes, the emotional

response to a game object and, therefore, to the game world depends not only on purposeful naming but also on the graphic and audio elements of the game (Butler, 2016, p. 27).

Far Harbor is a welcome sign to a “Fallout 4” location. *Far Harbor* is, on the one hand, an intertextual element referring the player to an already existing place – the town Bar Harbor, Maine. On the other hand, both this name and the visual element, through the naming/creative motivation *decay* (discussed in Section 3.2), help build the post-apocalyptic setting. Originally, the billboard said “Welcome to Bar Harbor”, but part of it is worn away, replacing the “B” with an “F”. A similar naming pattern occurs in *Novac*, in “Fallout: New Vegas” (originally a “no vacancies” sign), *Arefu*, in “Fallout 3” (originally a “careful” sign). Thus, the naming pattern and the visual representation add to building the post-apocalyptic setting with the help of the *decay* motivation.

Another important function of in-game toponyms is the referential function. Regarding the video game as a media text, the cases of reference are viewed as intertextuality. Intertextuality is described by Uribe-Jongbloed et al. (2016) as the practice of making associations between texts in a post-modern landscape in forms of co-presence (citations, references, plagiarism, allusion) and derivation (transformation – parody, imitation – pastiche) (pp. 146–147). Analyzing video game intertextuality, Boyd (2018) states that in the majority of cases, out of the three main types of intertextuality (obligatory, optional, and accidental), that of a video game is optional. This conclusion is based on the fact that cases of intertextuality in a video game do not alter its story, though they have a definite stylistic effect. In a video game, the cases of intertextuality are called “easter eggs”, serving most likely as a metaphor of being hidden for the players to find and, most importantly, “consume” them.

Studying naming patterns of an Online Minigolf Game, Hämäläinen (2019) allocates the following types of references: tribute (respected members of the community), reference to popular culture (cinema, literature, music, sports, games) and other. The latter includes referential variety: places, human conditions, food and drink, phraseological units, game terminology (p. 323).

### 3.2. Toponyms in “Fallout 4”

For this study, 547 toponyms of “Fallout 4” were analyzed. The choice for “Fallout 4” stems from its relative novelty. The “Fallout 4: Game of the Year Edition” with the latest updates, graphical enhancements, and all official add-ons included was released in 2017 (Bethesda Game Studios, 2017). Thus, the game world seems bigger than in previous installments and genuinely open, which makes studying toponyms more fruitful.

Studying toponyms from the point of view of their syntactic derivation, the following groups were identified:

- (1) One-word toponyms (49 cases);
- (2) Toponyms – combinations of two words (257 cases);
- (3) Toponyms – combinations of three and more words (241 cases).

Such a significant number of onyms-word combinations correlates with interactivity as the characteristic elements of a video game. According to their syntactic structure, 91% of all “Fallout 4” toponyms are word combinations.

**Table 2. Comparison of toponyms from the point of view of their syntactic structure**

	Toponym	Conceptual Sign
1	Boston	place
2	Boston Harbor	place + terrain
3	Boston Airport ruins	place + occupation + decay

Source: own work based on the data retrieved from Nukapedia.

As shown in Table 2, a toponym consisting of one word gives one piece of information about the place, whereas each additional word introduces a new detail to the location that enables the player to successfully develop a strategy.

Though semantic derivation of “Fallout 4” toponyms has been studied within these three groups separately, it seems appropriate to show the naming specifics of all “Fallout 4” toponyms without dividing them into separate groups. It should be noted that one toponym can have several motivations based on its syntactic structure.

**Table 3. The frequency of „Fallout 4” toponyms’ motivations (in descending order)**

Motivation	Quantity of onyms	Examples
Distinguishing feature: occupation	407	Hideout, Lexington Bank, Longneck Lukowski’s Cannery
Reference to existing places	140	Charlestown condo, Mass Pike Tunnel West, Ticonderoga
Person’s name	84	Bradbarton, Shroud Manor, Wilson Atomatoys Corporate HQ
Distinguishing feature: terrain	74	Cliff’s Edge Hotel, Dry Rock Gulch
Distinguishing feature: defining characteristic	49	Crater House, Glowing Grove, Echo Lake Lumber
War/army	36	Fort Hagen filling station, RobCo Battlezone
Radiation / radioactive contamination	34	Boston mayoral shelter, Nuka-station, Vault 95
Reference to culture	28	Fiddler’s Green Trailer Estates
Distinguishing feature: numeral	24	Fraternal Post 115, Vault 81, Vault 88
Distinguishing feature: decay	23	Faded Glory laundromat, Wreck of the FMS Northern Star
Religion	14	Lonely Chapel, South Boston Church
Commendation	13	Diamond City, Eden Meadows Cinemas
Distinguishing feature: color	11	Graygarden, Greenetech Genetics, Red Rocket truck stop
Creature’s name	9	Bear cave, Mole rat den
Warning	7	The Mechanist’s lair, Wicked Shipping Fleet Lockup
Reference to other in-game locations	6	King Cola’s Court, Nu Cafe Ola
Urban name	6	Park Street station, Water Street apartments
Irony	3	Faded Glory laundromat
Distinguishing feature: size	1	the World of Refreshment
Other	1	Compound

Source: own work based on the data retrieved from Nukapedia.

As indicated in Table 3, the naming patterns of in-game toponyms correlate with the classification of real place names and the existing classifications could be applied to in-game names. Therefore, it seems appropriate to compare in-game naming patterns with real-life patterns, using a more general classification based on a traditional physis-thesis opposition as introduced by Melnikova (2008).

- (1) Reflecting people's activity: *occupation, person's name, war/army, radiation/radioactive contamination, reference to culture, numeral, religion, commendation, irony.*
- (2) Showing characteristics of the surrounding world: *reference to existing places, terrain, defining characteristic, radiation/radioactive contamination, decay, color, creature's name, warning, reference to other in-game locations, urban name, size.*

As we can see, all motivations can be divided into these two general groups. However, *radiation/radioactive contamination* seems to belong to both two groups as justified by the post-apocalyptic genre. Its main element is demonstrating an opposition between the pre-apocalyptic world inhabited by a technologically advanced civilization and the new post-apocalyptic world adapting to an often hostile environment. The point separating these worlds is the Great War – a global thermonuclear war, which resulted in the destruction of civilization. The choice of weapons in the game stems from its retro-futuristic genre (atompunk).<sup>2</sup> Thus, the *radiation/radioactive contamination* element can both refer to people's activity (*General Atomics Galleria, Nuka-Galaxy, Nuka-Town backstage, Nuka-World, Vault 114*) and the environment (*Edge of the Glowing Sea, Glowing Grove, Glowing Sea, Radiant Chrest Shrine*).

When comparing in-game toponyms' forming patterns to the classification by Tent and Blair (2011), it can be noted that the majority of in-game toponyms are based on the *activity performed/occupation* conceptual sign. It results in the predominance of associative toponyms that indicate a habitual activity or an occupation related to the location. In a video game, the prevalence of such toponyms is justified by the "player–game" interactivity as an essential component of a role-playing game. Being aware of the possible scenarios, a player

<sup>2</sup> A derivative of cyberpunk with technology based on using nuclear reactors.

can develop their strategy in advance. Thus, these names refer to associative toponyms (local, occupation/activity, structures).

**Table 4. An example of toponyms with the “occupation” motivation used as a basis of naming and possible scenarios they suggest**

An associative toponym (distinguishing feature: occupation)	Possible scenarios
HalluciGen, Inc.	Find hallucinogenic substances; Be poisoned with hallucinogenic substances; Encounter someone under the effect of hallucinogenic substances; Fight someone under the effect of hallucinogenic substances; Avoid someone under the effect of hallucinogenic substances.
Old Robotics	Find scrap; Encounter robots; Destroy robots; Disable robots.
Warwick homestead	Encounter farmers; Help farmers; Gather crops; Plant crops.

Source: own work based on the data retrieved from Nukapedia.

In many cases, the conceptual sign *occupation* is combined with the *person's name* conceptual sign, and toponyms provide additional information about a person in charge of this specific location. It should be noted that anthrotoponyms are usually derived from the names of the first settlers (Shcherbak, 2012, p. 79). Rogalev (2009) also emphasizes that this group of toponyms (e.g., settlement names) are created based on the name or the nickname of the leader (p. 5). The specific mentioning of a person in the name of a location answers not only the question of “what to do”, but also the question “with whom?”.

**Table 5. An example of toponyms with “occupation” and “person’s name” conceptual signs used as bases of naming and possible scenario**

An associative anthrotoponym (distinguishing feature: occupation)	A person in charge of a definite location	Possible scenarios
Kellogg’s House	Kellogg	Encounter Kellogg; Talk to Kellogg; Fight Kellogg; Do not encounter Kellogg; Find leads on Kellogg’s whereabouts; Gather useful objects.
Nakano residence	Kenji Nakano Rei Nakano	Encounter Nakano; Talk to Nakano; Help Nakano; Fight Nakano; Ignore Nakano; Steal useful objects.

Source: own work based on the data retrieved from Nukapedia.

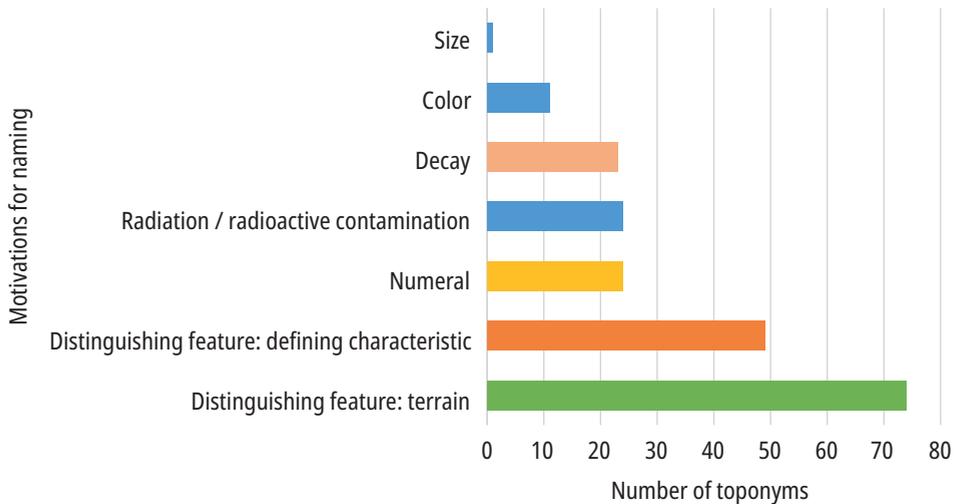
A substantial part of in-game toponyms are descriptive names. Studying level names in an Online Minigolf Game, Hämäläinen (2019) notes that the way of describing elements is a typical way of naming. The descriptive part gives additional information about the way the level is supposed to be played, the specifics of the level, and the minimum result, making it possible for a player to choose the optimal strategy (pp. 322–323).

In “Fallout 4”, special attention seems to be paid to distinguishing between the various types of geographical features in the descriptive names. The descriptive place names reflect a characteristic feature of the location with the possible addition of personal judgment (subjective naming). Due to their specific structure, these names are present in nearly every classification of toponyms (Rudnyckyj 1958; Mencken 1967; Baker & Carmony 1975; Stewart 1975; Gläser 1996; Rennick 2005; Tent & Blair, 2011). In “Fallout 4”, the features of locations being distinguished are (1) *terrain*, (2) *defining characteristic*, (3) *a numeral*, (4) *radiation/radioactive contamination*, (5) *decay*, (6) *color*, (7) *size*. The frequency of these motivations is presented in Figure 1. It shows the overwhelming predominance of the descriptive toponyms with the *terrain* feature as a naming motivation.

Turning to the basic conceptual areas of a toponymic concept as noted by Shcherbak (2012) in terms of descriptive toponyms, the following concepts

reflected in game toponymy can be allocated: concept of *water*; concept of *vegetation*; concept of *natural landscape views*:

- Concept of *water* (*Atom's Spring, Beaver Creek Lanes, Old Pond House, Waves Crest Orphanage*, etc.);
- Concept of *vegetation* (*Cranberry Island, Eden Meadows Cinemas, Roadside Pines motel*, etc.);
- Concept of *natural landscape views* (*Coastal cottage, Dry Rock Gulch Theater, Rock Point camp*, etc.).



**Figure 1. “Fallout 4” descriptive toponyms**

Source: own work based on the data retrieved from Nukapedia.

The *radiation/radioactive contamination* and *decay* motivations are worth mentioning in terms of the post-apocalyptic genre of the game. According to genre-forming characteristics, the world-modelling occurs in two planes – depicting a pre-apocalyptic world and creating a post-apocalyptic setting. The toponyms with the central meaning *radiation/radioactive contamination* as a naming motivation firstly are used as a stylistic device to create a retro-futuristic “atompunk” world (*General Atomics Energy, Nuka Rockets, Nuka-World*) and secondly contribute to constructing the scenario of a nuclear holocaust (*Atom's Spring, Boston mayoral shelter, Decayed reactor site, Glowing Grove, Vault 111*).

In terms of “pre-apocalyptic–post-apocalyptic” world-modelling, another important motivation for toponyms is a *reference to existing places*. Such location names fall within the scope of shift toponyms transferred from other and older places. However, in the context of a post-apocalyptic piece of fiction, it serves to establish the setting: a post-apocalyptic Boston, Massachusetts (*Bedford Station, Brookline Building, Charlestown condo, East Boston, Hyde Park, Quincy ruins, Walden Pond*). Already known places act as a means of introducing the player to the story, making them perceive the game world as close to the real model as possible. Moreover, toponyms that have a *reference to existing places* motivation take part in forming the “pre-war – post-war” opposition by referring to known places that are a part of the player’s background knowledge, while post-war place names are chosen with respect to “player–game” interactivity (*terrain, person’s name, creature’s name, warning*) and a post-apocalyptic, post-war setting (*war/army, radiation/radioactive contamination*).

Of particular note in analyzing in-game toponyms’ motivations are cases of reference. In “Fallout 4”, easter eggs could be classified according to their stylistic effect:

- (1) References to the setting of the game (scene): *C.I.T. ruins*: the abbreviation stands for “*Commonwealth Institute of Technology*” and refers to the real “Massachusetts Institute of Technology” through the name The Commonwealth of Massachusetts. *The Wright’s Inn* is an homage to the Wright’s Tavern, an old tavern located in the center of Concord. *Mystic Pines* refers to a real area located in Lexington, Mass. called Mystic Lakes.
- (2) References to the setting of the game (retro-futurism): *Concord Speakeasy*, cf. *speakasy* “a place where alcoholic beverages are illegally sold, specifically: such a place during the period of prohibition in the U.S.” (Merriam-Webster, n.d.-b).
- (3) References to literature: *Dunwich Borers, Pickman Gallery, Kingsport Light-house* refer to the work of H. P. Lovecraft where Dunwich is a fictional city located in Massachusetts in “The Dunwich Horror” (1929), Pickman is a fictional Boston artist in Lovecraft’s short story “Pickman’s Model” (1927), and Kingsport is a fictional Massachusetts City “The Strange High House in the Mist” (1931).

## 4. Conclusion

The importance of toponyms in an open-world video game stems from player–game interactivity and serves three main functions: navigating the player through the game-world, telling a story, and ensuring the players’ immersion into the game. As the “Fallout” game series tells a story about a post-apocalyptic world, one of the most genre-defining features is the opposition of pre-apocalyptic and post-apocalyptic worlds. In “Fallout”, this opposition is expressed by a dichotomy between in-game toponyms referring to real places and made up in-game toponyms named, however, in accordance with certain goals. In particular, those toponyms referring to real-life locations address the players’ background knowledge and create a post-apocalyptic setting within a location which is known to some extent. Made up in-game names are, however, formed purposefully: ensuring player–game interaction (motivations: *occupation, person’s name, terrain, radiation/radioactive contamination, creature’s name, warning*, etc.) and forming a post-apocalyptic world (*reference to existing places, war/army, radiation/radioactive contamination*, etc.).

After toponyms’ classifications and in-game naming patterns being analyzed, it transpires that the same classifications could be applied to categorizing names of in-game locations. In “Fallout 4”, the most frequent are descriptive toponyms, transmitting information about the basic conceptual areas of a toponymic concept as concepts of *water, vegetation*, and *natural landscape views*. Associative toponyms serve an interactive function and ensure player–game communication. In their role as depicting a pre-apocalyptic–post-apocalyptic world opposition, shift toponyms are used as intertextual elements addressing the player’s background knowledge. With regard to the key role of the intertextuality of a video game as a media text, it can be concluded that intertextual elements within toponymy refer to the following main areas: the setting of the game (time and place) and literature.

This article studies the role of toponyms in the story-telling and world-building of one RPG game of the post-apocalyptic genre. Hopefully, this study will be broadened by analyzing in-game toponyms of other fictional and game genres so that a complete and balanced picture can be obtained.

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