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CUSTOMIZING COMPENDIUM, 2nd ed.

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CUSTOMIZING COMPENDIUM

This guide is designed to help all customizers, whether they are making their very first custom or whether they are seasoned veterans, make the most "official" custom cards possible. Every effort has been made to present accurate information, but mistakes do happen so if you find anything missing or out-of-place, please let me know and I will update it.

Most of the guidance provided in this book is derived from an analysis of patterns on the official cards from Master Sets 1-3, Waves 1-11, and the *Marvel: The Conflict Begins Master Set.* Other information comes from decisions made by a consensus of experts from the customizing community.

Many thanks to *IAmBatman* for his suggestions, guidance, and masterful proofreading skills, not to mention his contributions to parts of this book, especially about costing figures and interpreting playtest results. And, of course, for introducing me to Bumbly Mufflepuff. Additional thanks to other contributors to select sections of the book: *ollie* for his Attack/Defense scale formula (which he derived from *Sisyphus*'s probability tables), *Tribesofwar* for his detailed analysis of turn phases, *Jexik*, for his classification of figure roles, *Hi1hi1hi1hi1hi1* for his method of handling vulnerabilities and weaknesses, *Corundum* and *Killz* for working out the naming classification for Marro, *Eclipse* for his analysis of threat ranges and kiting, *Aldin* for his explanation and examples of how to capture theme using Heroscape mechanics, *Matt Helm* for his excellent breakdown of the different kinds of customizers, *A3n* for his suggestions on where to find excellent background artwork, *Hahma* for his fabulous rebasing tutorial, and *Griffin* for both his costing formula and for putting together a fantastic set of playtesting requirements for the C3G project. And a final thank you to *Grungebob* for providing a small yet wonderful glimpse into the world of playtesting through his various posts, even if these reflect his personal thoughts on the subject rather than describing the official playtesting process. Ideas from these various methods of playtesting, among others, were used to create this compendium.

All contributions were used by permission from their respective authors.

Grey Owl

P.S. In my many travels across the realm of Heroscape customizers, I have found no customizer more inept and incompetent than **Bumbly Mufflepuff** *(who long ago retired from the life of customizing). Therefore, I will use the atrocious creations of Mr. Mufflepuff as examples of what not to do.*

Honestly, they are truly awful.

A NOTE ON THE ARTWORK

You may notice that the artwork throughout this book doesn't always look like the Heroscape figures you've come to know and love. That's because all of the artwork used in here is concept artwork that was used during development of official figures. I hope it will serve as inspiration as you create your own concepts and figures!

The cover art follows a similar line of thought. In the first edition, the young dragon, being watched by the older, wiser dragon, represented new customizers that I hoped would benefit from the experience of others before going out and becoming bigger dragons themselves. They were given the warning to "not to terrorize the countryside too much."

Now, in the 2nd edition, the dragon is mature and powerful. I hope our community of customizers is up to the challenge!

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THE FIRST TIME YOU CUSTOMIZE

Some tools you might need before you start customizing include:

- Art software, such as Photoshop or GIMP.
- A place to host your images, such as Photobucket or another hosting site.
- Cardstock and a photo-quality printer (if you wish to print your customs out)

Object: Create a custom, put it on your battlefield, choose your Army, and battle against your opponent. To win, be the first to achieve your Victory condition.

DECIDE ON YOUR CUSTOMIZING STYLE

There are many kinds of custom creators, with widely differing philosophies. Before embarking on the journey of creating your own customs, you should decide upfront which kind of customizer you are. It may even change over time, and that's okay, as long as you're always clear what your vision is and what the consequences

of your decisions are. These customizing philosophies, which were created by *Matt Helm*, can be broken down into several key areas. More detailed discussion about each of these can be found on his Heroscapers.com blog.

Theme vs. Mechanics

The first thing to decide is which is more important to you - representing the character as accurately as possible (*theme*), or creating a version of the character that fits in with existing Heroscape mechanics and concepts (*mechanics*). Most custom creators will be somewhere in the middle of the continuum, but eventually you will be forced to make a choice between them. The choice comes down to what type of game you're designing your custom to be used in. If it's more for role-playing, choose theme. If it's more for strategy, choose mechanics.

Another part of this decision is how you plan on representing multiple versions of the same character. For example, if you were to make a custom Green Lantern, would you want to distinguish between Hal Jordan and John Stewart, or would you rather make a generic Green Lantern that captures the essence of both? Official figures actually take both approaches, so there is official precedent for whichever path you choose. In the case of *Raelin* and *Sgt. Drake Alexander*, two different versions of each character were made. However, in the case of *Iron Man*, a generic Iron Man was chosen that wasn't specific to any one type of Iron Man armor.

Custom Rule Considerations

The second step in defining your customizing style is to decide whether you are willing to take liberties with the established precedent set by the official cards. With classic Heroscape card, there is a lot of data to look at, but with superhero cards, only 10 official cards were released so it is harder to say what may or may not have been done in the future.

Some of the more common Custom Rules that may take deviate from official cards include the use of secret identities to identify the different versions of the character and the inclusion of the Flying Symbol, and the number of powers placed on a card.

More extreme Custom Rules include the use of team symbols, unofficial terminology used in power text, and peripheral cards used to represent extra equipment or powers.

Details in Simplicity

Another area where you'll need to make a decision is where you would like to represent some of the figure's abilities. A simpler approach is to build as many powers as possible into the base stats of a figure (this is also the approach taken by official figures). An alternate approach is to make the stats represent the base character without any powers. A potential problem with the latter approach is the risk of having too many powers on the card and ending up with a card that is overly complex.

Power Levels

The next thing you have to do is decide on your power scale. Do you have a maximum point cost that no figure can exceed? Many customizers, especially in the superhero genre, set the limit at or slightly above *Incredible Hulk*. However, the arbitrary limit prior to the release of *Incredible Hulk* was *Jotun*, for many customizers. This makes the decision somewhat arbitrary. Other customizers don't set any artificial limits, instead taking the viewpoint that a figure's point cost should be based on the powers on the card, and not on an artificial scale. For example, many of *badgermaniac's* epic villain customs far exceed the 400 point range many customizers use as a cap, but these customs aren't necessarily broken because of that fact.

Community Compatibility

When deciding on how compatible you want your customs to be, consider both official cards and the various community projects. Do you want your customs to be compatible with classic Heroscape? Marvel Heroscape? The C3G project? NM24 and/or TNT cards? The Custom Star Wars Rules & Figures project?

This can be important, because it can affect things like names of powers to make sure they don't repeat with other cards with differing power text. You will also need to take into account commonly used personalities, classes, species, sizes, and general mechanics that are used in the various other projects.

Aesthetic Factors

The final area of decision involves the aesthetics of the cards. Will you use photos of miniatures, comic art, photos, or film stills? Will you mix multiple types or stick to just one? Will you use the standard borders, or use different colors? What about different *textures*? Will you use the official font or something different?

There are also other considerations to aesthetics besides artwork. For example, will you order your powers on a card in a logical fashion, or will it be random?

As *Matt Helm* always says, "don't love your own ideas". Be open to feedback and critique from the community, and be willing to make changes to your cards. Ninety-nine percent of the time, your customs will end up the better for it.

References:
"Building a SUPER Custom", Matt Helm's Blog on Heroscapers.com, *http://www.heroscapers.com/community/blog.php?b=1124*

CARD AND POWER DESIGN
IMPORTANT TERMS AND RULES
Targeting vs. Attacking

When creating customs and writing text for special powers, it is important to understand the difference between *targeting* and *attacking*. Below are the definitions from the glossary in the rulebook for the *Battle for the Underdark* Master Set (with a correction to the definition of "Attack").

Target: A figure with a Range of more than 1 must always target a figure it is attacking unless the two figures are engaged. Certain special powers may be triggered while a figure is targeting or is targeted. Note: A figure is not declaring an attack while targeting, and a figure may target one or more figures before it actually attacks.

Attack: An attack happens when one figure tries to destroy or adversely affect one or more figures or objects on the battlefield using a normal attack or a special attack. Each Army Card has an Attack number that specifies the number of attack dice to roll for a normal attack. Glyphs, height advantage, special powers, or other factors can affect the Attack number. Special attacks are never modified unless otherwise stated in the wording of the power.

Line of Sight vs. Clear Sight

When creating customs and writing text for special powers, it is important to understand the difference between *line of sight* and *clear sight*. Below are the definitions from the glossary in the rulebook for the *Battle for the Underdark* Master Set.

Line of Sight: Line of Sight is the imaginary straight line between an attacking figure's Target Point and a defending figure's Hit Zone. If the attacking figure can "see" any part of the defending figure's Hit Zone, the attacking figure can attack.

Clear Sight: To determine if a figure has clear sight to another, check that figure's Target Point. If you can see any part of another figure that it wants to affect (including gray non-Hit Zones), then that figure has clear sight. Just make sure that it is within the specified range for the power.

Powers, Attributes, and Rules

An *attribute* defines a certain characteristic of a figure, but does not do anything on its own. Examples of attributes are Class, Species, and Personality.

Powers, on the other hand, define specific **actions** or **behaviors** of a figure, and usually modify the rules of the game.

Rules define game mechanics or behaviors that are common to all figures (unless overridden by a power).

In general, it is suggested that you do not equate attributes and powers by creating powers that do nothing but define an attribute, because such a "power" would not be modifying any rules, but would instead be defining a new attribute. Sometimes there is a desire to do this for the purposes of creating synergy with other cards, but you should still resist the urge to do so.

This reminds me of a custom "School Teacher" card I once saw by the infamous Bumbly Mufflepuff. I think I have a copy around here somewhere….ah, there it is!

As you can see, Mr. Mufflepuff confused a **power** *with an* **attribute***, because the* Female *"power" doesn't describe any actions or behaviors.*

In addition, do not confuse *rules* and *powers* by adding a power to every affected card, such as putting a power on all Droid cards that says "Droids are treated the same as Soulborgs". A generalized behavior like that should be a custom rule, which does not go on the card, rather than a power. An exception would be if it only affected a few cards, and thus would not necessitate a rule.

This is something that has no direct precedence on official cards (though it could be argued that the lack of such things on official cards constitutes a precedent). Therefore, it should be treated as a suggestion and not a hard-rule that must be followed. The rationale behind the suggestion, however, is to follow the official precedent of what constitutes the difference between an *attribute*, a *power*, and a *rule*.

CUSTOM AND HOUSE RULES

Custom rules and house rules are great things. But in general, they should be kept off the cards because someone that wants to use your customs may not want to be forced into using one of your custom rules along with it. This also include referencing custom objects and terrain that other players may not have.

There are some rare cases where this cannot be avoided, especially if your custom is in a genre that requires a custom rule set. But if at all possible, the cards should be kept as "pure" as possible with respect to standard Heroscape rules.

Bumbly Mufflepuff used to have awesome custom terrain pieces lit up with multicolored LEDs. He even had a full set of custom rules that went with his lit terrain-the battlefield looked like a Christmas tree. It was a lot of fun to play, especially while listening to Abba. Unfortunately, he used to reference those custom creations on his cards, as you can see below.

DONNY THE DISCO KING

DANCING QUEEN
If Donny the Disco King starts his movement adjacent to a terrain piece lit with an LED, you may add 2 to the move number on this card.

HUMAN
UNIQUE HERO
DANCER
GROOVIN'
MEDIUM 5

3 LIFE

MOVE 7
RANGE 1
ATTACK 4
DEFENSE 2

50 POINTS

CARD ATTRIBUTES

Size
When referencing sizes in power names, always make them lower case.

References
"...when attacking or defending against large or huge figures.", "Fearless Advantage", The Axegrinders of Burning Forge

Class
When referencing classes in power text, always capitalize the first letter.

References
"All Guards you control ...", "Guard Leadership", Warden 816

Personality
When using personalities in power text, always make them lower case.

When using personalities in power names, always capitalize them.

Do not use the personality as an adjective describing the word "figure", as in "This power does not affect wild figures." The correct way to write it is "This power does not affect figures with the wild personality."

References
"Attack the Wild 2" and "Tricky Speed 4", Otonashi

"When attacking a figure who has a wild personality...", "Attack the Wild 2", Otonashi

"...who has a tricky personality", "Tricky Speed 4", Otonashi

Species
When referencing species in power names, always capitalize the first letter.

References
"...roll the 20-sided die once for each Soulborg figure...", "Circuitry Overload", Omnicron Repulsors

Rarity and Figure Type
A figure's *rarity* has three possible values: unique, common, and uncommon. A figure's *type* has two possible values: hero or squad.

When referring to a figure' rarity and type together, always capitalize both words, as in "Unique Hero", or "Common Squad". If the reference will be restricted by class or species, put the class or species in between the two words, as in "Unique Tribesman Hero". If you're restricting it by personality, it should be added to the end, such as "Unique Hero who has a tricky personality".

When referencing the rarity or type by itself, without the other one, you should always write it in lower-case, as in "unique card" or "squad figure".

References:
"Each time Brandis Skyhunter destroys an opponent's non-adjacent Unique Hero…", "Archer's Glory", Brandis Skyhunter – example of rarity and type being capitalized when used together

"At the start of the game, choose a Unique Lizardfolk Hero you control…", "Loyalty to the Lizard King", Greenscale Warriors – example of a rarity and type being restricted by a species

"Any squad figures moved with Jandar's Dispatch must be within 8 clear sight spaces…", "Jandar's Dispatch", Sir Gilbert – example of a type written in lower-case when used by itself

"At the start of the game, you may choose any unique Army Card you control.", "Disciplined Influence", Parmenio – example of a rarity written in lower-case when used by itself

Destructible Object
When referencing the phrase "destructible objects" in power names, always make it lower case.

References
"...does not affect Soulborgs or destructible objects.", "Chilling Touch", Cyprien Esenwein

Name
When naming figures, use a proper noun for Unique Heroes, plural form for Squads, and singular form for Common and Uncommon Heroes.

Marro Names: When naming Marro figures, there seems to be a classification system that is followed. This systems was worked out by *Corundum* and *Killz* in this thread:

http://www.heroscapers.com/community/showthread.php?t=6380

Marro names are two syllables, followed by a third syllable that represents a title. The naming convention of the title suffix is as follows:

- Warlords – *Sa*
- Male Hivelords – *Na*
- Female Hivelords – *Ga*
- Overlords – *Ra*

- Warwitches - *Shi*

References

Me-Burq-Sa, Ne-Gok-Sa – Marro Warlords

Su-Bak-Na, Tor-Kul-Na – Male Marro Hivelords

Wo-Sa-Ga – Female Marro Hivelord

Tul-Bak-Ra – Marro Overlord

Kee-Mo-Shi – Marro Warwitch

Self-Reference

While writing power text for a figure, many times you will need to reference the figure itself. For Unique Heroes, simply reference the name on the card. However, there are times where a shortened version of the name can be used to save space on the card and to make the text more readable.

For Squads, you can reference the name of the card, just like for Unique Heroes. If the power text refers to one member of a Squad, use the form "one of the…"

For Common Heroes and Uncommon Heroes, there is a subtle difference when referring to the figure's name. Uncommon Heroes should preface the name of the figure with "this…", while Common Heroes should preface it with "a…".

References

"Instead of his normal move, Incredible Hulk may Super Leap…. When counting spaces for Hulk's Super Leap, ignore elevations.", "Super Leap", Incredible Hulk – use of both the full name and a shortened version of the name

"If one of the Omnicron Repulsors you control successfully defends against an attack by a Soulborg figure…", "EMP Response", Omnicron Repulsors – use of "one of the…" for Squads

"All friendly Devourers adjacent to a Dumutef Guard receive an additional attack die.", "Devourer Attack Enhancement", Dumutef Guard – use of "a…" for Common Heroes.

"After taking a turn with this Greater Ice Elemental…", "Cold Healing", Greater Ice Elemental – use of "this…" for Uncommon Heroes

NOTE: There are some exceptions on official cards for the "a…" vs. "this…" rule, but in this post: http://www.heroscapers.com/community/showthread.php?p=1025198#post1025198, *theGuru* points out that the inconsistencies are editing errors, and that the "a…" vs. "this…" rule should be followed.

Faction

When referencing factions in powers, the name should always be capitalized. Instead of wording it as an "Utgar figure", it is preferable to word it as "a figure who follows Utgar".

Custom creators can also create new factions for their own custom universes. The CSWRC project, for example, has the following factions (as of the time of this writing, as the project never voted on a complete list of factions):

- Rebellion
- Independent
- Galactic Empire

The CSWRC project also decided that Jedi and Sith would not be separate factions.

By contrast, GreyOwl's Star Wars customs use somewhat different factions:

- C.I.S.
- Fel Empire
- Galactic Empire
- Galactic Republic
- Fringe
- Jedi
- Mandalorian
- Rebel Alliance
- Sith
- Yuuzhan Vong

Other examples of custom factions include GreyOwl's Transformers customs, which use:

- Autobot
- Decepticion
- Predacon
- Maximal

Other uses of factions include designating teams, like Eclipse does with his customs, including the following factions:

- X-Men
- Titans

On the other hand, the C3G project decided against the idea of using factions to represent teams, due to the fluid nature of most teams and the fact that many figures have served in multiple teams.

References
"...when rolling defense against an attack from a figure who follows Utgar.", "Protection from Evil Aura", Ana Karithon

Non-Existent Attributes

Do not reference attributes that don't actually appear on a card, such as gender, in any powers. For example, even though the gender of most figures is apparent, there are many where it isn't apparent.

This rule applies for all attributes that are not on the card, like the figure being "mechanical", the figure being "magical", or other similar situations.

The otherwise fantastic pirate squad created by Mr. Mufflepuff had this unfortunate problem. Note that the "Where Me Wenches?!" power references "female figures", which is a non-existent attribute on cards.

BARNACLED BUCCANEERS

ARRR!
After revealing an Order Marker on this card, if you announce what you're about to do while speaking like a pirate, you may add 1 to the Attack number on this card for the rest of this turn.

WHERE ME WENCHES?!
Any female figure starting its turn adjacent to one of the Barnacled Buccaneers must subtract 2 from the Move number on its card.

HUMAN
UNIQUE SQUAD
PIRATES
CRUSTY
MEDIUM 5

1 LIFE

MOVE 6
RANGE 1
ATTACK 2
DEFENSE 3

40 POINTS

SYMBOLS

Symbols are icons that represent a complete special power, including both the name and text. The use of symbols can be a controversial issue in some circles, so keep that in mind before you decide whether to use them or not. However, note that the use of symbols was first introduced on official cards from the *Marvel: The Conflict Begins* Master Set in the form of the Super Strength symbol, so there is precedent for using them.

If you decide to use symbols, there are few guidelines you should keep in mind:

- Only use them for powers that you use often.
- Only use them for powers that are simple and easy to remember. Otherwise, players have to constantly refer to the rulebook to see what the symbol does.
- If possible, only use symbols for powers that don't require remembering specific numbers, though this isn't always feasible.
- Limit the total number of symbols on a single card. As a general rule, two symbols is a good maximum.
- When considering the total number of powers on a card, don't forget that symbols count!

There are certain symbols that are commonly used in some community projects. If you decide to use a symbol for the same powers represented by those, it is recommended that you also use the same symbol. Avoid creating new symbols for powers that already have one established in the community. These symbols are detailed in the following section.

Super Strength (official version): used on official Marvel cards, as well as many superhero customs.

Super Strength (alternate version): this is a slight aesthetic modification to the official one created by *Hextr1p*, and is the one used by the C3G project.

Flying (version 1): represents the Flying power, and is used on some older superhero customs. It was created by Allskulls.

Flying (version 2): represents the Flying power.

Flying (version 3): represents the Flying power. This one is the standard one used by the C3G project, and was created by *Hextr1p*.

A Note on Stealth Flying: there is no community established symbol for the Stealth Flying symbol. This power can either be written out as normal, as it is not as common as normal Flying, or some standard text can be combined with the Flying symbol. The latter is the approach used by theC3G project.

"When FIGURE starts to fly, if he is engaged, he will not take any leaving engagement attacks."

Force Sensitive: used exclusively on Star Wars customs. For the Custom Star Wars Rules & Characters project (referred to as the CSWRC project from now on), it designates the figure as "Force Sensitive" but entails no actual powers. The symbol is a stylized "F", which stands for the Force.

Force User: used on GreyOwl's Star Wars customs. It designates the figure as a Force User and grants the same powers as the Super Strength symbol. The symbol is a stylized letter "F", standing for the Force, in the Aurebesh script (the written language seen in the Star Wars movies).

Force Leap: represents the Force Leap power, and is used by the CSWRC project. The exact wording of the Force Leap power represented by this symbol is:

FORCE LEAP

"Instead of a normal move, FIGURE may Force Leap. Force Leap has a move of 3. When counting spaces for Force Leap, ignore elevations. You may Force Leap over water without stopping, Force Leap over figures without becoming engaged, and Force Leap over obstacles such as ruins. You may not Force Leap more than 25 levels up or down in a single Force Leap. If you are engaged when you start to Force Leap, you will take any leaving engagement attacks."

In addition to symbols, some projects have standardized wording for powers that do not use symbols. One example of this is the CSWRC project, which uses a standardized wording for the Force Push Special Attack:

FORCE PUSH SPECIAL ATTACK X:Y

"Range X. Attack Y. Force Push Special Attack may only be used against small or medium figures. When attacking with Force Push Special Attack, for each skull rolled, you may move the defending figure one space to an empty space at the same level or lower. The most wounds a figure may take for this attack is one. Figures moved by Force Push Special Attack may receive additional falling damage, and never receive any leaving engagement attacks."

In general practice, symbols aren't used on classic Heroscape customs. The Super Strength and Flying symbols are commonly used on superhero customs, and other customs in related genres. The Force and Force Leap symbols are only used in Star Wars customs. In addition, Star Wars customs typically do not use the Flying symbol, as the power is not all that common in the genre.

References
CSWRC Project:
http://www.heroscapers.com/community/showthread.php?t=24975

Spider-Man - official Super Strength symbol

Superman (C3G) - C3G Super Strength symbol

Superman (C3G) - C3G Flying symbol

Hawkgirl (C3G) - C3G Stealth Flying symbol

Dr. Fate (wulfhunter667's Hero customs) - Flying symbol (version 1)

Booster Gold (IAmBatman's Comic customs) - Flying symbol (version 2)

Luke Skywalker (CSWRC) - Force Sensitive Symbo

Darth Vader (GreyOwl's Star Wars customs) - Force User symbol

Anakin Skywalker, Jedi Knight (GreyOwl's Star Wars customs) - Force Leap symbol

Ahsoka Tano (GreyOwl's Star Wars customs) - Force Push standard wording

SUPER STRENGTH

Determining Super Strength

In general, classic Heroscape figures, along with customs from non-Superhero genres such as Star Wars and Lord of the Rings, should not use the Super Strength symbol. The usual practice is to only put the Super Strength symbol on superhero customs.

When is it appropriate to put the Super Strength symbol on a custom? This question has a two-part answer. First, you can look at the physical (muscular) strength of the character in question. A good rule of thumb is that if the character in question can lift (press) 1 ton or more, it should have the Super Strength symbol. A good reference for relative strength levels, at least for Marvel superheroes, can be found at http://www.marveldirectory.com/strengthlevels/index.htm .

A second way to look at this is purely from the standpoint of Heroscape game mechanics. Even if the character does not have enhanced muscular strength, they can still get the Super Strength symbol if they have other powers that would result in the same benefits. Those benefits are:

- can lift 1 ton or more by some other means
- ignores special powers that give automatic shields to Destructible Objects
- is not affected by Falling and Major Falling rules).

A good example of such a figure is Magneto. While no stronger than an average human, his powers allow him to lift 1 ton or more, protect him against falls and can aid him when attacking Destructible Objects. By that reasoning, Magneto should also get the Super Strength symbol. While not all custom creators adhere to this second definition, many do and it is also the definition adopted by the C3G project.

References
Magneto (C3G) - an example of a figure that does not have superhuman muscular strength, but still meets all of the criteria on the above list and thus was given the Super Strength symbol.

TERMS USED IN SPECIAL POWERS

Disengagement

Official cards never use the term "disengagement" in the power text, only in power titles. In the power text, the proper term is "leaving engagement". Additionally, "leaving engagement attacks" are not called "disengagement strikes". The proper wording to describe whether a figure takes leaving engagement attacks is as follows:

"If FIGURE is engaged when he starts to *[power description]*, he will/will not take any leaving engagement attacks."

One exception to this is the Disengage power, which uses different wording:

"FIGURE is never attacked when leaving an engagement."

References
"...they will not take any leaving engagement attacks.", "Stealth Flying", Einar Imperium

"...is never attacked when leaving engagements.", "Disengage", Agent Carr

Wound Markers

When referencing the term "wound marker" on cards, the standard is to capitalize the first letter of each word on superhero cards, as in "Wound Marker", and to write it in lower case for classic cards, as in "wound marker". If you're creating a custom card for another genre, use your best judgment as to which of these is the closest match.

The only exception is one power on one card in the *Battle for the Underdark* Master Set, where it is capitalized. This is most likely a typo, as it is inconsistent with other classic cards and, in fact, with another power on the very same card.

References
"...he receives one extra attack die for each Wound Marker he has...", "Rage Smash 5", Incredible Hulk, - capitalized on superhero cards

"...remove one wound marker from the chosen Hero's Army Card.", "Dragon Healing", Sonlen - lower case on classic cards

"...for each wound marker on the defending figure's Army Card...", "Blood Frenzy", Feral Troll - lower case on classic cards

"...remove 1 Wound Marker from this Feral Troll's Army Card.", "Regenerate", Feral Troll - singular example of capitalization on classic cards

Enemy vs. Opponent

When referring to figures that belong to players that are not friendly, the official cards use one of two terms: "enemy" and "opponent". The vast majority of cards use the term "opponent", and only three official cards use the term "enemy". Therefore, it is more desirable to use "opponent", but if there is some pressing reason to use "enemy instead", it isn't without precedent.

References
"For every opponent's figure a Tagawa Samurai destroys...", "Bloodlust", Tagawa Samurai

"...can disappear only if they end their disappearing move not adjacent to any enemy figures.", "Disappearing Ninja", Ninjas of the Northern Wind - one of the three official cards that use "enemy"

"...can vanish only if he ends his vanishing move not adjacent to any enemy figures.", "Vanish 9", Isamu - one of the three official cards that use "enemy"

"If 3 Ashigaru Yari you control are adjacent to the same enemy figure...", "Encircle Special Attack", Ashigaru Yari - one of the three official cards that use "enemy"

Players and Figures

When referring to the plastic miniatures, the proper term is "figure". Do not use "character", "unit", or any other synonym. When referring to the people playing the game, the proper term is "player".

References
"If Tandros Kreel is attacking an adjacent figure...", "+2 Broadsword", Tandros Kreel - use of the word "figure"

"...control of the chosen Hero returns to the player...", "Mind Exchange 17", Doctor Doom - use of the word "player"

Map vs. Battlefield

When referring to the game map, the proper term is "battlefield". Do not use "map" or "board".

References
"Rechets of Bogdan do not start the game on the battlefield.", "Iskra's Summoning", Rechets of Bogdan

Space vs. Hex

When referring to individual hex spaces on the battlefield, the proper term is "space", and not "hex".

References
"...you may choose any empty space that is on the same level...", "Teleportation", Tul-Bak-Ra

Place vs. Move

When writing text for powers, keep in mind that the verbs "place" and "move" are synonymous with regard to Heroscape game mechanics and the phase within a turn they refer to. However, they could have different implications depending on the height of the terrain. So saying "move the figure 4 spaces" and "place the figure on an empty space within 4 clear sight spaces" might mean the same thing on a completely flat map, but may be different if the height of the terrain is taken into account. This is because when it comes to a change in the height of the terrain, a "move" requires you to count elevation, whereas a "place" ignores elevation.

References
"After you move Theracus, place the chosen figure adjacent to Theracus., "Carry", Theracus – use of the word "place"

"Before moving normally with Erevan Sunshadow, you may place him on any empty space within 5 spaces of his current location.", "Fey Step", Erevan Sunshadow – use of the word "place"

"If you roll a 15 or higher, you may move all Tarn Viking Warriors again.", "Berserker Charge", Tarn Viking Warriors – use of the word "move"

"If you roll a 9 or higher, Isamu takes no damage and may immediately move up to 4 spaces.", "Vanish 9", Isamu – use of the word "move"

Destroyed vs. Killed

Remember that in Heroscape, figures are always "destroyed" and not "killed". Figures do not "die", rather they "are destroyed".

References
"If you roll a 19 or higher, that figure is destroyed.", "Dust-of-Death", Red Skull

Army Cards

When referencing the cards that go with figures, there are two accepted ways to word it. One is to use the proper noun, as in "Army Card", in which case it is always capitalized. The other way to refer to it is simply as "card", as in "this card", or "the figure's card", in which case it should be lower case.

References
"After revealing an Order Marker on this card...", "Eternal Hatred", Marcu Esenwein - lower case "card"

"If Sir Dupuis has 4 or more wounds on his Army Card...", "Chalice of Fortitude", Sir Dupuis - "Army Card"

Hit Zone

When referencing the hit zone of a figure, refer to it as a "hit zone", not as a "target zone". It should always be capitalized when referenced in a special power.

References
"Estivara has no visible Hit Zone until the next time you reveal an order marker", "Cloud of Darkness", Estivara

Order Markers

When referring to order markers in the text of special powers, it should always be capitalized like "Order Markers".

Starting in Collection D1 (Collection 11), official cards began to write "order marker" in lower case. It is not known yet whether this is an intentional change in style, or whether these are typos. In addition, two cards prior to Collection 11 also write "order marker" in lower case (*Dünd* and *Shiori*). Until more information becomes available, the guideline for now is to use lower-case for classic cards and upper-case for superhero cards.

When referencing a particular order marker, its number or letter should not be in quotes, unless it is the "X" order marker.

Reference:
"If Shiori has only one unrevealed order marker...", "Concentrated Will", Shiori – one of two pre-Collection 11 cards that use lower-case

"…remove all order markers on the chosen figure's Army Card…", "Crippling Gaze 15", Dünd– one of two pre-Collection 11 cards that use lower-case

"…you may also reveal an "X" order marker that is on Siege's Army Card…", "Crag of Steel", Siege

"If at least one order marker is on Mogrimm Forgehammer… ", "Combat Leader", Mogrimm Forgehammer – an example from Collection D1 where "order marker" is not capitalized.

"Estivara has no visible Hit Zone until the next time you reveal an order marker", "Cloud of Darkness", Estivara – an example from Collection D1 where "order marker" is not capitalized.

Card Stats

When referencing card stats (Move, Attack, Range, Defense), always phrase it as "_____ number", where the name of the stat goes in the blank. Official cards are very inconsistent as to whether the stat name is capitalized or not.

For the attack stat, it was originally written lower-case ("attack number") starting in the *Rise of the Valkyrie* set, but later changed to capitalized ("Attack number") in subsequent sets.

For the defense stat, the sole example if from the *Rise of the Valkyrie* set and is lower-case ("defense number").

The move stat was capitalized ("Move number") originally in Waves 3 and 5, but was later changed to lower-case ("move number" in Waves 6 and 9.

The sole example the range stat is in the *Crest of the Valkyrie* set, where it is capitalized ("Range number").

So based on this, there is no consistent pattern as the attack stat changed from lower-case to being capitalized over time, whereas the move stat did the exact opposite. Typically, when something is inconsistent on official cards, the recommendation would be to follow the pattern established in the newest cards. However, doing so in this case would only lead to more inconsistency. Therefore, it is suggested that each customizer pick the pattern they like, either lower-case or capitalized, and at least stick to it consistently on their own customs. Most customizers seem to prefer the capitalized version, however.

References
"...adds 1 to the normal attack number on that card.", "Warrior's Attack Spirit 1", Finn the Viking Champion - lower-case "attack number"

"If you roll a 2-6, add 1 to the Attack number of this card.", "Unleashed Fury", Anubian Wolves - capitalized "Attack number"

"...adds 1 to the defense number on that card.", "Warrior's Armor Spirit 1", Thorgrim the Viking Champion - lower-case "defense number"

*"...add 2 to the Axegrinders of Burning Forge's move number.",
"Dwarven Strategic Bonding", The Axegrinders of Burning Forge - lower-case "move number"*

"Inspired Gladiators add one to their Move number...", "Gladiator Inspiration", Spartacus - capitalized "Move number"

"All friendly figures with a Range number of 4 or more...", "Vydar's Range Enhancement Aura", Laglor - capitalized "Range number"

Height Advantage

When referring to height advantage in powers, you should always word it as one figure "having height advantage on another figure".

References
"A Granite Guardian with a height advantage on an adjacent opponent's figure...", "Landslide", Granite Guardians

Terrain Types

When referencing specific terrain types, you should normally write them all in lower-case. There is one official card that capitalizes the type of terrain (Dzu-Teh), but since this is a singular occurrence it can be considered a typo.

When referencing categories of terrain, there are a couple of terms used on official cards:

- **Non-water space** – any space that is not a normal water or swamp water tile.
- **Land space** – any space that is not normal water, swamp water, molten lava, ice, or shadow tile.

References
"…at least one snow or ice space", "Cold Healing", Greater Ice Elemental

"…at least one ice or snow space", "Ice Spikes 15", Greater Ice Elemental

"…is on a water or ice space…", "Ice Cold", Greater Ice Elemental

"…on at least one shadow or swamp water space…", "Lurking Ambush", Othkurik the Black Dragon

"…do not have to stop their movement when entering a water space.", "Water Suits", Microcorp Agents

"…you may immediately place it on any empty non-water space…", "Underground Movement", Earth Elemental

"…ends her turn on an empty land space…", "Blend Into Shadow", Mika Connour

"Slippery Ice and Heavy Snow only count as 1 space when moving.", "Snow and Ice Enhanced Movement", Dzu-Teh – the lone example of an official card that capitalizes terrain types.

Plants

When referencing plants and trees, whether official or custom, you should always word it as an "Evergreen Tree or Jungle Piece". Any other custom plant pieces you may use on maps should have house rules in order to be incorporated into this definition.

References
"If a Quasatch Hunter begins its turn adjacent to an Evergreen Tree or Jungle Piece...", "Jungle Tracking", Quasatch Hunters

USING THE 20-SIDED DIE

The 20-Sided Die

When referencing the 20-sided die in a power name, always write it out as "20-sided die" in lower case. Do not use abbreviations such as "d20", "D20", "d-20", or "D-20".

References
"After moving and before attacking, roll the 20-sided die.", "Berserker Charge", Tarn Viking Warriors

Powers Using the 20-sided Die

When writing powers that make use of the 20-sided die, follow the convention that desirable outcomes are based on higher numbers. If you don't follow this convention, your power risks being broken by other special powers and glyphs that modify 20-sided die rolls.

When you enumerate the choices for the 20-sided die results, always use "a/an" in front of single number results, and leave it out for ranged results. For example, "if you roll an 11, ...", "if you roll a 9 or higher, ...", "if you roll 12-15...".

Also, keep in mind that some glyphs and powers could result in the final die roll result being greater than 20. Therefore, instead of wording something like "...if you roll 19-20, *do something*", word it as "...if you roll a 19 or higher, *do something*".

As a general rule, try not to use more than one d20 power on the same card. However, this is not a hard rule as there are a couple of official cards that do use more than one d20 power.

References
"After moving and before attacking, you may roll the 20-sided die. If you roll a 1-4, you must destroy one of the Marro Stingers you control and you cannot attack this turn. If you roll a 5-9, add 0 to the Attack number of this card. If you roll a 10 or higher, add 1 to the Attack number of this card.", "Stinger Drain", Marro Stingers

"If you roll 1-11, roll defense dice normally. If you roll a 12 or higher..." "Disappearing Ninja", Ninjas of the Northern Wind - using a/an before single values and not before ranged values

"If you roll a 17 or higher...", "Cell Divide", Marro Dividers - not limiting the max range to 20

"Dragon Healing", "Dragon Swoop", Sonlen - multiple d20 powers on the same card

"Mind Shackle 19", "Toxic Skin", Kee-Mo-Shi - multiple d20 powers on the same card

Enumerations

When listing possible outcomes of enumerations, do not use bullets if you have less than three options. If you have three or more options, always use bullets.

References
"After moving and before attacking, you may roll the 20-sided die. Add the number of Elves you control adjacent to Emirroon to your die roll.

If you roll 1-4, nothing happens.

If you roll 5-11, you may place 1 Elf you control adjacent to Emirroon.

If you roll 12-17, you may place up to 2 Elves you control adjacent to Emirroon.

If you roll 18-20, you may place up to 3 Elves you control adjacent to Emirroon.", "Elven Summoning Spell", Emirroon - more than 3 options with bullets

"If a Ninja of the Northern Wind is attacked with a normal attack and at least 1 skull is rolled, roll the 20-sided die to disappear. If you roll 1-11, roll defense dice normally. If you roll a 12 or higher, that Ninja of the Northern Wind takes no damage and instead may move up to 4 spaces.", "Disappearing Ninja", Ninjas of the Northern Wind - less than 3 options without bullets

POWER LEVELS

Single Power Levels

Some special powers have a number after them to indicate their "level" or "strength", such as "Attack Aura 1". Normally, you would add this number if you expected to have differing power levels of the same special power. If the special power references more than one number in its text, the one that is most likely to be varied should be used as the level.

When referencing the power title within the power text itself, there is no definite rule as to whether the power level should be included or not. On official cards, there is consistency by type of power only. For example, leap powers, such as "Stealth Leap 25", include the power level in the text, whereas swing powers, such as "Swing Line 4", do not. The two powers are identical as far as game mechanics go, aside from the specific numbers and some insignificant wording differences. More importantly, though, they differ because of the different thematic elements they represent through the title. Therefore, a good guideline is pick a consistent standard based on thematic reasons for your customs when it comes to including the power level.

References
"Attack Aura 1", Sir Gilbert – example of a single power level in the special power title

"Stealth Leap 25 has a move of 3… Master Win Chiu Woo may not leap more than 25 levels up or down in a single leap.", "Stealth Leap 25", Master Win Chiu Woo – example of a leap power that references two numbers in its text, and uses the one most likely to vary as the power level in the title of the power

"Swing Line has a move of 4…. Venom may not Swing Line more than 40 levels up or down…", "Swing Line 4", Venom – example of a swing power that references two numbers in its text, and uses the one most likely to vary as the power level in the title of the power

Specials Powers with Multiple Power Levels

Occasionally, you may have powers that require more than one number after the title. There are no official cards that do this, so there is no precedent as to how it should be formatted. However, many members in the customs community have come up with the standard to separate the numbers with a colon (":").

References
"Range 3. Attack 2. Force Push Special Attack may only be used against small or medium figures. When attacking with Force Push Special Attack, for each skull rolled, you may move the defending figure one space to an empty space at the same level or lower. The most wounds a figure may take for this attack is one. Figures moved by Force Push Special Attack may receive additional falling damage, and never receive any leaving engagement attacks.", "Force Push Special Attack 3:2", Ahsoka Tano (GreyOwl's Star Wars customs) - using the CSWRC project approved wording and syntax (note that normally the Range and Attack values of a special attack are not included in the power title, but in the case of the Force Push Special Attack it is because different characters will have the same attack at varying power levels, and the name of the power needed to stay the same for genre-specific reasons).

NORMAL AND SPECIAL ATTACKS

Referencing Normal and Special Attacks

In general, when referencing a "normal attack" or a "special attack" in powers, they should be written in lower case. There are two official cards that capitalize, but since all other cards are consistently lower case, these two can likely be considered typos.

The only exception to this if "special attack" is part of the name of a power, as in "Wrist Rocket Special Attack". In that case, it is always capitalized, since power names are always capitalized.

Some cards refer to "attacking normally". This wording refers to using a normal attack.

References

"If an opponent's figure that is adjacent to Tandros Kreel attacks with a normal or special attack", "Combat Challenge", Tandros Kreel - lower case

"When a Marro Divider you control receives one or more wounds from a Normal or Special Attack", "Cell Divide", Marro Dividers - one of the two classic cards that capitalize "normal" and "special"

"...one or more wounds from an opposing figure's Normal or Special Attack...", "Teleport Reinforcements", Tul-Bak-Ra - one of the two classic cards that capitalize "normal" and "special"

"If Brunak's Blood Hungry Special Attack destroys a figure."Blood Hungry Special Attack", Brunak - name of a specific special attack is capitalized

"Any of the Wolves of Badru that moved but did not attack normally may use…", "Pounce Special Attack", Wolves of Badru

Special Attack vs. Special Power

Most of the time, it is easy to decide whether a power should be a special attack or a special power based on the mechanics. If you roll combat dice, like you would for a normal attack, then it is a special attack. If you don't roll combat dice, then it is a special power. The reason for this is that if you make a special power that uses combat dice, it creates confusion and brings up too many questions, such as "does the power count as an 'attack' for the purposes of other powers?", "would you roll for height advantage?", "is line-of-sight needed?", and "how does it interact with other defensive powers, like Tough or Counter Strike?". All of these questions can be answered by existing rules, but some players may find it confusing nonetheless.

That being said, there are some exceptions in the official cards. The flagbearers have special powers that are not special attacks,

but use the Valkyrie dice. So therefore, this isn't a set rule, but more of a guideline, but think through the implications before creating a special power that uses combat dice.

What if you create a power that requires rolling both combat dice and the 20-sided die, or some other combination where it isn't clear how to classify the power? The general rule of thumb to follow is that "if the power requires rolling combat dice at any point, then it needs to be a special attack".

That being said, it is strongly recommended that you do not make a habit of using both the 20-sided die and attack dice in the same power too often, though there will occasionally be exceptions. You should also never create a power that requires rolling attack dice more than once, as it could get annoying for players.

References

"Lolth's Wrath Special Attack", Pelloth

"…you may roll 12 Jandar Valkyrie dice.", "Jandar's Dispatch", Sir Gilbert – use of Valkyrie dice in a special power
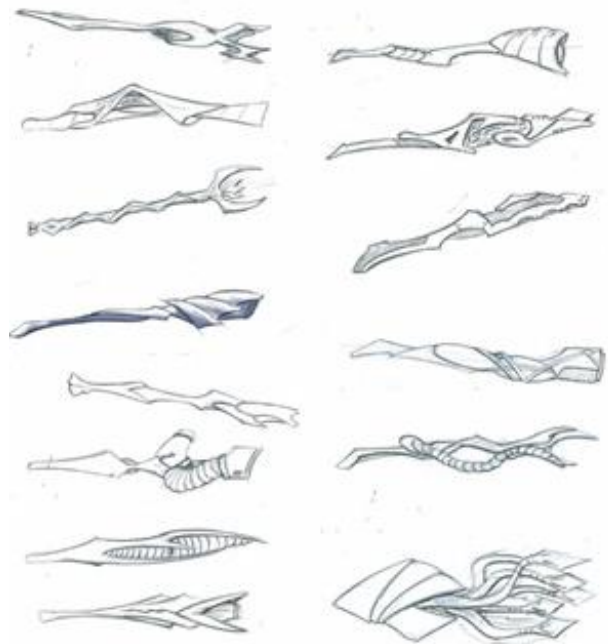
Special Attack vs. Normal Attack

When deciding whether to make a particular type of attack a special attack or to represent it through the normal attack, keep the differences in mind. There is more to a special attack than just adding additional thematic flavor. Since special attacks are not modified by height, other special powers, or Glyphs, ask yourself if that is thematically appropriate for that attack. In addition, remember that special attacks can bypass many defensive powers, such as "Tough", "Counter Strike", and "Man of Steel" (C3G). This also needs to be taken into consideration, both in terms of theme and game balance.

In general, try not to overuse special attacks as they would then cease to be "special". This not only means that you should avoid putting special attacks on all of your customs, but as a rule of thumb, you shouldn't put more than one special attack per card. There are some rare exceptions to this guideline, but consider the implications carefully when deciding to violate it.

To go along with idea of making special attacks "special", make sure you have a fun and unique mechanic that the special power will implement. Try to avoid reusing existing special attack mechanics with a new name, if at all possible.

References
"Machine Pistol Special Attack", "Wrist Rocket Special Attack", Major Q10 - rare example of multiple special attacks on a single card

Special Attacks

When creating a special attack, avoid creating one with no power text and only a Range and Attack value. If the power has no other distinguishing aspects, then it probably isn't relevant enough to go on the card.

References
No official cards have special attacks with only a range and attack value, or with no power text.

Attack and Range on Special Attacks

On older classic cards, the standard was to put the "Attack X. Range Y." portion of a special attack in-line with the rest of the text. On newer classic cards and all Marvel cards, it is standard to put it on its own line. Remember, though, that the "Attack X. Range Y." line is required in order to be a valid special attack.

References
"Shotgun Blast Special Attack", Johnny "Shotgun" Sullivan - in-line on older classic cards

"Earth Slam Special Attack", Earth Elemental - separate line on a newer classic card

"Web Special Attack", Venom - separate line on a Marvel card

Range Special on Special Attacks

If an attack can target all figures within a certain radius, you should use "Range X".

If an attack can target all figures within a certain radius, but the size of that radius can change depending on certain criteria, you should use "Range X, Y, or Z". For example, if an attack specifies a choice between affecting all figures within 4 spaces and all figures within 6 spaces, it would be "Range 4 or 6."

If an attack can target some figures within a certain radius, but not all of them, you should use "Range Special". For example, and attack that affects all figures in a straight line would be "Range Special", since it doesn't affect all figures within a given radius.

If an attack targets a combination of these things, you should use "Range X or Special". For example, if an attack affected all figures within 3 spaces, plus all figures in a single straight line that is 8 spaces long, it would be written as "Range 3 or Special".

Note that number values for ranges that are "Special" are not included in the "Attack X. Range Y." line.

References
"Acid Spray Special Attack", Othkurik the Black Dragon - use of the "Range X" format

"Fire Line Special Attack", Mimring - use of the "Range Special" format

Attack Special on Special Attacks

If an attack rolls a set number of attack dice, you should use "Attack *X*".

If an attack has different possible numbers of attack dice to roll, and you have a choice as to which one to use *after selecting a target*, you should use "Attack *X, Y*, or *Z*".

If an attack has different possible numbers of attack dice to roll, and you do *not* have a choice as to which one to use after selecting a target, you should use "Attack Special".

If an attack would be an "Attack Special", but has set number of dice your roll in addition to the variable number, you should use "Attack *X* + Special".

References

"Ice Shard Breath Special Attack", Nilfheim - use of "Attack X"

"Queglix Gun Special Attack", Major Q9 - use of "Attack X, Y, or Z

"Fire Blast Special Attack", Erevan Sunshadow - use of "Attack Special"

"Fire Strike Special Attack", Chardris - use of "Attack X + Special"

Bumbly Mufflepuff always had trouble with special attacks. A classic example is his (otherwise wonderful) Penguin Bandidos squad. How many mistakes can you find on this card? I think it might have been a record even for Mr. Mufflepuff!

GLYPHS

Referencing Glyphs

When referencing glyphs in power text, it should always be capitalized like "Glyph".

References

"Figures affected by Cyberclaw cannot be moved by any special power on an Army Card or Glyph.", "Cyberclaw", Gladiatrons - capitalizing "Glyph"

Glyph Types

If you create a custom glyph, first decide on which type of glyph it should be. There are several official types of glyphs, and there are a few created by customizers, as well. Make your best effort to fit your glyph into one of the existing types before deciding to create a new kind of glyph.

The official glyph types are:

- **Normal Glyph (Permanent)** - the power of the Glyph is in effect for as long as a figure is standing on it.
- **Normal Glyph (Temporary)** - the power of the Glyph takes effect only once. After a figure moves onto the glyph and activates it's power, the Glyph is removed from the game.
- **Normal Glyph (Artifact)** - represent objects as directed by a specific scenario.
- **Treasure Glyph** - mobile Glyphs that can be carried by Unique Heroes. Any number of them can be carried by a single figure. The power of the Glyph is activated whenever the player chooses to use it.
- **Ancient Artifact Treasure Glyph** - same as a Treasure Glyph, except that an Army can never control more than one copy of each Ancient Artifact Treasure Glyph

The custom glyph types are:

- **Equipment Glyph** - mobile Glyphs that can be carried by Unique Heroes. Unlike with a Treasure Glyphs, the power of an Equipment Glyph is in effect the entire time it is being carried. Only one Equipment Glyph can be carried at a time. Though not official, Equipment Glyphs were designed and extensively playtested by the C3G project.
- **Weapon Glyph** - mobile Glyphs that can be carried by all figures, including squads. Like an Equipment Glyph, the Glyph's power is in effect the entire time it is being

carried. No more than 2 Weapon Glyphs can be placed on a single Army Card at one time.

When creating custom glyphs, the standard wording used on them references Heroscape.com. Since your customs will likely not be on that site, it is recommended you change that to Heroscapers.com instead. The full standard text for a glyph (except for a Treasure Glyph) is:

"*See Heroscapers.com for scenarios using this glyph. You can also use this glyph with scenarios you create.*

Keep this card handy as a reference for the GLYPH's power."

The standard text for a Treasure Glyph is:

"*Keep this card handy as a reference for the GLYPH treasure glyph.*

Rules for Treasure Glyphs can be found in the Heroscape D&D Master Set: Battle for the Underdark. Or go to www.heroscape.com."

References
Glyph of Astrid - standard wording for a Normal Glyph

Elixir of Speed - standard wording for a Treasure Glyph

Glyph of Bolt of the Witherwood - Ancient Artifact Treasure Glyph

Glyph of Green Kryptonite (C3G) - Equipment Glyph

Glyph of Plasma Rifle (GreyOwl's Halo customs) - Weapon Glyph

DESIGN PRINCIPLES

CAPTURING THEME USING MECHANICS

When creating a custom that is based on a known character, like a superhero, it is imperative that you first decide which aspects of the character the card will represent. Typically, a character will have many more aspects than can be represented on an Army Card. Following is a summary of an example originally created by *Aldin.* To read and comment on the full example, see his thread on the topic, referenced below.

If you were designing a Batman custom, one of the first things you should do is to make a list of iconic aspects of Batman, such as:

- Refusal to use firearms or kill
- Willingness to brutalize criminals
- Intense, even unbalanced focus
- Extraordinary intelligence
- Martial Arts Expert
- Master Acrobat
- Commanding presence
- Unfeasible romantic interests
- Obscene Wealth
- Batarang
- Batmobile
- Batsuit
- Utility Belt
- Grapple Hook

Assuming for the sake of argument that you want to use 2 of these on your custom, you have several different aspects of the character you could represent. You could create a detective version of Batman, that focuses on crime solving skills (via revealing Order Markers, for example) and his utility belt. Or you could create a more crime fighting Batman that has a special power to aid in fighting squads and another for his Batarang. Or you could create a more powerful version of Batman that highlights his intelligence and his legendary fighting prowess.

The important thing here is to make a decision as to which version of the custom you will represent, so you don't end up with a mish-mash of powers. Otherwise, you run the risk of creating a custom that either has too many powers, or has a set of powers that aren't complementary to each other.

References:
"Capturing a figure's theme with mechanics", Aldin,
http://www.heroscapers.com/community/showthread.php?t=29355

SPECIAL POWER DESIGN

Number of Special Powers

There can sometimes be a tendency to try and pack too many powers onto a single card. Resist this! Keep in mind that the card cannot and should not represent every aspect of the character. Focus on the most iconic or fundamental aspects. For example, a character like Superman has many more powers than can be put on a card. Certain ones, like his flying ability, strength, and durability, are a given. Beyond that, it would be best to focus just one to two more that, in your mind, best define the character.

So how many powers are too many? Initially, you should shoot for one and see if that sufficiently represents the character. If not, add one more and try again. But as an absolute maximum, if looking at classic Heroscape official cards the most that ever shows up is four. For the Marvel official cards, there are four figures with four powers (remember, the Super Strength symbol counts as a power). It is probably acceptable in very limited cases to have five powers on a card, especially if one or two of them are common, short, or simple powers. If you feel you need more than five, or even if you find yourself needing four or five fairly often, then you should rethink your ideas about how you design cards.

One useful tip to keep the number of powers down is to remember to use the base stats (Life, Move, Range, Attack, Defense) to represent as many aspects of the character as possible. For the Superman example from before, his strength and durability may not require any powers at all, and can be reflected solely in his Life, Attack, and Defense. For a figure with a gun, the Range and Attack value is usually sufficient without needing a special power.

References

Sonya Esenwein - the only classic Heroscape official card with four powers

Spider-Man, Venom, Silver Surfer, Incredible Hulk - the official Marvel cards with four powers

Syvarris - the bow and arrow attack is represented solely in the base stats

Original Powers

Even though it is okay to use reuse existing powers on your custom cards, try to avoid creating a custom that consists of nothing but existing powers. You should shoot for at least one original power per card. There can be exceptions to this, but it should only be done if some other aspect of the card (class, personality, or faction, for example) results in different game play.

It is, however, perfectly acceptable to use existing powers with slight tweaks to give them a new twist. Combining existing powers into a single power can be done as well. However, when doing this, make sure you don't combine two powers that would activate in two different phases during a turn.

References
"Phantom Walk", Moriko - combination of the "Ghost Walk" and "Disengage" special powers

Bumbly Mufflepuff was very fond using existing powers without any original twist. And at times, like most customizers, he was tempted to put too many powers on one card. Here is his personal favorite custom, which is perfect for demonstrating both of the above sections.

LUCKY THE LEPRECHAUN

HUMAN CHAMPION BONDING
Before taking a turn with Lucky the Leprechaun, you may first take a turn with any Human Champion you control.

DOUBLE ATTACK
When Lucky the Leprechaun attacks, he may attack one additional time.

COUNTER STRIKE
When rolling defense dice against a normal attack from an adjacent figure, all excess shields count as unblockable hits on the attacking figure.

TOUGH
When rolling defense dice against a normal attack, Lucky the Leprechaun always adds one automatic shield to whatever is rolled.

PHANTOM WALK
Lucky the Leprechaun can move through all figures and is never attacked when leaving an engagement.

LEPRECHAUN
UNIQUE HERO
ADVENTURER
LUCKY
SMALL 3

7 LIFE
MOVE 5
RANGE 1
ATTACK 3
DEFENSE 2
100 POINTS

MARKERS

Before creating a power that relies on the use of markers, carefully consider whether there is another approach that could be implemented without markers. Too many powers with markers can become unwieldy (and therefore not fun) for players. Never put more than one marker-based power on the same card, unless the powers are a using the same set of markers.

If you determine a power does require markers, keep the number of markers needed as low as possible. Five is a good number for an absolute maximum, but lower is better.

MECHANICAL FIGURES

Eventually, you will have to deal with the issue of distinguishing mechanical figures from organic figures. In classic Heroscape, this is handled by simply referencing the Soulborg species, as all mechanical figures in that genre are Soulborgs.

For other genres, the appropriate method to handle this is to pick a single species that is the most iconic for the given genre, and reference that one. For example, Droids would be an appropriate choice for Star Wars, and either Robot or Android would be a good choice for superheroes. If the genre has more than one species that can be considered mechanical, you will need a supplemental rule to go along with your customs that states the equivalency of the various species. For example, you could have a rule that states "For the purposes of all special powers and glyphs, a Robot is considered the same as an Android or a Cyborg."

In actuality, you would have to decide if all of these species should truly be equal, especially Cyborgs since they are part organic. It all really depends on the reason you want to create the equivalency.

DOUBLE ATTACK

When using the official "Double Attack" special power, keep in mind that it does not differentiate between a normal and a special attack. If you use this power on a card that has a special attack, it will be unclear whether the figure gets two normal attacks, two special attacks, or a combination of both (though by strict reading of the power text, it would allow any of these choices). Due to the potential for confusion, no official card uses the "Double Attack" power on the same card as a special attack.

If you wish to allow double attacks on a card that has a special attack, consider creating your own modified version of "Double Attack" (with a different name) that specifies whether the power applies to normal or special attacks.

THREAT RANGES AND KITING

Kiting is a term often used to refer to a ranged figure's ability to attack without reprisal by using their superior range to keep out of their opponent's reach. It's not a bad thing as long as you're accounting for it and designing with it in mind. The danger is creating a unit that can stay out of an opponent's reach indefinitely. At that point a skilled player can abuse the unit to destroy far more than intended.

Games all have different means of dealing with kiting. Some examples are:

World of Warcraft Miniatures (Boardgame): In this game, the range is usually equal to or below the move value. Almost all units have a move of 2 or a melee threat range of 3. Range 4 in the game is restricted almost entirely to snipers, meaning most ranged units fall well within melee threat range. Adorably, the game still has kiting problems because it allows attack then move options. Melee is overly weak because range can wait for them to get in range, then retreat.

Advanced Wars (Game Boy Advance/DS): In this series, ranged units cannot attack and move on the same turn (melee however can) which essentially removes kiting problems from the game, but harshly restricts how ranged units play. You have to use them more to set traps and create kill zones rather than play with them aggressively, which isn't always the proper feel you want to get out of your units. Case in point, Heroclix, which uses a similar system and loses the CHARGE! mentality for one where players slowly set up crossfire kill zones and entrap one another. It ends up being very defensive for a genre where most people want to fly in guns blazing. Also, Advanced Wars and several other games (including World of Warcraft miniatures for extremely long range units) often don't allow ranged units to attack adjacent units. In the case of Advanced Wars where you also can't move and attack, it makes ranged units completely helpless once melee gets in range.

Real Time Games - First Person Shooters/Massive Multiplayer Online RPGs: Real time games have a variety of systems. First Person Shooters generally don't have a problem as all characters usually have the same concept of range, making kiting pretty difficult. Long range weapons, often through heavy zoom lens, however often make it difficult to remain in motion and struggle with close targets naturally.

MMOs often struggle with kiting, and address it in several ways. Some freeze the character in motion when attacking, which gives melee characters time to run towards them whenever they attack. This almost never works because jumping tends to override the freeze, but someday someone will program this correctly from day one.

Heroscape does it with a combination of not allowing movement after attacks, which limits the padding to the range stat instead of the threat range and the engagement system where mobility is severely impaired once an opponent closes the gap.

Keep in mind, lots of figures can theoretically kite melee figures forever in classic Heroscape, so it's not a total deal breaker. But the idea is to try and limit it on a flat plane so it doesn't become ridiculous on real terrain. That's why it's often vital to keep ranges short on flying units since they treat all terrain as flat and can kite like crazy if you're not careful.

Kiting on an infinite plane occurs whenever one character has the ability to end their turn outside the maximum threat range of another *and* that figure has the same or higher movement ability. In the game reality this doesn't happen very often because the arena is limited, and the chaser can intercept when the kiter hits the wall (this is also why range starts to break on larger maps).

A couple things worth tracking with figures is their maximum encumbered and unencumbered threat range. *Encumbered threat range* is the distance they can move without flight and *unencumbered threat range* is their range or flying move value. Unencumbered threat range is a huge advantage in the game due to just how much horizontal distance is consumed by vertical changes.

The key is to design your figures with threat ranges in mind. In Heroscape, because figures must move before they attack, the primary thing you want to keep an eye on is how far away a unit can be from its target after its attack. This is usually just the figure's range, but special powers like *Hyper Speed* can add to it. If you're farther away than the opponent's threat range, you get one extra turn of protection.

References:

Post on Kiting (plus additional information in a PM), by Eclipse,
http://www.heroscapers.com/community/showthread.php?p=1028393#
post1028393

ATTACK SCALE VS. DEFENSE SCALE

Due to the fact that each die has 3 skulls but 2 shields, the odds of rolling one vs. the other are different. The consequence of this is the scale used for the Attack and Defense stats are not actually the same. This means that if you wanted to create a custom that was equally good at attacking and defending, you should not give it the same number for Attack and Defense. The numbers on both scales are spread out differently.

What exactly does "just as good at attacking as defending" mean? It means that a figure with Attack *X* attacks a figure with Defense *Y*, what do the X and Y have to be to make the odds of causing a wound exactly 50%? This would mean that both attacker and defender are equally matched. It's not, as some may think, where both numbers are the same. For example, Attack 1 vs. Defense 1 actually has a 33.33% chance of causing a wound. Those two figures would not be evenly matched, instead the defender would have a significant advantage. An Attack 1 vs. Defense 0 actually has a 50% chance of causing a wound, so those two figures would be evenly matched.

The following table shows how the two scales map to each other. In most cases to get an exact 50% you'd have to use fractional Attack and Defense values, so the table rounds off the values to the closest possible whole number. However, it also shows the actual percentage so you can tell how close it really is to the 50% mark. Here's the chart for Attack 0 - 10.

ATTACK	DEFENSE	Chance of Causing At Least One Wound
0	-	0%
1	0	50%
-	1	
2	2	44.44%
3	3	50.93%
-	4	
4	5	46.30%
5	6	50.74%
-	7	
6	8	47.03%
7	9	50.63%
-	10	
8	11	47.45%
9	12	50.55%
-	13	
10	14	47.73%

Note that the blank spots in the table for the attack column theoretically represent fractional Attack values.

ollie also came up with a formula to approximate this table, so use whichever one you find most handy. For the fractional attack values, the formula returns the next higher attack value, regardless of rounding, so keep that in mind when using it. *ollie*'s formula is:

$$A = (2D/3) + 1$$

Where A is the # of attack dice and D is the number of defense dice. You'll have to round off A after getting a result. For those of you more familiar with "Excel formula syntax", it would be like this:

$$A = ROUND((2D/3) + 1)$$

SYNERGY

A *synergy* is the combined or cooperative use of two or more figures that goes beyond what would normally be possible without the use of a specific special power. Synergy can be dependent on many factors: Class, Species, Personality, Rarity (Unique, Common, or Uncommon), Hero vs. Squad status, Size, Height, Faction, or even the name of the figure or the name of a specific special power.

Synergies can be categorized into two main classifications, *positive synergy* and *negative synergy.* A positive synergy is where at least one of the figures involved receives a benefit, while the rest either receive a benefit or are unaffected. A negative synergy is where at least one figure involved receives a benefit, while the rest receive a penalty. Both kinds of synergy can also come in two types, *explicit* or *implicit.* In addition, bonding, which is discussed in detail in the next section, is a specific type of explicit positive synergy. The classification of synergy types is outlined below:

- **Positive Synergy**
  - Explicit
    - Bonding
  - Implicit
- **Negative Synergy**
  - Explicit
  - Implicit

An explicit synergy is where the type of figure that the synergy is designed to work with is spelled out on the card. This can take the form of a special power that mentions a specific faction, class, species, personality, or even a specific figure.

An implicit synergy is more subtle, because the specific attributes of the figure it is designed to work with are not mentioned on the card. Instead, careful consideration of strategy will lead one to use the two (or more) figures together.

Basically, the difference can be summed up by the fact that explicit synergies tell the player what figures to combine together, whereas implicit synergy merely hints at it.

While synergy adds a lot to the game and many players clamor for more of it, it is something that should be used in moderation and in measured doses. Excessive use of synergy, especially explicit synergy, limits the creativity and strategy of building armies by essentially telling the player what they need to do. Too much of this can drastically lower the replay value of the game, as people

would always tend to build the same or similar armies over and over again. As IAmBatman put it, "Retaining a diversity of viable builds is important."

In order to help avoid this problem, use synergy in moderation and when you do use it, tend toward the less-specific end of the continuum (implicit over explicit, a general attribute like personality over a specific character's name, *etc*.).

References:
"...you must place all 3 Rechets of Bogdan on empty spaces...", "Summon the Recehts of Bogdan", Iskra Esenwein - a very rare case of an extremely specific positive explicit synergy based on the name of a particular figure.

"Turn Undead Special Attack can be used to attack only Undead figures.", "Turn Undead Special Attack", Ana Karithon - a general negative explicit synergy based on Species.

"All friendly figures with a Range number of 4 or more who follow Vydar...", "Vydar's Range Enhancement Aura", Laglor - a general positive explicit synergy based on Faction.

"If an opponent''s figure that is adjacent to Tandros Kreel attacks with a normal or special attack, it must attack Tandros Kreel.", "Combat Challenge", Tandros Kreel

"If Darrak Ambershard is attacking an opponent's figure that is adjacent to at least one other figure you control, add 2 dice to Darrak Ambershard's attack.", "Sneak Attack 2", Darrak Ambershard

"After revealing an Order Marker on a wounded small or medium Hero figure you control that is adjacent to Ana Karithon, and before using any other special powers on any Army Card or Glyph, you may first roll the 20-sided die. If you roll a 1-12, nothing happens. If you roll a 13 or higher, remove up to 2 wound markers from that Hero's Army Card", "Healing Word", Ana Karithon

"Combat Challenge" and "Sneak Attack 2" form an implicit synergy, where Darrak benefits from being adjacent to Tandros, but in turn is protected by him. In addition, Ana's "Healing Word" can form an implicit synergy with Tandros as she can heal him while he fights, and in turn he protects her with "Combat Challenge". Also note that "Healing Word" contains a generalized explicit synergy as well, through the use of the term "Hero".

BONDING

Bonding is a type of positive explicit synergy that allows a player to take turns with cards other than the one they just revealed an Order Marker on. There are five primary categories of bonding:

- **Type I**: *Before* taking a turn with the figure or figures (in the case of squads)
  - o Full Bonding
  - o Movement Bonding
  - o Strategic Bonding
  - o Variable Bonding
  - o Combination Bonding
  - o Life Bonding
- **Type II**: *Instead* of taking a turn with the figure (or figures)
- **Type III**: *After* taking a turn with the figure (or figures)
  - o Full Bonding
  - o Movement Bonding ("Dispatch")
- **Type IV**: In between different phases of a turn (for example, after moving but before attacking)
- **Type V:** Instead of one or more consecutive phases of a turn (for example, instead of attacking)

When creating bonding powers, there are a few things to keep in mind.

On all official cards, only Type I Bonding uses the term "bonding". The other three types always use unique power names that do not include the word "bonding". But for the purposes of this guide, all five cases are referred to as "bonding powers".

When Type I Bonding is used, the bonding should be named with a description of the figure that bonding works with. For example, if the power lets you take a turn with a Vigilante before taking a turn with the figure in question, the power would be named "Vigilante Bonding".

Type I Bonding has several different versions:

- *Full Bonding* - allows a full turn with the bonded figure.
- *Movement Bonding* - if Type I Bonding does not allow a full turn with the bonded figure, but rather just a movement, then it should use the term "Movement Bonding".
- *Strategic Bonding* - if a Type I Bonding power offers a choice between bonding and something else instead of bonding, it is referred to as "Strategic Bonding".

- *Variable Bonding* - if a Type I Bonding power determines the outcome bonding based on a random dice roll, it is referred to as "Variable Bonding".
- *Life Bonding* - this is a special type of bonding that is only useful for common and uncommon figures. After taking a turn with the bonded figure, one or more of the figures with the bonding power are destroyed.

Also note that combinations of these types are also possible (such as Variable Movement Bonding, or even Variable Strategic Movement bonding), though no such power currently exists on any official cards.

When creating a Type I Bonding power between a squad and a unique hero, the bonding power typically goes on the squad's card, though it isn't absolutely necessary to do it that way..

For Type II Bonding, the name doesn't use the term "bonding", but is usually a unique name that carries the connotation of someone giving orders or being in command.

Type III Bonding powers usually have a unique name and don't follow any common naming convention. The one exception is that Type III Bonding powers that allow for only movement of the bonded figure(s) use the term "Dispatch".

Note that there are no official cards that use Type IV or Type V Bonding.

Bonding Chains and Bonding Loops: Even though not all official cards follow this pattern, it is strongly suggested that you use the phrase "After revealing an Order Marker on this Army Card, ..." in front of all bonding powers, to avoid *bonding chains*. Bonding chains are undesired sequences of multiple bonding powers working together. A *Bonding Loop* is a bonding chain that can continue indefinitely.

This reminds me of Bumbly Mufflepuff's extensive line of "Monty Python and the Holy Grail" customs. Specifically, "Brave, Brave Sir Robin" has a bonding loop. Note the "Human Knight Bonding" power. This power would allow a player to take a turn with the Knights of Weston. The Human Champion Bonding on the Knights of Weston would then allow a turn to be taken with Brave, Brave Sir Robin, and the bonding would go on-and-on forever. One possible way to resolve this bonding loop is to include the pharse "After revealing an Order Marker on this card…" in the "Human Knight Bonding" power.

BRAVE, BRAVE SIR ROBIN

HUMAN KNIGHT BONDING
After taking a turn with Brave, Brave Sir Robin, you may take a turn with one Squad of Human Knights you control.

BRAVELY RUN AWAY
If any opponent who has a figure within 8 clear sight spaces of Brave, Brave Sir Robin even thinks about attacking, you may immediately move Brave, Brave Sir Robin up to 6 spaces.

HUMAN
UNIQUE HERO
CHAMPION
BRAVE-ISH
MEDIUM 5

4 LIFE

MOVE 5
RANGE 1
ATTACK 3
DEFENSE 5

90 POINTS

References

"Hive Mind", Marro Hive; "Master Manipulator", Red Skull - use of the phrase "After revealing an Order Marker..."

"Beast Bonding", Arrow Gruts - use of the word "bonding" for Type I Bonding

"Utgar's Orders", Minions of Utgar - lack of the word "bonding" for Type II Bonding

"Moon Frenzy", Werewolf Lord — example of Type I Variable bonding.

"Jandar's Dispatch", Sir Gilbert - lack of the word "bonding" for Type III Bonding

Jedi Wisdom", Depa Billaba (GreyOwl's Star Wars customs) - lack of the word "bonding" for Type IV Bonding

"Telepathic Rapport", Cyclops (C3G) - lack of the word "bonding" for Type V Bonding

"Before taking a turn with the Sacred Band, you may first take a turn with any Warlord you control who follows Einar.", "Einar Warlord Bonding", Sacred Band - description of figure to bond with in the power name for Type I Bonding

"Kato Katsuro's Command", Kato Katsuro; "Utgar's Orders", Minions of Utgar - naming convention for Type II Bonding, demonstrating use of a word that indicates command or orders

"Before taking a turn with the Blastatrons, you may move 4 Gladiatrons you control up to 5 spaces each.", "Gladiatron Movement Bonding",

Blastatrons - use of the phrase "Movement Bonding" for Type I Bonding that does not allow a full turn

"Before taking a turn with the Marrden Nagrubs, you may first take a turn with any Hivelord you control. Before moving the chosen Hivelord, you may destroy one adjacent Marrden Nagrub you control. If you destroy one of the Marrden Nagrubs with Hivelord Life Bonding, remove 1 wound marker from the chosen Hivelord's Army Card.", "Hivelord Life Bonding", Marrden Nagrubs - Type I Life Bonding

"Dwarven Strategic Bonding", The Axegrinders of Burning Forge - use of term "Strategic Bonding" for Type I Bonding that offers a choice between bonding and something else

"Jandar's Dispatch", Sir Gilbert - use of the term "Dispatch" for Type III Bonding that only allows for movement

"Before taking a turn with the Arrow Gruts, you may first take a turn with any Beast you control.", "Beast Bonding", Arrow Gruts - example of Type I Bonding

"Instead of taking a turn with Ulginesh, you may take a turn with up to 2 different Elf Wizards you control.", "Mind Link", Ulginesh - example of Type II Bonding

"After taking a turn with the Mohican River Tribe, if at least two of the Mohican River Tribe you control are engaged, you may immediately take a turn with one Unique Tribesman Hero you control.", "War Cry", Mohican River Tribe - example of Type III Bonding

"After revealing an Order Marker on this card and after moving but before attacking, you may take a turn with any squad you control that follows the Galactic Republic or the Jedi.", "Jedi Wisdom", Depa Billaba (GreyOwl's Star Wars customs) - example of Type IV Bonding

"After revealing an Order Marker on this card, instead of attacking, you may take a turn with any Unique Telepath Hero you control.", "Telepathic Rapport", Cyclops (C3G) - example of Type V Bonding

VULNERABILITIES AND RESISTANCES

The idea of giving figures vulnerabilities and resistances has come up several times in the course of designing customs. While there are many approaches for how to implement it, most have their shortcomings in the long run. The best method to accomplish the concept while keeping the cards as official as possible, is the one implemented by the C3G project, and also used on one official card in Wave 11. For compatibility and consistency, it is suggested that other designers use the same vulnerabilities outlines below whenever possible.

The idea is to put a power on the card of all figures that have the vulnerability or resistance. This power should not only address the vulnerability or resistance, but should also be a viable and thematic power in its own right. Attacks and special powers on other cards will exclude these powers, as necessary. For example, a Human Torch card might have the Lava Resistant power on it whereas a Flamethrower Special Attack on another card would include the line "Flamethrower Special Attack may not be used on figures with the Lava Resistant power."

So why is this the best way to do it? Because if you did the alternative and simply put a power on Human Torch's card that said "FIRE RESISTANCE – Human Torch cannot be affected by fire-based attacks", you would be referencing a non-existent attribute.

This method of handling vulnerabilities and resistances was developed by Hi1hi1hi1hi1hi1 and adopted by the C3G project. Later, the method became official with the release of the Fire Elemental figure.

Vulnerabilities

Fire/Heat/Lava Weakness

FIRE WEAKNESS – If X is on a lava field space, he rolls 2 fewer defense dice and 2 fewer attack dice.

Water Weakness

WATER WEAKNESS – If X is on a water space, he rolls 2 fewer defense dice.

Wood Weakness

WOOD WEAKNESS – X rolls 2 fewer defense dice when defending against attacks from Archers or Spearmen.

Ice/Cold Weakness

COLD WEAKNESS – If *X* is on a snow or ice space, he rolls 2 fewer defense dice.

Sound Weakness

SENSITIVE TO SOUND - Before rolling defense dice against a special attack, first roll the 20-sided die. If you roll 1-12, roll 1 less defense die.

Resistances

Magic Resistance

MAGICAL DEFENSES - When X is attacked by a normal attack, the most wounds X may take for this attack is one.

Fire/Heat/Lava Resistance

LAVA RESISTANT – *X* never rolls for molten lava damage or lava field damage and does not have to stop on lava spaces.

Ice/Cold Resistance

ICE RESISTANT – *X* is not affected by heavy snow or slippery ice.

Electrical Resistance

ELECTRICALLY CHARGED - If *X* is standing on a water space, *X* rolls 1 less defense die against special attacks.

Radiation Resistance

RADIOACTIVE – Before moving, you must roll the 20-sided die once for each figure adjacent to *X*. If you roll a 17 or higher, that figure receives one wound.

Sound Resistance

SONIC DISRUPTION – If an opponent's figure that is within 4 clear sight spaces of *X* attempts to disengage, it will always take leaving engagement attacks, regardless of any special power on an Army Card or Glyph.

Acid/Toxin/Poison Resistance

TOXICITY – When any figure moves into engagement with *X*, the player controlling that figure must roll the 20-sided die. If they roll 1-2, place one wound marker on the figure's card.

Light Resistance

BLINDNESS - *X* is not affected by any powers that remove *X*'s line of sight on a figure *X* targets for an attack.

Psychic Resistance

MENTAL SHIELD - An opponent may never take temporary or permanent control of *X*.

References
"Figures with the Lava Resistant special power are not affected by Searing Intensity", "Searing Intensity", Fire Elemental - example of a Fire/Heat/Lava Resistance.

"An opponent may never take temporary or permanent control of Magneto.", "Mental Shield", Magneto (C3G) - example of a Psychic Resistance.

FIGURE ROLES

When creating a custom, one of the most important things you can do is decide what role your custom will fill. Without deciding this, you risk creating a mish-mash figure that doesn't have a clear purpose. The various roles a figure can server were clearly defined by *Jexik* in his "What's in an Order Marker?" thread.

Bread and Butter: These figures give you a lot for each order marker placed on them, and are durable.

Example: 10th Regiment of Foot

Cheerleader: These are figures that you don't need to (or want to) activate to get a benefit from. Most of the time, they have an aura effect to benefit other friendly figures.

Example: Raelin

Defender: These figures are designed to draw fire, and can be great for things like holding onto glyphs.

Example: Sentinels of Jandar

Shark: These are similar to Bread and Butter figures, but they consume more order markers if you want them to continue being beneficial. These figures are usually unique, have a low defense, or have a high point cost.

Example: Nilfheim

Menacer: These are similar to Sharks, but have a higher defense. The opponent should view them almost like a Shark, but they are more durable.

Example: Major Q9

Cleanup: These are typically ranged heroes that are best used near the end of the game, because they aren't tough enough to survive at the beginning.

Example: Kaemon Awa

Niche: These are heroes without a lot of synergy, but can be useful in the right situation.

Example: Theracus

FACTIONS

Many figures fit into natural factions. While the faction of a figure isn't explicitly stated on its card as an attribute, they do, nonetheless, exist. Examples from classic Heroscape are the Marro, Ninja, Cowboy, Samurai, Orc, and Elf factions. When designing your own customs, especially if you're planning on making a lot of them, you may want to plan out your factions and the different roles you want represented within them. For example, you may want to make sure that each faction has a commander, a cheerleader, basic "grunts", *etc.* Proper planning and design of your factions can do wonders for how enjoyable your customs are.

Every faction ideally consists of several roles, although many factions can be "incomplete", either temporarily or permanently, depending on your ultimate purpose for the faction. Larger factions can even be broken down into sub-factions, if needed. The roles for a faction were elegantly defined by *IAmBatman* in his "Some Action in the Faction Section" thread.

General: Has synergy with all members of the faction, usually with order marker flexibility so you can activate multiple members of the faction per turn.

Example: Kato Katsuro, General for the Samurai faction.

Flagbearer: Similar to a general, but lack the higher cost and order marker influence of a general.

Example: Hatamoto Taro, Flagbearer for the Samurai faction.

Unique Hero: Each faction should have at least one unique hero, not counting the General or the Flagbearer.

Example: Kaemon Awa, Unique Hero for the Samurai faction.

Specialized Figures: These can take the form of a unique squad, a common hero, or an uncommon hero.

Example: Tagawa Samurai, Unique Squad for the Samurai faction.

Ranged Common Squad: Every faction should have at least one ranged common squad.

Example: Tagawa Samurai Archers, Ranged Common Squad for the Samurai faction.

Melee Screen Squad: Each faction should have at least one squad that can be used as a melee screen.

Example: Ashigaru Yari, Melee Squad for the Samurai faction.

Shocktroops: These are figures that move fast and hit hard. Sometimes, but not always, these end up being cavalry.

Example: Kozuke Samurai, Shocktroops for the Samurai faction.

TURN PHASES

Though turns in Heroscape aren't officially broken down into phases in the rulebooks, aside from a high-level Move/Attack phase, phases do exist. These phases are defined through an analysis of the power text on official cards. When designing customs, make sure it is very clear from your powers exactly in which phase the power should be activated. Also, do not create powers that would create new phases.

A very good description of the phases was compiled by *Tribesofwar* in this thread: http://www.heroscapers.com/community/showthread.php?p=644960. A copy of his summary is included here, but if you have detailed questions please post them in Tribesofwar's thread. You may also want to check the thread for updates if you're working on a power that depends on the nuances of these phases.

Phase 1 Reveal order marker
Once an order marker has been revealed the player's turn begins. Some units abilities can/must be activated by revealing the order marker.

Phase 2 Before taking a turn
Some units have regular bonding, some have movement bonding, or "in place of bonding". The regular bonding allows another figure/squad to take a turn independent of the figure who received the order marker. Movement bonding allows another figure/squad to move. While they still obey terrain rules they receive no movement bonus. The "in place of" bonding allows another figure/squad to take a turn instead of the unit that received the order marker.

Phase 3 Before Moving
Some units have abilities that activate before any figures move. Having to move is not a requirement of the ability unless specified on the card. Check if the conditions are met for any carry ability.

Phase 4 Moving
All figures have movement with exception of the Marro Hive. During this phase a figure is chosen and moved. Remember to check for movement bonuses from glyphs, terrain and any abilities if the requirements were met. There are multiple movement rules as far as height, engagement, disengagement and so on. Read the rule books for those rules. Some abilities allow for a figure to choose another action in place of moving. Now would be the time to activate the ability if the requirements are met.

PART 4A (Movement Pausing)
Movement can be pause by several in game checks. Typically it will be paused by disengagement, but can also happen when an engagement strike ability is activated or in the case of Tor-Kul-Na his trample stomp. If an engagement strike ability's requirements are fulfilled then movement pauses and the attack dice/20 sided die is rolled. If a disengagement were to occur by moving, then before actually moving the figure the disengagement die would need to be rolled. Do not forget about the Coward's Reward ability. That would allow additional disengagement dice to be rolled.

PART 4B (Ignoring wounds)
If a figure were to receive a wound from Phase 4, PART A and has an ignore wound ability that figure may now chose to roll the die for that ability.

PART 4C (Placing wounds removing figure, continue movement)
Any wounds received are now placed on the figure's army cards. If the wounds are enough to destroy the figure the figure is removed. If the figure survives, then it can continue movement unless there are multiple disengagements then start over from Phase 4, PART A for each disengagement. In the case of Tor-Kul-Na for his trample stomp, if the figure he is trying to trample stomp is not destroyed his movement ends.

(Rinse and repeat from Phase 4 Part A for each disengagement/engagement strike/trample stomp)

(Rinse and Repeat Phase 4 for each figure in a squad that has not yet moved)

Phase 5 After Moving, Before Attacking
Some abilities are activated during this phase. While most can be, some have to be activated, such as the Marrden Hounds. Moving is not a requirement for these abilities unless specified on the card. Any carry ability that was checked in phase 3 would now activate if the requirements are fulfilled.

Phase 6 Ignoring, Placing Wounds
If a figure were to received any wounds from Phase 5 and has an ignore wounds ability, the player controlling that figure can now roll to ignore the wounds. If the figure is not successful then the wounds are placed. If the wounds would be enough to destroy the figure the figure is then removed.

Phase 7 Choosing a Target
During this phase you choose a figure to attack or in the case of Mimring 8 spaces in a straight line. If you are targeting a figure to attack with an area of effect special attack, then any figures who are presently adjacent to the targeted figure are the only ones who would be affected by the area of effect attack.

Phase 8 No Longer A Legal Target
After a target is chosen if the target has an ability that would allow it to no longer be a target then that figure may roll for its ability. If successful the target is no longer a legal target for any future attacks from the targeting figure and the flow returns to Phase 7 and you may target another legal target.

Phase 9 Attacking Dice Roll
At this time you add any modifiers to your attack such as height, auras, glyphs and abilities that give extra dice if the requirements were fulfilled. The attack dice are rolled.

Phase 10 Attacking Post Dice Roll
After the dice have been rolled you now add any abilities that add to the skull count. Any instant effects such as the Lethal Sting ability are activated if the requirements are met, which in the case of the Lethal Sting ability would cause the figure to be removed.

Phase 11 Defending Abilities
Any abilities that allow the figure to avoid rolling defense dice are now activated if the requirements of the ability are met.

Phase 12 Defense Dice Roll
Any modifiers that add to your dice count, such as height, auras, glyphs, and abilities that give extra dice if the requirements were fulfilled. The dice are rolled.

Phase 13 Defending Post Dice Roll
Any abilities that add to your shield count are now activated as well as any ability that allows one shield defense or stealth dodge if the requirements are met. The counterstrike ability would also activate if the requirements are fulfilled.

Phase 14 Ignoring, Placing wounds
If a figure were to receive wounds from the attack or the counterstrike ability then any figures with the ignore wounds abilities can now roll to ignore wounds. If the figure is not successful in ignoring wounds then the wounds are placed on the cards. If the wounds would be enough to destroy the figure then the figure is removed.

Phase 15 Newly Placed/Removal of Figures
Any abilities that allows for placement/relocation of any alive/destroyed figures are now activated as long as the requirements are met. (With the exception of Scatter) If the wolves Pounce ability was unsuccessful it is now removed.

Phase 16 Scatter and Poison Sting

This phase is specifically for the Deathreavers' Scatter ability. It the requirements are met then the ability can now be activated. Any abilities that would allow additional wounds to be placed, if the requirements are met of course, such as Sujoah's Poison Sting, would now activate.

(Rinse and Repeat from Phase 11 for each figure that was affected by the area of effect attack in phase 7)

(Rinse and Repeat from Phase 7 for any figures in a squad that have not yet attacked)

(Rinse and Repeat from Phase 14 if any wounds were made from Phase 16)

Phase 17 After Attacking

Some abilities activate after attacking. Attacking is not a requirement for the ability unless specified on the card.

Phase 18 Ignoring, Placing Wounds

Figures that would receive wounds from Phase 18 and have an ignoring wound ability can now roll. If the ability was not successful then any wounds receive would be placed on the figures army card. If the wounds would be enough to destroy the figure the figure is then removed. Phase 19 End of Turn

Some abilities refer to End of Turn. At this point those abilities can now be activated. This would start the turn flow over at Phase 3. If any unit was taking a turn from regular bonding then the unit that originally had the order marker may now take a turn starting from phase 3. Also any units with the frenzy ability can now roll to try and take another turn. If the attempt is successful then the turn flow starts over with that squad at Phase 3.

GAME BALANCE

Concepts of balancing games is usually a topic reserved for when one is creating a new game that they have full control over. However, many of the principles apply to custom design since customs are essentially modifying the existing game. It becomes even more important when creating an entire genre of customs that will usually be played on its own, such as Star Wars Heroscape.

Before discussing game balancing, there are a few terms that must first be defined. Note that the following four definitions are somewhat interdependent.

Balanced: A game is balanced if a reasonably large number of the options available to the player are *viable options*.

Depth: A game has depth if is strategically interesting to play by experts, even after it has been studied and practiced for a very long time.

Viable Options: A game has viable options if many meaningful choices are presented to the player. If the player is allowed to use strategy to make those choices, then the viable options allow for greater *depth*.

Fair: A game is fair if players of equal skill have an equal chance of winning, even when starting with different options.

A game is considered *imbalanced* if an expert player can consistently beat other expert players by using the same few tactics every time. This situation would arise if a game only had a limited number of *viable options*. Note that the game may have many options, but only a few of them might be viable.

In the specific case of Heroscape, the game is *balanced* because an expert player cannot consistently beat other experts by using the same tactic over and over again. The game has many *viable options*, in the form of many Army Cards, Glyphs, and special powers. The choice of which cards to draft, which figures to activate each round, and which powers to use is very strategic, so the game has *depth*. And finally, the game is *fair*, because players of equal skill starting with different options (different armies) have an equal chance of winning.

Another way to categorize games is by whether they are *symmetric* or *asymmetric*. A symmetric game is one where all players start with the same options, such as Chess. An asymmetric game is one where players start with different conditions. The amount of

asymmetry can vary from game to game. Heroscape is an asymmetric game, with a fairly diverse set of starting options. While maintaining fairness is relatively simple in symmetric games, it can be much more difficult in asymmetric games.

Since Heroscape already meets all of the conditions of a balanced and fair game, the job of a customizer is to not break it. When creating customs, do not create cards, scenarios, or rules that severely limit a player's viable options. For example, if one were to create a card that had a power that specified that another specific figure must be drafted along with the chosen one, and then that figure had a similar power, and on and on, then that single card would essentially dictate the entire army build. That sort of custom would limit the player's viable options and reduce the depth of the game.

So how does one ensure plenty of viable options? Through the use a concept called *yomi*. Yomi comes in different layers. Yomi Layer 0 is the act of using something powerful against your opponent. Yomi Layer 1 is the act of your opponent countering that. Yomi Layer 2 is your counter to that, and finally Yomi Layer 3 is your opponent's counter to your previous one. This can show up in Heroscape during the drafting process, during Order Marker placement, during the use of special powers, or in other ways. The key here is to not limit this process through your customs. Do not create a custom that cannot be countered, and do not create a custom that cannot counter anything. Both of these extremes will limit the Yomi process, which will limit the number of viable options in the game, which will result less depth of gameplay and possibly reduced fairness.

With this in mind, be sure to not go to the other extreme. Not all situations in a game need to allow for Yomi Layer 3, and not all situations need to be fair to all players. A game has to be *globally* fair, which is based on starting conditions, but it doesn't have to be *locally* fair, which refers to a specific point in time during gameplay.

References:
"Balancing Multiplayer Games", David Sirlin,
http://www.sirlin.net/articles/balancing-multiplayer-games-part-1-definitions.html (with a thanks to Eclipse for the recommendation)

"Yomi Layer 3: Knowing the Mind of the Opponent", David Sirlin,
http://www.sirlin.net/articles/yomi

COSTING AND PLAYTESTING

COSTING

Determining the proper cost for a figure can sometimes be the most tricky part of creating a custom.

Ultimately, the cost of a figure should be based on how much somebody would be willing to pay to draft that figure, and not based on any arbitrary scale. Remember that the value of a figure is not based solely on the card, but also on the map and your opponent's army.

The cost of a figure should be based on an ideal case, meaning that the figure is able to maximize all of its powers. When costing cards that have bonding powers, the cost of the bonding should be distributed across both cards.

For example, the Obsidians Guards are worth their points on lava-heavy maps. However, they would be severely overcosted on a map with absolutely no lava. Even so, the card should be priced according to their worth *once a player feel the need to draft them*.

Power Scale: Even though the cost of a figure isn't based on an arbitrary scale, there is still an inherent scale built into most cards, especially in the superhero genre where the characters are usually well-known prior to creating the custom. This means that overall power levels of some characters are obvious, like "Superman is more powerful than Spider-Man", or "Hulk is more powerful than Daredevil". Therefore, there is a tendency to correlate these overall power levels directly to the cost of the card, meaning Superman must cost more than Spider-Man and Hulk must cost more than Daredevil. This can be both good and bad. It can keep relative consistency across your customs, ensuring that you don't create a Nick Fury custom that is three times the cost of Thor, for example. However, it also runs the risk of locking creators into a less flexible mindset and limiting the creativity of the card. The opposing viewpoint holds that the cost should simply reflect the powers on the card, and that since most characters have to be represented by a subset of their total abilities, it could be completely reasonable to have a Robin custom that costs more than a Batman. The reality is that a good custom creator must always balance both of these ideals. As a general rule, try to keep a consistent relative scale across your customs, but at the same time don't be afraid to occasionally break that pattern if it benefits the card. In addition, always make your final cost a multiple of 5.

There are many ways to determine the cost for your customs, but they all break down into two main categories:

1. Costing by **Theory** ("Theoryscaping")
2. Costing by **Playtesting**

The playtesting method is, without a doubt, the more rigorous and accurate method. However, sometimes that level of accuracy isn't desired or possible, so for those cases theoryscaping is a good second choice. In fact, even if you plan on playtesting, it's a good idea to arrive at an initial starting cost through theoryscaping anyway.

There are several methods that can be used to determine cost via theoryscaping. Most involve either some manner of comparison to official figures or a loose formula. This guide will cover two methods of comparison (by *IAmBatman* and *Sherman Davies*) and one theoryscaping formula (by *Griffin*).

Theory Costing By Comparison, Method I

Thank you to IAmBatman *for writing the following section:*

Well, *GreyOwl* recently asked me to write a quick blurb on how to correctly cost custom units. I've actually been kind of avoiding it a bit, though at first I wasn't sure why (always easy to blame work or C3G or hanging out with my lady and so on, right?). But there was more to it than that. There were actually three reasons I was a bit reluctant to write this up.

1. I'm really not an expert on anything. I just kind of dabble a lot on Heroscapers and you guys seem to like me all right and I make my arguments and do some things pretty well and some things pretty poorly. But I sure don't have all the answers when it comes to custom creating - especially not when it comes to something as dicey as costing them.
2. There are already some great posts out there on costing, some of which are included here (*Grungebob*, *Sherman Davies*, and *Griffin* all have amazing insights to share on the topic), so I'm not sure I have much to add.
3. When it comes to correctly costing, I've come to the conclusion that it's largely impossible. But it is, at least, impossible to degrees. I'd say it's impossible to get a well playtested custom any closer than within 10 points of its optimal cost. You might hit it exactly and you might be 5 or 10 points over or undercosted. This is with lots of playtesting.

Without it? Well, it's kind of a crapshoot. And it really depends on the unit.

For instance, *Griffin* and I broke down the C3G Professor X and spent hours discussing what each of his stats and powers were worth, compared him to official units, discussed his role in an army, applied formulas, and so on. We arrived at 160 points for him.

Then we playtested. Long story short, he's now at 220.

Now I do think there are plenty of figures that are a lot more straightforward than old Charles Xavier here, and I'm definitely not suggesting that every non-playtested custom out there is 60 points off. But I am saying that theoryscape is just that - theory. You're never really sure of how a unit functions until you put it in practice.

And that's why the number one thing to do when you're trying to theoryscape custom cost is to look at existing units and compare.

If you haven't had the chance and won't have the chance to playtest a unit yourself (though, honestly, I highly recommend it. I think that the quality of customs only goes up when you take them for a spin. And nothing helps you check for wonky power interpretations, unclear mechanics, broken combinations, and potential bonding loops like getting together with a friend and running some tests) then all you're left with is theoryscaping. So the best thing to do is to look at some units that *have* undergone the rigors of playtesting and see how your guys stack up.

So how do you choose the right figures to compare?

Well, really, it's a two step process.

The first type of figure you should choose for comparison is a figure or figures with similar powers and stats to your card. Ideally, you'll get a card as close to yours as possible. But, if an

official card is extremely close to yours, then you're not looking all that original, so often you can only get one that's so close.

Often a card will have a couple straightforward powers with limited effects and then one real doozy of a power that could have some crazy effects. In that case, you either want to find a card that has a power really similar to the crazy big one you have or that has similar stats and powers to the rest of the card and then mentally adjust for what you think that crazy power is brining to the table.

Let's use an example here ...

Let's say I have a custom with a special attack of range 3 and attack 4 that lets him attack 3 times, a cheerleader type power that lets him add movement to any figure you control, and a power that lets him double shields. Then he has 5 life, 8 movement, 1 range, 6 attack, and 5 defense.

OK, so who can I compare him to? The first unit that comes to mind is Captain America. Cap has a special attack that you could potentially attack with 3 times and has the same attack and a similar range. He has a cheerleader type power in tactician, though it's probably more powerful than the one on my custom. He has a defensive power - though it offers more offensively against other units and my custom's defensive power offers him more staying power. Cap has the same life, worse movement, the same range, the same attack, and one better defense.

So then I break down each category, compare them side by side, and ask myself - is this worth more or less than the other power? And then - about how much?

Special Attacks: I'd say that the unrestricted ability to attack three figures makes the custom special attack more than Cap's, which can be restricted when he's engaged. They have the same attack value and both offer the benefits of being a special attack. Cap's has more range, though, which is nice. If everything else were equal, I'd say the extra range would make Cap's special attack worth about 10 more points. But the flexibility on the custom attack would make that attack worth at least 10 more if everything else were equal. So, at this point, I'm thinking the custom special attack is about on par with Cap's, and maybe worth slightly more (5-10 points?).

Cheerleader Power: The movement power is a nice one because it's completely passive. It lets my whole army move faster, no matter where they are and no matter where my custom is. Pretty nice, right? Cap's tactician power, though, despite its restrictions, offers a lot of value the movement power doesn't. That's because Cap's power affects two statistical categories instead of one (attack and defense versus movement) and because the categories that Cap affects are generally considered of higher value than movement. That said, the adjacency restriction on Cap's Tactician power do hold its value down a bit. Still, I'd rather have someone who could pump attack/defense on my team. The restrictions make it closer than you might think, though, so right now I'm thinking Cap's cheerleading power is probably worth only slightly more than the custom's (5-10 points?)

Which means that, right now, the two are roughly on par.

Defensive Powers: Counter Strike versus Doubling Shields. Counter Strike has the following benefits: It discourages units with only normal attacks from placing adjacent attacks on Cap, it discourages units with only normal attacks from engaging Cap (which can help him get more use out of the shield throw), and it potentially wounds or destroys other figures which is a very nice benefit. However, does it really add much to Captain America's staying power? Beyond the psychological effect (which experienced players might choose to ignore) counter strike doesn't make Cap much tougher to bring down. It doesn't cause him to roll any more shields or block any more wounds. It just, potentially, eliminates an attacker every once in a while. Also, it has a clear counter, which is special attacks. Especially in the world of SuperHeroScape, special attacks are abundant, so this is a pretty significant Achilles' heel.

The Doubling Shields power, on the other hand, adds significantly to the staying power of my custom by making each of his shields count as two. This means he effectively has 10 defense dice. Also, it has no restriction making it vulnerable to special attacks - it doubles shields against all attacks. The only benefits Counter Strike has over my custom defensive power is that Counter Strike offers a psychological benefit and can potentially hurt attacking figures. I'd still take the increased survivability afforded by Doubling Shields though, any time, especially on a 5 life figure. So, to me, Doubling Shields is clearly the more useful power by 10-20 points.

Stats: Life is a push. Movement, my custom guy has 3 more spaces per movement. I roughly calculate base stats to be worth 10 points each when comparing to other units and Life to be worth 20 points per. These calculations are very rough, though, and somewhat depend on the other powers on the card. Here, though, it seems straightforward, so I'll bump my guy 30 points for his extra movement. Range and attack are pushes as well. Under defense, however, Cap has one better. This makes his counter strike potentially more effective than the doubling shields, but with doubling shields, my custom doesn't *need* such a high defense. He's rolling like he has 10 defense already. Imagine how tough he'd be if he was rolling like he had 12. So, in this case, considering the powers, I'm actually not even going to give Cap an edge here. So, after considering things, I have my custom guy up 30 for stats.

Once I factor everything in, I'm looking at my custom being worth 50-60 more points than Cap. That's 270-280 points.

At this point, I can either look for another card with similar powers and see how my guy stacks up for more theoryscaping that way, or I can "check" my results with Cap by moving on to unit comparison type two.

The second type of unit to compare with is a unit in the projected cost range. You should definitely look at multiple units for this comparison.

So what I'd want to do here is look at other 250-350 point units that have been playtested and ask myself - is this guy better or worse than each of these? Whom would I draft him over? Whom would I draft over him? Are there army builds where he'd really fit in well at this point range? How well do I think would he stack up in a fight against 270-280 points worth of heroes or squads? Would he be destroying them consistently? Would he be

struggling to get back his points? Considering all of these questions and more for several cards is the best way to see if your initial theoryscaping was on target.

Of course, there are no officially tested 270-280 point units out there, so sometimes you just have to spitball it too and see what other people think!

Anyway, I hope that was helpful! If there was anything else I could add, it's this: play the game. Don't just theoryscape, play the game. The more you play, the better of an idea you'll have for what a power is actually worth in game play, all the sneaky ways you can milk it for value, and all the other powers that beat it by a mile. You won't know how broken a figure that's undercosted can actually be or what it takes to want to draft a figure over another without having it so powerful you never want to draft anything else until you consistently put yourself in these situations and see what works.

Happy Scaping!

IAmBatman

Theory Costing By Comparison, Method II

Once the character's stats and special powers are designed, it's time to start thinking about cost. The attributes of a figure can be broken down into four attributes:

Mobility

This is the figure's ability to move around the battlefield. This attribute is a combination of their Move stat, size (note that double-base figures are generally less mobile than single base figures, even when they have higher Move stats), height and abilities like Flying, Disengage, Slither, Ghost Walk, *etc.* A figure's Range stat also plays a small part in judging their mobility; after all, a figure with a ranged attack is less hampered by a low Move stat than a melee figure.

Offense

This is the figure's ability to destroy (not impair – those abilities fall under the fourth attribute, Miscellaneous) other figures. This attribute is a combination of the Attack and Range stats as well as factors like: number of attacks per activation, presence or lack of a special attack, and potency of attack (two of Zetacron's attack dice are more potent than two of a Microcorp Agent's). Special powers like Counter Strike are another thing to keep in mind when trying to judge a figure's offensive ability. Also factor in a figure's mobility into its offense, since more mobile figures can gain height or other positional advantage when attacking more easily than less mobile ones.

Survivability

This is the figure's ability to stay in play or, in some cases like the Zombies, to return to play. Survivability is a measure of the Defense stat and Life score, plus any defensive abilities like Stealth Dodge or Tough. Mobility also is something to consider when judging the survivability of a figure, for the same reasons it applies to offense. Range is something else that affects survivability, since the ability to avoid engagement while attacking is itself a form of defense. Anyone who's seen Guilty McCreech run & gun a couple of squads of MacDirk Warriors to death will agree, I'm sure.

Miscellaneous

This encompasses any special powers that don't move the figure, destroy other figures, or help the figure stay on the board. These are usually what are often called "cheerleader" powers, the best known example of this being Raelin's "Defensive Aura". Since these powers usually do not benefit the figure who possesses

them, the figure's other attributes or powers don't factor in as much when it comes to determining how useful they are. Often these abilities can be judged in isolation from the figure's other attributes. There are exceptions, though. For example, Raelin's mobility makes her aura more useful than it otherwise would be. The same goes for Nerak's ability to bond with the very figures he boosts. As a final example, the Nakita Agents' Smoke Powder Special Power would be more useful if they were larger, double-based figures.

Once a custom figure's general attributes are broken down, try to find an existing Heroscape figure that fills a similar role/niche and seems to be in the ballpark when it comes to power level. For example, if you had just designed a Fantastic Four Thing figure, you want to find another melee brawler to compare him to and not, say, Nilfheim, even if your Thing also has a 6 Attack and 4 Defense. Charos might be a better comparison in this example.

When looking for an official figure to compare a Superhero custom to, try to limit yourself to figures that are generally considered by the community to be fairly costed, that is, neither A+ nor C- units. A good rule of thumb is to shoot for figures to be B or B+ type units.

After picking an official figure, start comparing the attributes of your custom against those of the official figure. Who's more mobile? Who's the better attacker? Who will last longer on the battlefield? What else do the figures bring to the table? And so on.

References
http://www.heroscapers.com/community/showthread.php?t=23255 - this section was almost entirely copied word-for-word from this post by *Sherman Davies*

http://www.heroscapers.com/community/showthread.php?t=6171 – the power rankings mentioned in this section can be found in this thread, maintained by *spider_poison*

Theory Costing By Formula

The following section describes the formula for theory costing that was developed by Griffin*:*

This a quick formula to come up with a very rough cost estimate for a custom figure. The formula is based mostly on guesses, and there is no guarantee that this formula will work every time, so when you are guessing, you should go with your gut and round up or down when appropriate. The formula is calculated as follows:

Add up all of the stats except for the life. Call this SUM1.

Then add up the powers, using the following guidelines:

- Movement powers like flying or Leaping, or any movement power that allows you to move over terrain or more quickly add 3 or 4 depending on how far it can take you.
- Add 4 to 6 for movement powers if it is stealth like in nature.
- Add 4 for a special attack, 5 or 6 if it is a powerful area effect.
- Double attacks you just double your attack value in the stats.
- Special powers that inflict wounds cost about the same as Special attacks, unless they allow you to attack as well in the same turn, then add an additional 2.
- SS power adds 2.
- Cheerleader powers such as Raelin add 2-4.
- Any modifier to your attack or defense, just add the modifier number then subtract one if it is circumstantial.

Call this SUM2.

Now add SUM1 to SUM2, and them multiply the result by the Life. The result should give you a number to start theoryscaping.

Remember this: The number one thing you can do to help create a balanced custom with an appropriate point is to play the official game. The more you are familiar with the official game and its rules, mechanics, units and their powers, you are more likely to create a well-balanced and fun custom.

References
Griffin – this section was written almost entirely based on a private conversation with *Griffin*

PLAYTESTING

The following section is from a general Q&A with Grungebob. Note that his answers are not necessarily reflective of the official playtesting process; they are his ideas about playtesting off the top of his head.

Before playtesting, make sure all issues that can be worked out in the design phase have been worked out. Do not start playtesting an incomplete figure.

When playtesting, it isn't necessary to play every possible army combination with your custom figure to see if anything breaks. Instead, focus on the most likely combinations and strange, extreme army builds. For example, one thing *Grungebob* has mentioned is that he might test an entire army of cheap fodder units, just to see if it would break anything.

If a figure has specific synergies, like bonding or enhancements, then your playtesting should heavily focus around those combinations.

The number of playtests you need to do in order to feel comfortable with a certain figure will vary. Keep testing until you get consistent results.

References
http://www.heroscapers.com/community/showthread.php?p=624775#post624775 - Q&A with Grungebob

C3G PLAY TESTING GUIDELINES

The C3G project has its own playtesting guidelines, which have been refined as the project has evolved. The following are the minimum requirements for playtesting any C3G Unit Type, with some modifications to accommodate use by a single custom creator who is also their own playtester. The requirements are a little different when there is a team of playtesters available.

Figures: Each test should be done on a BoV map. The following tests should be completed:

- For testing a hero figure, 5 tests versus heroes of the same or close to the same point cost (can either be one "heavy hitter" or two mid level heroes). If the test figure is 300 points or more, 2 of these tests must be against 2 or more mid-level Heroes. Suggestions are, but not limited to, *Crixus*, *Incredible Hulk*, *Krug*, *Superman (C3G)*, or *Darkseid (C3G)*. For testing a squad, use 5 test versus squads of the same or close to the same point cost instead.
- For testing a hero, one test versus a squad of the same or close to the same point cost. Suggestions are, but not limited to, *Marro Stingers*, *4th Massachusetts Line*, *Knights of Weston*, or *Sentinels of Jandar*. For testing a squad, use one test versus a hero of the same or close to the same point cost instead.
- One melee army test with the test unit as part of a melee oriented army battling a melee oriented army of the same point cost (540 is a great competitive point range). Suggestion are, but not limited to, *Raelin (RotV)*, *Finn the Viking Champion*, *Thorgrim the Viking Champion*, *Eldgrim the Viking Champion*, *Alastair MacDirk*, *2x MacDirk Warriors*.
- One ranged army test with the test unit as part of a range oriented army battling a range oriented army of the same point cost. Suggestion are, but not limited to, *Major Q9*, *Agent Skahen*, *Theracus*, and *2x Microcorp Agents*.

Glyphs: Each test should be done on a BoV map with Glyph placements designated. Four tests should be done using complete armies that are considered evenly matched. Each test should incorporate different army selections.

Scenarios: Four tests of the scenario and build instructions are required.

Optional Rules: Four tests should be done on a BoV map, using full armies that are considered evenly matched. Each test should incorporate different army selections. There may be additional necessary requirements based on the details of the optional rules design.

Destructible Objects: Four tests should be done on a BoV map, using full armies that are considered evenly matched. Each test should incorporate different army selections. There may be additional necessary requirements based on the details of the destructible object rules design.

C3G PLAYTESTING CHECKLIST

When playtesting your figures, there are several situations that you must keep in mind:

- **Theme Test:** Check to see if there are any powers or stats on the test card that do not accurately reflect the theme or likeness of what the character would and could do. Also consider destructible objects, and whether or not this character's powers should affect them.
- **Mirror Test:** Check to see if the figure were played against itself, if there would be any loops that would upset the balance of the game.
- **Bonding Test:** Compare the card with all possible currently existing bonding abilities to make sure there are no undesired bonding chains or bonding loops.
- **Synergies Test:** Compare the card with all possible currently existing synergies to make sure there are no factors that could break the game by making any unit to powerful or too weak.
- **Power Check:** Consider the test figure and all existing figures and glyphs to compare and check for any powers that could be over amplified and break the game. Each power must define *when* it takes place, *who* or *what* it affects, and *what* the stipulations are on the power, if any.

References
"C3G Playtesting FAQs",
http://www.heroscapers.com/community/showthread.php?t=28451

PLAYTESTING ON YOUR OWN

Sometimes, it will be necessary to playtest on your own. This is completely possible, as long as you keep a few key points in mind.

- You must decide before beginning that you will not change the results based on what you want. So if you roll a 20 for Mind Shackle, then you must honor those results.
- There are many times in competitive games where predicting your opponents Order Marker placement is a huge factor. Since you know where your opponent's markers are (because you are your own opponent, you will need to exercise some selective memory. You should make a decision that you believe you would make if you did not know what the opponent was thinking.
- It is important when rolling for initiative to have a system for knowing which side is rolling. One suggestion is to always assume that the first initiative roll is for the figure you are testing. Another method would be to use two separate colored D20s, one color for each team.

References
"C3G Playtesting FAQs",
http://www.heroscapers.com/community/showthread.php?t=28451

INTERPRETING YOUR PLAYTESTING RESULTS

Interpreting your playtest results is pretty easy, in theory. Without getting too into specifics, just go with what fits best in gameplay. If a figure feels broken at a certain cost, raise its cost five or ten points and try it again. If a figure feels underpowered at a certain cost, lower its cost five or ten points and try it again. Basically the main questions you're trying to answer in playtesting are - would I draft this figure consistently at this price? How high a cost would I consistently pay to draft this figure? How does it stack up against other figures in that price range in terms of how it actually plays? Keep playing until you're confident in the answers to all of these questions. Once you are, you should have your perfect cost.

Another thing to keep in mind is what power level you are wanting to achieve for your custom. If you're shooting for an A+ figure, then the figure should be slightly undercosted. If you want an F unit, it should be overcosted. Typically, it is a good idea to shoot for a range anywhere from B+ down to C-, depending on your personal goals for the custom. Resist the urge to make all of your customs A+ units, as that will introduce power creep and essentially make many older figures useless when played in conjunction with your customs. Therefore, it usually isn't a good idea to try and trump official figures that are ranked A+ , or even A.

References:
http://www.heroscapers.com/community/showthread.php?t=6171
– the power rankings mentioned in this section can be found in this thread, maintained by *spider_poison*

CARD AESTHETICS

ARTWORK

There are several choices for the artwork on a card. The most official option is taking a photo of the miniature, placing it against an appropriate background, and adding a fog effect. Other options include comic art or photo and film stills, either with or without the fog effect. In general, it is usually best to stick to a consistent style within any given genre, but this will not always be possible because some characters don't have miniatures, comic art, or photos. But whenever possible, consistency should be maintained.

BACKGROUND ARTWORK

If you use photos of miniatures on your customs, you will be faced with the task of finding good background images to use. Some great suggestions for places to find artwork are below, courtesy of *A3n*:

deviantART: Look under the "Digital Art"-> "Photomanipulation"-> "Landscapes & Scenery" category. http://browse.deviantart.com/#catpath=digitalart/photomanip/landscapes

webshots: http://www.webshots.com/

Surreal Places: http://www.surrealplaces.com/

ORDER OF SPECIAL POWERS

The order of the special powers on a card not only affects the aesthetics of the card, but it can also affect how easy the card is to use. Even though official cards aren't always consistent with their power ordering, a good rule of thumb is to list powers in *phase order*, meaning the order they would be activated during a turn. One fairly consistent exception to that rule is that any movement power, such as Flying, Stealth Flying, or Swing Line, should generally be listed last.

FONTS

The font used on official cards is "Helvetica Neue". Unfortunately, it is a commercial font and is not free. "Arial Narrow" is a free font that gives a close approximation. The necessary font settings for all text that appears on a card is given below:

+/- refers to kerning. + means expand and - means contract. If this is missing, then the kerning is zero.

<-> refers to stretch. Usually it is less than 100%, which really means compress. This is horizontal only.

Autosized means the values given are the maximum. If the text doesn't fit, it is automatically scaled down to fit. You need a program that will let you autosize with maximum settings to do this correctly.

Classic Cards

Figure name (both sides of card)
HelveticaNeue LT 67 MdCn, 10.5 pt, +0.4 pt, line spacing at 0.8 pt

Faction/General Name
HelveticaNeue LT 67 MdCn, 6.5 pt, -0.1 pt

Left Box (Species, Class, Personality, Unique/Common, Hero/Squad)
HelveticaNeue LT 67 MdCn, 7 pt, +0.05 pt

Size and Height
HelveticaNeue LT 67 MdCn, 10 pt, +0.1 pt

Move, Range, Attack, Defense Values
HelveticaNeue LT 67 MdCn, 11.5 pt, Bold

Move, Range, Attack, Defense Text
HelveticaNeue LT 67 MdCn, 10.5 pt, +1.0 pt, <-> 130%, Center Justified

Move, Range, Attack, Defense Suffixes (Die, Dice, Space, Spaces)
HelveticaNeue LT 47 MdCn, 6.5 pt, +0.2 pt

Points Value
HelveticaNeue LT 67 MdCn, 12 pt, Bold, +0.1 pt

Points Text
HelveticaNeue LT 47 MdCn, 6.5 pt, +0.3 pt

Realm/Planet Name
HelveticaNeue LT 67 MdCn, 8 pt, +0.2 pt

Wave Name
HelveticaNeue LT 57 Cn, 8 pt, line spacing 0 pt before

Figure Number(s)
HelveticaNeue LT 57 Cn, 8 pt, -0.15 pt, line spacing 0 pt before

Copyright
HelveticaNeue LT 57 Cn, 6 pt, +0.1 pt

Life Value
HelveticaNeue LT 67 MdCn, 14 pt, Bold, <->110% (Autosized)

Life Text
HelveticaNeue LT 67 MdCn, 6.3 pt, +0.25 pt

Special Ability Name
HelveticaNeue LT 67 MdCn, 8 pt, +0.05 pt, 10 pt line spacing
before all but the first (Autosized)

Special Ability Text
HelveticaNeue LT 57 Cn, 8 pt, +0.05 pt, line spacing 1.11
(Autosized)

Marvel Cards

Figure name (both sides of card)
HelveticaNeueLT Pro 57 Cn, Bold, 11 pt, 95% tracking, line
spacing at 0.8 pt

**Left Box (Species, Class, Personality, Unique/Common,
Hero/Squad)**
HelveticaNeueLT Pro 67 MdCn, 8 pt, <-> 90%

Size
HelveticaNeueLT Pro 67 MdCn, 8 pt

Height
HelveticaNeueLT Pro 67 MdCn, 20 pt, 90% tracking, <-> 90%

Move, Range, Attack, Defense Values
HelveticaNeueLT Pro 57 Cn, 16.8 pt, Bold

Move, Range, Attack, Defense Text
HelveticaNeueLT Pro 67 MdCn, 17.1, <-> 90%, Left Justified

Points Value
HelveticaNeueLT Pro 57 Cn, 15 pt, Bold, <-> 90%

Points Text
HelveticaNeueLT Pro 57 Cn, 7 pt, Bold

Life Value
HelveticaNeueLT Pro 57 Cn, 16.1pt, Bold (Autosized)

Life Text
HelveticaNeueLT Pro 57 Cn, 11.5, Bold, -0.05 pt, <-> 96%

Special Ability Name
HelveticaNeueLT Pro 47 LtCn, Bold, 8 pt, 10 pt line spacing before
all but the first (Autosized)

Special Ability Text
HelveticaNeueLT Pro 47 LtCn, 8 pt, +0.05 pt, line spacing 1.11
(Autosized)

Realm/Planet Name
HelveticaNeueLT Pro 67 MdCn, 8 pt, +0.2 pt

Wave Name
HelveticaNeueLT Pro 57 Cn, 7 pt, -0.1, line spacing 2 pt before

REBASING FIGURES

Many thanks to Hahma for writing this section.

These are my tools of the trade. They can differ from person to person, but this is what I have been using. I use a little breakaway razor knife, Krazy Glue, a normal Sharpie and a fine tip black marker.

These are the bases that I use. They are Elfball 30mm bases that I got from FRP Games and their Item Number is IMXSP-PB30. They are made by Impact Miniatures. I paid $2 for each pack of 15 bases. These bases fit into ladders well, though a little looser than official HS bases. Some of the other bases were found to be a little too snug without modification. One thing to know about ordering these bases if you order from FRP Games is that your order might take from a few weeks to two months (in an extreme case) to get. So you are better off ordering them directly from http://impactminiatures.com/. To get in touch with them, email them at either impactminiatures@gmail.com or questions@impactminiatures.com

This quote is from Tom Anders of Impact Miniatures:

"*To prove that we are reliable ... a promise from me to the Heroscape crowd. If you are ordering basing material from us ... just drop me an email and say you found out about us from this forum and I'll make sure your order ships out in 4 days or less. Normally all orders all filled within 7 days ...* "

These base stickers were purchased from fellow Heroscapers member, Cavalier. I PM'd him and inquired about them and he told me how to proceed in ordering. I won't quote the price for them at the moment as they may have changed.

These stickers are easy to peel off and apply to your new bases.

Here is a Heroclix figure that I will re-base.
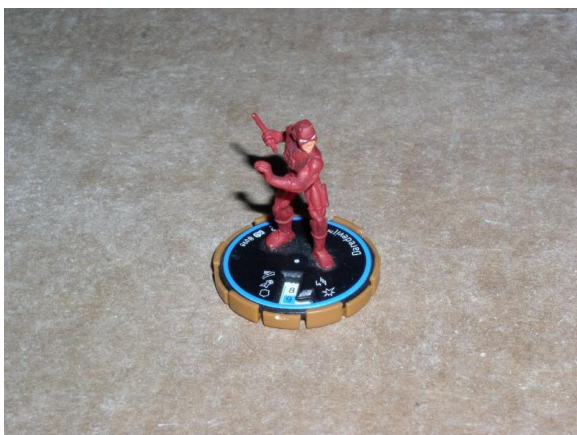
Carefully use your razor knife to separate the figures feet from the current base. I usually try to angle the knife slightly downward toward the base to avoid cutting into the softer figure's foot.
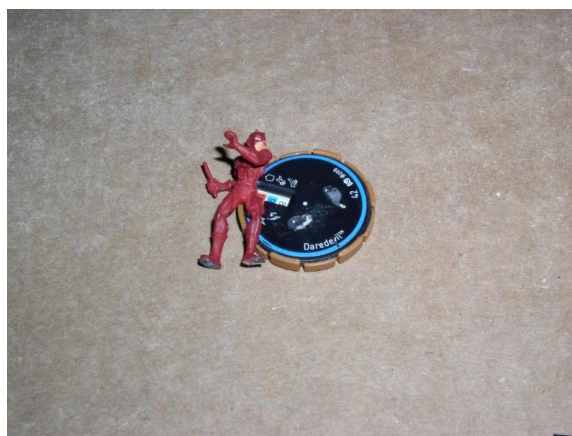
I clean up the bottom of the feet and gently scratch the underside with the knife in order to help get a better bond.
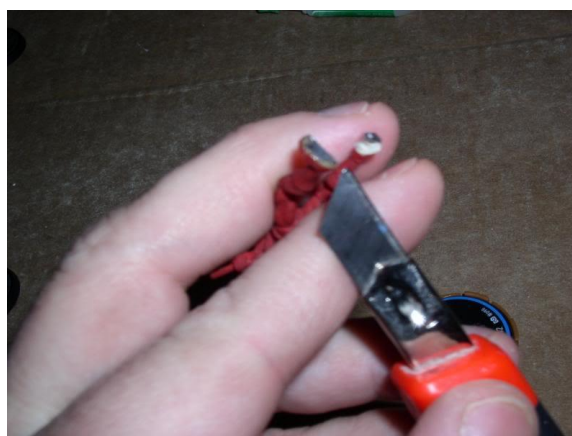
I place the figure where I want him and then tilt him backward a little and make a mark with the fine tip marker where his feet need to go. I then use my knife to cut around the mark. After cutting the first one, I usually place the figure back on the base to double

check to make sure the other foot will still line up correctly or if I have to make slight adjustments with my cutting. After I get the second mark cut out, I clean up any loose sticker left there and then I scratch the black footprints with my knife, again, this is to help in bonding. I apply a drop of glue to each footprint and then place the figure, careful to pretty much get him right where I want him because there won't be much time to move him around. I then hold him there for about 30 seconds and I'm done.
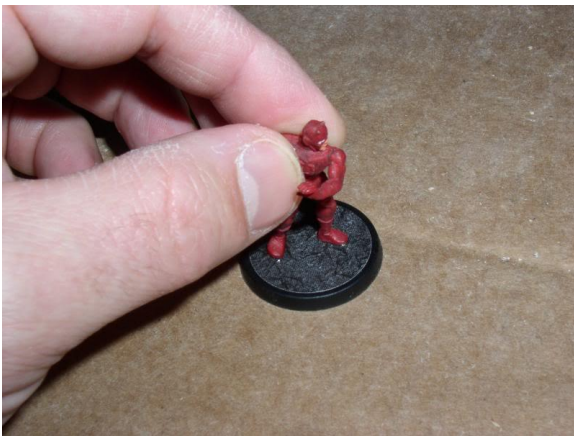
the figure.

Now for flying figures, I have done different things depending on the figure and how I think I need to do it that will work best for the figure and for me. Flying figures will have a clear plastic stand that they are attached to (Sorry no pix, but it's easy to figure out) that stand up from the Heroclix base. If I will remove the figure from the clear stand that the peg connects to, I will use the figure to help me mark a spot on the un-stickered base. Depending on the figure, some will line up in the middle and some might line up closer to the edge of the base. I chose to remove Jack O' Lantern from the clear peg base and attach his pegged hover disc directly to the new base. I used him to mark the spot where his peg will go and then I used my razor knife to make the hole. I use the knife because the pegs can be of slightly different sizes and I want a snug fit. So before I make the hole too big, I'll keep checking to see if the peg fits into it and so on until I get the snug fit that I want. I make the hole prior to applying the base sticker so that I don't mess up the sticker. Once the hole is made and the fit is right, I apply the sticker and then use my knife to poke a hole in the sticker where the hole is and then I insert the figure. I can either glue the peg into the hole or not depending on the fit and

Just for the heck of it, I figured I'd show how I store most of my Superhero figures. I believe I got these Plano boxes at Home Depot or Lowe's and they weren't very expensive.

Here are some other examples of some flying figures and how I chose to re-base them. The Storm one for example had the peg on a foot that was higher than the other one and the bottom of the peg just barely went past the other foot. I didn't think that would have been a good secure bond, so I had cut off the clear plastic peg stand and applied it to the new base, following the correct steps for attaching it. I thought the Hobgoblin's glider might not look right sitting directly on the base, so I kept the clear plastic stand, I did the same for Black Knight, though I think I lowered the clear plastic stand. Hawkgirl, Wonder Woman and Thor had good peg position to allow for me to insert their peg directly into the base.

Well that's it. I hope this helps anyone that's interested in re-basing Heroclix (or other figures) onto new bases that are perfect for Heroscape.

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