

# Potential Atium Alloys

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**Abstract**—Atium can theoretically be Alloyed with all 16 base Allomantic metals. The Allomantic effect of these Atium Alloys is only known for 2 of these. This paper will attempt to extrapolate from these 2 to the other 14.

**Index Terms**—meta, Brandon Sanderson, mistborn: The Final Empire, mistborn: Well of Ascension, Mistborn: Hero of Ages, Mistborn: Bands of Mourning, Mistborn: The 11th metal, Mistborn: the secret history, Mistborn: The Alloy of Law, Mistborn: Shadows of Self, Mistborn,

## INTRODUCTION

Atium can theoretically be Alloyed with all 16 base Allomantic metals. The Allomantic effect of these Atium Alloys is only known for 2 of these, Gold and Electrum. First we will attempt to extrapolate what Atium DOES when alloyed with Gold and Electrum, and then apply this to the other metals.

## SAMPLE ALLOYS

For those unaware, the Atium found in the final empire is actually an alloy of Atium and Electrum. This pares nicely with Malatium, an alloy of Atium and Gold.

Electrum is an Internal Pushing Temporal metal. The effect of burning Electrum is to give the person burning a view of their own immediate future.

Gold is an Internal Pulling Temporal metal. The effect of Burning gold is to give the person burning a view of an alternative version of them self based on a major life choice that effects who they currently are.

The effect of the Atium-Electrum Alloy is to give the person burning a view of the future of others.

The effect of the Atium-Gold Alloy is to give the person burning a view of the past of an other.

For both of these, the effect is the "same" but "inverted". Pushing and pulling is not changed, and the category is not changed (ie, Temporal metals make Temporal alloys)

The first conclusion from this is that Atium inverts internal/external, however we dont think this is quite right. Consider Duralumin and Nicrosil, these are the same metal, but with internal/external inverted. If Atium only inverts internal/external, the Alloy of Duralumin would be identical to Nicrosil, and vice versa.

We suggest rather, that there is actually a 4th adjective that describes a metal. Rather than strictly internal/external, we suggest that there is both a target and effect internal/external.

For clarity, we will use the first person perspective of a Misting who can burn the example metal for all examples.

For example, Gold: If you burn gold YOU see YOUR past self. This is internal-internal. YOU see YOU. When alloyed

with Atium, the effect of Gold is that YOU see an OTHERS past self. This would be internal-external. The vision is still only visible to YOU (internal), but the target is an OTHER (external).

Similarly using Electrum as an example we see the same thing. If you burn Electrum YOU see YOUR future. Internal-Internal. But when burning Atium-Electrum Alloy, YOU see an OTHER's future. Internal-External.

We hypothesize that the effect of alloying a metal with Atium is to invert this 4th previously unused qualifier.

## EXTRAPOLATING THE QUALIFIER

In order to use our hypothesis to determine the other metal's Atium alloy we must first identify this 4th qualifier for each. We will use [qualifier 1]-[qualifier 2] notation, where the first qualifier is the location of the entity feeling the effect, and the second is the location of the entity that sources the effect, as we did with Electrum and gold. As such, there are 4 possible combinations.

- Internal-Internal; where the Allomancer is effected something based on them self.
- Internal-External; where the Allomancer is effected by something external.
- External-Internal; where something outside the Allomancer is effected based on the allomancer.
- External-External; where something other than the Allomancer is effected by something external.

As Gold-Electrum are pared, we will assume all other push/pull metals are likewise paired in this new qualifier, and they will be handled as one.

We will **bold** the classification that matches the current classification of the metal as it is not consistently the first or second. If both classifications match (ie internal-internal or external-external) we will not bold either.

## Iron/Steel

The effect of an iron/steel is to move an object towards or away from an Allomancer. This is either **External-Internal** or Internal-**External**, as the effect of moving the External object also moves the Allomancer. As Iron/Steel are classified as an External power, we will pick **External-Internal** as its classification.

## Tin/Pewter

The effect of tin/pewter is to enhance an Allomancers physical attributes. While there is an argument that tin is Internal-External as it allows an allomancer greater response

to External stimuli, we would argue that Internal-Internal is a better classification for both. The interaction is derived from the heightening of internal senses, not from any external interaction.

#### *Zinc/Brass*

Zinc and Brass allow an allomancer to manipulate the emotions of another. This is clearly **External**-Internal.

#### *Copper/Bronze*

Copper and Bronze have different enough effect to be explained separately. Copper allows an Allomancer to hear pulses of another Allomancer using their metals. This is **Internal**-External. Bronze allows an allomancer to hide other Allomancers from copper. In short, This is an External effect, yet bronze is classified as Internal, and also protects the allomancer from emotional manipulation. As such we are happy to classify this as **Internal**-External as well, completing the pairing with copper.

#### *Aluminum/Duralumin*

Without argument, Aluminum/Duralumin are Internal-Internal. Both only effect the allomancer burning them.

#### *Chromium/Nicrosil*

Chromium/Nicrosil only effect external allomancers, thus it is **External**-Internal.

#### *Cadmium/Bendalloy*

Cadmium and Bendalloy are tricky. Both create "time bubbles" around a user. This is clearly an external effect. However, the allomancer must be within this bubble. In a sense this could be said to be internal, as the allomancer must effect them self. Classifying this as Internal-**External** is possibly the weakest, however we can not see that any other classification makes sense.